ANNUAL PERFORMANCE REPORT
2002-2003
MAGNET SCHOOLS ASSISTANCE PROGRAM GRANT

Wake County Public School System
Raleigh, North Carolina
July 2003

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E&R Report No. 03.05

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OMB No. 1890-0004
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U.S. Department of Education
GRANT PERFORMANCE REPORT

I. COVER SHEET

1. Performance Reporting Period
9/01/02 to 8/31/03

2. PR/Award No. (Block 5 on Grant Award Notification)

S165A010034

3. Project Title

Magnet Schools Assistance Program

4. Recipient Information

Name: Wake County Public School System

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6. Cumulative Expenditures

Federal: $2,505,270.00

Non Federal: $

7. Annual Certification(s) of IRB approval

Yes ____ No X

8. Authorized Representative Information

To the best of my knowledge and belief, all data in this performance report are true and correct.

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II. EXECUTIVE SUMMARY

Magnet Schools Assistance Program Annual Performance Report Year 2 (2002-03)

From September 1, 2002, through June 30, 2003, the staff members of the Wake County Public School System (WCPSS) 2001-04 Magnet Schools Assistance Program (MSAP) grant have successfully built upon the foundation they established in Year 1. This year they have endeavored to make up for any objectives not fully achieved in Year 1 and to attain all of their Year 2 objectives. Schools participating in the project and their magnet themes are:

- Brooks Elementary School — Museums,
- Joyner Elementary School — Language Explorations,
- Millbrook Elementary School — International Baccalaureate,
- Powell Elementary School — Visual and Performing Arts, and
- Moore Square Middle School — Museums.

The project focuses on four major purposes and has objectives related to each. Annual benchmarks have been established to measure success in achieving the objectives. The four MSAP purposes are listed below, followed by a summary of accomplishments or deficits in meeting the Year 2 benchmarks for each purpose.

MSAP PURPOSE 1:
The elimination, reduction, or prevention of minority group isolation in elementary and secondary schools with substantial proportions of minority students.

Official fall 2002 membership figures indicate that Year 2 enrollment percentages of minority students at project schools were not low enough to meet benchmarks for eliminating, preventing, or reducing minority group isolation. To maintain diversity in its schools, the WCPSS student assignment policy takes into account each school's percentage of students on free/reduced-price lunch and percentage of students below grade level. The fact that race is not a factor in the assignment of students undoubtedly affects the project's ability to meet minority group isolation benchmarks. The continued high growth in the number of students enrolled in WCPSS as well as overall increases in the percentage of minority students also affect enrollment percentages of schools throughout the system. Because minority enrollment benchmarks are always a challenge for them, administrators and coordinating teachers who work on the project review their recruitment activities regularly and revise them to make needed improvements. In an effort to reach and attract as many families as possible, this year the magnet recruiter was able to obtain the services of a Raleigh-area marketing firm *pro bono*. The recruiter then collaborated with project staff to use the firm's advice in targeting and strengthening their 2002-03 activities to recruit students for the 2003-04 school year.

MSAP PURPOSE 2:
The development and implementation of magnet school projects that will assist local educational agencies in achieving systemic reforms and providing all students the opportunity to meet challenging State content standards and challenging State performance standards.

The capabilities that staff members gained in Year 1 to use the reform-based themes embodied in this project were broadened and deepened by professional development in Year 2. To add to the 1,000 hours of training provided in Year 1, over 1,600 hours were offered in Year 2. To ensure that these experiences prepared teachers to assist their students in meeting state standards, every workshop was explicitly linked to the North Carolina Standard Course of Study (NCSCS). Every school had high attendance rates of their faculty and staff at professional development sessions for the project. Staff survey results showed that staff members at four of the five project schools felt the training had increased their level of familiarity with new instructional methods for their classrooms. At three of the five schools, more than 80% of staff members who responded to the survey perceived their school's magnet theme as being *effective* or *very effective* in helping meet standards of the state accountability system. The two schools with responses below 80% will carefully identify and address any problems that may be negatively affecting staff perceptions.

MSAP PURPOSE 3:
The development and design of innovative educational methods and practices.

In fall 2002, the 36 curriculum units completed by faculty in Year 1 were reviewed to ensure their alignment with NCSCS content and assessment standards. Staff at each school have committed to completing a total of 45 units by August 31, 2003. Based on this number, it appears that the Year 2 curriculum development benchmark specifying completion of 83% of the curriculum units required by the end of the project will be met. Coordinating teachers have summarized current citations to update the research base about innovative methods and practices being used to implement project themes at their schools. Onsite observations of a sample of teachers at each school showed that they are appropriately implementing project themes and elements in their classrooms. High percentages of the parents who responded to the WCPSS annual parent survey felt that project schools were offering a high-quality educational program with challenging work in all classes. They also agreed that project schools were helping children learn academic subjects, computer skills, and visual and performing arts.

MSAP PURPOSE 4:
Courses of instruction within magnet schools that will substantially strengthen the knowledge of academic subjects and the grasp of tangible and marketable vocational skills of students attending such schools.

Benchmarks to evaluate Purpose 4 are based on North Carolina's state accountability system, the ABCs of Public Education. The evaluation plan also includes local indicators of performance — the WCPSS Board of Education Goal 2003 and the district literacy and mathematics assessments. In anticipation of improved student achievement, benchmarks required that all schools in the project attain the ABCs Expected Growth Composite set for them by the state and that their ABCs Performance Composites increase in comparison to the previous year. These high standards are augmented by the MSAP performance indicator system, which requires that achievement gains at project schools meet or exceed gains for students in the district as a whole. In a district such as Wake County, where 91% of students scored at or above grade level and 97% of schools achieved or exceeded *expected growth* in 2002-03, this requirement raises the student achievement bar even higher. Each student achievement measure used to evaluate the project is listed below together with a summary of Year 2 results.

- **ABCs Expected Growth Composite**: Brooks, Joyner, Millbrook, and Powell elementary schools all attained their ABCs *expected growth* levels. In fact, growth was strong enough at all four schools to meet the state's *high growth* standard. Moore Square Middle school did not achieve *expected growth* for the 2002-03 school year.
- **ABCs Performance Composite**: Brooks, Joyner, Millbrook, and Powell's ABCs performance composites ranged from 85 to 88% of students proficient, but were not as high as the systems 91% composite for elementary schools. Although Moore Square's 86% performance composite was high, it did not reach the district middle school level, which was 89%.
- **WCPSS Goal 2003**: The WCPSS Board of Education Goal 2003 required that 95% of 3rd and 8th graders score at or above grade level on the 2002-03 End-of-Grade reading and mathematics tests. Project benchmarks also obliged participating schools to reach this level. However, like many schools in the system, elementary schools in the project fell somewhat short of the goal. Performance of third graders at project schools, which ranged from 74 to 85% proficient in reading and 83 to 90% in mathematics, was below 95%. In Year 3, project schools will again strive for the high level of performance represented by Goal 2003. Moore Square Middle School, which did not have an 8th grade in 02-03, will also be evaluated on this benchmark next year.
- **Disaggregated Results**: Results from all of the state and system performance indicators used as project benchmarks were also disaggregated. Scores were reported for minority students (WCPSS *Asian/Pacific Islander*, *Alaskan/American Indian*, *Black, Hispanic/Latino*,

and *Multiracial* ethnicity codes) and nonminority students (WCPSS *White* ethnicity code) and compared to district-wide scores for these same groups. The project is designed to improve performance for both minority and nonminority students and also to reduce the gap in minority/nonminority achievement. At Brooks, Joyner, and Millbrook, achievement of both minority/nonminority students rose in 2002-03 in comparison to 2001-02. The achievement gap between these two groups also decreased at these three schools. Nonminority achievement rose a bit at Powell, whereas minority achievement declined very slightly. This resulted in a very small increase in the achievement gap from 2001-02 to 2002-03. Moore Square opened in 2002-03 and thus did not have comparison data from the previous year.

- **WCPSS Literacy and Mathematics Assessments**: The district's literacy and mathematics assessment profiles were used to evaluate students in grades K through 2, where standardized testing is not used. None of the four elementary schools attained the overall benchmark of having their students score as well as or better than the district. Brooks did meet the benchmark for minority and nonminority students by having two out of the three K-2 grade levels equal or exceed the WCPSS reading or mathematics assessment scores for these same groups. Joyner met the benchmark for nonminority students only.
- **Planned Adjustments Based on Evaluation Outcomes**: All areas where Year 2 outcomes fell short of the benchmarks were closely examined by project staff and used as a catalyst for improvement. The state disaggregates ABCs results by grade level, and the WCPSS Evaluation and Research Department further subdivides ABCs growth and performance composites by factors such as ethnicity, eligibility for free or reduced-price lunch, previous achievement level, and special programs status. Evaluation and Research also makes a breakdown of results available for the WCPSS literacy and mathematics assessments. This provides a wealth of specific information that grade-level teams can use to understand shortfalls for various student groups. School administrators, project staff, and coordinating teachers at each school ensure that such information is available to faculty members and that time is allocated for teachers to integrate it into their instructional planning.

