Internship in supervision and curriculum development in the Millville Public Schools, Millville, New Jersey, 1996-1997

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Internship in Supervision and Curriculum Development
in the Millville Public Schools
Millville, New Jersey
1996-1997

by
Debra G. Wenrick

A Report
Submitted in partial fulfillment of the requirements for
the Master of Arts Degree in the Graduate Division
of Rowan University
December, 1997

Approved by
Professor

Date Approved January 26, 1998
Abstract

Wenrick, Debra G.


Project Advisor: Ronald L. Capasso, Ed. D.

Practicum and Seminar in Administration and Supervision I and II, Rowan University

The internship in Supervision and Curriculum Development provided the intern the opportunity to develop and strengthen leadership skills required for educational administrators for the 21st century.

The internship focused on the following projects: 1) the development of a balanced curriculum for the district’s bilingual summer enrichment program, 2) the facilitation of a collegial sharing of ideas learned at out-of-district workshops, 3) the piloting of a teacher-centered revision of the district’s evaluation system, 4) a teacher-led workshop to encourage the use of CD-ROM technology as an instructional tool, and 5) the implementation of cross-age tutoring.

The following recommendations were made: 1) further grade level specification for the summer enrichment program curriculum, 2) linking of collegial staff development to the supervision and evaluation process, 3) a full-scale revision of the district’s evaluation system, 4) periodical teacher-led technology workshops, and 5) implementation of cross-age tutoring in the bilingual classes during the regular school year.
Mini-Abstract

Wemick, Debra G.

An Internship Experience in
Supervision and Curriculum Development
in the Millville Public Schools,
Project Advisor:
Ronald L. Capasso, Ed. D.
Practicum and Seminar in Administration
and Supervision I and II, Rowan University

This internship developed and strengthened the leadership and management skills required for supervision and curriculum development. It focused on five projects in the following areas: 1) development of a summer enrichment program curriculum, 2) collegial in-house staff development, 3) revision of the district's evaluation instrument, 4) instructional integration of CD-ROM technology, and 5) cross-age tutoring.
Acknowledgments

An effort of the magnitude of this internship cannot be successful without the interdependence of a number of individuals. I sincerely appreciate the contribution of each and every professor, advisor, mentor, teacher, student, friend, and family member who has supported my efforts.

My special thanks go to Mrs. Mary Jane Copenhaver, my internship mentor and longtime supervisor. Her constant encouragement, input, and guidance have been invaluable to my professional development.

I also express my gratitude to Dr. Shelly Schneider, my building principal. Dr. Schneider was always cooperative in allowing me to carry out my various projects. She was never too busy to listen and offer advice. From her I have gained many insights into effective administration.

I reserve my greatest thanks and love for my wonderful son Matthew. Together we have gone through some very difficult times, and today we are both stronger individuals. I apologize to him for the hundreds of hours he had to spend alone while I completed my graduate work. I know he is proud of my accomplishments.
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Chapter 1

Introduction to the Internship Setting

Introduction

The field of education is highly complex and is constantly changing. The change can be either positive or negative. Positive change must be carefully planned and be carried out with an acute awareness of the setting for which it is intended. This researcher intends to fulfill the requirements of Rowan College for an internship in Supervision and Curriculum Development. Projects in curriculum, staff development, supervision, technology, and change as presented in this paper were conducted within the Millville Public Schools in Millville, New Jersey. Chapter 1 presents an overview of this educational setting.

The Community

The city of Millville is one of three urban areas in otherwise rural Cumberland County in southwestern New Jersey. The county covers 500 square miles from the Delaware Bay on the west to Atlantic County on the east, Cape May County to the south, and Salem and Gloucester Counties to the north. Approximately 138,000 people live in this county (Board of Chosen Freeholders, 1991). The other two urban areas are Vineland, the largest city, and Bridgeton, the county seat.

Millville's long history dates back to 1790, when the Union Company bought approximately 20,000 acres of land, built a dam creating what is now Union Lake, and started a lumber mill (Johnson). In 1795, visionary Joseph Buck, then Sheriff of
Cumberland County, purchased the Union Company mill and much of the surrounding land that now makes up the City of Millville. He built himself a home there, named the area Millville, and designed the layout of the town to be developed on both sides of the Maurice River. Although Buck died in 1803, his vision was fulfilled when Millville Manufacturing Company started its textile industry in 1804, James Lee opened a glass factory in 1806, and T. C. Wheaton Glass Company began in 1883 to become Millville’s largest industry.

Millville was incorporated as a city in 1866. The city operated under a charter, with the people electing a mayor. When the Walsh Act was passed in 1913, the city changed to a commission form of government. Five commissioners are elected. After the election, the five commissioners choose one of their number to serve as the mayor, generally choosing the candidate who received the most votes. In 1996, the commissioners were Emil L. VanHook, Mayor and Director of Revenue and Finance; W. James Parent, Vice Mayor and Director of Public Affairs; Robert J. Shannon, Director of Parks and Public Property; David W. Vanaman, Director of Public Safety; and Vicki Marshall, Director of Public Works (Millville City Commission, 1991).

Over the years, the city has supported a great variety of churches. In 1952, there were twenty churches. Some of them date back to the 1800's, including several Methodist Episcopal churches, a Presbyterian church, and a Catholic church and parochial school. In 1910, Beth Hillel Synagogue served the needs of a small Jewish population. St. Nicholas Old Orthodox Russian Church opened in 1937 in response to a growing number of immigrants (Johnson).
Millville now has about 26,000 residents occupying only fifteen percent of its 44.3 square miles (City of Millville Planning Board, 1983). The surrounding area is rural, used for farms, orchards, and nurseries. As already explained, Millville has historically been a manufacturing town. The economy currently depends on several major employers: Alusuisse-Lonza (formerly Wheaton Glass), Foster Forbes, Airwork, Prudential Insurance, and Durand Glass. The area's dependence on these industries needs to change, as manufacturing jobs are declining, and there is a slow increase in construction, service, and public administration jobs. In 1990, 93.6% of Millville's adults were employed, 25.8% in manufacturing and 29.1% in service-related businesses, as compared with 38.7% and 23.8%, respectively, in 1980 (Fenton, 1995). The median household income in 1989 was $31,266 with a per capita income of $13,748.

The city of Millville has increased in population from 19,096 in 1960 (City of Millville Planning Board) to 25,992 in 1990 (U.S. Bureau of the Census, 1992). In 1990, 22,531 of those persons were whites, 2,199 were blacks, 1,841 were Hispanics, and 205 were Asians. The Hispanic population in Millville is predominately Puerto Rican. The number of African-Americans has increased 2.4% since 1980, while Hispanics have increased 3.5%. The white population experienced a decrease of 2.6% in that decade (Fenton). Most of the minorities live in center city and in two public housing projects, Wade East and Delsea Gardens/Delsea Village on the edges of the city. This growth and change in population has impacted on and required a response from the city's schools.

Other factors such as mobility, language diversity, educational attainment, and family makeup also have an effect on the public schools. Four-fifths of the community is
fairly stationary. Approximately 56% of the people in Millville lived in the same house in 1990 as in 1985, and another 24% had moved to a different house but within Cumberland County. While 21,669 people in Millville speak only English, 1,203 speak Spanish in the home, and the rest of the population represents a wide variety of other languages. Thirty percent of the 16,308 adults 25 years and older have not earned a high school diploma. Less than ten percent hold bachelor's degrees. Finally, out of 9,579 households, 2,330 are married couples with children, 234 are single fathers with children, and 782 are single mothers with children.

The dependence on industry, the prevalence of unions, the increase in minorities, the low educational attainment, and the urban nature of Millville contribute to this city usually voting along Democratic Party lines. About one third of the approximately 18,000 citizens who are eligible to vote were not registered in the 1996 Presidential election year. A telephone call to the Department of Voter Registration (October 7, 1996) revealed the following registration figures: Republican, 2,313; Democrat, 2,952; Independent, 15; and undeclared, 7,366.

Millville is somewhat unique in that it has big city problems with small town limitations. Its problems include increasing crime - theft, drugs, and prostitution, a large population on welfare, and low tax ratables. As in big cities, federal and state grants and programs, such as the Urban Enterprise Zone with reduced sales tax, relieve some of the economic burden. However, unlike larger urban areas, Millville has no public bus system to provide transportation for those citizens without cars. The very poor are limited in their access to community services. Millville's services include a post office, a public
library, and a hospital with free clinics. It is very difficult in this town to find doctors who accept Medicaid patients. Millville no longer has a movie theater; nor does it have any bowling alleys or skating rinks. Its most important attraction is Wheaton Village, which honors Millville's history with a glass museum, a working glass-blowing furnace, and quaint shops from a previous time period. The city also maintains several recreational parks as well as a Babe Ruth Invitational baseball park. Millville's location encourages the popularity of fishing and hunting.

The city's size and location in rural Cumberland County influence the mental outlook of its citizens. Many of Millville's children remain in Millville as adults. Even many of the city's teachers are graduates of the Millville Public Schools. There is a large group of people who know who is related to whom and how they are related. Such "small-townness" creates a general mistrust of outsiders. It also makes people resistant to change. The changing demographics have given rise to a great deal of racial tension within the city.

The School District

The Millville Public School District began in 1849 when the city built Central School, which was designed to hold 450 students. At that time, Millville had 1,500 people and 300 attended school. That building no longer exists. It was torn down and replaced by Culver School, which was recently renovated as the district's central administration building. Today the district consists of nine school buildings: the Child Family Center (Pre-K); Bacon, Mt. Pleasant, and Wood Schools (Pre-K/Kindergarten - 5); Holly Heights, Silver Run, and Rieck Avenue Schools (Pre-K/Kindergarten - 7); Memorial High School (8 - 9); and
Millville Senior High School (10 - 12). Wood School, built in 1916, is the oldest, while Silver Run, constructed in 1992, is the newest. Total enrollment for the 1995-96 school year was 5,569.

Because of the economic realities of the city, the Millville Board of Education has traditionally been very frugal. In 1991, as in other years, Millville's per pupil expenditure was the lowest of the 212 K-12 districts in the state (Fenton, 1991). In 1995-96, the per pupil expenditure was $7,386, with a total budget of $47,615,912 (Millville Public Schools, 1995). Three-fourths of the required monies necessary to run the district came from the State. The district has especially benefitted from Abbott v. Burke and the resultant Quality Education Act, because it was included as one of the "Urban Thirty" at-risk districts. Each school now has a Building Planning Team composed of administrators, teachers, and parents to determine how the additional monies should be spent.

Another change the district has undergone recently was the switch to an elected board of education. Until 1993, Millville was a Type I district with an appointed board. Seven board members were appointed by the mayor of Millville to serve three-year terms. Budgets proposed by the board had to be approved by the Board of School Estimates. Appeals could be made to the County Superintendent. Under this system, the city government had a great deal of control over the school district. Today's nine board members are elected for three-year terms, with three up for election each year. The public votes on the budget. In the past five years, four budgets have passed. The 1996-97 budget failed. Over the years, six bond issues have also passed. The change to an elected
board has had its drawbacks. It has heightened the political nature of the board members. Each member comes to the Board with his own political agenda. The Millville Education Association (MEA) has carefully interviewed each candidate to select which candidates it would endorse for election. The change has also created a separation between city government and school district administration. The two now must compete for a limited amount of tax dollars. The district must convince the citizens of Millville of the need to support education. This is no easy task, because only one-third of the households have school-age children; at one time, the ratio was seventy-five percent, district spokesperson William Fenton revealed in an interview July 11, 1996.

Administratively, Millville Public Schools have been led by Superintendent Dr. G. Larry Miller since 1993. Central administration also includes an assistant superintendent in charge of curriculum and instruction, an assistant superintendent responsible for personnel, a director of special services, a director of facilities planning, a director of computer services, and a supervisor of school and community relations.

The latter position, public relations supervisor, was added several years ago and serves to facilitate communication within the district and between the schools and the community. Supervisor Fenton collects and disseminates a large quantity of information and statistics which influence decisions made throughout the district. Having developed informal communication channels with various sectors of the community, he quickly replaces rumors with accurate facts. He also has daily contact with all local newspapers, obtaining positive press and improving the district’s public image.
In recent years, better communication channels have contributed to a higher level of trust. Newsletters inform staff of what is happening throughout the district. Newsletters to parents increase home-school communications. Teachers are asked to serve on committees to help make decisions which will affect them, such as the school calendar and changes in parent-teacher conference days. Surveys are sometimes used to get teachers' input on various issues. One survey mailed to parents netted a fifty percent return, said Featon (July 11, 1996). At times, central administration and the MEA have worked together to develop the surveys.

Communications will play an important role in resolving two major issues now confronting the district. The Millville Board of Education is currently investigating the feasibility of privatizing the cafeteria and/or custodial services. A more critical issue is redistricting. The need for redistricting stems primarily from two factors: a shortage of space throughout the district, causing overcrowding in some grade levels, and a State mandate for more equitable racial balance among the district’s six elementary schools. A redistricting advisory board composed of parents, teachers, board members, and administrators was formed in 1994 to develop “a fair and equitable redistricting plan that is both educationally and fiscally sound” (Daily Journal, September 29, 1994). The plan selected was presented to the Board at its meeting in August of 1996. It was dependent on an addition being built to Mt. Pleasant School and called for the three smaller elementary schools (now Pre-K/K - 5) to become Pre-K - 2 primary centers. The three Pre-K/K - 7 buildings would become 3 -7 buildings. Each primary center would be paired with a 3 - 7 building to create continuity. The plan would place the youngest children in
the three small, old buildings with limited facilities for the special subjects, leading to a more equitable use of facilities. It also would more closely equalize the percentage of at-risk students (as determined by the number of students qualifying for the free lunch program) among the six elementary schools. The change would have resulted in a large number of staff being relocated, requiring a great deal of support as six elementary schools adjust to significant faculty regrouping and reorganization. It would also mean that parents must accept that all students would at one time or another need to be bussed and would not be in "neighborhood" schools. The Superintendent recognized the need to have the support of the community in order to make redistricting a positive change. He held two community meetings in the fall of 1996 to allow parents and other citizens to voice their concerns. The general consensus of the community was so negative that the redistricting plan recommended by the committee was dropped. The district must now develop a new action plan, or the State will force a plan upon the district.

The district throughout the last several decades has attempted to address the needs of the community it serves. In Millville Public Schools' most recent Demographic Study (July 1995), Fenton relates district programs to 1990 statistics. For working parents, inexpensive before- and after-school child care programs have been instituted. Also, parent-teacher conferences are held during the evening hours. In response to the increasing pressures of modern life on children, the district has increased the number of guidance counselors, substance awareness counselors, and child study team members, especially at the elementary level. The local police department provides extensive instruction at various grade levels in drug abuse and gang resistance. Each building has a
Core Team composed of administrators, guidance counselors, substance awareness counselors, teachers, and nurses to develop and implement strategies for students who use drugs, tobacco, and/or alcohol or whose parents are users. In addition, parenting workshops have been offered, with transportation provided for parents without cars. The availability to Millville parents of free half-day pre-school is an attempt at early intervention, particularly for the large numbers of children living below the poverty level. For the same reasons, instructional aides were hired for all kindergarten and first grade classes. In response to an increase in teenage mothers, students who are disruptive in regular classroom situations, and an unacceptable dropout rate, Millville in 1974 instituted its Alternative School, which is housed in the Senior High School and runs from 2:30 to 7:05.

Many of the programs that have been instituted in recent years have been in accordance with the Mission Statement adopted by the Board of Education on September 21, 1992. It reads:

We affirm the primary mission of the Millville Public Schools is to have all students graduate from high school. Upon high school graduation, the student will be able to function in a competitive modern society with marketable skills for entry into the job market. The student will be prepared to continue his or her education and will have developed appropriate social and coping skills. Millville will include programs introduced at the earliest year to promote individual success throughout each grade level and provide support services to students and parents aiding the education process.

Further, we believe a student's education will be enhanced through an environment conducive to learning. The education of all students will be secured by providing students and teachers with proper facilities, instructional materials and resources to achieve desired learning outcomes.
The School Building

This intern is working at Rieck Avenue School. This Pre-K - 7 building has over 700 students enrolled for the 1996-97 school year. The staff is led by three administrators: Shelly Schneider, principal; Edward Rush, vice principal; and Sherry Miskelly, guidance counselor. An additional part-time guidance counselor meets the needs of the K - 5 students. A full-time nurse and three secretaries complete the main office staff.

Rieck Avenue has a fairly large teaching staff. Not including the bilingual/English as a Second Language (ESL) staff, the faculty consists of a half-day preschool teacher, one full-time kindergarten teacher (two sessions), two first grade, three second grade, three third grade, two fourth grade, and two fifth grade teachers, eight academic subject teachers on the sixth and seventh grade levels, and one in-school suspension teacher. Special area teachers include one librarian, two music, one and one-half art, one technology, two physical education, one home economics, and one-half keyboarding teachers. Four basic skills teachers and a part-time Reading Recovery teacher work in pull-out programs. The special education department consists of one teacher of self-contained perceptionally-impaired, one teacher of self-contained neurologically-impaired, one teacher of emotionally-disturbed, and two resource room teachers. A speech and hearing specialist is shared with other schools in the district. The bilingual/ESL staff and many instructional aides complete the staff. Two of the Rieck Avenue teaching staff are black, and three are Hispanic; the rest are white. The majority of the faculty is female, with only eight male teachers. Many of the teachers have taught in Rieck Avenue for a
long time, some since the school opened in 1969. The staff’s average number of years of experience is 16 years (Rieck Avenue School Report Card for 1994-95). Twenty-five percent of them currently hold master’s degrees.