III. PROJECT STATUS

PROJECT PURPOSES AND OBJECTIVES

The purposes of the 2001-04 Wake County Public School System (WCPSS) Magnet Schools Assistance Program (MSAP) project are as follows:

MSAP PURPOSE 1:
The elimination, reduction, or prevention of minority group isolation in elementary and secondary schools with substantial proportions of minority students.

MSAP PURPOSE 2:
The development and implementation of magnet school projects that will assist local educational agencies in achieving systemic reforms and providing all students the opportunity to meet challenging State content standards and challenging State performance standards.

MSAP PURPOSE 3:
The development and design of innovative educational methods and practices.

MSAP PURPOSE 4:
Courses of instruction within magnet schools that will substantially strengthen the knowledge of academic subjects and the grasp of tangible and marketable vocational skills of students attending such schools.

Staff members who wrote the application for this project formulated specific objectives through which each of the purposes above is being operationalized across the three years of the project. Because the project culminates on June 30, 2004, at the end of Year 3, each objective is referenced to that date. It is assumed that the stated outcomes will be attained by that time. This Annual Performance Report specifically addresses activities undertaken during the 2002-03 school year, the project's second year. Objectives associated with each purpose are listed below. For the convenience of those reading this report, objectives are also restated in the sections of the report that deal with each purpose.

MSAP PURPOSE 1: Objectives	
WCPSS Project Objectives 1-1 a-e:	By June 30, 2004, as a result of the successful implementation of new and significantly revised magnet programs, WCPSS will eliminate, reduce, or prevent minority group isolation at **Moore Square Museums Magnet Middle School, Brooks Museums Magnet Elementary School, Millbrook Magnet Elementary School: An International Baccalaureate Primary Years Programme, Joyner Language Explorations Magnet Elementary School,** and **Powell Visual and Performing Arts Magnet Elementary School** by achieving the minority enrollment percentages listed below, as evidenced by: • the district's annual *Historical Membership and Capacity Chart* of official 20th day enrollment data.

***MSAP PURPOSE 1: Objectives**, continued*	
WCPSS Project Objectives 1-2 a-e:	By June 30, 2004, as a result of the successful implementation of new and significantly revised magnet programs, WCPSS will eliminate, reduce, or prevent minority group isolation at **Moore Square Museums Magnet Middle School, Brooks Museums Magnet Elementary School, Millbrook Magnet Elementary School: An International Baccalaureate Primary Years Programme, Joyner Language Explorations Magnet Elementary School,** and **Powell Visual and Performing Arts Magnet Elementary School** without their feeder schools becoming racially isolated as evidenced by: • the district's annual *Historical Membership and Capacity Chart* of official 20th day enrollment data.
WCPSS Project Objectives 1-3 a-e:	By June 30, 2004, as a result of the successful implementation of new and significantly revised magnet programs at **Moore Square Museums Magnet Middle School, Brooks Museums Magnet Elementary School, Millbrook Magnet Elementary School: An International Baccalaureate Primary Years Programme, Joyner Language Explorations Magnet Elementary School,** and **Powell Visual and Performing Arts Magnet Elementary School**, activities will be in place that promote broad participation and interaction among diverse groups of students in magnet curricular activities reflecting the same minority/nonminority distribution as the magnet school as evidenced by: • the school's documentation of minority/nonminority student distribution in required and elective curricular activities representative of the entire curriculum and • the district's annual *Historical Membership and Capacity Chart* of official 20th day enrollment data.

MSAP PURPOSE 2: Objectives	
WCPSS Project Objectives 2-1 a-e:	By June 30, 2004, **Moore Square Museums Magnet Middle School, Brooks Museums Magnet Elementary School, Millbrook Magnet Elementary School: An International Baccalaureate Primary Years Programme, Joyner Language Explorations Magnet Elementary School,** and **Powell Visual and Performing Arts Magnet Elementary School** will implement new and significantly revised magnet themes to assist the district in achieving national, state, and local reforms, as evidenced by: • sections of the annual project report describing reforms and how they are implemented at the school; • professional development documents for the magnet theme showing a 100% correlation with state standards; • staff participation rate of 95% in professional development related to the theme; • surveys of staff members' agreement that they have learned to use new instructional methods; and • surveys of staff members' familiarity with specific reform-based instructional approaches being used to implement the theme.

***MSAP PURPOSE 2: Objectives**, continued*	
WCPSS Project Objectives 2-2.1 a-e:	By June 30, 2004, program curricula for the new and significantly revised magnet themes at **Moore Square Museums Magnet Middle School**, **Brooks Museums Magnet Elementary School, Millbrook Magnet Elementary School: An International Baccalaureate Primary Years Programme, Joyner Language Explorations Magnet Elementary School,** and **Powell Visual and Performing Arts Magnet Elementary School** will be 100% aligned with the state's challenging content *(N.C. Standard Course of Study—NCSCS*) and performance standards (*N.C. State Accountability System—ABCs*) as evidenced by: • reviews of all new curriculum documents by Curriculum Specialists verifying the correlation of curricular materials with the state curriculum (NCSCS) and • reviews by Evaluation Specialists of official *Public Schools of North Carolina End-of-Grade Tests Grade-Level Reading and Mathematics Summary Goal Reports* to assess the percent of items correct for each *NCSCS* reading and math goal measured in the state accountability system.
WCPSS Project Objectives 2-2.2 a-e:	By June 30, 2004, the new and significantly revised magnet themes at **Moore Square Museums Magnet Middle School, Brooks Museums Magnet Elementary School, Millbrook Primary Years An International Baccalaureate Magnet Elementary School, Joyner Language Explorations Magnet Elementary School,** and **Powell Visual and Performing Arts Magnet Elementary School** will assist the schools to meet or exceed both the growth and performance standards of North Carolina's state accountability system and to reach the WCPSS Board of Education Goal of having 95% of 3rd and 8th graders at or above grade level by 2003, as evidenced by: • official results from the annual *ABCs of Public Education: Growth and Performance of NC Schools* report of the state Board of Education; • official results from the WCPSS Evaluation and Research Department annual publication, *Measuring Up : Progress Towards the 95% Goal*; and • surveys of staff members' perceptions of the effectiveness of the schools' magnet programs in helping meet standards of the state ABCs accountability system and expectations of the WCPSS Board Goal.

MSAP PURPOSE 3: Objectives	
WCPSS Project Objectives 3-1 a-e:	By June 30, 2004, **Moore Square Museums Magnet Middle School, Brooks Museums Magnet Elementary School, Millbrook Magnet Elementary School: An International Baccalaureate Primary Years Programme, Joyner Language Explorations Magnet Elementary School,** and **Powell Visual and Performing Arts Magnet Elementary School** will have implemented new and significantly revised magnet themes that meet identified student needs and interests as evidenced by: • successful completion of at least 100 new curriculum documents; • sections of the annual project report outlining the research base of innovative educational methods and practices; • sections of the annual project report describing how innovative themes and elements are incorporated; • sections of the annual project report explaining how the themes and elements meet identified student needs and interests; • onsite observations showing 90% of staff implementing the theme appropriately; and • surveys of staff members' perceptions of the effectiveness of the program in meeting student needs and interests.

***MSAP PURPOSE 3: Objectives**, continued*	
WCPSS Project Objectives 3-2 a-e:	By June 30, 2004, **Moore Square Museums Magnet Middle School, Brooks Museums Magnet Elementary School, Millbrook Magnet Elementary School: An International Baccalaureate Primary Years Programme, Joyner Language Explorations Magnet Elementary School,** and **Powell Visual and Performing Arts Magnet Elementary School** will have implemented innovative classroom methods and practices which promote student achievement as evidenced by: • annual project report describing the degree to which new classroom methods and practices are research-based, innovative, and promote student achievement; • classroom observations showing that 90% of staff are effectively incorporating innovative educational methods and practices; • surveys of staff members' perceptions of the effectiveness of innovative methods in promoting student achievement; and • surveys of parents' perceptions of the effectiveness of innovative methods in promoting student achievement.

MSAP PURPOSE 4: Objectives	
WCPSS Project Objectives 4-1.1 a-e:	By June 30, 2004, as a result of the implementation of new and significantly revised magnet themes, the state ABCs accountability system Growth Composite for **Moore Square Museums Magnet Middle School, Brooks Museums Magnet Elementary School, Millbrook Magnet Elementary School: An International Baccalaureate Primary Years Programme, Joyner Language Explorations Magnet Elementary School,** and **Powell Visual and Performing Arts Magnet Elementary School** will exceed the Growth Composite for elementary and middle schools in the district as a whole; the schools' ABCs Performance Composites will be equal to or greater than district elementary and middle schools; and the schools will meet or exceed the WCPSS Board of Education Goal 2003 of having 95% of 3rd and 8th graders performing at or above grade level by 2003, as measured by: • scale scores and performance levels on the state accountability system End-of-Grade Reading and Mathematics tests (grades 3-8); • focused holistic scores on the state accountability system writing assessment (grades 4 and 7); and • official results from the WCPSS Evaluation and Research Department annual publication, *Measuring Up : Progress Towards the 95% Goal*.
WCPSS Project Objectives 4-1.2 b-e:	By June 30, 2004, as a result of the implementation of their new or significantly revised magnet themes, achievement of kindergarten through second-grade students at **Brooks Museums Magnet Elementary School, Millbrook Magnet Elementary School: An International Baccalaureate Primary Years Programme, Joyner Language Explorations Magnet Elementary School,** and **Powell Visual and Performing Arts Magnet Elementary School** on the district's Literacy, Writing, and Math Assessment Profiles will exceed that of students in the district as a whole as measured by: • official results from the Evaluation and Research Department's annual *Grade K-5 Assessment Data Capture Form*.

MSAP PURPOSE 4: Objectives, *continued*	
WCPSS Project Objectives 4-1.3 a-e:	By June 30, 2004, as a result their new and revised magnet themes, proficiency of 4th or 7th grade students at **Moore Square Museums Magnet Middle School, Brooks Museums Magnet Elementary School, Millbrook Magnet Elementary School: An International Baccalaureate Primary Years Programme, Joyner Language Explorations Magnet Elementary School,** and **Powell Visual and Performing Arts Magnet Elementary School** on the North Carolina Writing Assessment will exceed that of 4th or 7th graders in the district as a whole and proficiency of 8th grade students on the NC Tests of Computer Skills and Proficiency will be higher than district 8th graders as evidenced by: • the state *Writing Assessment Local Education Agency Summary Report* published by the North Carolina Department of Public Instruction and • WCPSS mainframe files of Computer Skills scores and the state's *Summary Statistics on Computer Performance Scores*.

In addition to developing objectives for each MSAP purpose, staff members who wrote the project proposal linked individual objectives to the specific schools at which they would be carried out. Across all five schools, a total of 54 specific objectives are being implemented through this project. The chart below gives an overview of the specific objective numbers on which each school is focusing.

Alignment of MSAP Purposes with Objectives for Each School

MSAP Purpose 1: Objectives 1-1, 1-2, 1-3	***MSAP Purpose 2: Objectives 2-1, 2-2.1, 2-2.2***	***MSAP Purpose 3: Objectives 3-1, 3-2***	***MSAP Purpose 4: Objectives 4-1.1, 4-1.2, 4-1.3***
Moore Square Middle Objectives			
1-1 a; 1-2 a; 1-3 a	**2-1 a; 2-2.1 a; 2-2.2 a**	**3-1 a; 3-2 a**	**4-1.1 a; 4-1.3 a**
Brooks Elementary Objectives			
1-1 b; 1-2 b; 1-3 b	**2-1 b; 2-2.1 b; 2-2.2 b**	**3-1 b; 3-2 b**	**4-1.1 b; 4-1.2 b; 4-1.3 b**
Millbrook Elementary Objectives			
1-1 c; 1-2 c; 1-3 c	**2-1 c; 2-2.1 c; 2-2.2 c**	**3-1 c; 3-2 c**	**4-1.1 c; 4-1.2 c; 4-1.3 c**
Joyner Elementary Objectives			
1-1 d; 1-2 d; 1-3 d	**2-1 d; 2-2.1 d; 2-2.2 d**	**3-1d; 3-2 d**	**4-1.1 d; 4-1.2 d; 4-1.3 d**
Powell Elementary Objectives			
1-1 e; 1-2 e; 1-3 e	**2-1 e; 2-2.1 e; 2-2.2 e**	**3-1 e; 3-2 e**	**4-1.1 e; 4-1.2 e; 4-1.3 e**

PROJECT EVALUATION

As in Year 1, a full-time evaluator has monitored implementation and effectiveness of project schools' new and significantly revised magnet themes throughout Year 2. Working from the detailed evaluation plan in the project proposal, she provided both formative and summative evaluation information to schools, central administration, and, in the Annual Performance Report, to the U.S. Department of Education. The evaluation plan follows The Program

Evaluation Standards (1994, 2nd Ed., Joint Committee on Standards for Educational Evaluation) and incorporates the MSAP Performance Indicators (1997, American Institutes for Research). MSAP indicators were used to establish annual performance benchmarks for every objective of the project. Success in attaining each benchmark during Year 2 has been measured, and results are reported in Benchmark Charts keyed to the objectives. Year 1 evaluation results were used formatively so that staff members planning for Year 2 could recognize and replicate program successes, identify areas requiring improvement, and develop plans to ensure that needed improvements occurred in Year 2.

This Annual Performance Report provides the Year 2 summative evaluation results required by the U.S. Department of Education. Year 2 results are also made available locally to appropriate WCPSS central and school administrators and to coordinating teachers at each project school. In leadership team and school-level meetings, the evaluator will consult with project staff to ensure that Year 2 results are used formatively to plan any needed adjustments in the project for Year 3.

For every project objective, tables in the evaluation plan list MSAP indicators, give baseline data, identify annual (Year 1 and Year 2) and final (Year 3) benchmarks, and describe evaluation methods used to track yearly progress toward each benchmark. The evaluation plan is designed to:

- gather meaningful data about project implementation and outcomes and report this information in a timely manner;
- incorporate overall and disaggregated state and local accountability system results to evaluate student achievement and school effectiveness, including
  - the Growth Composite and the Performance Composite from North Carolina's ABCs accountability system,
  - state End-of-Grade Reading and Math Test scale scores and performance levels,
  - state Writing Assessment and Computer Test results, and
  - district Literacy, Writing, and Mathematics Assessment profiles;
- employ appropriate evaluation methods and data analysis techniques to determine project success in meeting interim and final benchmarks;
- apply formative and summative evaluation methods for continuous improvement of the project; and
- communicate evaluation findings efficiently and effectively to appropriate audiences.

In this 2002-03 Annual Performance Report, portions of the evaluation plan detailing Year 2 indicators, objectives, and benchmarks are duplicated so that readers will know the attainment levels expected in Year 2 and can ascertain whether or not those levels were met.

Evaluation Data Sources: The following table lists all evaluation data sources used in Year 2 to compile this report. Official North Carolina accountability system results will not be released by the July 15, 2003 due date of this report; therefore, the projected availability date of that information is included in the table. Also not available by the report due date are results of the review process for curriculum units developed in Year 2. All curriculum units completed by August 31, 2003 will be reviewed in the fall. Hence, the fall review date is listed in the table.

Data Source	Brooks Elem.	Joyner Elem.	Millbrook Elem.	Powell Elem.	Moore Sq. Middle
Magnet Applications	√	√	√	√	√
Actual Magnet Enrollments	√	√	√	√	√
ABCs Accountability System/Growth Composite	**Aug. 2003**	**Aug. 2003**	**Aug. 2003**	**Aug. 2003**	**Aug. 2003**
ABCs Accountability System/Performance Composite	**Aug. 2003**	**Aug. 2003**	**Aug. 2003**	**Aug. 2003**	**Aug. 2003**
State EOG Reading Test	**Aug. 2003**	**Aug. 2003**	**Aug. 2003**	**Aug. 2003**	**Aug. 2003**
State EOG Math Test	**Aug. 2003**	**Aug. 2003**	**Aug. 2003**	**Aug. 2003**	**Aug. 2003**
State Writing Assessment	**Aug. 2003**	**Aug. 2003**	**Aug. 2003**	**Aug. 2003**	**Aug. 2003**
State Computer Test	**NA**	**NA**	**NA**	**NA**	√
District Literacy Assessment	**Aug. 2003**	**Aug. 2003**	**Aug. 2003**	**Aug. 2003**	**NA**
District Writing Assessment	**Aug. 2003**	**Aug. 2003**	**Aug. 2003**	**Aug. 2003**	**NA**
District Math Assessment	**Aug. 2003**	**Aug. 2003**	**Aug. 2003**	**Aug. 2003**	**NA**
Enrollment Levels in Required and Elective Courses	√	√	√	√	√
Parent, Staff, and Student Surveys	√	√	√	√	√
School and Classroom Observations	√	√	√	√	√
Theme-Related Assessments	√	√	√	√	√
Reading and Math Summary Goal Reports	**Aug. 2003**	**Aug. 2003**	**Aug. 2003**	**Aug. 2003**	**Aug. 2003**
Staff Development Curriculum Alignment Tables	√	√	√	√	√
Core-Subject and Elective Curriculum Unit Alignment Review	√	**Sept. 2003**	**Sept. 2003**	**Sept. 2003**	√
Coordinating Teachers' Action Plans	√	√	√	√	√
Discussions, Decisions, Activities of Schools' Project Core Teams	√	√	√	√	√
Discussions, Decisions, Activities of Central Project Leadership Team	√	√	√	√	√
Reporting Templates and Data Tables Completed by Coordinating Teachers	√	√	√	√	√

State Accountability System: In WCPSS and North Carolina, the primary measures of achievement in grades 3 through 8 are the North Carolina End-of-Grade (EOG) reading and mathematics tests. Since 1993, these tests have been administered statewide in May of each year. In the 1996-97 school year, the state incorporated EOG scores into its ABCs accountability system. EOG scores are part of a Growth Composite and a Performance Composite calculated for every school in the state. These scores can also be used to assess academic achievement for individual students and student groups. The tests were designed to be more challenging and appropriate than a nationally normed achievement test because they (1) are in alignment with reading and mathematics goals and objectives of the North Carolina Standard Course of Study, (2) include interdisciplinary items, with science and social studies content incorporated into particular reading and mathematics items, and (3) measure higher-order thinking skills more extensively. The table below provides an overview of the ABCs.