Shelly Schneider has been principal in the building since January 1995. She replaced the former principal who retired after serving as Rieck Avenue Principal since it opened in 1969. She was chosen out-of-district for the express purpose of facilitating change. In less than two years, she has developed a climate of trust in which change is possible. By eliciting input from teachers, she works with staff to solve problems and implement new ideas which will benefit students and teachers. She accomplishes much by empowering teachers with responsibilities for new projects. She truly believes that all children can learn, and she works toward that end.

Rieck Avenue School offers its students a variety of special programs. The Core Team and a newly established peer mediation program meet psychological and social needs of some students. The music department provides instrumental lessons for grades 3 - 7 and chorus for grades 4 - 7. Almost all of the fourth and fifth graders participate in the Christmas and spring concerts. After-school intramurals in a variety of sports involve a lot of students. Some of the staff each year organize Family Math Night. Two Student Councils (grades 3 - 5 and grades 6 - 7) plan a number of dances, contests, and other activities to get students involved.

The Parent Teacher Organization at Rieck Avenue is very active. The officers frequently volunteer to work on school projects. Their fundraising projects allow them to
sponsor assemblies and field trips throughout the year. They also organize a Fall Festival, a Family Fun Night, Santa’s Shop, skating parties, and two book fairs.

**The Bilingual/ESL Department**

A major part of this internship will be completed in the bilingual/ESL department. Since September 1992, Rieck Avenue has served as a magnet center for the district’s limited English proficient (LEP) students. The department’s nearly 150 students are predominately Puerto Rican and receive full-time bilingual instruction through the seventh grade. In the bilingual self-contained classroom, all academic subjects are taught using both Spanish and English. All students in bilingual classrooms receive daily ESL instruction. Students in eighth grade and above and those whose native language is other than Spanish receive high-intensity ESL instruction. Participation in the program is determined by scores on the Language Assessment Battery (LAB). State law also now requires parental consent for their child’s entrance into the program. The majority of the students exit the program after three years of instruction.

The department currently consists of one district supervisor, one secretary, six full-time bilingual classroom teachers, one half-time preschool teacher, one and one-half bilingual basic skills teachers, three and one-half ESL teachers, and three full-time and two part-time instructional aides. The six classroom teachers are for transitional kindergarten and kindergarten, pre-first, first grade, combined second and third grades, combined fourth and fifth grades, and combined sixth and seventh grades. Some of the ESL teachers work at the 8th to 12th grade level in the appropriate buildings.
The supervisor of the department, Mary Jane Copenhaver, has a multi-faceted position. She supervises, observes, and evaluates all teachers in the department. She is responsible for periodically updating the bilingual and ESL curricula. She works together with the Vice Principal when discipline problems occur with limited English proficient students. She has to make sure that all important forms and notices which go home to parents are translated into Spanish. She acts as the school-home liaison for a myriad of problems, even for students no longer in the program. Often she has to interpret for families in meetings with the Child Study Team. In addition, she organizes the required Parent Advisory Council and schedules a minimum of four parent meetings per school year. One other very critical part of her job is the completion and submission of state reports.

To run the department's programs, Mrs. Copenhaver has her own departmental budget. The money for this budget comes from bilingual categorical aid and from local funding. The state sends the district a dollar amount per student enrolled in the program. Since the '92-'93 school year, Millville has received $141,892 each year, which is approximately $900 per student, based on the 1992 enrollment figure of about 160 students. This figure is applied toward bilingual and ESL teaching staff. The rest of the budget money comes from the general fund. Besides salaries for teachers and instructional aides, the budget is used to purchase textbooks, other teaching supplies geared to limited English proficient students, computers and software, field trips, and special supplies for parent meetings. The biggest expenditure after regular salaries is for the bilingual summer enrichment program offered to the department's students.
Being a magnet school greatly facilitates the coordination of staff, materials, and student services. Prior to 1992, the program had bilingual and ESL teachers divided among three elementary buildings. Basic skills and ESL teachers had to spend part of their day traveling from one building to another. Space for pull-out instruction was usually inferior. The move to Rieck Avenue School greatly benefited the supervisor, teachers, students, and parents. Under the proposed redistricting plan, the department’s minority population would have been divided between Mt. Pleasant School (K - 3) and Silver Run School (4 - 7) to help the district achieve racial and socio-economic balance. Such a move would be a step backward for the department.

Conclusion

An awareness of the educational setting just described helped this researcher carry out her internship projects. The next five chapters present the rationale, related research, procedures, results, conclusions and recommendations for the five projects she completed. Chapter 2 outlines a project which developed a new curriculum for an at-risk summer enrichment program for the bilingual department. The Rieck Avenue School was the setting for a staff development project, Chapter 3, to encourage staff to offer mini-workshops to share teaching strategies with their peers. The purpose of the project in supervision, Chapter 4, was to pilot a process for the district to revise its teacher observational system. Technology is the topic for Chapter 5, an attempt to increase the instructional use of CD-ROM in Rieck Avenue School classrooms. In Chapter 6, Change, the intern worked in the bilingual/ESL department to institute the concept of cross-age
In the final chapter of this report, the intern summarizes her reflections on the value of the projects and the internship experience.
Chapter 2
Curriculum

Problem Statement

In a decade focused on school reform, states and local school districts are taking a close look at curriculum. Well-developed, updated curriculum is essential because it should direct most of what occurs within the school system. Curriculum outlines the goals and objectives for a course of study and helps to define valid evaluation of that study. Those individuals responsible for developing or revising curriculum must make sure it meets the needs of the student population for which it is intended. National goals and state standards now also greatly influence the curriculum of public schools.

Since 1992, the bilingual department of the Millville Public Schools has operated a summer enrichment program for its K-5 students. The program has a set of stated goals, but no formal curriculum guides for teachers to plan their instruction. They have been using curriculum guides designed for the academic year. The enrichment nature of the program requires a curriculum of its own. The program is voluntary, lasts for five weeks for half-days, and both reinforces and enriches the skills that have been taught during the year. Staff is limited by time and therefore must carefully choose what skills to address. The manner in which they address them must be hands-on, fun, and different than during the school year. In order to fill the program's curricular void, this intern directed the development of a new summer enrichment curriculum.
Review of the Literature

Researchers and experts in the field contend that curriculum plays an important role in school reform. Glatthorn (1994), a consultant to school districts, emphasizes the importance of a quality curriculum and of the process of developing that curriculum. He insists that curriculum developers have a global picture of what influences the curriculum. These influences include national curriculum projects, state guidelines, and research on teaching, learning, and child development. Locally, the district's vision and goals as well as teacher and administrative recommendations also play an important role in the final product.

Glatthorn (1994) recommends a twelve-step approach to the development process. Step 1 is the identification of educational goals. With the general goals in mind, the developers review the requirements set by state frameworks. Step 3 is to refine the subject goals based on the frameworks. These goals will guide the rest of the process. The next step is to review current research on effective practices. The research will aid in the decision making required for Step 5, the development of the desired features of the curriculum. Step 6 usually involves a great deal of in-district input as the actual curriculum framework gets more specific and more focused on the population for whom the curriculum is intended. Step 7 identifies the horizontal components, or different subject areas, within the curriculum. Step 8, vertical articulation, develops the scope-and-sequence chart. The final four steps involve identifying available curriculum materials, producing the actual curriculum guide, evaluating that guide, and then deciding how to
distribute the guide. Once the curriculum has been developed, it enters a subsequent process of updating and revisions.

Glarthorn (1994) also identifies four factors that contribute to a quality curriculum. Shared leadership ensures that all stakeholders have input during the curriculum development and implementation process. Curricular decisions are made based on appropriate data and research-based knowledge. A third factor is cooperation and teamwork, both in the development and in the actual implementation of the curriculum. Lastly, professional development must be directly related to curricular reform goals.

Westwood Public Schools in Massachusetts value such factors as they develop new curricular roles for teachers (Monson & Monson, 1993). The district is following the Curriculum Inquiry Model to guide them in the collective and individual decision-making process. The process begins with a collective determination of the central purpose and the desired learning outcomes. Once the outcomes are established, individual teachers determine what themes, materials, and learning strategies they will use and what professional development they personally need. Committees which include teachers collectively decide on assessment standards and strategies, a reporting system, and the staff development needs on a building or district level. When supported and encouraged by administration, teachers can and should play a significant role in curriculum development, implementation, and revision.

New Jersey school districts are in the midst of trying to realign their curricula to the Core Curriculum Content Standards developed by the New Jersey State Department of Education (1996). The standards are an attempt to define a “thorough and efficient”
education, as guaranteed in the New Jersey State Constitution. They indicate the knowledge and skills all students should possess by the time they have completed grades 4, 8, and 12. Fifty-six standards are divided into seven academic content areas: Visual and Performing Arts, Comprehensive Health and Physical Education, Language Arts/Literacy, Mathematics, Science, Social Studies, and World Languages. Five additional workplace readiness standards apply across all the content areas. Each standard is specified by a number of behavioral indicators.

The rationale for the New Jersey Standards (1996) is the increasing demands of the twenty-first century. Education must meet the demands of a global, information-based society by setting high standards for excellence, creating lifelong learners, and developing problem-solving, decision-making, and critical thinking skills. Curriculum must reflect these needs.

An important consideration in developing a curriculum is the population it will serve. Does it meet the special needs of a diverse student body? Many schools today include large numbers of at-risk students and must ascertain that the curriculum addresses their academic, social, and psychological needs.

A report by the Center for Research on Effective Schooling for Disadvantaged Students (Legters & Slavin, 1992) identifies factors which place students at risk of academic failure or low achievement. Socio-economic status, race/ethnicity, language background, family structure and stability, and parents’ educational level potentially affect a student’s chances for success. Natriello, McDill, and Pallas, as cited by Legters and Slavin estimate that as many as forty percent of the school age children can be considered
at risk on the basis of at least one of those five factors. When these children are enrolled in schools with large numbers of poverty students, poor resources, and/or unchallenging curricula, the probability of their failure increases. Identifiable outcomes for these children are poor attendance, low achievement, discipline problems, and retentions.

Dorrell (1992) further describes and offers explanations for the characteristics of at-risk children. At-risk students are underachievers, failing to work to their potential. They do not take advantage of learning opportunities. A possible reason for the lack of effort is insufficient internal and/or external motivation. In the child's home and community environment, education is neither valued nor encouraged. Poverty seems to be the greatest factor in creating at-risk children. Students living below the poverty level often lack good nutrition, basic health care, sufficient clothing, preschool opportunities, and access to extra-curricular activities. Most importantly, they often suffer from low self-esteem and an attitude of hopelessness.

Dorrell (1992) also offers possible solutions to the educational difficulties of such students. The individual classroom teacher who cares about the whole child can be the best intervention. Schools that have relatively small student populations tend to be more effective. Small class size is also extremely important for giving at-risk children the attention they need. At-risk children need to feel they belong in order for them to achieve academically.

Instead of belaboring the factors that put children at risk, Benard (1993) focuses on the "resiliency" factors of at-risk students who overcome the barriers and find success. Resilient children display social characteristics of responsiveness, flexibility, caring,
communication skills, and a sense of humor. Being able to plan and knowing how to get help from others are important problem-solving skills. Another important resiliency trait is autonomy, a sense of oneself with the ability to act independently and to have some control over one's environment. A crucial characteristic is a positive sense of purpose and future. All of these factors can help to erase the "at risk" label.

Benard (1993) identifies three environmental attributes that encourage resiliency in potentially at-risk children. A caring, supportive environment in the home, school, or community produces positive outcomes. The school environment is especially effective when it establishes high academic expectations for all students, provides a rich and varied curriculum and other necessary resources for achieving the expectations, and encourages a high level of student participation. Participation is very important in that it connotes having some control in one's life. Schools can facilitate participation by offering students a variety of meaningful academic and social activities. Instructional strategies such as hands-on activities, cooperative learning, and peer and cross-age tutoring provide opportunities for increased participation.

Butler (1997), a Missouri elementary school principal, shares Benard's focus. Jefferson School is ninety-six percent African American. Thirty-six percent receive free or reduced lunch, a frequent identifier of at-risk children. At the time Butler was hired, discipline and teacher morale were very poor, and students were scoring below the thirtieth percentile on standardized tests. Past reactions to the low scores were excuses and a watering down of the expectations and the curriculum. Butler reversed the trend by revamping the curriculum, focusing on enrichment rather than remediation. To develop
higher-level thinking skills, subject areas were integrated. Content became more in-depth, allowing students to understand fewer concepts but with broader applications. Most importantly, expectations for students were significantly raised, with support provided for meeting the expectations. The results were better test scores, decreased behavior problems, increased parental involvement, and improved teacher morale.

The literature cited clearly proposes that curriculum development be approached thoughtfully and systematically. The process is more effective when it includes teachers. In addition, the curriculum must take into account both the demands of national goals and state standards and the special needs of the school population. With this research base in mind, the intern led the development of a new curriculum for the bilingual summer enrichment program of the Millville Public Schools.

**Methodology: Research Design**

The purpose of this project was to provide a new curriculum for at-risk bilingual students in the Summer Enrichment Program. The intern formed a committee composed of the summer program teachers. Classroom teachers completed a needs assessment of the skills that needed reinforcement at each grade level. The intern then used the needs assessment, a list of learning activities provided during the summer program, and the New Jersey Core Curriculum Content Standards to develop the new curriculum. The committee evaluated the final product using a checklist of seven criteria.

**Methodology: Sampling**

The target population for the summer enrichment program curriculum includes students who have just completed kindergarten through fifth grade in the bilingual
They vary greatly in levels of English proficiency. Some of the students have just passed the Language Assessment Battery which qualifies them to exit the bilingual program and enter the monolingual classroom. Others are recent arrivals, primarily from Puerto Rico, and speak and understand very little English. Some of the students have been referred to and classified by the Child Study Team and receive special education services during the school year. Usually one hundred percent of the students qualify for the free breakfast and lunch program, which is also an integral part of the summer program. It is a truly at-risk student population and greatly benefits from the summer enrichment program.

The staff that will implement the curriculum varies from year to year. Depending on budget constraints and the number of students, the program employs four to six bilingual teachers and about four bilingual instructional aides. Usually the teachers and aides work in Millville’s bilingual/ESL department during the school year; however, occasionally an out-of-district teacher is hired for the summer program.

Methodology: Procedures

While reviewing the literature, the intern, as administrative leader of the curriculum development process, formed a curriculum committee composed of the four bilingual teachers hired to work in the summer enrichment program during the summer of 1996. The committee met before the end of the school year to discuss the general goals of the program, review the scheduled field trips, and reach a consensus on the themes that would guide the content of instruction. The intern asked the teachers to complete and submit outlines of the learning activities and skill focuses for each week of the summer program.
She also indicated to the teachers that she would make frequent informal classroom visitations to view the types of activities occurring and the student reactions to those activities for the purpose of developing valid and useful instructional objectives.

The intern also asked the bilingual classroom teachers from the regular school year to make a list of special academic and social needs of the students in their particular grade level. The intern herself, as the fourth and fifth grade teacher, completed such a list. All these lists were then compiled into a needs assessment (see Appendix A).

Because of the enormous effect of the New Jersey State Core Curriculum Content Standards, the intern spent a great deal of time studying the standards and the indicators for students through grade 4 to determine which ones the summer enrichment program could effectively address. She then compared the list with the teacher-generated needs assessment. The weekly summaries of summer program activities became the third data source. Using the Core Curriculum Content Standards as the primary organizing structure, the intern compiled a list of objectives for seven areas: language arts literacy, mathematics, science, social studies, visual and performing arts, health and physical education, and cross-content workplace readiness. She also wrote the historical background and purpose of the bilingual summer enrichment program and an overview of the program's instructional focus. A copy of the district's mission statement was also included.

The first draft of the curriculum guide was presented to the curriculum committee. One member of the committee had dropped out, since she was only hired for the summer program. The other three reviewed the curriculum and recommended additions,
clarifications, word changes, and consolidations. The intern amended the curriculum based on the committee’s recommendations. The final draft (see Appendix A) was used as the basis for evaluation of the project.

**Methodology: Measures**

To measure the quality of the new summer enrichment program curriculum, the intern asked four bilingual classroom teachers and two ESL teachers to review the curriculum and complete a questionnaire (see Appendix A). The questionnaire asked them to rate the curriculum against seven criteria using a five-point Likert scale, a score of five being excellent to one being poor. The seven criteria were:

1) ease of use
2) level of specificity
3) flexibility allowing for various teaching styles
4) appeal to students
5) ability level appropriateness
6) ability to meet individual needs of students, and
7) suitability to a variety of student learning styles.

The intern tabulated and averaged the ratings for each criteria to assess the overall quality of the curriculum.

The intern also gave the curriculum reviewers the opportunity to make additional comments about the curriculum by adding three open-ended questions to the questionnaire. Reviewers could write responses to:

1) What did you like best about the curriculum?
2) What needs to be changed in the curriculum?

3) What should be added to the curriculum?

Answers to these questions were noted in addition to the quantitative data.

**Project Evaluation Results**

The intern designed this curriculum project for the purpose of providing a curriculum for a summer enrichment program working only with curriculum from the regular school year. She judged the effectiveness of the finished product based on a questionnaire completed by six bilingual and ESL teachers in the department.