The ABCs of Public Education

The North Carolina State Board of Education implemented the statewide **ABCs of Public Education** accountability system during the 1996-97 school year, and it has been in use throughout the state since then.

- **A** represents accountability, holding schools accountable for meeting high standards;
- **B** represents emphasis on the basics, with testing focused on reading, writing, and mathematics; and
- **C** represents control, with more site-based control over budget, staff development, purchasing, and staff organization resting with schools.

The **ABCs** accountability system uses results from state EOG reading and mathematics tests for grades 3-8 in conjunction with grades 4 and 7 writing assessment results to calculate an annual **Growth Composite** and **Performance Composite** for every elementary and middle school in the state. Schools that meet or exceed standards that are set by the state receive awards, and schools that fall below standards are sanctioned. The accountability system is based on student test scores, but statistical models are used to aggregate individual scores and report them for the school as a whole.

Growth Composite: The state calculates a composite for each school from two years of EOG reading and mathematics test scale scores and three years of writing test data. Schools achieve *expected* Growth if the composite indicates, on average, one year's growth for one year of instruction. To meet *exemplary* Growth, a school must attain 110% of its expected growth.	**Performance Composite**: The state applies pre-established cut points to convert EOG scale scores to level scores which indicate whether a student performs below (Level I or II), on (Level III), or above (Level IV) grade level. A Performance Composite, the percent of students on or above grade level in reading, math, and writing, is then reported for each school.

The evaluation plan draws upon the ABCs Growth Composite and the Performance Composite to assess project schools' Year 2 attainment of the content standards represented by the state curriculum, the North Carolina Standard Course of Study (NCSCS). As soon as official EOG test scores and related ABCs results become available from the state Board of Education in August 2002, the evaluator will report this information as an addendum to the Annual Performance Report. Year 2 benchmarks set the expectation that achievement of project schools on both the Growth and Performance composites will equal or exceed district achievement levels. Both composites will also be disaggregated by minority status, with minority and

nonminority students expected to gain as much as or more than the district. EOG test scores will also be used to evaluate project schools' Year 2 attainment of the WCPSS Board Goal 2003. This goal, established by the Board of Education in 1998, stipulates that 95% of 3rd and 8th graders in the district will be performing at or above grade level, as measured by EOG reading and math level scores, by the end of the 2002-03 school year.

State Writing Assessment: In addition to EOG tests, all students at grades 4 and 7 take the state writing assessment each spring. A common prompt is administered to each grade level and scored using focused holistic scoring as well as a conventions score. Year 2 benchmarks specify that proficiency of project schools' 4th and 7th graders on the state writing assessment will equal or exceed district proficiency. The same pattern of achievement is expected when writing proficiency scores are disaggregated by minority status.

System Performance Assessments: North Carolina has discouraged norm-referenced testing for students in grades K-2; instead, the state recommends using performance-based assessments to monitor student progress in these grades. Therefore, performance assessment results will be used to assess the project's success with students in the primary grades. The Mathematics Assessment profile lists major curriculum strands and allows teachers to chart progress on each strand. The Literacy and Writing Assessment profiles are used to track progress across a variety of communication skills. All of these performance-based assessments are aligned to the state curriculum and include features such as observations, performance tasks, running reading records, and writing samples. As with test results for higher grade levels, grade K-2 students in project schools are expected to have literacy, writing, and math results that equal or exceed the district's results, both overall and when results are disaggregated by minority status.

The table below lists all of the state and district tests and assessments included in this evaluation

Type of Test	K	1	2	3	4	5
ABCs Accountability System						
Growth Composite				√	√	√
Performance Composite				√	√	√
EOG Reading Test				√	√	√
EOG Mathematics Test				√	√	√
State Writing Assessment					√	
WCPSS Literacy Assessment Profile	√	√	√			
WCPSS Writing Assessment Profile	√	√	√			
WCPSS Mathematics Assessment Profile	√	√	√			

Other Data Sources: In addition to the state and district accountability measures described above, information to evaluate the success of this project is gathered from a variety of other data sources. Both the magnet grant director and project evaluator held quarterly meetings with a core team of key grant staff members at each school. At the central level, they met twice a month for day-long meetings with a leadership team comprised of coordinating teachers from the project schools. Through discussions of project-related issues and activities in these meetings, the evaluator and director were able to "keep a finger on the pulse" of events. These meetings were an important source of qualitative information about project implementation. Additionally, the director and evaluator also had access to Action Plans prepared by the grant coordinating teachers at each school. These were detailed lists of and timelines for activities that teachers would be completing during Year 2. The evaluator also conducted observations in K-8 classrooms of randomly selected teachers. The addendum for project schools that was attached to the annual district wide staff survey in Year 1 was again part of the survey in Year 2. As in Year 2, project-related items also appeared on the parent survey. The evaluator provided a detailed template for project staff members so that they could efficiently structure the narrative and tabular data they were asked to provide about Year 2 activities at their schools. Additional school-level documentation included items such as workshop agendas and attendance rosters, planning and curriculum documents, school logos and signage, program guides, training materials, contracts and partnership agreements, staff and student schedules, professional growth plans, memoranda, lesson plans, student portfolios, and work samples.

The Project Evaluator: The evaluator is based in the Evaluation and Research (E&R) department and reports to that department's senior director of program accountability. E&R is a separate department from the Magnet Program, which is where the MSAP project is based. This separation helps the evaluator maintain objectivity and also provides access to the E&R department's districtwide assessment and survey data as well as supplemental technical and computing support. Participation in E&R staff meetings keeps the evaluator informed about other evaluation projects that might enhance MSAP evaluation. Other E&R staff members are available to review documents, comment on evaluation plans, and discuss evaluation methods. They can also benefit from information about the methods utilized by the MSAP evaluator.

The evaluator is responsible for conducting all activities identified in the evaluation plan; this includes collecting and analyzing data, writing reports, and disseminating results on an ongoing basis. This year she executed the Year2 evaluation activities calendar (see following page) which included tasks such as collaborating with other E&R staff on the district parent and staff surveys, drafting observational checklists for each project school, and developing templates to gather performance report data from each school. She coordinated evaluation activities with school-based and central-office personnel and created a database structure to track all evaluation activities and results. Both quantitative and qualitative data analysis techniques were used to analyze Year 2 data, yielding useful statistical and descriptive information on project outcomes.

Year2 Evaluation Activities Calendar

Evaluation Task/Activity	Date
Review with project staff evaluation expectations for all purposes and objectives	Sept.-Oct. 2002
Obtain 2001-02 20th day enrollment data from Student Assignment	Sept. 2002
Analyze 2001-02 20th day enrollment data from Student Assignment	Oct.-Nov. 2002
Review evaluation expectations in faculty meetings at all project schools	Sept.-Oct. 2002
Review Parent and Staff Survey items	Oct. 2002
Provide Parent and Staff Survey items to School Accountability staff	Nov. 2002
Plan for and Attend School Core Team Meetings	Sept. 02-May 03
Plan for and Attend Central Leadership Team Meetings	Sept. 02-May 03
Develop and Distribute Timeline for Producing Performance Report	Jan. 2003
Develop School and Classroom Observation Checklists	Feb. 2003
Monitor Magnet Fair	Nov. 2002
Revise School and Classroom Observation Checklists	Aug. 2003
Collect 2002-03 recruitment activities data from schools	Jan. 2003
Distribute and collect recruitment activities table shells	Jan. 2003
Administer Parent and Staff Surveys	March 2003
Conduct School and Classroom Observations	Feb/March 2003
Analyze Parent and Staff Surveys	May 2003
Obtain magnet application numbers from Student Assignment	May 2003
Develop template for school information on research, innovations, implementation	April/May 2003
Obtain magnet acceptances from Student Assignment	June 2003
Write narrative and compile data for Annual Performance Report	June 2003
Analyze magnet applications & acceptances	July 2003
Obtain official state Writing Assessment report files (Grade 4)	July 2003
Analyze and disaggregate official state Writing Assessment report files	July 2003
Review template for school information on research, innovations, implementation	May-June 2003
Obtain WCPSS K-2 Literacy, Writing, and Math Performance Assessment data files	Aug. 2003
Analyze WCPSS Literacy, Writing, and Math Performance Assessment Data files	Aug. 2003
Obtain official Masterbuild file of state ABCs Accountability System Results (Grades 3-5)	Aug. 2003
Analyze and disaggregate official Masterbuild file of state ABCs Accountability System: Growth Composite and Performance Composite	Aug. 2003
Obtain version of Masterbuild with 3rd grade EOG Reading and Math scores for Goal 2003	Aug. 2003
Analyze and disaggregate version of Masterbuild with 3rd grade EOG Reading and Math scores for Goal 2003	Aug. 2003
Review Year 2 evaluation results with staff and finalize plans for any needed project adjustments in Year 3	Sept. 2003

Year 2 evaluation activities made use of district enrollment levels and state testing results. Both standardized multiple-choice tests and performance assessments were included. Other data were drawn from surveys, documents, written reports, and classroom observations. Both formative and summative approaches were employed. The data produced are organized and reported according to the evaluation plan structure for Year 2; that is, they are aligned to the MSAP performance indicators and to the project objectives. Appropriate quantitative and qualitative analyses were carried out to determine whether the annual benchmarks for each objective were met. This Annual Performance Report contains a section for each of the MSAP Purposes — Purpose 1, Purpose 2, Purpose 3, and *Purpose 4. Benchmark Charts in these sections display a "Yes" for each objective where a benchmark has been attained (e.g., achievement of project schools is above the district) and a "No" where it has not. Charts are then followed by data tables and narrative paragraphs that document and support determinations about whether or not benchmarks were met. When a school's performance is not at the benchmarked level, plans for improvement are described. This type of planning strengthens the project and ensures that the high levels of performance benchmarked for each school are attained.