Using a five-point Likert scale ranging from poor (1) to excellent (5), the questionnaires netted the following ratings:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ease of use</td>
<td>4.50</td>
</tr>
<tr>
<td>Level of specificity</td>
<td>3.50</td>
</tr>
<tr>
<td>Flexibility allowing for various teaching styles</td>
<td>4.67</td>
</tr>
<tr>
<td>Appeal to students</td>
<td>4.00</td>
</tr>
<tr>
<td>Ability level appropriateness</td>
<td>3.17</td>
</tr>
<tr>
<td>Ability to meet individual needs of students</td>
<td>4.17</td>
</tr>
<tr>
<td>Suitability to a variety of student learning styles</td>
<td>4.67</td>
</tr>
</tbody>
</table>

These quantitative scores were combined with the qualitative responses received for the three open-ended questions. To the question “What did you like best about the curriculum?” teachers responded that they liked the flexibility it gave them, it allowed them freedom to be creative, and it would be very easy to use. The second question asked
for needed changes. All but one teacher said no changes were needed at this time. The remaining teacher would like to see the curriculum broken down by grade level. The final question, "What should be added to the curriculum?" received no responses.

Findings, Conclusions, and Future Study

Because curriculum is so important for focusing and guiding instruction, the intern elected to create a curriculum specifically for the bilingual summer enrichment program in the Millville Public Schools. State standards, research on student learning and effective teaching, teacher input, classroom observations, and the special needs of the program's at-risk population all played a significant role in the formulation of the curriculum. The resulting curriculum encourages student-centered learning, integrated instruction, cooperative learning, hands-on activities, and the use of computer technology as an instructional tool. It strives to promote the development of critical thinking, problem-solving, and decision-making skills so necessary in today's workplace.

The quantitative results of the questionnaire range from good to excellent for the seven criteria. It rated highest, 4.67, for its flexibility in allowing for various teaching styles and for its suitability to a variety of student learning styles. These results align with the district's mission, respecting the diversity of its learners and vowing to provide the necessary support for all its students to learn. The lowest ratings were for the ability level appropriateness, 3.17, and the level of specificity, 3.50. These low scores, while still slightly above satisfactory, probably result from the gradeless design of the curriculum. The design reflects the population's whole continuum of grade level abilities as opposed to actual grade level placement. However, some teachers feel more comfortable with greater
grade level specification. Ease of use, appeal to students, and ability to meet individual
needs of students received "very good" ratings of 4.50, 4.00, and 4.17, respectively.
Based on the ratings, the intern judges the project to have been successful and worthwhile.

For the future, the intern recommends that the curriculum be implemented for the
summer enrichment program beginning in 1998 and be reevaluated and revised as needed.
She recommends that a curriculum committee composed of teachers consider the
possibility of including more grade level specificity. She especially hopes that the
curriculum will encourage the summer program staff to provide effective learning
activities for Millville's bilingual elementary students.
Problem Statement

If current school reform efforts are to achieve excellence in education, staff development must play a significant role. More and more changes and new strategies are offered, encouraged, and even thrust upon today's educators. In order for teachers to adopt and implement more effective approaches to improve student achievement, they need increasing opportunities for professional development and growth. New Jersey's current plan, beginning in 1999, to require all teachers to accumulate one hundred hours of staff development over five years will add even greater impetus to this process. Central administration, principals, supervisors, and the teachers themselves all must assume the responsibility for this crucial ingredient in reform.

In the Millville Public Schools, staff development opportunities are available, but it does not seem to be a major priority. In the last ten years, very few in-service days have been scheduled, except for the traditional first day back in September. Central administration, though, has responded to an increasing number of requests by teachers for days on which grade level articulation can occur. A variety of technology workshops are offered during the summer months. Originally they were taught by the district technology coordinator, but now some of them are presented by other staff members. Teachers are also permitted to take school business days for out-of-district workshops. While some staff members regularly attend out-of-district workshops, others rarely avail themselves of
this opportunity for professional development. Two years ago, the administration began requiring teachers desiring to attend a workshop to complete a justification sheet explaining how participation in the out-of-district workshop would improve student achievement. However, the accountability ended there; after the workshop, the teacher was not required to implement new ideas acquired at the workshop. In order to increase collegial sharing of information and strategies learned at out-of-district workshops, the intern implemented a staff development program in which Rieck Avenue School staff members present mini-workshops to small groups of their peers.

Review of the Literature

The school reform movement asks today's teachers to offer a wide variety of learning activities and teaching strategies in order to meet the individual needs of a diverse student population. Staff development has traditionally meant teachers attending out-of-district workshops or districts bringing in outside consultants to train a large group of teachers in some teaching methodology. Research studies and current literature suggest that staff development is moving away from its traditional form in response to the necessities of the reform movement.

In response to research on learning, teaching strategies have changed. It is now generally accepted that students learn best through active participation. Yet many districts still hold to a traditional staff development program that treats teachers as passive learners (Lieberman, 1995). The result is little or no change in teachers' teaching behaviors and consequently little or no change in student achievement. Educators also now strive to encourage lifelong learning. Traditional staff development is piecemeal. To facilitate
school reform, staff development must be an ongoing, integral part of the school culture, according to Lieberman.

Sparks and Hirsh (1997) also see a paradigm shift in staff development as essential for school reform. The focus of staff development must shift from the development of just the individual to the development of both the individual teachers and the organization as a whole in order to have a concerted effort to provide all students with opportunities for academic success. This shift in thinking requires a change from piecemeal efforts to a staff development program that is an integral part of strategic planning on a department, school, or district level. "Off the job" training needs to be replaced by "job-embedded" learning. No longer should staff development mean experts delivering nicely packaged knowledge; instead, teachers engage in processes that will develop their teaching expertise. These processes can include action research, peer observation and coaching, study groups, and curriculum planning. The job of the staff developer then becomes one of facilitator and consultant to aid teachers in their ongoing professional improvement.

Staff development must be all-encompassing to lead to school reform.

This new approach to staff development significantly changes the roles teachers play. Reform demands that teachers rethink the way they teach. They must become reflective practitioners (Darling-Hammond & McLaughlin, 1995). To encourage teachers' reflective practice, districts must promote a vision of professional development as a lifelong process based on collegial inquiry, exploration, and experimentation. Schools must institute policy changes to facilitate such activities. Scheduling changes can allow
Districts can also connect with colleges, universities, and Professional Development Schools which can provide valuable support.

The district's commitment to change through staff development is crucial. A study by Hopkins (1990) analyzed the relationship between teacher personality and school climate and how it affects professional development and reform efforts. He summarized his findings as the equation, "positive climate evolved by positive people equals effective use." If teachers are motivated, and if they work in a climate where collegiality and experimentation are encouraged, they will work towards self-actualization, improving their professional expertise.

In Santa Cruz, California, the city school district replaced its traditional staff development efforts with Professional Development Support Teams (Krovetz & Cohick, 1993). Teachers choose a teaching strategy or approach in which they would like to become more proficient. Then teachers with similar goals form a peer coaching team to support each other in achieving their professional goals. Tied closely to the evaluation system, the administration has observed that teachers' classroom behavior is indeed changing. The collaboration has greatly improved school culture, with collegiality creating a climate of respect and trust among teachers. Their shared goals produce common expectations and better educational opportunities for students.

Bunting (1997) agrees with this teacher-centered approach to staff development. She maintains that existing staff development seminars are still useful; however, outside experts may not provide the best recommendations to meet the individual needs of the school and its student body. She offers five suggestions for teacher-centered staff
First, the principal should encourage the teachers to choose an area in which to develop expertise. The instructional leader needs to give teachers opportunities to present case histories of individual students. The principal should strive to build an intellectual climate within the school. Encouraging teachers to form groups based on various personal interests also creates a positive climate. Finally, Bunting recommends that principals start some form of idea exchange whereby teachers share their ideas with their peers. Such a teacher-centered approach to staff development motivates and energizes teachers to grow personally and professionally and increases the strength of the organization.

Too often financially-strapped districts find it easy to cut the budget in the area of staff development. Stern, Gerritz, and Little (1989) analyzed the average taxpayer and participants’ costs for traditional staff development activities. The costs are divided into the cost of participants’ time, which includes substitute pay, reduced instructional time, contractual salary increments, and the cost of providing staff development activities, which consists of presenters’ time, use of facilities, and materials. The major cost, they claim, is the time participants and leaders actually spend in staff development activities. They calculate that the taxpayers’ average investment in staff development represents only 1.43 percent of total classroom costs in California. They also compare costs according to the type of staff development. District-organized workshops on staff development days are the most economical, while the most expensive option is out-of-district conference attendance, which is approximately four times as costly. The new concept of staff development makes more sense from an economic standpoint.
Del Norte High School in Albuquerque, New Mexico responded to budgetary cuts in staff development by implementing a new in-house program called INService Ideas for Teacher Encouragement [INSITE] (Dunaway, Mechenbier, Parsons, & Wright, 1987). The INSITE program takes advantage of existing facilities, expertise, and personnel. Two mini-workshops per month are given during the teachers’ thirty-minute lunch period by teachers on topics of their choosing. They had thirty percent of the staff attending sessions the first year. The greatest criticism of the program was a lack of time. The observed benefits were increased conversation among teachers, greater interdepartmental interest, and stimulated teacher motivation. The program has been very successful.

A district in New Jersey also tried an innovative approach for a half-day in-service (Sills, 1996). The yearly scheduled in-service day had become very ineffective. The staff development committee developed a program called Inside Inservice: A Smorgasbord from a Superb Staff. Teachers with special areas of expertise were asked to share their knowledge with their peers. Sixteen out of the 115 teachers consented to present two-hour workshops. Some of the teachers paired up. Because teachers were taking a professional risk, administrators offered a great deal of encouragement and support. The program was very successful. Presenters received positive feedback from their peers. Teachers elected to continue the program the following year.

The literature clearly defines the direction staff development must take if it is to complement and facilitate school reform. In order to encourage a collegial approach to professional development, the intern implemented a staff development program in which teachers offered mini-workshops to their colleagues.
Methodology: Research Design

In order to stimulate sharing of ideas garnered from out-of-district workshops, the intern designed and implemented a new staff development program she named Learn It, Live It, Share It. After first surveying teachers about the number and type of out-of-district workshops they had attended during the previous school year, she introduced the new program to all pre-K to seventh grade staff members at a monthly Rieck Avenue School faculty meeting and requested volunteers to present mini-workshops to small groups to their peers. The intern herself presented the first mini-workshop, followed by additional workshops presented by other teachers. All teachers were invited to participate in the program. The intern evaluated the success of the program by means of a staff questionnaire completed by teachers who had attended at least one of the mini-workshops offered.

Methodology: Sampling

All forty-nine Pre-K to 7th grade teachers at Rieck Avenue School were invited to participate in the Learn It, Live It, Share It program. Participation either as a presenter of an attendee was strictly voluntary. Four teachers, one from first grade, one from sixth grade, and two from the special education department, gave mini-workshops. Some of the workshops were not appropriate for all grade and/or subject areas. A total of twelve teachers attended at least one of the workshops.

Methodology: Procedures

After reviewing available literature on staff development, the intern designed a survey to assess the professional development activities of the Rieck Avenue School
teaching staff (see Appendix B). Teachers completing the survey indicated how many workshops they had attended during the previous school year and listed them. They also responded "yes" or "no" to five questions:

1) Did you bring back any new ideas or materials you have used successfully in your classroom?
2) Do you plan to try out any new strategies in your classroom this year?
3) Have you ordered new materials that others may find useful in their classrooms?
4) Would you be interested in attending one-day mini-workshops after school to find out about some of the new ideas learned last year?
5) Would you be willing to present an informal 45-minute workshop after school to share a new idea or interesting materials with a small group of interested colleagues?

Thirty staff members returned the survey. Four of them had attended one workshop, nine had attended two, five attended three workshops, and six had attended four or more workshops. Twenty-three respondents said they had brought back new ideas that they had used successfully in their classrooms. Sixteen have new materials that others would find useful. Seventeen of the thirty, or just over half, were interested in attending after-school mini-workshops, and only five were willing to be presenters.

When the intern was ready to begin the Learn It, Live It, Share It program, she introduced the concept to the staff at a monthly faculty meeting and asked for volunteers to present workshops. She stressed that the mini-workshops would be very informal and would generally be very small groups. She encouraged them to watch for workshop notices next to the staff sign-in sheet in the office.
The intern herself planned the first mini-workshop based on a *Strategies for Struggling Readers* workshop she had attended. She prepared a brief outline and a packet of handouts she thought others might find useful. She selected a date for the workshop and prepared a notice and sign-up sheet for the office. The day of the workshop, four teachers came. However, some of them had other commitments and had to leave early. The intern condensed her planned presentation from forty-five to fifteen minutes. In spite of the shortened time, the attendees expressed interest in the strategy presented.

The intern next approached the teachers who had expressed a willingness to present a workshop. They discussed the topic to be presented and agreed on a date. The second scheduled *Learn It, Live It, Share It* workshop was on a strategy called “Pass It On” learned in a workshop on brain-based research. It was very difficult to schedule an after-school date because of the number of teachers involved in after-school clubs and intramurals and others with family commitments, so the intern switched to mornings. However, holding the workshops before school limited the time frame to fifteen minutes. The “Pass It On” mini-workshop was very successful, attracting nine teachers.

The third mini-workshop was on direct instruction for reading and was presented by two special education teachers. It was also held before school and was attended by three people. The fourth workshop was given by a first grade teacher for other primary teachers to share materials. Three attended the before-school workshop.

For each workshop, the intern acted as a facilitator. She scheduled the date, determined where it would be held, and prepared a notice to advertise the workshop (see Appendix B). She also offered to xerox any handouts for the presenters.
A month after the last mini-workshop, the intern distributed copies of the post-project questionnaire to teachers that had attended the workshop. She evaluated the program based on those results.

**Methodology: Measures**

To assess the effectiveness of the *Learn It, Live It, Share It* program, the intern asked staff members who had attended at least one mini-workshop to complete a questionnaire about the program. The questionnaire (see Appendix B) posed five questions:

1) **How many *Learn It, Live It, Share It* mini-workshops have you attended?**

2) **Did the workshop(s) give you valuable teaching ideas?**

3) **Have you tried any of the ideas in your classroom?**

4) **Do you feel the *Learn It, Live It, Share It* Program should be continued?**

5) **Would you be willing to present a mini-workshop in the future?**

Questions 2 through 5 only needed to be checked “yes” or “no”. To further assess the effects of the program, the intern also informally interviewed each of the presenters following their mini-workshop to gauge their feelings about sharing their experiences with their peers.

**Project Evaluation Results**

The questionnaire about the *Learn It, Live It, Share It* staff development program was completed by all twelve teachers that had attended at least one of the workshops.

When asked how many workshops they had attended, one attended three, five attended two workshops, and six had attended one *Learn It, Live It, Share It* mini-workshops. All
twelve responded that the mini-workshops gave them valuable teaching ideas (Question 2), but only four out of the twelve, or one third, had tried the ideas in their classrooms (Question 3). Nine respondents, seventy-five percent, thought that the Learn It, Live It, Share It program should be continued (Question 4), but only two would be willing to present workshops in the future (Question 5).

The informal interviews the intern conducted with the four presenters also yielded information about the value of the program. The four teachers expressed that they felt comfortable with the small informal group setting and felt good about themselves for being able to share the information with their peers. The two special education teachers who jointly presented one of the workshops claimed the collegial support considerably lessened any anxiety over leading the workshop.

Findings, Conclusions, and Future Study

The evaluation results obtained from the post-project questionnaire and from post-workshop interviews with the various presenters yielded valuable information to the intern. When planning the program, the intern had hoped to provide a series of at least six after-school workshops. It soon became apparent that after-school workshops were not going to be successful. The change to before-school workshops increased participation but significantly limited the time available and therefore altered the nature of the presentations, allowing less time for explanations and questions. Furthermore, five teachers had indicated on the original survey that they would be willing to present a mini-workshop; two of them changed their minds when the program started. One of the two
co-presenters had not wanted to give a workshop when she completed the survey. In that respect, the program was less than successful.

On the other hand, the results tabulated from the post-project questionnaire are encouraging. All the participants felt they had gained valuable ideas by attending the workshops, even though some of them had not actually implemented them in their own classrooms. The most encouraging result is that three-fourths of the participants felt that the program should continue. However, these nine teachers are probably highly-motivated teachers who take an active role in assuming responsibility for their own professional growth and take advantage of opportunities to attend out-of-district workshops.

Based on the results of the program and on the available literature, the intern would probably not continue the program on an official basis. While the goals were valid, the Learn It, Live It, Share It vehicle did not fulfill the intended purpose to the extent desired. The intern instead recommends that collegial sharing of information gained from out-of-district workshops be encouraged through the supervision process as part of the Annual Performance Review and the Professional Improvement Plan. Principals and supervisors can ask supervisees to talk about workshops they have attended during the year, identify valuable ideas, determine what staff members would benefit from the ideas, and try to arrange a convenient time for small group sharing. In this way, administrators can stimulate greater collegiality, improve school culture, and promote professional growth.
Supervision of Instruction

Problem Statement

Supervision and evaluation of staff is one of the most important administrative responsibilities. However, administrators often do not devote sufficient time to this activity. New Jersey Administrative Code requires that properly certificated personnel formally observe all tenured teachers once annually and hold post-observation conferences. Non-tenured teachers receive at least three formal observations. All teachers also receive an annual performance review.

The evaluative instruments of a district generally guide the supervisory process. The Millville Public Schools have been operating with the same instrument for about twenty years. Used by principals, district supervisors, and department heads, it consists of three forms, A, B, and C (see Appendix C). A teacher completes Form A prior to a scheduled observation, listing the lesson's objectives, required materials, and planned sequence of procedures. Form A becomes the focus of the pre-observation conference. However, for tenured teachers and some non-tenured teachers, the pre-observation conference consists only of scheduling the observation. Observers complete Forms B and C following the observation. Form B provides space for a narrative summary of what occurred during the lesson. Form C has a section for the observer's comments about the observation, another section to list the teacher's strengths and weaknesses, and a third area to be used for a summary of ideas discussed during the post-observation conference.
Some observers forego the conference, complete this section, and merely give the completed forms to the teacher to sign and return.

The design of these forms for documenting the formal observations leads to a lack of inter-rater reliability. The district does not have an established list of criteria that evaluators should be able to observe in an effective teacher. Therefore, each evaluator develops his/her own style of evaluation, whose focus may significantly differ from another evaluator. These forms have often proven ineffective in promoting professional growth among tenured teachers. In order to initiate a district revision of the instrument used for formal observations, this intern piloted a process in which teachers develop a new, more effective instrument.

Review of the Literature

For decades, researchers have studied the supervision and evaluation of teachers. Early studies focused on teachers' content knowledge. More recent research addresses the effects of teacher performance on student learning (Gibney and Wiersma, 1986). In order to assess what a teacher does, most evaluation consists of formal and informal observations of the teacher, with or without accompanying pre- and post-observation conferences between supervisor and supervisee.

Most researchers agree that supervision of instruction serves two major purposes: accountability and professional development. The first purpose involves gathering data for personnel decisions concerning tenure and renewal or dismissal. The second purpose is to provide teachers with feedback about their teaching in order to promote improvement and/or growth.
Stiggins (1986) argues that most teacher evaluation systems fulfill only one of the two purposes, namely accountability or summative evaluation. He further proposes that it is very difficult to have one evaluation system that can serve both the summative accountability function and the formative growth promotion function. However, he feels that both purposes are important. The focal point of an accountability system is the incompetent teacher and is based on minimum expectations. Such a system is also useful for developing a beginning teacher. In order for an evaluation system to foster professional development, it must lead the competent teacher to professional excellence.

Saphier (1993) makes even greater distinction. First, he separates supervision from evaluation. Both involve observations of teachers. The difference is that evaluation means using the data to make decisions from a position of authority. He equates supervision with a formative approach and evaluation with a summative approach. He further divides both types into nine functions. Supervision consists of “cheerleading,” facilitating, stimulating, and problem solving. Feedback from observations has the ability to validate and reinforce effective teaching behaviors, facilitate teachers formulating goals for professional growth, stimulate exploration of new strategies, and help teachers identify and find solutions to classroom problems. Evaluation, on the other hand, monitors use of the curriculum, focuses on weak areas and directs improvement strategies, provides valid data for making decisions about issues such as tenure and teaching assignments, and identifies incompetent teachers in need of remediation or dismissal. Saphier’s ninth function of observation is to send a message of the value of teaching.
McColskey and Egelson (1993) emphasize that current school reform efforts require teachers to rethink the way they teach. They believe a formative evaluation system is essential for the changes to take place. Based on the formative systems they piloted in three North Carolina school districts, they claim that similar systems benefit the district in five major ways. The system encourages teacher self-evaluation and reflection, which in turn leads to change. The teacher's professional growth is individualized according to his/her interests. Teachers are treated as professionals, which positively affects teacher morale and motivation. An increase in teacher collegiality occurs as a result of growth initiatives. Finally, the system provides the support teachers need as they explore new instructional approaches.

Formative systems advocated by McColskey and Egelson (1993) differ from summative systems in several aspects. The administration establishes the evaluation criteria for a summative system, whereas the teachers themselves choose the criteria against which they are evaluated in a formative system. Summative classroom observations are done by an administrator, while peers can conduct formative classroom observations. The resulting evaluation report becomes part of the teacher's personnel file in a summative system; this is not the case in a formative system. Furthermore, participation in the formative system is totally voluntary, but participation in summative evaluation is required.

Regardless of which evaluation system is employed, certain factors must be taken into consideration. Evaluation systems vary in their validity, reliability, and discrimination (Manatt and Kemmis, 1997). A valid instrument uses carefully chosen criteria that measure
effectiveness. The reliability of an instrument means that results should be relatively consistent over time and by different evaluators. A high-inference instrument which requires a great deal of evaluator subjectivity loses much of its reliability if used without thorough evaluator training. A third desirable characteristic, discrimination, measures the system’s ability to distinguish levels of performance from incompetence through competence to excellence.

An evaluation instrument generally bases its validity on criteria derived from proven effective teaching behaviors and characteristics. Saphier (1993) lists fifteen parameters of teaching: 1) student engagement, 2) momentum, 3) teacher expectations for students, 4) teacher-student relations, 5) discipline, 6) principles of learning, 7) clarity, 8) use of space, 9) use of time, 10) classroom routines, 11) models of teaching, 12) objectives, 13) evaluation, 14) learning experiences, and 15) organization of curriculum. These parameters serve as an organizer for feedback from supervisor to teacher. For each parameter, the observer can make a claim about the person’s teaching, substantiate that claim with evidence, interpret the evidence, and make a judgment about the effectiveness of the behavior.

Danielson (1996) calls her organizer a “framework for teaching.” Her framework consists of four domains: planning and preparation, classroom environment, instruction, and professional responsibilities. Each domain is subdivided into several more specific components. Her twenty-two components correspond closely to Saphier’s parameters. Danielson proposes that the framework is useful for experienced as well as beginning
teachers. Without the structure it provides, she says, evaluation is based on the personal beliefs of the observer and reduces the validity.

A four-year study in Texas (Tyson and Silverman, 1994) illustrates the difficulty in achieving reliability and at the same time stimulating professional growth. Texas schools use a statewide evaluation instrument, the Texas Teacher Appraisal System (TTAS). The instrument gives each teacher a numerical rating based on thirteen criteria in five domains of teaching: instructional strategies, classroom management, presentation, learning environment, and professional growth and responsibilities. Tyson and Silverman compared scores in one large district over four years from 1988 to 1992. They found that primary appraisers (in-house administrators) gave significantly higher scores than secondary appraisers (administrators from other buildings) and attributed that phenomenon to a desire by primary appraisers to maintain a positive relationship. They also noted an increase in scores from year to year, falsely indicating growth in the quality of teaching. The instrument is used for a reward system, creating pressure to inflate scores. From the second to third year, this increase did not occur, apparently due to intense evaluator retraining prior to the third year of the study.

One has to question the reliability and discrimination of the Texas Teacher Appraisal System and systems like it. While achieving reliability and discrimination are difficult, the instruments no less have value. Gibney and Wiersma (1986) analyzed the teaching competencies of student teachers at the University of Toledo using the high-inference Teaching Performance Assessment Instrument (TPAI) and the low-inference Classroom Observations Keyed for Effectiveness Research (COKER). Using both
instruments, they compared the results of elementary, secondary, and special education
student teachers for forty-nine competencies within the domains of 1) planning, materials,
and evaluation, 2) methodology, 3) communication skills, 4) learner reinforcement and
involvement, and 5) professional standards. Student teachers in special education program
scored significantly higher than the primary and secondary student teachers. Gibney and
Wiersma interpret the results as an indication of the success of the special education
program and as a reflection of the variation in the nature of teaching at different levels and
subjects. Nevertheless, they find the TPAI and the COKER to be effective,
comprehensive, and fairly objective instruments for evaluating student teachers.

Many educators have questioned the usefulness of current teacher appraisal
instruments, and changes are beginning to occur. A summative system that meets a
district's needs for non-tenured and incompetent teachers most likely does not encourage
professional growth in already proficient teachers and therefore becomes a relatively
useless, frustrating requirement. Depending on the restrictions of state regulations, some
districts are designing and implementing more effective formative evaluation systems.
McColskey and Egelson (1993) describe dual-purpose systems in which summative
evaluations are conducted every few years and formative evaluations occur in other years
to promote professional development. In such a system, as long as a tenured teacher
remains above a level of basic competence, he/she is reviewed by peers for two years and
can focus on professional growth. Every third year, an administrator conducts a formal
observation to assure acceptable teaching quality. During the formative years, evaluation
can also include self-evaluation, videotaping, student and/or parent questionnaires,
journals, and portfolios. The individual teacher decides the focus of the evaluation and the multiple measures to be employed.

Other researchers report similar attempts. Manatt and Kemis (1997) refer to the formative process as 360° feedback, with everyone in contact with the teacher providing data. Districts in five states use this approach, and studies have shown great improvements in student achievement since its implementation.

Vann (1996), a principal in New York, experimented with a voluntary alternative assessment for his master teachers. He worked with four teachers from different grade levels. Meetings between the teachers and him focused on the teacher’s goal and time frame for achievement, the rationale for the goal, the action plan, anticipated problems, and methodology for the assessment of growth. Vann found the process to be much more time-consuming than formal observations, but very rewarding and worthwhile.

Rooney (1993), a principal in Illinois who wanted to strengthen her role as an instructional leader, attempted to work within the confines of the district-negotiated evaluation system to make it more effective. She held a group pre-observation conference with interested, growth-oriented teachers. Peer teachers performed the actual “formal” observation, while the principal made frequent visits to those teachers’ classrooms. She also substituted in classrooms, allowing teachers to observe each other. The post-observation conference was again a group meeting where the teachers discussed progress and problems. Rooney then held a final individual conference with each teacher. All teachers involved were pleased with the process and elected to continue it. Rooney observed that the peer coaching technique led to an increase in collegiality, a newfound
respect for individual differences among teachers, and an increase in discussions about

teaching and learning.

Nolan, Hawkes, and Francis (1993) believe that collegiality and professional
improvement can both be achieved within even stricter parameters of clinical supervision.
To substantiate their beliefs, they offer six case studies of supervisors working with
individual teachers from various grade levels and subject areas and with varying amounts
of experience. An important feature of the studies is the use of multiple cycles of clinical
supervision (preconference, observation, and postconference) within a single school year.
The important difference is that the supervisor and teacher agreed upon the area of focus
for improvement or growth. Comparing the six studies, Nolan, Hawkes, and Francis
noted five factors which contributed to the success:

1) the development of a collegial relationship
2) the amount of teacher control over the supervision process
3) the continuity of the process
4) the use of focused, descriptive data as a basis for reflection, and
5) the reflection required by both the supervisor and supervisee during
postconferencing.

Clinical supervision used in this way can be highly instrumental in promoting teacher
growth.

According to a nationwide survey cited by Black (1993), teachers’ unions are
taking an active role in encouraging districts to redesign the evaluation process. In
Elmira, New York, the teachers’ union officials collaborated with district administration to
produce a new evaluation system. Elsewhere, teachers are proactively involved in revising evaluation systems. Teacher contracts are requiring principals to hold pre-observation conferences, to review the actual forms to be used, to clarify the criteria against which teachers will be evaluated, and to observe an entire lesson.

Teacher involvement seems to be the key needed in order for evaluation to effectively lead to professional growth. Saphier (1993) recommends that an early step in the evaluation revision process be the formation of a representative committee. The committee identifies five to ten performance areas of teaching that the district values. From these areas, they develop more specific criteria of effective teaching. Root and Overly (1990) also maintain that involving teachers in the development and revision process is essential for fostering ownership, acceptance, and effective participation in evaluation. When teachers and administrators agree on the process and the criteria used, the resulting data can serve as an appropriate vehicle for analysis, conferencing, goal setting, and growth (Conley and Dixon, 1990).

Based on the recommendations of research, and working within the constraints of New Jersey state laws and of district contractual agreements, this intern chose to involve district teachers in a project piloting a process by which the Millville Public Schools could revise the instrument it uses for formal observations of teachers as part of the evaluation system.

Methodology: Research Design

In piloting the process by which the district could redevelop its observation instrument, the intern tested the process on a very small scale. She formed a committee of
six teachers from various grade levels, subjects, and buildings throughout the district. The committee began by critiquing the district's current observation instrument for seven characteristics. The members developed a list of criteria of effective teaching as a basis for the new instrument it designed. The intern used the new instrument to observe teachers and conduct post-observation conferences. The committee evaluated the new instrument for the same seven characteristics as the current instrument, and the intern compared the numerical results.

Methodology: Sampling

The intern formed a committee composed of six teachers from various buildings, grade levels, and subject areas. She selected teachers on the basis of their experience and reputation as excellent teachers. She also made sure that the group had both male and female representation. Teacher A is a female first-grade bilingual teacher with a master's degree and thirteen years' experience. Teacher B is a male teacher of basic skills for grades two through five. He has earned a doctorate degree and has taught for nineteen years. Teacher C teaches seventh grade language arts. She has completed a master's degree and twenty-two years of teaching. She has been a recipient of the district Teacher of the Year award. The fourth member, Teacher D, is a female eighth-grade social studies teacher with a master's degree and twenty-seven years of experience. The second male member of the team is Teacher E, who teaches high school health and physical education. He has a doctorate and nineteen years' experience. Lastly, Teacher F, female, teaches high school Spanish. She previously taught in the district's bilingual program at the elementary and middle school levels. This teacher has also been a Teacher of the Year.
recipient and has seventeen years' experience. These six teachers were the only ones the intern approached. She briefly explained the purpose of the project, and all six volunteered to be a member of the observation revision pilot program.

Methodology: Procedures

Having formed the team, the intern chose several possible dates for an initial meeting and contacted all six members. One date was acceptable to all, so the first meeting was scheduled. The intern sent each member a notice of the meeting date, time, and location and a pre-project questionnaire to be completed and brought to the meeting.

The meeting was held in a classroom with a large table and a blackboard. The intern provided snacks and beverages. In spite of the effort to arrange a date convenient to all, two of the members had to cancel. Acting as a facilitator, the intern again described the purpose of the pilot project. She asked the team to critique the instrument currently used by the district for observations. The members expressed their concerns for the lack of consistency inherent in the instrument and its failure to lead to professional growth. They also discussed the advantages and disadvantages of checklists used in other districts. The general consensus was against a checklist in spite of its tendency to be more objective.

The intern then asked the committee to brainstorm characteristics of excellent teachers that should be observable in any lesson. As the members named various attributes, the facilitator listed them on the board. The team continued by discussing each attribute in length as to its importance to student performance and to the typical teaching behaviors that demonstrate that quality. After combining some of the attributes, the group
decided on a final list of thirteen criteria (see Appendix C) to guide the observer during a formal observation. The meeting lasted ninety minutes, and the team was very involved in the process.

A second meeting was held to incorporate the selected criteria into a new instrument and to establish procedures for the observation process. The intern distributed copies of forms found in Enhancing Professional Practice: A Framework for Teaching (Danielson, 1996). The team discussed the usefulness of the instructional plan questions (see Appendix C) as a pre-observation conference tool and the reflection sheet (see Appendix C) for use during the post-observation conference. The instructional plan asks the teacher to write answers to ten questions about the nature of the class, the goals of the lesson, the planned activities, needed materials, anticipated problems, and plans for assessment. The team decided to use the form to replace the current Form A, because it asks for much of the same information but requires more teacher reflection and offers more opportunity for supervisor-supervisee dialogue.

The group also elected to use the "Reflection Sheet" (see Appendix C). The observed teacher writes answers to four questions as he/she reflects on the lesson taught. The questions address student engagement, accomplishment of instructional goals, reasons for any change in goals or plans, and ways to improve the lesson. The answers to the questions become a point of departure for dialogue during the post-observation conference.

The intern collected teaching schedules from each team member in order to arrange dates and time to observe their classes. She sent copies of the instructional plan
and reflection sheet to each member. She contacted each individual to schedule a pre-
observation conference, observation, and post-observation conference. Because some of
the observations were to take place in buildings other than the intern’s home school, she
sent letters to the various principals to obtain their permission to observe one of the
teachers in their buildings.

During the pre-observation conference, the intern and observee again reviewed the
list of criteria which would be the focus of the observation. The intern asked pertinent
questions similar to those on the instructional plan, which the intern read before the actual
observation. The day of the observation, the intern arrived several minutes before the
lesson was scheduled to begin. She recorded teacher and student behaviors as they
occurred, focusing especially on the list of criteria. When the lesson was over, she
thanked the teacher and left. Soon afterwards, the intern used her notes to compose a
narrative summary and write the observed evidence of each of the thirteen criteria of the
observation instrument (see Appendix C).

The intern attempted to schedule a post-observation conference within a week of
the observed class. Because of the differences in buildings and schedules, this was
sometimes very difficult. Before the conference, the intern prepared a short list of topics
for discussion, highlighting areas of strength and areas for exploration or growth.

The final step in the process was another team meeting held for the purpose of
analyzing the process and the value of the instrument they had designed. The group easily
reached a consensus that the instrument needed no modifications. The intern thanked the
members for their volunteer participation and the time they had committed.
Methodology: Measures

Project participants completed two instruments for the intern to use to evaluate the effectiveness of the project. The pre-project questionnaire (see Appendix C) asks participants to rate the district's current observation instrument for seven characteristics: 1) objectivity, 2) reliability, 3) ease of use for the observer, 4) clarity of expectations, 5) ability to provide teachers with valuable feedback, 6) conduciveness to professional growth, and 7) conduciveness to supervisor-supervisee dialogue. A five-point Likert scale was used to rate the characteristics from poor (1) to excellent (5). The post-project questionnaire (see Appendix C) rates the team-designed observation instrument using the same seven criteria and the same Likert scale. An additional open-ended question asks participants to write their reaction to being involved in the revision process. Results from the two questionnaires are compared to evaluate the usefulness of the new instrument.

Project Evaluation Results

In order to evaluate the effectiveness of the piloting of the observation instrument revision process, the intern compared the results of the pre-project and post-project questionnaires completed by the six members of the revision team. Using the project five-point Likert scale questionnaire, the participants rated the observation instrument the district currently uses. The post-project questionnaire rated the observation instrument as revised by the team for the same seven criteria.