***Please Note:** As soon as accountability results are made official by the state Board of Education, Purpose 4 evaluation results (based on the state accountability system) will be reported as an Addendum to the Year 2 Annual Performance Report.

PROGRESS IN ACHIEVING PURPOSE 1 OBJECTIVES

MSAP PURPOSE 1:
The elimination, reduction, or prevention of minority group isolation in elementary and secondary schools with substantial proportions of minority students.

MSAP OBJECTIVE 1:
Federally funded magnet programs eliminate, reduce, or prevent the incidence and/or the degree of minority student isolation in targeted schools.

Tables 1 and 2 provide official Year 2 student membership information to update the September 2000 baseline enrollment figures submitted in the approved grant application.

- Table 1 uses official 20th day enrollment figures provided by the North Carolina State Department of Public Instruction to update baseline information from Table 002 on page 44 of the approved grant application.
- Table 2 uses official 20th day enrollment figures to update baseline information from Table 005 on pages 47-48 of the approved grant application.

Table 1. WCPSS Overall District Enrollment by Minority Status, Grades K-8
September 9, 2002

Grade	Minority Students		Nonminority Students		Total
	Number	Percent	Number	Percent	
K	3909	45%	4799	55%	8708
1	3813	44%	4773	56%	8586
2	3494	42%	4811	58%	8305
3	3547	42%	4836	58%	8383
4	3408	41%	4856	59%	8264
5	3295	40%	4890	60%	8185
6	3497	41%	4996	59%	8493
7	3430	40%	5113	60%	8543
8	3108	38%	5087	62%	8195

Data Source: Official NC Wise 20th day enrollment file wake.multi.xls archived at S:\Data Folders\Membership\Memb0203.

Table 2. Magnet Schools' Total and Grade-Level Student Enrollment by Minority Status, September 9, 2002

School		Minority Students		Nonminority Students		Total
	Grade	Number	Percent	Number	Percent	
Brooks Elementary	K	53	55	44	45	97
	1	30	51	29	49	59
	2	45	60	30	40	75
	3	41	55	34	45	75
	4	42	64	24	36	66
	5	38	59	26	41	64
Total Enrollment		**249**	**57**	**187**	**43**	**436**
Joyner Elementary	K	36	53	32	47	68
	1	37	67	18	33	55
	2	47	61	30	39	77
	3	35	57	26	43	61
	4	53	59	37	41	90
	5	45	62	28	38	73
Total Enrollment		**253**	**60**	**171**	**40**	**424**
Millbrook Elementary	K	71	63	41	37	112
	1	65	64	37	36	102
	2	79	75	27	25	106
	3	75	75	25	25	100
	4	52	71	21	29	73
	5	42	58	31	42	73
Total Enrollment		**384**	**68**	**182**	**32**	**566**
Powell Elementary	K	39	68	18	32	57
	1	49	77	15	23	64
	2	48	65	26	35	74
	3	53	60	36	40	89
	4	58	69	26	31	84
	5	54	64	30	36	84
Total Enrollment		**301**	**67**	**151**	**33**	**452**
Moore Square Middle	6	100	48	109	52	209
	7	80	71	33	29	113
	8	0	0	0	0	0
Total Enrollment		**180**	**56**	**142**	**44**	**322**

The three project objectives related to Purpose 1, along with their associated MSAP performance indicators, are listed in the Benchmark Charts which follow; the charts also contain official Year 2 school membership totals and minority enrollment percentages for each objective. For Objective 1-1 a-e and Objective 1-3 d, the Benchmark Charts compare the actual Year 2 enrollment figures to the Year 2 benchmarks and provide a "Yes" or "No" annotation depending on whether or not a benchmark was met.

For Objective 1-2 a-e, Year 2 student enrollment numbers and percentages are provided for all feeder schools of schools in the project. Because of continued high growth in the number of students enrolled in the district as well as overall increases in the percentage of minority students, a minority enrollment percentage of 50% or above at a feeder school is unlikely to be the result of the new and significantly revised magnet themes in this project.

BENCHMARK CHART 1-1 a-e

WCPSS Project Objectives 1-1 a-e:	By June 30, 2004, as a result of the successful implementation of new and significantly revised magnet programs, WCPSS will eliminate, reduce, or prevent minority group isolation at **Moore Square Museums Magnet Middle School, Brooks Museums Magnet Elementary School, Millbrook Magnet Elementary School: An International Baccalaureate Primary Years Programme, Joyner Language Explorations Magnet Elementary School,** and **Powell Visual and Performing Arts Magnet Elementary School** by achieving the minority enrollment percentages listed below, as evidenced by: • the district's annual *Historical Membership and Capacity Chart* of official 20th day enrollment data.					
Indicator 1.1	**Objective and Baseline Minority Enrollment Percentage**			**Year 2 Benchmark**	**Year 2 Actual**	**Benchmark Met? Yes/No**
Minority enrollment in targeted schools. • Targeted schools with objectives of *eliminating* or *preventing* minority group isolation keep minority enrollments below 50 percent. • Targeted schools with the objective of *reducing* minority group isolation reduce their minority enrollment percentages.	School	Objective	Baseline Pct.			
	Brooks	Eliminate	54%	52%	57%	No
	Joyner	Eliminate	56%	52%	60%	No
	Millbrook	Reduce	71%	63%	68%	No
	Powell	Eliminate	62%	54%	67%	No
	Moore Sq.	Prevent	NA	53%	56%	No

Year 2 benchmarks required specific reductions in minority enrollment percentages for all five project schools. Reductions are calibrated across the three years of the project so that minority group isolation will be eliminated or reduced by Year 3. However, rather than reductions in minority enrollment percentages, the percent of minority students enrolled at all five schools increased. This means that no school met its benchmark for elimination, reduction, or prevention of minority group isolation. It also means that, in order to meet the overall reductions planned by Year 3, every school in the project will have to achieve even greater decreases in their percentage of minority students for the 2003-04 school year. It should be noted that, although not low enough to meet Year 2 benchmarks, Joyner and Millbrook's minority enrollment percentages have decreased in comparison to 2001-02, when they were 63% and 70%, respectively.

WCPSS policies and aspects of the student assignment process that affect enrollment percentages at project schools and feeder schools are discussed at the end of this section, and a table showing recruitment statistics for the 2002-03 school year, overall and by race, is provided. In the face of discouraging information about student enrollment benchmarks for Year 2, administrators and coordinating teachers who work on the project have taken a proactive approach. They are carefully tracking recruitment activities and tailoring them to attract as many families as possible. They continually review, revise, and improve recruitment-related communications and publicity procedures. During the spring 2003 recruitment season for the 2003-04 school year, project staff recorded the types of recruitment activities that they planned and conducted; they also tallied the numbers of people involved in those activities. Tables with this information appear at the end of this section. Special assistance that the magnet recruiter provided to project schools to improve their recruitment processes and procedures is also described. Staff members are optimistic that improvements they have made will have a positive effect on the Year 3 benchmarks for eliminating, preventing, or reducing minority group isolation.