To compare the scores, the intern averaged the ratings of the six team members for each criteria and noted pre and post scores as follows:
<table>
<thead>
<tr>
<th>Criteria</th>
<th>Pre</th>
<th>Post</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Objectivity</td>
<td>1.33</td>
<td>3.33</td>
<td>+ 2.00</td>
</tr>
<tr>
<td>2. Reliability</td>
<td>2.00</td>
<td>3.67</td>
<td>+ 1.67</td>
</tr>
<tr>
<td>3. Ease of use of observer</td>
<td>3.50</td>
<td>4.00</td>
<td>+ 0.50</td>
</tr>
<tr>
<td>4. Clarity of expectations</td>
<td>1.33</td>
<td>4.33</td>
<td>+ 2.00</td>
</tr>
<tr>
<td>5. Ability to provide teacher with valuable feedback</td>
<td>1.83</td>
<td>3.83</td>
<td>+ 2.00</td>
</tr>
<tr>
<td>6. Conduciveness to professional growth</td>
<td>1.33</td>
<td>3.67</td>
<td>+ 1.34</td>
</tr>
<tr>
<td>7. Conduciveness to supervisor-supervisee dialogue</td>
<td>1.17</td>
<td>3.33</td>
<td>+ 1.16</td>
</tr>
</tbody>
</table>

All seven criteria showed an increase. The district’s current instrument received less than satisfactory ratings for all criteria, except for ease of use. The revised instrument earned ratings of satisfactory or better for all seven criteria.

The post-project questionnaire also included an open-ended question to gauge the participants’ reaction to being part of the revision process. The following comments were recorded:

"I enjoyed the process."

"Being involved in the process made me feel valued as a professional."

"I like the instrument we came up with."

"I really enjoyed the meetings."

"The post-observation conference was useful."
"I think it's a good idea for the district."

The remarks are all very positive.

Findings, Conclusions, and Future Study

Because the Millville Public Schools have been using the same observation instrument for about twenty years with little evaluator training and poor inter-rater reliability, the intern conducted a pilot program to revise the instrument. The quantitative results indicate that the revision team has created an instrument they judge to be at least satisfactory compared to the current instrument which they judge as poor to less than satisfactory. The new instrument clearly made gains in objectivity and reliability. Expectations for teachers are clearer. Because the instrument can provide teachers with valuable feedback, it is more conducive to professional growth, a priority of the team. It also provides better opportunities for collaborative dialogue between supervisor and supervisee. The qualitative responses on the post-project questionnaire reflect the team's positive reaction to being involved in the revision process. Based on this data, the intern judges the project to have been successful.

This researcher recommends that the Millville School District consider following a similar process for revising its evaluation system. The current observation instrument lacks objectivity and reliability and does little to encourage professional growth. In order for supervision and evaluation to become more valuable, the district needs to develop a new system. Based on the available literature and on the experience gained from this project, it is imperative that teachers be an integral part of the revision process. Participation in the process should represent a cross-section of all buildings, various grade
levels, subject areas, and special programs. Whereas the intern hand-selected her participants for the pilot program, participants for a full-scale project should be chosen by the union.

Supervision and evaluation is a significant aspect of administration. In the current era of school reform, it has a great potential for motivating change at the classroom level. Educators at all levels need to take a close analytical look at how evaluation is conducted to see if it is effective enough to encourage positive change and increase student achievement.
Chapter 5
Technology

Problem Statement

Over the years, technology in the classroom has referred to a variety of different machines. In the 1990's, classroom technology usually refers to the use of computers. Whereas computers in the classroom a decade ago meant using Apple IIs for drill-and-practice exercises, today's classrooms are equipped with multimedia Macintoshes and PCs. By 1995, U.S. public schools had about six million computers. Elementary schools alone had an average of sixty computers per school (Snyder, 1996). A great deal of federal and state funds are being spent on computer technology for schools. However, the expensive equipment too often is not used to its fullest potential to enhance student learning (Bull, Nonis, and Becker, 1997).

As an Abbott district receiving large amounts of New Jersey funding, the Millville Public Schools have steadily increased their acquisition of educational technology in recent years. At Rieck Avenue School, the Building Planning Team purchased multimedia computers and printers for almost every classroom. It also purchased a variety of CDs for use in these computers. The district periodically offers a variety of computer workshops for its teachers; however, because the computer labs do not have CD-ROM capability, there has never been a workshop on the use of CD-ROM. In spite of the staff development available, many Rieck Avenue teachers do not utilize their classroom computers to their greatest capability as an effective learning tool. By providing teachers
with in-school training specifically on CD-ROM, this researcher sought to increase classroom use of CD-ROM technology.

Review of the Literature

Most experts and researchers in the field of educational technology agree that today's computer has the potential of being a powerful instructional tool. Means and Olson (1994) explain that when computers first entered the classroom decades ago, their effectiveness did not last because their applications were limited, being basically remedial in nature, and were not aligned with curriculum. The potential of today's computer technology is much stronger because of its expanding capabilities and increasing accessibility.

Much of the literature proposes that effective use of computer technology in the classroom complements and encourages educational reform efforts and thereby increases student achievement. To respond to the needs of the workplace, today's schools must prepare students to be able to access, manipulate, and communicate information while thinking critically and making decisions. Bitter et al. (1997) outline the changing face of the classroom learning environment. The traditional classroom was passive, isolated, and teacher-centered, relying on information delivery via a single media, whereas today's transformed classroom focuses on active, collaborative, student-centered learning using multimedia stimulation and requiring critical thinking and informed decision-making. When integrated into the curriculum, technology is the tool that can help transform classroom instruction to meet the needs of today and tomorrow's workplace.
An extensive eight-year study, Apple Classrooms of Tomorrow [ACOT] (Dwyer, 1994), observed the effects of technology on seven classrooms of varying grade levels across the nation. ACOT researchers observed three major ways in which technology acts as a catalyst for the transformation away from the traditional classroom. First, technology changes the nature of teacher-student and student-student interactions. The classroom is now collaborative and cooperative rather than being primarily a directorship with the teacher providing direct instruction. A second result of technology is that it causes teachers to question long-accepted concepts of instruction and learning. The study found that the new approach requires teachers to work much harder and longer than before, but their work is now much more satisfying. Use of technology and new teaching strategies in turn leads them naturally to team teaching with an interdisciplinary approach. With students engaging in more cooperative learning, student attitudes toward learning and toward themselves improved. Students assumed more leadership roles. Student productivity increased, and achievement levels, as indicated by standardized test scores, either improved or remained stable. One reason for this outcome may be the third factor emphasized in the ACOT report. Technology offers significant opportunities for students to work on higher-order cognitive tasks, thus preparing students for the workplace.

Many educators enumerate the benefits of technology. Solomon (1993) compiles the experiences of three different teachers. Jim Riser, a science teacher, used CD-ROM and a scanner to enable his students to “discover” scientific concepts by observing and manipulating real images and data. Another teacher, Caroline Embrey, observed that students took more pride in finished projects, and the projects were more creative, when
they used computers. A third teacher, Eileen Coppola, values computer technology in her classroom because of its ability to create a positive classroom culture where students share information and make interdisciplinary connections between concepts.

Other writers describe many of the same effects that computer technology has on students. Computers increase student motivation (Lumley, 1991; McCarthy, 1989). Students become empowered, proactive learners (McCarthy). The learning environment created develops self-managed, self-directed learning (November, 1996). Because students are more motivated and are therefore more engaged in learning activities, student misbehavior decreases (Dwyer, 1994; Lumley). Attendance improves (Dwyer). Technology also has the ability to meet various student needs and learning styles. Students develop at different rates, but all need high-level, high-interest, and meaningful learning tasks (Peck and Dorricott, 1994). Computers especially appeal to visual learners, and even poor readers can access information and learn from it (McCarthy). Technology also offers a medium for artistic expression (Peck and Dorricott) to meet the needs of kinesthetic learners.

Not only does technology in the classroom have a positive effect on students, it also affects the role of teachers. With the increasing number of standards and curricular demands for which teachers are accountable, computer technology lends itself well to an interdisciplinary approach, thereby providing teachers with an educationally-sound way to accomplish so many goals (Mageau and Chion-Kenney, 1994). Teachers can provide students with opportunities for in-depth learning (McCarthy, 1989; Peck and Dorricott, 1994), necessitating the use of higher-order thinking skills (Phillipo, 1989).
Technology has the potential to increase the amount and level of students' thinking and writing (Peck and Dorricott). Important research skills can be developed and encouraged in a realistic context (Mageau and Chion-Kenney; McCarthy; Phillipo). Phillipo (1989) highly recommends the introduction of the CD-ROM encyclopedia, through which the students must analyze their particular research needs in order to choose key words to narrow their search. As a result of such learning activities, teachers have an excellent opportunity for authentic, criterion-referenced assessment (November, 1996), another facet of school reform.

Of course, one of the most important jobs of education is to prepare students to be productive citizens. Proficiency in technological skills will be invaluable for today's students as they enter the workplace. Technology prepares students for the high-tech workplace by developing their flexibility to meet new challenges (November, 1996). It encourages students to become lifelong learners (Mageau and Chion-Kenney, 1994), which, in a rapidly changing workplace, will be a survival skill. Students must be able to take advantage of available tools and resources to assess information, analyze complex problems, engage in cooperative problem solving, and communicate their conclusions (McCarthy, 1989; Peck and Dorricott, 1994).

Computers in the classroom are obviously a beneficial learning tool. The computers currently in classrooms cover a full range of capabilities. Multimedia computers offer special advantages for today's students. McCarthy (1989) defines multimedia as "nothing less than the integration of text, audio, graphics, still image and moving pictures into a single, computer-controlled, multimedia product." Multimedia
computers usually include a drive for CD-ROM. CD-ROM is a 4.75 inch round disc with read-only memory that digitally stores audio, textual, and graphic data that cannot be altered (Phillipo, 1989). The discs are very durable, withstanding frequent handling. They are capable of storing 550 megabytes of data. That capacity is the equivalent of 250 large reference books (Phillipo, 1989). For instance, the twenty-one volumes of Grolier's Encyclopedia require only twenty percent of one CD's capacity. The cost is attractive too. The average encyclopedia on CD costs less than one hundred dollars (Association of Supervision and Curriculum Development [ASCD], 1996).

Are teachers ready to implement the effective classroom computer technology that is available to them? Some are; many are not. So what needs to be done? Staff development must be the answer. Callister and Dunn (1992) see "machines as tools, valuable only when a human intelligence organizes their use in a productive way." They observe that when teachers do not know how the tool works, fear the tool, or are unaware of the potentially effective uses of the tool, it will be poorly used or not used at all.

Butt, Nonis, and Becker (1997) identified the steps necessary for the effective integration of technology into classroom instruction. A district or school must first develop effective goals for its overall technology program. Then it must provide staff with adequate access to the desired technology. Technical support in the form of ongoing maintenance and updated software must be available. Finally, a critical step is to provide continuous instructional support. According to a report by the Office of Technology Assessment [OTA] (Bull, Nonis, and Becker, 1997), teacher training in technology rarely focuses on ways to integrate technology into the subject areas. Often, training is rushed
and offers no follow-up support. Computer-literate peers can effectively provide this needed support.

An earlier OTA report (Fulton, 1988) identified factors which influence whether or not a teacher adopts the technology after inservicing. Training is more effective when it includes hands-on sessions. Teachers also prefer classes taught by "credible sources," namely other teachers. The inservice must accommodate teachers' varying levels of computer competence and confidence. Effectiveness also depends on helping the teachers adapt the particular application to their specific subject areas or grade levels. Most of all, teachers require time and support during the inservice and afterwards.

The Portland Public School District in Oregon offers such a program (Black and Mishler, 1988). The technology inservices they provide develop when a district teacher successfully tests a technological strategy in his/her classroom. That teacher shares the strategy with others through an inservice. West (1994) also emphasizes the value of peer instruction and coaching. A district needs to utilize those teachers already integrating computers into classroom instruction in order to encourage and stimulate others to expand their computer expertise and effective usage.

Hurst (1994) has developed a technology inservice program in many schools. His program involves devoting a small space within the school as a technology training room, where inservice would be an ongoing occurrence. The teachers he surveyed wanted a nonthreatening environment in which to develop their computer skills. When one teacher instructed three or four fellow teachers and gave them hands-on practice and continued guidance, teachers responded positively, and the training was effective.
Based on the evidence provided by the literature, this intern addressed the disuse of the available CD-ROM capability at Rieck Avenue School by offering an after-school inservice on effective CD-ROM instructional strategies.

Methodology: Research Design

The technology project was designed to increase classroom use of CD-ROM technology. The intern first did a needs assessment by surveying all Rieck Avenue School teaching staff as to their current use of and comfort with CD-ROM technology. She then organized an after-school CD-ROM inservice presented by a fellow Rieck Avenue School teacher. The inservice was geared towards teachers in grades 3 to 7. To evaluate the effectiveness of providing the inservice, the intern designed a four-question survey to be completed one month after the workshop. The intern reviewed the results of the post-project questionnaire completed by teachers who had attended the workshop to ascertain whether their use of and comfort with CD-ROM technology had increased.

Methodology: Sampling

The intern limited the project to the twenty-eight academic classroom teachers in kindergarten through seventh grade. Following the needs assessment, she further limited the focus to third through seventh grade. Four teachers, representing third, fifth, sixth grade language arts, and seventh grade geography, attended the workshop. The teachers were at various comfort levels with computer use. Only workshop attendees were asked to complete a post-project questionnaire which evaluated the increase in classroom integration of CD-ROM technology.
Methodology: Procedures

After reviewing literature on the benefits of integrating computer technology and on the attributes of effective staff development for technology, this researcher began preparations for a CD-ROM inservice at Rieck Avenue School. She first assessed the availability of CD-ROM technology and the teaching staff's current classroom use of CD-ROM software by sending out a questionnaire (see Appendix D) to all academic area classroom teachers in kindergarten through seventh grades. The survey asked teachers if their classrooms have at least one computer with a CD-ROM drive, if they have personally used CD-ROM technology, if their students have used CD-ROM in their classrooms, and if they have integrated CD-ROM into their instruction. An additional form (see Appendix D) asked teachers to list any CD-ROMs they had in their classrooms. The intern compiled the individual lists into a building CD-ROM inventory.

The next step was to find a presenter for a CD-ROM workshop. This writer approached a Rieck Avenue teacher who frequently uses her classroom computers as instructional tools and who is very familiar with available CD-ROM programs. She was very willing to provide a workshop. The presenter and the intern met to decide on what approach to take and when to offer the workshop. Based on the teacher survey, they chose to gear the workshop towards teachers in grades three through seven. The nature of the workshop would be hands-on. The content would focus on various reference materials such as CD-ROM encyclopedias that were already part of the school's inventory.
Next, a tentative date and length of time for an after-school workshop were chosen. The principal checked the master calendar and approved the date, adding it to the calendar. Advertising was another important step in the process. A flyer (see Appendix D) was created on the computer, xeroxed, and distributed to all teachers' mailboxes two weeks prior to the workshop. A brief reminder appeared in the weekly bulletin the week prior to and the week of the scheduled workshop.

In anticipation of the workshop, the inventory was compiled to hand out to workshop participants. The inventory listed all CD-ROMs in the school building, the appropriate grade level for each, and the location from which teachers can borrow them. After the workshop, inventory copies were available in the office and the library for other interested teachers.

The day of the workshop the intern, working as a facilitator for the presenter, moved five multimedia computers from various classrooms into the library and set them up. As participants entered the workshop site, they picked up and completed a pre-workshop survey (see Appendix D), a Likert-scale response to five statements about computer use and one question about computer workshops.

The workshop lasted one hour. The presenter demonstrated the proper way to install the discs. She used topics of interest to the participants to illustrate the kinds of information the discs contain and how to access it. After a brief introduction to each of the five different CDs, the presenter gave the participants a significant amount of hands-on practice, guiding them as they experimented with the use of the various CDs. At the
conclusion of the workshop, participants completed a workshop evaluation form this intern designed in order to provide feedback to the presenter.

One month after the workshop, the intern asked the participants to complete a follow-up questionnaire with four Likert-scale questions (see Appendix D). The questions measure the teachers' new comfort and use levels of the CD-ROM technology.

The intern also investigated the quality, usefulness, and appropriateness of CD-ROMs currently on the market. ASCD's *Only the Best: The Annual Guide to the Highest-Rated Educational Software and Multimedia* (Felix, 1996) and *The 1995-96 Technology and Learning Software Awards* (McLester, 1995) offered insightful reviews of highly-recommended CD-ROMs for classroom use. The intern had originally planned to recommend CD-ROMs for purchase by the Building Planning Team. However, during the year, the central administration changed the way special Abbott district monies would be handled, so that the following year funds would not be available to purchase CD-ROMs.

**Methodology: Measures**

A post-workshop questionnaire (see Appendix D) asked workshop participants to assess their classroom use of CD-ROM technology one month after the workshop. Using a five-point Likert scale, ranging from 1—Not at all to 5—Frequently, the targeted staff members responded to the following statements:

1. Since attending the CD-ROM workshop, I have used CD-ROM to obtain information for lessons.

2. Since attending the CD-ROM workshop, I have integrated CD-ROM into some of my lessons.
3. Since attending the CD-ROM workshop, I have given my students opportunities to use CD-ROM to obtain information.

4. I feel I need more inservice in the use of CD-ROM.

The intern used the results from this questionnaire to assess the effectiveness of the workshop presentation.

**Project Evaluation Results**

Through this project the intern sought to increase the use of CD-ROM technology as an instructional tool in the Rieck Avenue School classrooms. In evaluating the effectiveness of the project, she used four different teacher questionnaires.

The initial questionnaire was given to all academic classroom teachers. Those completing the questionnaire answered yes or no to the following statements:

1) My classroom has at least one computer with a CD-ROM drive.

2) I have personally used CD-ROM technology.

3) My students have used CD-ROM technology in my classroom.

4) I have integrated CD-ROM technology into my instruction.

Twenty-five out of twenty-eight teachers returned the questionnaire. All twenty-five responded affirmatively to the first statement, indicating that they all have easy access to a multimedia computer. The researcher knows that, in fact, all academic classrooms have at least one such computer. To the second statement, which addressed personal use of CD-ROM, eleven responded that they had used CD-ROM, whereas fifteen, or sixty percent of the respondents, had never used that technology. Nine out of the twenty-five teachers, or approximately one third had had students using CD-ROM in their classrooms, according
to the results of the third statement. On the final question, only two out of twenty-five felt that they were integrating CD-ROM technology into instruction. One of the two “yes” respondents was the teacher chosen to be the workshop presenter.

Four teachers came to the workshop. One was a third grade teacher, one was from fifth grade, another teaches sixth grade language arts, and the fourth teacher is from seventh grade geography. They each completed a pre-workshop questionnaire. Two of the teachers had previously used CD-ROM technology on a home computer. One of the teachers had used CD-ROM on her classroom computer for instruction but not for her own information. She was somewhat comfortable using the technology; the rest were not. However, all four teachers were at least somewhat comfortable using pre-installed programs on their computers, circling 3s and 4s on the 5-point Likert scale. All four of them had also attended other computer workshops.

At the end of the workshop, the four attendees completed a five-point Likert scale evaluation of the workshop for the appropriateness of materials, the clarity of the presentation, the usefulness of the information, the length of the workshop, and the usefulness of the handouts. All four participants gave the workshop five 5s, indicating the excellence of the workshop.

After a one-month time frame in which the participants could have attempted to include CD-ROM technology in their instruction, the interim gave another questionnaire to the four teachers. They again responded to statements using a five-point Likert scale, with five being the best. The four sentences read:
1) Since attending the CD-ROM workshop, I have used CD-ROM to obtain information for lessons.

2) Since attending the CD-ROM workshop, I have integrated CD-ROM into some of my lessons.

3) Since attending the CD-ROM workshop, I have given my students opportunities to use CD-ROM to obtain information.

4) I feel I need more inserviceing on the use of CD-ROM.

The results were as follows:

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
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<td>0</td>
<td>0</td>
<td>0</td>
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<td>3</td>
<td>2</td>
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<td>0</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

The most significant response was to statement three, concerning students using CD-ROM. Two out of the four teachers indicated that they had indeed provided opportunities for their students to use the CD-ROM. One of those two teachers felt she had used the technology to the extent that it was integrated into her teaching unit. The most varied response came from the fourth statement, regarding the need for more inserviceing. To various extents, they all feel some need or desire for follow-up training.

Findings, Conclusions, and Future Study

Because of the large amount of money spent to equip all Rieck Avenue School academic classrooms with multimedia computers, and because classroom teachers were
not using those computers to their fullest potential, this intern chose to provide an in-
house workshop on instructional uses of CD-ROM for teachers in grades three to seven. 
Based on the pre- and post-project questionnaires, the intern judges the project as 
somewhat successful.

The initial questionnaire illustrated the general lack of the Rieck Avenue staff's 
knowledge about and/or comfort level with CD-ROM technology. Research indicates that 
once a school makes the technology easily accessible, training is of the utmost importance. 
Furthermore, training provided in small groups by a familiar colleague is one of the most 
effective techniques. The workshop for this project followed these guidelines, and those 
factors probably contributed to its success.

The workshop was geared towards third to seventh grade and focused on CD-
ROM as a research tool. The CD-ROMs in the school's inventory for the primary level 
are mostly interactive storybooks and are relatively simple to use. Several of the primary 
teachers were already using them. The need seemed much greater at the intermediate 
level. Limiting the scope and level of the workshop, the intern believes, was another 
contributing factor to the relative success of the workshop.

Attendance at the workshop was both disappointing and beneficial. The targeted 
teachers numbered twenty-eight, and only four, or fourteen percent, attended the 
workshop. The Rieck Avenue School staff is an aging staff and is somewhat resistant to 
new ideas. After-school activities and family commitments also occupy many staff 
members who would otherwise be interested in learning more about technology. 
However, the small number of attendees contributed to the effectiveness of the workshop.
The content was easily individualized. In addition, the small number allowed the maximum hands-on opportunities. The results of the workshop evaluation clearly indicated the participants' satisfaction.

The feedback received from the post-workshop questionnaire suggests that the workshop did have an effect on the use of CD-ROM. As with many educational changes, the seed can be planted, but depending on the recipient of the seed, it varies in the amount of time it takes to germinate and grow. This reality definitely applies to technology. Teachers are at many different comfort levels and degrees of understanding when it comes to computer technology. The four CD-ROM workshop attendees were all at different levels of acceptance and readiness to experiment and grow in computer use. The fact that they volunteered their time to participate in the workshop in itself implies a certain degree of readiness and curiosity. Hence, their degree of experimentation and usage after the workshop would also vary, which accounts for the differences in responses. Two of the teachers, one month after the workshop, had not yet implemented what they had learned. Another teacher had her students use a CD-ROM encyclopedia to help them draw flags of different countries as part of projects about those countries. Again, the comfort level of the teacher is critical for implementation. For this reason, the intern is confident that the workshop had a positive effect on all four participants; however, the effect may not be apparent for some time. The key to integrating technology across the curriculum is to continue offering periodic small group workshops, while depending upon the slow but contagious spread of technological strategies from one teacher to his/her peers.
Chapter 6

Change - Cross-age Tutoring

Problem Statement

All of the students in the bilingual program at Rieck Avenue School qualify as “at-risk” students because of a variety of characteristics, in addition to being limited English proficient. These students lag behind their peers academically, socially, and psychologically. Many of them suffer from low self-esteem and poor attitudes toward academic success. This need in large part became the rationale in 1992 for implementing a summer enrichment program for bilingual students having just completed grades K through 5. Still seeing needs to address, this researcher chose cross-age tutoring as a further strategy for meeting the academic, social, and psychological needs of the K-5 students enrolled in the bilingual summer enrichment program for the summer of 1996.

Review of the Literature

Many researchers agree that cross-age tutoring is an effective teaching strategy. Although this strategy has received a lot of attention in the past decade, it is hardly a new concept. Rekrut (1994) credits Joseph Lancaster with establishing in the 19th century monitorial schools in which older students were responsible for teaching younger children. Various forms of cross-age tutoring continued, but Rekrut (1994) suggests that tightened budgets in the 1980's led schools to investigate cross-age tutoring as a cost-effective instructional strategy. The resulting studies indicate how this method results in academic, social, and psychological benefits for the tutors and their younger tutees.
A study by Klingner and Vaughn (1996) compared the effects of cooperative peer grouping versus cross-age tutoring in regards to the reading comprehension of English as a Second Language students who are also learning disabled. The goal was for students to increase their use of four reading strategies: prediction, summarization, question generation, and clarification. While both groups, eighth graders working cooperatively with other eighth graders and eighth graders tutoring sixth graders, made considerable gains according to comprehension test results, the students involved in cross-age tutoring showed significantly greater improvement.

Henriques (1992) targeted younger students for her cross-age tutoring study to increase emergent literacy skills of at-risk kindergarten students. Pointing to print-poor home environments as one probable cause of delayed literacy development, she identified nine kindergarten students as at-risk and sought to increase their letter recognition, book awareness skills, pre-reading strategies, and pre-writing strategies by fifty percent. The children were paired with carefully chosen fifth and sixth graders. For the seven children who completed the three month tutoring program, increases in letter recognition ranged from 71 to 340 percent. They showed similar improvement in the other three areas. The ESL student showed the greatest gains. Two of the students with the lowest increases were referred for Child Study Team evaluation. The other five, contends Henriques (1992), no longer are considered at-risk.

Not all cross-age tutoring attempts are limited to a select few children. In response to the recognition that students in their predominately white, upper middle class elementary school were not choosing reading as a leisure time activity, Krug and
Fordonski (1998) randomly matched one-to-one a kindergarten class with a fourth grade class to increase recreational reading habits. Each student pair, a fourth grade tutor and a kindergarten tutee, weekly chose a book from the library. The fourth grader practiced reading the book in preparation for reading it aloud and helping his/her tutee to read it during the tutoring session. At the conclusion of the study, the fourth graders assessed themselves as being better readers. Fourth grade teachers observed a quantitative increase in recreational reading. The kindergarten students showed a large increase in relating prior knowledge to literature. Every participant had acquired that skill by the end of the study. A parent survey revealed the greatest significant change. In the spring ninety percent of the parents reported that their children preferred reading to playing games, an increase of thirty-four percent over fall statistics.

Possible explanations for academic improvement are varied. Some researchers propose that, because the tutors are close in age to the tutees, they can sometimes communicate more effectively than teachers (Henriques, 1992; Gaustad, 1993). In addition, the tutoring situation allows maximum student participation as opposed to full classroom instruction (Klingner and Vaughn, 1996). Henriques (1992) reports a positive transfer of a desire to participate to the regular classroom instruction. Time on task is excellent, and active learning occurs (Henriques, 1992; Klingner and Vaughn, 1996). Tutors benefit from the reinforcing review of material that is necessary prior to tutoring sessions (Gaustad, 1993). Their interactions with younger students develop their own communication and higher-order thinking skills. A sixth grade science teacher, who pairs her students with first graders, claims that the greatest academic gains occur in her lower
ability level students (Smith and Burrichter, 1993). Gaustad (1993) believes that low-achieving students are more patient and thus more effective as tutors, because they empathize with their tutees. Regardless of the reasons, it is clear from these studies that cross-age tutoring leads to student achievement.

While many of cross-age tutoring programs strive to increase literacy or other academic skills, some programs focus on social and/or psychological aspects as well. In a self-contained school for children with behavioral disorders, Cochran et al. (1993) paired four low-achieving fifth grade African American boys with four low-achieving second grade African American boys. Although the tutoring program they implemented involved reading skills, the goals also stressed increasing students' scores on a social skills rating system completed by teachers and the students themselves. At the conclusion of the program, the experimenters compared the assessment results with those of a control group of similar students who did not participate in tutoring. While the experimental group did not perceive themselves as having improved their social skills, teacher ratings indicated an increase in desirable behaviors as well as increases in sight word recognition.

Many researchers agree that cross-age tutoring has great psychological benefits, whether or not they were a goal of the particular study. Increased self-esteem is the desirable outcome reported most often. From personal experience and a review of literature, Hall et al. (1994) list probable causes for low self-esteem in at-risk students. In general, at-risk children come from low income families, have little parental support, lack self-control, responsibility, and goal setting, rarely engage in extra-curricular activities, and have different behavior and academic expectations and values than their teachers and
the school. Low self-esteem often translates into academic difficulties, which in turn further lower the child’s self-esteem. Cross-age tutoring often breaks the cycle.

Urzua (1995) observes a related benefit in her cross-age tutoring program. At her elementary school in California, where many students’ native languages are other than English, the Literacy Club pairs Rapid Readers and younger Little Readers whose native language is the same. Although the focus is on developing English literacy skills, tutors and tutees employed their native language to discuss concepts. As a result, their attitudes towards bilingualism are more positive, even in absence of a bilingual classroom or teacher.

As with any educational initiative, thoughtful planning is essential for program success. Educators implementing cross-age tutoring programs stress the importance of training for tutors. Programs differ as to the form the training takes and to the content of the training. Rekrut (1994) recommends tutors receive training in three areas: interpersonal skills to know how to deal with younger children, management skills to help the sessions run smoothly, and content skills to know on what academic skills and knowledge to focus. Smith and Burrichter (1993) offer two 45-minute sessions prior to starting the tutoring program in science. Prospective tutors are reminded of their roles and the roles of their tutees and are advised about the typical characteristics and individual differences of the younger students. They also receive training in the learning cycle of exploration, concept formation, and application that guides their lessons. Finally, role playing prepares them for their initial tutoring session. The training session for a fourth grade - first grade math tutoring program (Eggers, 1995) offers the “pause, prompt, and
praise" approach to remind tutors to pause to give the tutees time to respond, prompt them to come up with the answer themselves, and praise them to give positive reinforcement and keep them on task. Other researchers trained tutors in teaching skills but also made tutors well aware of the reading strategies that were the goals of the program. Henriques (1992) taught tutors how to use the 4MAT System as applied to reading and reacting to reading. In order to monitor tutors throughout the process, she asked tutors to keep a journal and responded to those needing assistance. She also offered a second training session halfway through the program. Boland-Willms (1991), in a program designed to increase reading motivation, also had tutors keep a log, but she met with the tutors every two weeks during the program and provided extra training as needed. The amount and type of training required may depend on the age of the tutors, the goals of the program, and the content involved.

Clearly, cross-age tutoring programs in which older students are paired with younger students are a viable and effective instructional strategy. Requiring no additional personnel or materials, they are very cost-effective. Programs have been implemented at all different grade levels, but generally the difference between tutor and tutee is two to four grade levels. Tutors can be of any ability level and may benefit more from the experience if they are of a lower level. Many programs target reading activities, but programs have also been developed in math and science. In addition to academics, some programs aim to improve social and psychological skills. Both tutors and tutees tend to reap psychological benefits from their interactions in such programs.
On the basis of the encouraging literature and considering the at-risk characteristics of the bilingual students at Rieck Avenue School, this researcher has chosen to develop and implement cross-age tutoring for the Summer Enrichment Program of 1996.

Methodology: Research Design

In order to address the academic, social, and psychological needs of the bilingual K-5 students of the Millville Public Schools, this intern implemented cross-age tutoring during the Summer Enrichment Program at Rieck Avenue School in 1996. She and her teaching staff paired two classes of older students with two classes of younger students, matching the students one-to-one. The intern observed the teachers of those classes as they provided the students with a variety of cross-age learning activities periodically throughout the five-week summer program. To measure the perceived effects of the cross-age tutoring program, the intern developed three separate post-project questionnaires, one for tutors, another for tutees, and a third for the eight staff members. The three-point Likert scale questionnaires addressed the academic, social, psychological benefits of the cross-age tutoring strategy. The teachers and students completed the questionnaire the last day of the summer program, and the intern analyzed the results.

Methodology: Sampling

The Summer Enrichment Program conducted annually since 1992 at Rieck Avenue School is open to all students who were enrolled in the K-5 bilingual classes during the school year. The students were divided into classes of relatively equal numbers and older classes paired with younger classes. The results of this project can be generalized to any
grade K-5 bilingual students. The students in this study all speak Spanish as their native language but vary in their level of English proficiency. They are predominately of Puerto Rican heritage. All are considered "at risk".

**Methodology: Procedures**

The supervisor of the bilingual/ESL department in the Millville Public Schools hired one head teacher, four bilingual classroom teachers, and four instructional aides for the 1996 Summer Enrichment Program at Rieck Avenue. Once the positions were announced, this researcher, serving as the head teacher, convened a meeting of the four teachers to discuss possible themes to guide instruction, answer any questions, and introduce the concept of cross-age tutoring. The convener explained cross-tutoring and highlighted many of the advantages purported in the literature, including increase in self-esteem, increase in reading enjoyment, increase in cooperative skills, and a decrease in discipline problems. Various formats of cross-age tutoring were discussed, and the teachers agreed that two classes would be paired, then the teachers of those two classes would each take half of the pairs to her classroom. The frequency and the type of activity of the tutoring sessions would be the choices of the teachers involved in order to maximize their comfort level and to take advantage of each teacher's areas of strength. The researcher assured the teachers that she was available at any time during the program to discuss ideas and resolve difficulties resulting from the implementation.

Once the enrollment was complete, the researcher examined the list of students by grade level just completed. Because the numbers of students per grade level were very dissimilar, and because six grade levels had to be covered by only four teachers, she
divided the students into four relatively equal groups A through D, combining students
from adjacent grade levels. Class A had 14 kindergarten children, B had 14 from
kindergarten and pre-first, C had 15 first and second graders, and D had 13 from third
through fifth grades. Having class members match exactly was not crucial, because
attendance varies during the summer program. In the event of uneven numbers of
students during a tutoring session, a tutor or tutee could double up, so that every student
could participate.

The four teachers were assigned to the groups, and each received enrollment lists
of her students and the students with which her group would be paired. Classes A and C
were paired together, as were classes B and D, students in C and D serving as tutors, and
those in A and B as tutees. It was the teachers’ responsibility to make the pairings based
on gender and personality.

The researcher then convened another meeting at the end of the second day of the
Summer Program. The teachers had an opportunity to discuss any concerns they had
about implementing the cross-age tutoring. They decided their goal was to schedule
tutoring sessions approximately once a week. The researcher also reviewed the scheduled
field trips and encouraged the teachers to extend the tutor-tutee relationship to a buddy
system on the trips.

When the teachers planned a tutoring session, they informed the researcher. She
then arranged to be present in the appropriate classrooms to observe the interactions,
looking for the reactions of the children to the experience. She also observed the children
on the various field trips.
Methodology: Measures

During the fifth and last week of the Summer Enrichment Program, the researcher distributed a three-point Likert scale questionnaire (see Appendix E) to all students, teachers, and instructional aides. The staff responded to the accuracy of eight statements as being “very true,” “somewhat true,” or “not very true.” The statements were as listed:

1. In general, my students benefited from working in a cross-age tutoring situation.
2. The older students increased their self-esteem by helping younger students.
3. The older students increased their self-confidence by helping younger students.
4. The younger students improved their self-concept by having the individual attention of any older student.
5. Few conflicts and discipline problems occurred when the children were working in the cross-age tutoring situation.
6. A lot of learning took place in the cross-age tutoring situation.
7. I would like to use cross-age tutoring again.
8. I would like to see cross-age tutoring more fully incorporated into next year’s summer enrichment program.