BENCHMARK CHART 1-2 a-e

WCPSS Project Objectives 1-2 a-e:	By June 30, 2004, as a result of the successful implementation of new and significantly revised magnet programs, WCPSS will eliminate, reduce, or prevent minority group isolation at **Moore Square Museums Magnet Middle School, Brooks Museums Magnet Elementary School, Millbrook Magnet Elementary School: An International Baccalaureate Primary Years Programme, Joyner Language Explorations Magnet Elementary School,** and **Powell Visual and Performing Arts Magnet Elementary School** without their feeder schools becoming racially isolated as evidenced by: • the district's annual *Historical Membership and Capacity Chart* of official 20th day enrollment data.					
Indicator 1-2	**Baseline September 2000 Minority Enrollment**		**Minority Students September 2002**		**Nonminority Students September 2002**	
			Number	**Percentage**	**Number**	**Percentage**
<u>Brooks Elementary</u> feeder schools. Feeder schools do not become racially isolated, or in districts where the minority enrollment is greater then 50%, minority enrollments in feeder schools do not increase above the district average for the grade levels served by the magnets.	Baileywick	30%	165	30%	376	70%
	Brassfield	14%	160	23%	543	77%
	Hilburn	32%	200	33%	403	67%
	Jeffreys Gr.	43%	264	47%	293	53%
	Leesville Rd.	21%	180	27%	499	73%
	Lead Mine	47%	298	53%	269	47%
	Lynn Rd.	50%	251	55%	208	45%
	North Ridge	41%	366	50%	363	50%
	Pleasant Un.	15%	114	19%	474	81%
	Stough	47%	277	49%	291	51%
	Wake Frst.	32%	314	36%	562	64%
	Wakefield	31%	283	34%	558	66%
	Wildwood	44%	357	51%	343	49%
	York	42%	276	44%	347	56%

Indicator 1-2	Baseline September 2000 Minority Enrollment		Minority Students September 2002		Nonminority Students September 2002	
			Number	Percentage	Number	Percentage
Joyner Elementary feeder schools. Feeder schools do not become racially isolated, or in districts where the minority enrollment is greater then 50%, minority enrollments in feeder schools do not increase above the district average for the grade levels served by the magnets.	Apex	19%	183	27%	488	73%
	Aversboro	55%	278	63%	166	37%
	Baileywick	30%	165	30%	376	70%
	Baucom	21%	262	30%	625	70%
	Brassfield	14%	160	23%	543	77%
	Brentwood	71%	454	80%	113	20%
	Briarcliff	38%	222	43%	297	57%
	Brooks	54%	249	57%	187	43%
	Bugg	55%	254	62%	155	38%
	Carver	46%	379	57%	284	43%
	Cary	42%	264	41%	386	59%
	Combs	44%	284	47%	322	53%
	Conn	56%	320	61%	201	39%
	Creech Rd.	56%	425	66%	221	34%
	Davis Dr.	22%	294	30%	683	70%
	Dillard Dr.	50%	304	51%	296	49%
	Douglas	50%	231	49%	241	51%
	Farmington Wd	43%	206	32%	428	68%
	Fox Rd.	60%	619	65%	327	35%
	Fuller	57%	296	68%	142	32%
	Fuquay-Varina	34%	246	43%	320	57%
	Green Hope	12%	123	16%	629	84%
	Hilburn Dr.	32%	200	33%	403	67%
	Hodge Rd.	60%	469	67%	230	33%
	Holly Sprgs.	34%	342	37%	574	63%
	Hunter	48%	291	49%	307	51%
	Jeffreys Gr.	43%	264	47%	293	53%
	Kingswood	47%	155	47%	174	53%
	Knightdale	55%	452	62%	276	38%
	Lacy	40%	144	31%	323	69%
	Leesville Rd.	21%	180	27%	499	73%
	Lead Mine	47%	298	53%	269	47%
	Lincoln Hghts.	34%	204	36%	356	64%
	Lockhart	52%	449	60%	294	40%
	Lynn Rd.	50%	251	55%	208	45%
	Middle Crk.	44%	236	39%	368	61%
	Millbrook	70%	384	68%	182	32%
	North Rdg.	41%	366	50%	363	50%
	Northwoods	36%	319	44%	406	56%
	Olive Chpl.	17%	164	17%	824	83%
	Olds	47%	119	38%	197	62%
	Penny Rd.	37%	259	37%	444	63%
	Pleasant Un.	15%	114	19%	474	81%
	Poe	46%	181	47%	202	53%
	Powell	62%	301	67%	151	33%
	Rand Rd.	40%	157	33%	320	67%
	Reedy Crk.	54%	413	57%	314	43%

Indicator 1-2, Joyner (continued)	**Baseline September 2000 Minority Enrollment**		**Minority Students September 2002**		**Nonminority Students September 2002**	
			Number	**Percentage**	**Number**	**Percentage**
	Rolesville	42%	326	49%	335	51%
	Root	33%	126	30%	294	70%
	Salem	26%	180	27%	499	73%
	Smith	69%	360	72%	138	28%
	Stough	47%	277	49%	291	51%
	Swift Crk.	50%	243	58%	174	42%
	Underwood	48%	166	54%	140	46%
	Vance	47%	174	41%	249	59%
	Vandora Spgs	57%	333	65%	183	35%
	Wake Frst.	32%	314	36%	562	64%
	Wakefield	31%	283	34%	558	66%
	Washington	38%	241	42%	331	58%
	Weatherstone	37%	282	34%	555	66%
	Wendell	49%	280	50%	285	50%
	Wilburn	60%	756	69%	337	31%
	Wildwood	44%	357	51%	343	49%
	Wiley	50%	171	45%	213	55%
	Willow Sprgs.	29%	193	30%	458	70%
	Yates Mill Pond.	35%	137	37%	232	63%
	York	42%	276	44%	347	56%
	Zebulon	53%	396	55%	325	45%

Indicator 1-2	Baseline September 2000 Minority Enrollment		Minority Students September 2002		Nonminority Students September 2002	
			Number	Percentage	Number	Percentage
Millbrook Elementary feeder schools. Feeder schools do not become racially isolated, or in districts where the minority enrollment is greater then 50%, minority enrollments in feeder schools do not increase above the district average for the grade levels served by the magnets.	Aversboro	55%	278	63%	166	37%
	Baileywick	30%	165	30%	376	70%
	Brassfield	14%	160	23%	543	77%
	Brentwood	71%	454	80%	113	20%
	Brooks	54%	249	57%	187	43%
	Bugg	55%	254	62%	155	38%
	Carver	46%	379	57%	284	43%
	Combs	44%	284	47%	322	53%
	Conn	56%	320	61%	201	39%
	Creech Rd.	56%	425	66%	221	34%
	Douglas	50%	231	49%	241	51%
	Fox Rd.	60%	619	65%	327	35%
	Fuller	57%	296	68%	142	32%
	Hilburn Dr.	32%	200	33%	403	67%
	Hodge Rd.	60%	469	67%	230	33%
	Hunter	48%	291	49%	307	51%
	Jeffreys Gr.	43%	264	47%	293	53%
	Joyner	56%	253	60%	171	40%
	Knightdale	55%	452	62%	276	38%
	Lacy	40%	144	31%	323	69%
	Leesville Rd.	21%	180	27%	499	73%
	Lead Mine	47%	298	53%	269	47%
	Lockhart	52%	449	60%	294	40%
	Lynn Rd.	50%	251	55%	208	45%
	Middle Crk.	44%	236	39%	368	61%
	North Rdg.	41%	366	50%	363	50%
	Olive Chpl.	17%	164	17%	824	83%
	Olds	47%	119	38%	197	62%
	Pleasant Un.	15%	114	19%	474	81%
	Poe	46%	181	47%	202	53%
	Powell	62%	301	67%	151	33%
	Rand Rd.	40%	157	33%	320	67%
	Rolesville	42%	326	49%	335	51%
	Root	33%	126	30%	294	70%
	Smith	69%	360	72%	138	28%
	Stough	47%	277	49%	291	51%
	Vance	47%	174	41%	249	59%
	Vandora Sprgs.	57%	333	65%	183	35%
	Wake Frst.	32%	314	36%	562	64%
	Wakefield	31%	283	34%	558	66%
	Washington	38%	241	42%	331	58%
	Wendell	49%	280	50%	285	50%
	Wilburn	60%	756	69%	337	31%
	Wildwood	44%	357	51%	343	49%
	Wiley	50%	171	45%	213	55%
	Yates Mill Pond	35%	137	37%	232	63%
	York	42%	276	44%	347	56%
	Zebulon	53%	396	55%	325	45%

Indicator 1-2	Baseline September 2000 Minority Enrollment		Minority Students September 2002		Nonminority Students September 2002	
			Number	Percentage	Number	Percentage
Powell Elementary feeder schools. Feeder schools do not become racially isolated, or in districts where the minority enrollment is greater then 50%, minority enrollments in feeder schools do not increase above the district average for the grade levels served by the magnets.	Brentwood	71%	454	80%	113	20%
	Fox Rd.	60%	619	65%	327	35%
	Hodge Rd.	60%	469	67%	230	33%
	Knightdale	55%	452	62%	276	38%
	Lead Mine	47%	298	53%	269	47%
	Lockhart	52%	449	60%	294	40%
	Millbrook	70%	384	68%	182	32%
	North Rdg.	41%	366	50%	363	50%
	Pleasant Un.	15%	114	19%	474	81%
	Rolesville	42%	326	49%	335	51%
	Wake Frst.	32%	314	36%	562	64%
	Wakefield	31%	283	34%	558	66%
	Wilburn	60%	756	69%	337	31%
	Wildwood	44%	357	51%	343	49%