The student questionnaires also employed a three-point Likert scale. The older students rated statements about the program in general and about their feelings towards the cross-age tutoring using the same three options as the staff questionnaire. They responded to:

1. I liked the summer program.
2. I learned something new in the program.
3. I had fun learning.
4. I feel good about myself because I helped a younger student learn.
5. I liked helping a younger student.
6. I would have liked to spend more time working with my partner.
7. I feel more confident now about my own abilities.
8. I want to come to the summer program next year.

The younger students responded by coloring one of three faces, happy, sad, or neutral, for each statement. The statements were read by the teacher, and students had time to respond to each one. Many of their statements were similar to the older students' questionnaire. Their sentences were:

1. I liked the summer program.
2. I learned something new during the summer program.
3. I had fun learning.
4. I feel special because I worked with any older student.
5. My partner helped me learn new things.
6. We should spend more time working with our partners.
7. I want to come to the summer program next year.

This researcher collected and tabulated all of the questionnaires to evaluate the effects of the cross-age tutoring on the academic, social, and psychological aspects of the bilingual students. Results were shared with the teachers involved.

Project Evaluation Results

The cross-age tutoring program was implemented during the 1996 Summer Enrichment Program for the purpose of meeting academic, social, and psychological needs.
of the at-risk bilingual students in grades K to 5 at Rieck Avenue School. The program was specifically designed to increase self-esteem, self-confidence, and positive attitudes towards learning, and to reduce behavior problems.

In order to ascertain the success of the program towards these goals, the researcher created three different questionnaires - one for older students serving as tutors, one for younger students, the tutees, and one for staff. The numbers of questionnaires returned were:

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
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<tbody>
<tr>
<td>Group A</td>
<td>12</td>
</tr>
<tr>
<td>Group B</td>
<td>8</td>
</tr>
<tr>
<td>Group C</td>
<td>11</td>
</tr>
<tr>
<td>Group D</td>
<td>12</td>
</tr>
<tr>
<td>Staff</td>
<td>8</td>
</tr>
</tbody>
</table>

Each questionnaire contained items designed to assess self-esteem, self-confidence, attitude towards learning, and overall acceptance of the cross-age tutoring concept. Only the staff questionnaire addressed behavior. The numerical results of the three questionnaires appear in Tables 1, 2, and 3.
### Table 1

**Tutors' Reaction to Cross-age Tutoring Project**

\( n = 23 \) (Groups C and D)

<table>
<thead>
<tr>
<th>I Liked</th>
<th>Very True</th>
<th>Somewhat True</th>
<th>Not Very True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I liked the <em>summer program</em>.</td>
<td>22 1 0</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>I learned something new in the program.</td>
<td>23 0 0</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>I had fun learning.</td>
<td>22 1 0</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>I feel good about myself because I helped a younger student learn.</td>
<td>18 3 2</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>I liked helping a younger student.</td>
<td>22 1 0</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>I would have liked to spend more time working with my partner.</td>
<td>22 1 0</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>I feel more confident now about my own abilities.</td>
<td>22 1 0</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>I want to come to the summer program next year.</td>
<td>22 0 1</td>
<td></td>
</tr>
</tbody>
</table>
Table 2

Tutees' Reaction to Cross-age Tutoring Project

n = 20 (Groups A and B)

<table>
<thead>
<tr>
<th>Statement</th>
<th>3 Very true</th>
<th>2 Somewhat true</th>
<th>3 Not very true</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I liked the summer program.</td>
<td>20</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. I learned something new during the summer program.</td>
<td>19</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>3. I had fun learning.</td>
<td>17</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>4. I feel special because I worked with an older student.</td>
<td>20</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5. My partner helped me learn new things</td>
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<td>0</td>
</tr>
<tr>
<td>6. We should spend more time working with our partners.</td>
<td>16</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>7. I want to come to the summer program next year.</td>
<td>19</td>
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<td>0</td>
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</tbody>
</table>
### Table 3

**Staff Reaction to Cross-age Tutoring Project**

*n = 8*

<table>
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<tr>
<th></th>
<th>Statement</th>
<th>Score</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>In general, my students benefited from working in a classroom.</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>The older students increased their self-esteem by helping younger students.</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>The older students increased their self-confidence by helping younger students.</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>The younger students improved their self-concept by having the individual attention of an older student.</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Few conflicts and discipline problems occurred when the children were working in the cross-age tutoring situation.</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>A lot of learning took place in the cross-age tutoring situation.</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>I would like to teach using cross-age tutoring again.</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>I would like to see cross-age tutoring fully incorporated into next year's summer enrichment program.</td>
<td>7</td>
</tr>
</tbody>
</table>
Several statements dealt with the participants' general reaction to the Summer Enrichment Program and the cross-age tutoring strategy. Both younger and older students reacted positively to "I liked the summer program," with forty-two responding "very true" and only one answering "somewhat true." Similarly, forty-one tutors and tutees selected "very true" in response to "I want to come to the summer program next year," while one tutee chose "somewhat true" and one tutor "not very true." Of course, these statements concerned the entire summer program, not just the cross-age tutoring component.

Other items more specifically required a reaction to the pairing activities. Sixteen tutees thought they "should spend more time working with [their] partners." Four students from Group A did not share those feelings, responding "not very true." Twenty-two of the twenty-three tutors considered it "very true" that they "would have liked to spend more time working with [their] partners," with only one tutor tempering the response to "somewhat true." While paired groups A and C showed at least three-fourths of the students would have liked more time spent in paired activities, groups B and D overwhelmingly responded positively to the experience, with 100% choosing "very true."

Teachers and aides also reacted to general statements indicating their overall opinion of the tutoring strategy. Seven of the eight staff members "would like to use cross-age tutoring again" and "would like to see cross-age tutoring more fully incorporated into next year's summer enrichment program." The other staff member responded "somewhat true" to both statements. With only one of the eight staff members
having some reservations about the tutoring program after its brief five-week implementation, this researcher interprets these results as encouraging.

With regards to the academic learning that occurred during the tutoring sessions, the staff was somewhat less positive when they responded to “A lot of learning took place in the cross-age tutoring program.” Six of them responded “very true,” and two chose “somewhat true.” Both younger and older students reacted to “I learned something new during the summer program” and “I had fun learning.” All but one student, a tutee, responded “very true” to the first statement. The second statement netted thirty-nine “very true” and four “somewhat true” responses. While both of these statements did not specifically address the cross-age tutoring component, another one for only the younger students did. All twenty tutees considered it “very true” that their “partner helped [them] learn new things.” The reaction to these statements indicates a strongly positive attitude towards the academic learning environment of the Summer Enrichment Program aided by the cross-age tutoring component.

Four statements addressed self-esteem. All twenty tutees “feel special because [they] worked with an older student.” Tutors had a more varied response to “I feel good about myself because I helped a younger student learn.” Eighteen said “very true,” three “somewhat true,” and two “not very true.” The staff’s reaction to “The older students increased their self-esteem by helping younger students” was six for “very true” and two “somewhat true.” Concerning the younger students’ improvement in “self-concept by having the individual attention of an older student,” the staff was equally divided between
“very true” and “somewhat true.” These results underline the discrepancy between the children’s self-assessment and the adults’ assessment of their feelings.

Other statements measured increased self-confidence. To “I feel more confident now about my own abilities,” twenty-two tutors felt it was “very true,” and one responded only “somewhat true.” Staff again was unsure of the impact the cross-age tutoring program had on students. The statement, “The older students increased their self-confidence by helping younger students,” netted three “very true” and five “somewhat true” responses.

The only negative results appeared on the tally of the staff questionnaire for the statement addressing the issue of negative behavior, “Few conflicts and discipline problems occurred when the children were working in the cross-age tutoring situation.” Only two staff members responded “very true,” while three responded “somewhat true,” and three others answered “not very true.”

All of the results from the three surveys provide an overall picture of the effects of the cross-age tutoring program implemented during the 1996 Bilingual Summer Enrichment Program.

Findings, Conclusions, and Future Study

The objectives for implementing cross-age tutoring during the Bilingual Summer Enrichment Program were 1) to improve attitudes toward academic learning, 2) to decrease negative behaviors, and 3) to increase students’ self-esteem and self-confidence. The findings based on student and staff questionnaires reveal that the tutoring project was
fairly successful in working towards meeting the academic, social, and psychological needs of an at-risk population.

Questionnaire responses definitely demonstrate that the students are aware of and enjoy the learning that occurs during the summer program. Although it was difficult to separate the cross-age activities from other learning activities, this researcher deduces that the cross-age tutoring played at least a partial role in developing the positive attitude toward learning.

The effort to decrease negative behaviors and improve social skills may not have been as successful. Staff reactions to the statement about conflicts and discipline problems were disappointing, weighted on the negative side. However, from the researcher’s observations, the children appeared to be on task and working cooperatively. Especially on field trips, the older students assumed responsibility for their younger partners, sat with them on the bus, and thus avoided some opportunities for negative and disruptive behavior.

The third goal - increasing self-esteem and self-confidence - was clearly a beneficial outcome of the cross-age tutoring program. Student responses to the questionnaire statements dealing with these psychological qualities reflect their awareness of their own level of self-esteem and self-confidence. Building positive self-esteem and self-confidence is a long process and cannot be accomplished in a short period of time. However, the children seem to feel that the experience increased these positive feelings about themselves.
While the results for the three objectives are highly positive, this researcher's reaction to the program is not one of complete satisfaction. She is still fully committed to cross-age tutoring as a successful strategy to be used for at-risk students, including those who are limited English proficient. However, she anticipates better results and increased staff commitment if the project were implemented during the school year. The five week summer program has too many constraints. There is too little planning time between hiring and the first day of the summer program. The actual attendance time is only two and a half hours per day, five days a week, and includes lunch. Four or five of the days are used for field trips or other special programs. All of these limitations detracted from the proper implementation of the cross-age tutoring strategy. In order to maximize the benefits, the cross-age tutoring project should be well planned, staff need more advance training, teachers must train the tutors and prepare well throughout activities for the tutor-tutee pairs, and the administration must monitor progress and revise the program as needed. Cross-age tutoring remains an extremely viable strategy, especially but not only for at-risk children.
Bibliography


Johnson, V. S. Milville 1802 to 1952. (Bound copy available at the Millville Public Library, Millville, NJ).


Students who have just completed the following grade levels need reinforcement/remediation in the skills listed:

**Transitional Kindergarten**

To say the names of the letters
To recognize the numbers 1 to 10
To write the letters of the alphabet

**Kindergarten**

To write the letters of the alphabet
To identify a sound for each letter
To join sounds together to make words
To count to 50
To add and subtract to 6
To identify pennies, nickels, dimes, and quarters
To read high frequency words

**Transitional First**

To follow directions
To demonstrate listening comprehension
To build vocabulary
To formulate oral sentences

**First Grade**

To use proper intonation when reading aloud
To demonstrate comprehension of reading material
To build vocabulary
To use correct grammatical structures when writing
To use a variety of vocabulary in writing
To spell high-frequency words correctly
To punctuate sentences and questions
To expand their use of Spanish and English to describe ideas and thoughts
**Second and Third Grades**

- To enrich English vocabulary
- To demonstrate comprehension of reading material
- To read critically
- To increase word attack skills
- To recognize sound-symbol relationships
- To follow directions
- To demonstrate comprehension of oral material

**Fourth and Fifth Grades**

- To write complete sentences
- To join related sentences together in a well-organized paragraph
- To edit run-on sentences
- To use proper capitalization and punctuation
- To use computers for composing, editing, and producing original work
- To build vocabulary in Spanish and English
- To summarize stories
- To identify important information
- To explain concepts and processes
- To use higher-level thinking skills
Bilingual Summer Enrichment Program
Curriculum Guide
1996

Millville Public Schools
Millville, New Jersey
Since 1992, the Millville School District has provided a summer enrichment program for its limited English proficient students. The program is open to those students who just completed kindergarten through fifth grade. The program lasts five weeks in June and July, and students attend from 9:00 A.M. to 12:30 P.M. Monday through Thursday.

The purpose of the program is to maintain, enrich, and supplement academic and social skills acquired during the school year and to ease the transition to the next grade level. The specific objectives in the curriculum guide reflect the National Goals 2000, the New Jersey Core Curriculum Content Standards, and the district's mission statement. They also address the special needs of the at-risk population for which the program is designed.
Mission Statement

We affirm the primary mission of the Millville Public Schools is to have all students graduate from high school. Upon high school graduation, the student will be able to function in a competitive modern society with marketable skills for entry into the job market. The student will be prepared to continue his or her education and will have developed appropriate social and coping skills. Millville will include programs introduced at the earliest year to promote individual success throughout each grade level and provide support services to students and parents aiding the education process.

Further, we believe a student’s education will be enhanced through an environment conducive to learning. The education of all students will be secured by providing students and teachers with proper facilities, instructional materials and resources to achieve desired learning outcomes.
Before the beginning of each year's summer program, the teachers collectively choose two science- and social studies-related themes to govern the content of instruction. Themes might include Nature (plants and animals), Air, Land, and Water, Communication and Transportation, and Community Living. Through thematic instruction, teachers use an integrated approach to address objectives in the content areas of mathematics, language arts literacy, science, social studies, visual and performing arts, and health and physical education. A number of field trips to local sites of interest tie into the general themes. Computer technology and other cross-content workplace readiness skills are also an important aspect of the program. The five-week program culminates in a parent visitation day with presentations by each class.

The curriculum is designed to allow flexibility for teacher creativity and for grade level differences, but at the same time provide enough direction for accountability and consistency.
At a level appropriate for the students' current grade and abilities, students will:

- Build vocabulary in both Spanish and English
- Participate in group discussions
- Participate in collaborative speaking activities, such as choral reading, plays, and recitation of poems
- Give and follow oral directions
- Demonstrate active listening skills
- Listen for a variety of purposes, such as enjoyment and obtaining information
- Use reading for a variety of purposes, such as enjoyment, learning, and problem solving
- Identify sound-symbol relationships
- Recognize sight words
- Read literally, inferentially, and critically
- Use prior knowledge to extend reading ability
- Respond to the use of illustrations to support text
- Demonstrate comprehension of a story
- Explain and summarize ideas
- Retell stories
- Distinguish between fact and fiction
- Follow written instructions
- Use writing to extend experiences
- Revise and edit writing
- Publish writing for others to read
Mathematics

At a level appropriate for the students' current grade and abilities, students will:

- Recognize, formulate, and solve problems arising from everyday experiences
- Construct and use concrete, pictorial, symbolic, and graphical models to represent problems situations
- Apply a variety of problem-solving strategies in cooperative and independent learning environments
- Explain their mathematical work to others
- Recognize the role of mathematics in daily life
- Recognize patterns and relationships
- Develop number sense
- Understand and demonstrate the use of money
- Use a variety of tools to measure mathematical and physical objects
- Identify two- and three-dimensional shapes
- Select and use various methods of performing numerical operations
Science

At a level appropriate for the students' current grade and abilities, students will:

- Recognize patterns
- Record observations
- Draw conclusions
- Recognize interdependent parts of a system and understand how the system works
- Observe and discuss ways in which technology and tools help people
- Use appropriate tools to measure quantities
- Display understanding of scientific concepts
- Recognize the diversity of plants and animals
- Identify the various habitats of plants and animals
- Investigate the interdependence of living things and their environment
- Examine how man interacts with the environment
At a level appropriate for the students' current grade and abilities, students will:

- Describe work that people perform in our economic system.
- Demonstrate understanding of the spatial concepts of location, distance, and direction.
- Identify the location of places in the local community.
- Compare the physical characteristics of places and regions.
- Explain the role of transportation and communication.
- Discuss the similarities and differences of rural, suburban and urban communities.
- Demonstrate understanding of the relationship between humans and the environment.
- Identify renewable and non-renewable resources.
- Discuss the family as a social unit.
Visual and Performing Arts

At a level appropriate for the students' current grade and abilities, students will:

- Demonstrate performance and participation skills by working and creating individually and with others
- Perform songs, dances, poems, and/or skits for an audience
- Display personal artistic creations
Health and Physical Education

At a level appropriate for the students' current grade and abilities, students will:

- Discuss and follow rules designed to promote health and safety
- Identify potentially dangerous situations and develop personal protection strategies
- Identify factors that contribute to good health
- Identify conflicts and demonstrate appropriate strategies to resolve them
- Discuss the importance of friends and family
- Discuss and demonstrate respect for and acceptance of others
- Participate in physical activities, such as games, exercise, and sports
At a level appropriate to the students' current grade and abilities, students will:

- Demonstrate ability to get along with others
- Work cooperatively with others to accomplish a task
- Explore career possibilities
- Use computer technology and other tools to produce products
- Select appropriate tools and technology for specific activities
- Use critical thinking, decision-making, and problem-solving skills
CURRICULUM QUESTIONNAIRE

Please review the new curriculum for the summer enrichment program and rate it for the following criteria. Completed forms should be returned to Debbie Wurick as soon as possible.

1. Ease of use

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<tr>
<td>Excellent</td>
<td>Very good</td>
<td>Good</td>
<td>Needs Improvement</td>
<td>Poor</td>
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</tbody>
</table>

2. Level of specificity

| 5 | 4 | 3 | 2 | 1 |

3. Flexibility allowing for various teaching styles

| 5 | 4 | 3 | 2 | 1 |

4. Appeal to students

| 5 | 4 | 3 | 2 | 1 |

5. Ability level appropriateness

| 5 | 4 | 3 | 2 | 1 |

6. Ability to meet individual needs of students

| 5 | 4 | 3 | 2 | 1 |

7. Suitability to a variety of student learning styles

| 5 | 4 | 3 | 2 | 1 |

Use the back of this sheet to write answers to these questions:

8. What did you like best about the curriculum?

9. What needs to be changed in the curriculum?

10. What should be added to the curriculum?
APPENDIX B

STAFF DEVELOPMENT
STAFF DEVELOPMENT WORKSHOPS
Staff Survey

Many of us attended one or more out-of-district workshops, seminars, or conferences during the past school year. How many of us have returned with interesting strategies and concepts that we wanted to try out in our own classrooms? Wouldn’t it be great to share some of those successful ideas with our colleagues! Please complete this survey, adding any comments on the back, and return to Debbie Wenrick’s mailbox by __________. Your help would be greatly appreciated.

Name __________________________________________________________

Number of workshops or conferences you attended last year __________

Title of workshop(s) attended last year: __________________________________________________________

Did you bring back any new ideas or materials you have used successfully in your classroom?

Yes _________ No _________

Do you plan to try out any new strategies in your classroom this year?

Yes _________ No _________

Have you ordered new materials that others may find useful in their classrooms?

Yes _________ No _________

Would you be interested in attending one day mini-workshops after school to find out about some of the new ideas learned last year?

Yes _________ No _________

Would you be willing to present an informal, 45-minute workshop after school to share a new idea or interesting materials with a small group of interested colleagues?

Yes _________ No _________
Learn it, Live it, Share it
Mini-workshop

Topic:

Presenter:

Date:

Place:

Sign if you plan to attend:

______________________________________________________________

______________________________________________________________

______________________________________________________________

______________________________________________________________

______________________________________________________________
Thank you for participating in the Learn It, Live It, Share It program this year. Please take a few minutes to answer the following questions, then return the completed questionnaire to Debbie Wenrick's mailbox. Thanks for your feedback.

1. How many Learn It, Live It, Share It mini-workshops have you attended? _____

2. Did the workshops give you valuable teaching ideas? Yes_____ No_____

3. Have you tried any of the ideas in your classroom? Yes_____ No_____

4. Do you feel the Learn It, Live It, Share It program should be continued? Yes_____ No_____

5. Would you be willing to present a workshop in the future? Yes_____ No_____
APPENDIX C

SUPERVISION OF INSTRUCTION
OBJECTIVES: (What are you trying to accomplish in this lesson? What will students be able to do as a result of participating in the lesson? Are the objectives keyed to the course of study?)

Students will . . .

MATERIALS: (What materials will be required for this lesson?)

PROCEDURES: (Review - Presentation - Guided Practice - Feedback and Correctives - Independent Practice - Evaluation)
GENERAL COMMENTS: (What was observed. Objective statements of what actually took place during the lesson.)
MILLVILLE PUBLIC SCHOOLS
MILLVILLE, NEW JERSEY

PROFESSIONAL EVALUATION

(FORM C)

Teacher ................................................................. Date .........................................................

1. Comments on Observation:

2. Summary of Conference: (Include statements of planned activities, changed methods, etc.)

Signature of Evaluator ........................................... Date .................................................

This signature indicates that the Evaluator and Evaluator have discussed this evaluation. It does not necessarily denote agreement with all statements within the Evaluation.
Evaluators may submit a written response to any material in this report within 15 days of the post-observation conference.

REV. 8-86. WHITE - Staff Member YELLOW - Evaluator PINK - Building GOLDENROD - File
Please rate the current instrument used for observations for the following characteristics:

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<th>Poor</th>
<th>Satisfactory</th>
<th>Excellent</th>
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<tr>
<td>1. Objectivity</td>
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<td>2. Reliability</td>
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<td>3. Ease of use for observer</td>
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<td>4. Clarity of expectations</td>
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<td>5. Ability to provide teacher with valuable feedback</td>
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<td>6. Conduciveness to professional growth</td>
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<tr>
<td>7. Conduciveness to supervisor-supervisee dialogue</td>
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CRITERIA FOR OBSERVATIONS OF TEACHERS

The observer will look for and record evidence that the teacher:

- has a good rapport with the students
- has a sense of humor
- has a good command of the subject matter
- maintains discipline
- presents information in more than one way
- manages classroom procedures
- makes the classroom conducive to learning
- can be flexible
- thoughtfully plans the lesson
- assesses student progress
- possesses excellent communication skills
- makes a personal connection with individual students
- maintains a professional demeanor

October 22, 1996
INSTRUCTIONAL PLAN

Name_________________________ School_________________________

Grade level_____________ Subject_________________________ Date___________

1. Briefly describe the students in this class, including those with special needs.

2. What are your goals for the lesson? What do you want the students to learn?

3. Why are these goals suitable for this group of students?

4. How do these goals support the district's curriculum, state frameworks, and content standards?

5. How do these goals relate to broader curriculum goals in the discipline as a whole or in other disciplines?

6. How do you plan to engage students in the content? What will you do? What will the students do?

7. What difficulties do students typically experience in this area, and how do you plan to anticipate these difficulties?
8. What instructional materials or other resources, if any, will you use?

9. How do you plan to assess student achievement of the goals? What procedures will you use?

10. How do you plan to make use of the results of the assessment?
1. As I reflect on the lesson, to what extent were students productively engaged?

2. Did the students learn what I intended? Were my instructional goals met? How do I know, or how and when will I know?

3. Did I alter my goals or instructional plan as I taught the lesson? Why?

4. If I had the opportunity to teach this lesson again to this same group of students, what would I do differently? Why?
The class observed was part of a brand new 9-week course designed for students not involved in foreign languages or band. It combines computer applications with research strategies. As Ss entered the classroom, they put their belongings at their desks then immediately went to various locations in the room to get the supplies they needed and to start up the computers. When most of the Ss had arrived, T asked Ss to sit down so she could give some instructions. As Ss took their seats, T put away the overhead projector she had used in the previous period. S asked T to check her eye. T looked at it and discussed it with her. A second T (computer expert) entered the room. T explained that there would be no class the following day due to a scheduled pep rally. T told Ss that they needed to finish their projects by the end of class Monday and that the final exam would be on Wednesday. She explained what the exam would consist of and informed Ss that there would be a computer for each student. Twice during these instructions Ss began to leave their seats to go to the computers. T chuckled and said, "Not anxious, are you?" T. reminded Ss of procedures for determining use of computers: "Last yesterday, first today." Ss quickly went to workstation. The third T (media specialist) of the team entered the room. One S couldn't find her diskette, so T went to the filing cabinet to get one for her. Ss used the Hyperstudio program to design a short presentation to teach one concept of their choice. The presentation will incorporate the Hyperstudio skills they have learned in the course. The Ss were fully engaged in their work, asking for help or guidance as problems arose. T responded quickly and guided them through the problems. Those Ss who were not on computers quietly worked at a desk, planning what they were going to do when it was their turn to use a computer. Halfway through the period those without computers switched with several Ss whose projects were almost finished. Two minutes before the end of the period, T warned Ss to clean up. They quickly closed the computers, stored their materials, and returned to their desks. When the bell rang, Ss were dismissed.
Good rapport with the students:
Ss responded well to T and felt comfortable asking for help on project and/or personal matters.

Sense of humor:
T used humor to temper Ss' enthusiasm until she finished giving instructions when she said, "Not anxious, are you?"

Command of subject matter:
T is knowledgeable but still not completely comfortable with Hyperstudio. She relies on the expertise of the other Ts. This is the first time teaching this class.

Discipline:
No discipline problems arose. Ss were all fully engaged in learning activities.

Presentation of information in more than one way:
This class is teaching Ss an alternative way of presenting material. The Ss are given the opportunity to choose what kind of information they present.

Classroom management:
The Ts have developed an effective system for sharing computers. Ss know the procedures and what is expected. They can begin to prepare for the class as soon as they enter the classroom. Ss are given a two-minute warning to clean up. Materials for Ss are easily accessible.

Classroom conducive to learning:
The computers are arranged such that the Ss have sufficient room to work; also, they do not interfere with other classes. Materials are effectively stored to allow student access. The nature of the course and the good rapport the T has developed with the Ss create a positive classroom climate.

Flexibility of teacher:
The class is student-centered. T showed flexibility in responding to various S needs.

Thoughtful planning of lessons:
The class observed was just a small part of the total project. The project was long-term and was well-planned and systematic. Ss had excellent guidelines to follow.

Assessment of student progress:
The project will be formally assessed when complete and shared with the class. T checked progress as Ss worked.
Communication skills:
T clearly and succinctly gave initial instructions, including special instructions for the following day's class. When Ss were on computers, T listened and responded to questions.

Personal connection with students:
T responded to S having trouble with her eye. T commiserated with S who forgot to save her work and lost part of it.

Professional demeanor:
T maintained her professionalism at all times. The team of three teachers work well together and rely on each other's strengths. T treats Ss with respect.
Please rate the observation instrument designed by your committee for the following characteristics:

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<th>Characteristic</th>
<th>Poor</th>
<th>Satisfactory</th>
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<td>7. Conduciveness to supervisor-supervisee dialogue</td>
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Please write your response to the following question:

8. How did you feel about being involved in the instrument revision process?
TECHNOLOGY SURVEY

Please take a few minutes to respond to the following statements. Return your completed survey to my mailbox.

Thanks for your time.

1. My classroom has at least one computer with a CD-ROM drive.
   Yes__________  No__________

2. I have personally used CD-ROM technology.
   Yes__________  No__________

3. My students have used CD-ROM technology in my classroom.
   Yes__________  No__________

4. I have integrated CD-ROM technology into my instruction.
   Yes__________  No__________
Dear Colleagues:

As part of my internship in Supervision and Curriculum Development, I am working on a project to increase the use of CD-ROM as an instructional tool in Kieck Avenue School. Please list all CDs you have in your classroom. If you have none, please write NONE. Completed forms may be placed in my mailbox. Thank you in advance for your cooperation, time, and support.

Sincerely,

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<tr>
<td>3 Faces of Evil</td>
<td>6, 7</td>
<td>no</td>
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<td>5 a Day Adventures</td>
<td>K, 2, 5</td>
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<td>ESL, Nutrition</td>
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<tr>
<td>A Global Family Portrait</td>
<td>Cornelius</td>
<td>no</td>
<td>Social Studies</td>
</tr>
<tr>
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<td>6, 7</td>
<td>no</td>
<td>Reading</td>
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<td>Big Anthony's Mixed-up Magic</td>
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<tr>
<td>Building Reading Comprehension</td>
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<td>Busy Town</td>
<td>K</td>
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<td>Card Shop Plus</td>
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<td>Career-O-Rama</td>
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<td>no</td>
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<td>K, 1, 5, 6</td>
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<td>Legends of the Americas</td>
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<td>Material World</td>
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<td>Bilingual</td>
<td>Subject</td>
</tr>
<tr>
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<td>-----------</td>
<td>---------------</td>
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<td>Me, Myself, and I</td>
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<td>Super Print</td>
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<td>The Animals</td>
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<td>The Cat Came Back</td>
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<td>Yes</td>
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<tr>
<td>The Cities Below</td>
<td>K, 2, 5</td>
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<td>The New Kid on the Block</td>
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<td>Reading, Discus</td>
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<td>The Tortoise and the Hare</td>
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<td>Reading</td>
</tr>
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<td>The Velveteen Rabbit</td>
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<td>The Way Things Work</td>
<td>Hayes, Corn</td>
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<tr>
<td>Time Almanac</td>
<td>K, 2, 5, Co,H,Passa</td>
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<td>Webster's Collegiate Dictionary</td>
<td>Cooper</td>
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<td>Who Built America</td>
<td>K, 2, 5</td>
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<td>History</td>
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<td>Word Tales</td>
<td>K</td>
<td>no</td>
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<tr>
<td>Worldview</td>
<td>1</td>
<td>no</td>
<td>Geography</td>
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</tbody>
</table>
Are you using your classroom computer to its full potential?

Come and see the capabilities of CD-ROM. Several CDs have been purchased by Building Planning Team and can be borrowed for classroom use.

Find out what CDs are available, how to use them, and how they can be integrated into your curriculum.

Join us for a fun, no-pressure, hands-on inservice!
# CD-ROM TECHNOLOGY

## Pre-workshop Survey

<table>
<thead>
<tr>
<th>Name __________________________</th>
</tr>
</thead>
</table>

I have previously used CD-ROM technology on a computer in my home:

<table>
<thead>
<tr>
<th>Never</th>
<th>Occasionally</th>
<th>Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

I have previously used CD-ROM technology in my classroom for my own information:

<table>
<thead>
<tr>
<th>Never</th>
<th>Occasionally</th>
<th>Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

I have previously used CD-ROM technology on my classroom computer for instruction:

<table>
<thead>
<tr>
<th>Never</th>
<th>Occasionally</th>
<th>Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

I am ____________ comfortable using CD-ROM technology:

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Somewhat</th>
<th>Very</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

I am ____________ comfortable using programs already installed on the computer:

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Somewhat</th>
<th>Very</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

I have attended other computer workshops: Yes No

Please list on other side.
CD-ROM TECHNOLOGY
Workshop Evaluation

Please rate the workshop for the following:

<table>
<thead>
<tr>
<th></th>
<th>Poor</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Excellent</th>
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<tbody>
<tr>
<td>Appropriateness of materials</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Clarity of presentation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Usefulness of information</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Length of workshop</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Usefulness of handouts</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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</tbody>
</table>

Additional comments:
Thank you for attending last month’s CD-ROM workshop. To help me evaluate the effectiveness of the workshop, please respond to the following statements by circling a number from 1 to 5. The completed questionnaire can be returned to my mailbox.

Name_____________________

1. Since attending the CD-ROM workshop, I have used CD-ROM to obtain information for lessons.

   1   2   3   4   5
   Not at all   Sometimes   Frequently

2. Since attending the CD-ROM workshop, I have integrated CD-ROM into some of my lessons.

   1   2   3   4   5

3. Since attending the CD-ROM workshop, I have given my students opportunities to use CD-ROM to obtain information.

   1   2   3   4   5

4. I feel I need more inservice in the use of CD-ROM.

   1   2   3   4   5
   Not at all   Somewhat   Definitely

Please list any CDs you have tried:
APPENDIX E

CHANGE - CROSS-AGE TUTORING
Please circle the number that tells how you feel about each sentence.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Very true</td>
<td>Somewhat true</td>
<td>False</td>
</tr>
</tbody>
</table>

1. I liked the summer program.  
3 2 1

2. I learned something new in the program.  
3 2 1

3. I had fun learning.  
3 2 1

4. I feel good about myself because I helped a younger student learn.  
3 2 1

5. I liked helping a younger student.  
3 2 1

6. I would have liked to spend more time working with my partner.  
3 2 1

7. I feel more confident now about my own abilities.  
3 2 1

8. I want to come to the summer program next year.  
3 2 1
SUMMER ENRICHMENT PROGRAM
Student Questionnaire

Please color the face that shows how you feel about each sentence.

1. I liked the summer program.
   
2. I learned something new during the summer program.
   
3. I had fun learning.
   
4. I feel special because I worked with an older student.
   
5. My partner helped me learn new things.
   
6. We should spend more time working with our partners.
   
7. I want to come to the summer program next year.
Please circle the number that corresponds to the way you feel about each of the following statements. On the back, feel free to make any additional comments or suggestions you may have regarding the cross-age tutoring component of the summer program.

<table>
<thead>
<tr>
<th></th>
<th>Very true</th>
<th>Somewhat true</th>
<th>Not very true</th>
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<td>1</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. In general, my students benefited from working in a cross-age tutoring situation.
   - 3
   - 2
   - 1

2. The older students increased their self-esteem by helping younger students.
   - 3
   - 2
   - 1

3. The older students increased their self-confidence by helping younger students.
   - 3
   - 2
   - 1

4. The younger students improved their self-concept by having the individual attention of an older student.
   - 3
   - 2
   - 1

5. Few conflicts and discipline problems occurred when the children were working in the cross-age tutoring situation.
   - 3
   - 2
   - 1

6. A lot of learning took place in the cross-age tutoring situation.
   - 3
   - 2
   - 1

7. I would like to teach using cross-age tutoring again.
   - 3
   - 2
   - 1

8. I would like to see cross-age tutoring fully incorporated into next year’s summer enrichment program.
   - 3
   - 2
   - 1
Biographical Data

Debra G. Wenick (nee Grey) was born and raised in Allentown, Pennsylvania. Her father was a Certified Public Accountant, and her mother was an office clerk with the city government. She grew up with a younger brother, Thomas.

After high school, Debra attended Indiana University of Pennsylvania in Indiana, Pennsylvania, where she received a B.S.Ed. in French Education. She spent one semester of her junior year studying abroad in Grenoble, France. Following graduation she attended Millersville State College for one year to add Spanish to her teaching certificate.

She married and several years later had a son named Matthew. In 1984 she and her family moved to Bridgeton, New Jersey.

In 1988, she was hired as an ESL teacher in the Millville Public Schools. Over the next several years, she held a number of positions, teaching English as a Second Language to almost all grade levels. In 1992 she took a position as a bilingual classroom teacher in the same district. She took courses at Glassboro State College to earn an ESL certificate and a bilingual endorsement. She currently teaches a 4th and 5th grade bilingual class and also serves other roles within the district.

In 1992 Ms. Wenrick began her Master’s program in Educational Leadership at Rowan College (now Rowan University). She will achieve both Principal’s and Supervisor’s certificates. Her professional goal is to supervise a bilingual/ESL program.