Indicator 1-2	Baseline September 2000 Minority Enrollment		Minority Students September 2002		Nonminority Students September 2002	
			Number	Percentage	Number	Percentage
Moore Square Middle feeder schools. Feeder schools do not become racially isolated, or in districts where the minority enrollment is greater then 50%, minority enrollments in feeder schools do not increase above the district average for the grade levels served by the magnets.	Apex	24%	258	26%	751	74%
	Carnage	60%	654	65%	353	35%
	Carroll	48%	471	55%	386	45%
	Centennial	49%	274	45%	330	55%
	Daniels	40%	370	40%	554	60%
	Davis Dr.	24%	279	24%	897	76%
	Dillard	35%	357	34%	686	66%
	East Cary	33%	418	41%	601	59%
	East Garner	45%	473	58%	338	42%
	East Millbrook	58%	614	62%	384	38%
	East Wake	50%	494	56%	384	44%
	Fuquay-Varina	31%	464	34%	903	66%
	Leesville Rd.	31%	335	34%	654	66%
	Ligon	44%	385	41%	553	59%
	Martin	37%	388	36%	684	64%
	North Garner	61%	554	63%	325	37%
	Wake For-Rol.	34%	478	43%	633	57%
	Wakefield	21%	262	27%	703	73%
	West Cary	31%	339	31%	746	69%
	West Millbrook	37%	490	44%	612	56%
	Zebulon	44%	461	48%	499	52%

BENCHMARK CHART 1-3 a-e

WCPSS Project Objectives 1-3 a-e:	By June 30, 2004, as a result of the successful implementation of new and significantly revised magnet programs at ***Moore Square Museums Magnet Middle School, Brooks Museums Magnet Elementary School, Millbrook Magnet Elementary School: An International Baccalaureate Primary Years Programme, Joyner Language Explorations Magnet Elementary School,** and **Powell Visual and Performing Arts Magnet Elementary School**, activities will be in place that promote broad participation and interaction among diverse groups of students in magnet curricular activities reflecting the same minority/nonminority distribution as the magnet school as evidenced by: • the school's documentation of minority/nonminority student distribution in required and elective curricular activities representative of the entire curriculum and • the district's annual *Historical Membership and Capacity Chart* of official 20th day enrollment data.		
Indicator 1-3	**Year 2 Benchmark**	**Year 2 Actual**	**Benchmark Met? Yes/No**
Minority/nonminority distribution. Magnet curricular activities generally reflect the same minority/nonminority distribution as the magnet school.	Minority Enrollment Brooks Required courses ± 10% school Joyner Required courses ± 5% of school Millbrook Required courses ± 5% of school Powell Required courses ± 5% of school *Elective courses ± 5% of school Moore Sq. Required courses 10% *NOTE: Benchmarks for electives apply to only Powell Elementary, which has a Gifted and Talented electives program.	Minority Enrollment Brooks Required courses in 3 or more grade levels have minority enrollment percentages ± 10% of that grade level Joyner Required courses in 3 or more grade levels minority enrollment percentages ± 5% of that grade level Millbrook Required courses in 3 or more grade levels have minority enrollment percentages ± 5% of that grade level Powell Required courses in 3 or more grade levels have minority enrollment percentages ± 5% of that grade level *Elective courses ± 5% of grade levels (K-2 or 3-5) Moore Sq. Required courses in 3 or more grade levels have minority enrollment percentages ± 10% of that grade level	Minority Enrollment Brooks Required courses Yes Joyner Required courses Yes Millbrook Required courses Yes Powell Required courses Yes *Elective courses No Moore Sq. Required courses Yes

Official 20th day enrollment figures (September 9, 2002) provided by the state were used to calculate minority/nonminority enrollment percentages for all preceding Purpose 1 benchmarks; however, a later WCPSS data base was used to assess benchmarks pertaining to broad participation and interaction of students in required and elective courses at project schools. These later figures contained accurate homeroom notations for students and thus could be used to divide grade levels into their respective courses. Tables 3-7 provide grade-level and course minority enrollment percentages for each school in the project. Based on the decision rules used to determine whether or not a school met its benchmark (see below), all schools did have appropriate distributions of minority/nonminority students to indicate broad participation in required courses during Year 2.

Decision Rules Used to Assess Objective 1-3 Benchmarks	
Grade-Level Analysis	School Analysis
If half or more of the courses in a grade level are within *± 5% of that grade level's overall minority enrollment percentage, the grade is designated as showing broad participation. (*± 10% for Brooks and Moore Square)	If three or more grade levels in an elementary school or two or more grade levels in a middle school show broad participation, the school is deemed to show broad participation.

Table 3. Brooks' Grade-Level and Course Student Enrollments by Minority Status, September 9, 2001

Brooks Grade	Course (designated by homeroom #)	Percentage of Minority Students	Percentage of Nonminority Students	Percentage ± 10% of Grade?
K		57	43	
	306	55	45	Y
	308	58	42	Y
	316	55	45	Y
	318	60	40	Y
1		50	50	
	307	50	50	Y
	320	48	52	Y
2		58	42	
	208	61	39	Y
	209	60	40	Y
	211	52	48	Y
3		53	47	
	219	50	50	Y
	220	50	50	Y
	221	60	40	Y
4		64	36	
	232	57	43	Y
	236	62	38	Y
	237	74	26	Y
5		57	43	
	229	60	40	Y
	230	52	48	Y
	231	59	41	Y

Table 4. Joyner's Grade-Level and Course Student Enrollments by Minority Status, September 9, 2001

Joyner Grade	Course (designated by homeroom #)	Percentage of Minority Students	Percentage of Nonminority Students	Percentage ± 5% of Grade?
K		53	47	
	1	59	41	N
	2	46	54	Y
	3	54	46	Y
1		62	38	
	7	43	57	N
	8	87	13	N
	9	64	36	Y
2		61	39	
	10	56	44	Y
	11	67	33	N
	12	52	48	N
	15	70	30	N
3		58	42	
	13	61	39	Y
	16	52	48	N
	19	53	47	Y
4		57	43	
	18	50	50	Y
	Trl3	55	45	Y
	Trl4	53	47	Y
	Trl8	67	33	N
5		58	42	
	Trl5	59	41	Y
	Trl7	61	39	Y
	Trl9	52	48	N

Table 5. Millbrook's Grade-Level and Course Student Enrollments by Minority Status, September 9, 2001

Millbrook Grade	Course (designated by homeroom #)	Percentage of Minority Students	Percentage of Nonminority Students	Percentage ± 5% of Grade?
K		36	64	
	DS	27	73	N
	ER	36	64	Y
	KG	38	62	Y
	LK	36	64	Y
	MY	39	61	Y
1		35	65	
	AT	33	67	Y
	LH	40	60	Y
	MH	30	70	Y
	NB	35	65	Y
	TO	33	67	Y
2		22	78	
	BW	29	71	N
	JR	14	86	N
	KS	22	78	Y
	MT	16	84	N
	SV	25	75	Y
3		26	74	
	AC	18	82	N
	AD	20	80	N
	BA	30	70	Y
	EH	37	63	N
	SM	32	68	N
4		29	71	
	HA	32	68	Y
	JH	27	73	Y
	TB	29	71	Y
5		31	69	
	JJ	43	57	Y
	LS	48	52	Y
	MC	48	52	Y

Table 6. Powell's Grade-Level and Course Student Enrollments (Required Courses) by Minority Status, September 9, 2001

Powell Grade	Course (designated by homeroom #)	Percentage of Minority Students	Percentage of Nonminority Students	Percentage ± 5% of Grade?
K		76	24	
	112	70	30	Y
	114	78	22	Y
	116	79	21	Y
1		76	24	
	111	75	25	Y
	113	72	28	Y
	115	80	20	Y
2		64	36	
	103	59	41	Y
	105	59	41	Y
	106	67	33	Y
3		60	40	
	104	55	45	Y
	119	60	40	Y
	120	55	45	Y
	122	53	47	N
4		70	30	
	118	61	39	N
	123	68	32	Y
	124	68	32	Y
5		65	35	
	125	63	37	Y
	126	63	37	Y
	127	62	38	Y

Table 7. Moore Square's Grade-Level and Course Student Enrollments by Minority Status, September 9, 2001

Moore Sq. Grade	Course (designated by homeroom #)	Percentage of Minority Students	Percentage of Nonminority Students	Percentage ± 10% of Grade?
6		48	52	
	AUST	31	69	Y
	BOGG	44	56	Y
	DAY	50	50	Y
	EDMO	55	45	Y
	HODG	46	54	Y
	HUMP	52	48	Y
	MART	29	71	N
	NEWT	78	22	N
7		47	26	
	DEAN	100	00	N
	HOBA	71	29	Y
	JAIM	1.00	00	N
	JORD	72	28	Y
	KILL	74	26	Y
	KIG	67	33	Y
	ROBE	47	53	N
	ZHOU	88	13	N

Information in the preceding tables is for required courses. The following tables, for electives, apply only to Powell Elementary, which is a Gifted and Talented (GT) school offering a GT electives program to all of its students. Tables 8 and 9 list minority enrollment percentages for 3rd and 4th quarter electives open to grade K-2 students and grade 3-5 students. Based on the decision rules below, distributions of minority/nonminority students are not indicative of broad participation in Powell's electives program during Year 2. Certain factors mitigate against broad participation in every elective. Advanced arts electives are best suited to students who have mastered previous skill levels. Electives that provide acceleration for students falling behind in reading and math best meet the needs of those whose previous performance has lagged. In spite of this, the percentages in Tables 8 and 9 indicate that Powell needs to carefully examine the inclusiveness of many of its electives. Powell is committed to providing a meaningful selection of electives to all of its students. Scrutiny of Tables 8 and 9 will help identify problems in this area so that Powell staff can plan and implement solutions.

Decision Rules Used to Assess Objective 1-3 Benchmarks (for Electives)	
Grade-Level Analysis	School Analysis
If half or more electives across grade ranges (i.e., K-2 or 3-5) NOT ± 5% of that grade range's minority enrollment percentage, grade level does not show broad participation	If one or more grade level ranges (i.e., K-2 or 3-5) does NOT show broad participation, school does not show broad participation

Table 8. Powell's Grade K-2 Elective Course Student Enrollments by Minority Status, 3rd and 4th Quarters

3rd Quarter	Period	K-2 Elective Courses	Percentage of Minority Students	Percentage of Nonminority Students
	1	Art in the Making	85%	15%
	1	Creative Dance	92%	8%
	1	Games Galore	68%	32%
	1	Grin & Graph It	25%	75%
	1	Learning through Games	67%	33%
	1	Rhyme Time	68%	32%
	1	Rhythm Band	88%	13%
	1	Theater Games & Improvisation	88%	12%
	1	You've Got Character	86%	14%
	7	All Together	75%	25%
	7	Blossoming with Books	94%	6%
	7	Book Into Math	87%	13%
	7	Building Readers	100%	0%
	7	Dance Around World	86%	14%
	7	Fairy Tales & Fables	92%	8%
	7	Gymnastics	47%	53%
	7	Intro to Stage	77%	23%
	7	Invisible Force	71%	29%
	7	Rooftop Readers	86%	14%
	7	The Shape of Things	62%	38%
4th Quarter	**Period**	**K-2 Elective Courses**	**Percentage of Minority Students**	**Percentage of Nonminority Students**
	1	All Together	73%	27%
	1	Creepy Creatures	82%	18%
	1	Digging Dinosaurs	67%	33%
	1	Dimensions	29%	71%
	1	Games Galore	75%	25%
	1	Let's Move	63%	37%
	1	Pantomime	100%	0%
	1	Rhythm Band	91%	9%
	1	Sports Arena	76%	24%

Table 8 (continued)**. Powell's Grade K-2 Elective Course Student Enrollments by Minority Status, 3rd and 4th Quarters**

4th Quarter	Period	K-2 Elective Courses	Percentage of Minority Students		Percentage of Nonminority Students	
	7	Blossoming with Books	81%		19%	
	7	Building Readers	100%		0%	
	7	Come Fly with Me	30%		70%	
	7	Dance through Literature	92%		8%	
	7	Intro to Computers	100%		0%	
	7	Intro to Stage	77%		23%	
	7	Magic in Music	92%		8%	
	7	Making Rainbows	69%		31%	
	7	Rooftop Readers	86%		14%	
	7	Sports Arena	80%		20%	
	7	Temp, Time & Money	73%		27%	
Total	1 and 7		128 students	79%	34 students	21%

Table 9. Powell's Grade 3-5 Elective Course Student Enrollments by Minority Status, 3rd and 4th Quarters

3rd Quarter	Period	3-5 Elective Courses	Percentage of Minority Students	Percentage of Nonminority Students
	4	ALP	100%	0%
	4	Begin Strings	80%	20%
	4	Best of Best	10%	90%
	4	Broadway	71%	29%
	4	Classy Readers	94%	6%
	4	Clogging	36%	64%
	4	Dance Ensemble	50%	50%
	4	Just Grammar	67%	33%
	4	Math Magic	100%	0%
	4	Modern Art	69%	31%
	4	Photography	67%	33%
	4	Sensational Sagas	55%	45%
	4	Show Choir	52%	48%
	4	Web Design	20%	80%
	4	Wrestling	50%	50%
	5	Advanced Band	55%	45%
	5	Advanced Strings	75%	25%
	5	ALP	86%	14%
	5	Architecture	38%	62%
	5	Band Continued	29%	71%
	5	Continuing Clogging	55%	45%
	5	Gymnastics II	50%	50%

Table 9 (continued). **Powell's Grade 3-5 Elective Course Student Enrollments by Minority Status, 3rd and 4th Quarters**

3rd Quarter	Period	3-5 Elective Courses	Percentage of Minority Students	Percentage of Nonminority Students
	5	Keyboard II	70%	30%
	5	Langston Speaks	52%	48%
	5	Lego Logo Robotics	30%	70%
	5	Math Magic-3rd	100%	0%
	5	Math Magic-5	90%	10%
	5	Poetry	74%	26%
	5	Recreational Games	100%	0%
	5	You Gotta Have Art	75%	25%
	8	Advertising	62%	38%
	8	Aquatic World	70%	30%
	8	Beginning Band	47%	53%
	8	Crafts Around	44%	56%
	8	Games of Strategy	55%	45%
	8	Geometric	40%	60%
	8	Modern Dance	81%	19%
	8	Play Production	52%	48%
	8	Recorder I	82%	18%
	8	Recreational Games	68%	32%
	8	Scientific Reasoning	80%	20%
	8	Soar to Success-3rd Huffman	83%	17%
	8	Study Skills	93%	7%
	8	Supreme Strategies	81%	19%
	8	WRTZ News	33%	67%
4th Quarter	**Period**	**3-5 Elective Courses**	**Percentage of Minority Students**	**Percentage of Nonminority Students**
	4	Advanced Clogging	45%	55%
	4	ALP	100%	0%
	4	Beginning Strings	67%	33%
	4	Broadway Bound	86%	14%
	4	Classy Reader	60%	40%
	4	Geology	8%	92%
	4	Int. Folk Dance	40%	60%
	4	Keyboard III	100%	0%
	4	Math Magic - 4	100%	0%
	4	Photography	70%	30%
	4	Project Wild	53%	47%
	4	Shaping Up	57%	43%
	4	Stitchery & Weaving	71%	29%
	4	Super Sleuth	72%	28%
	4	Team Sports	71%	29%

Table 9 (continued)**. Powell's Grade 3-5 Elective Course Student Enrollments by Minority Status, 3rd and 4th Quarters**

4th Quarter	Period	3-5 Elective Courses	Percentage of Minority Students		Percentage of Nonminority Students	
	4	Web Design	20%		80%	
	5	Advanced Band	50%		50%	
	5	Advanced Strings	71%		29%	
	5	ALP	100%		0%	
	5	Aquatic World	75%		25%	
	5	Art in Nature	63%		37%	
	5	Behind the Scenes	36%		64%	
	5	Cheerleading	74%		26%	
	5	Further	33%		67%	
	5	Geometric	40%		60%	
	5	Lego Logo Robotics	100%		0%	
	5	Mythology	52%		48%	
	5	Powell Radio	67%		33%	
	5	Recorder I	78%		22%	
	5	Soar to Success	67%		33%	
	5	Tap	100%		0%	
	5	Team Sports	77%		23%	
	8	Advertising	47%		53%	
	8	Aeronautics	100%		0%	
	8	Beginning Band	50%		50%	
	8	Crafts from America	77%		23%	
	8	Insect Study	80%		20%	
	8	Jazz	71%		29%	
	8	Play Production	40%		60%	
	8	Scholastic Pursuit	42%		58%	
	8	Sky Scrapers	74%		26%	
	8	Study Skills	87%		13%	
	8	Track	73%		27%	
Total	4, 5, and 8		182 students	66%	92 students	34%

As stated earlier, grant staff members reviewed their recruiting activities and procedures for the 2002-03 school year when they realized that the Year 2 minority enrollment benchmarks had not been met. They kept careful track, as reflected in Tables 10 and 11, of the types of activities that occurred and the numbers of people involved. Hopefully, this expansion of activitiy will help make up for deficits in meeting this year's benchmarks and attain the reductions set for Year 3.

Table 10. Year 2 Events to Recruit Students for 2003-04

School / EVENT	Brooks	Joyner	Millbrook	Powell	Moore Sq.
Open Houses					
# Scheduled	4	4	2	3	3
# Attending	91	181	53	393	220
# Staff Involved	55	16	85	65	45
# Parent Volunteers	10	32	0	16	0
Evening Info. Sessions					
# Scheduled	2	6	2	2	3
# Attending	44	49	52	55	140
# Staff Involved	7	7	15	6	6
# Parent Volunteers	4	2	0	0	0
***Other Events**					
# Scheduled	1	3	3	8	8
# Attending	135	280	600	1250	151
# Staff Involved	55	60	85	14	23
# Parent Volunteers	0	45	0	11	9
Magnet Fair					
# Staff Involved	13	29	16	22	15
# Parent Volunteers	7	34	4	9	3
# Students Involved	3	21	4	56	4

**(Examples of other events include school activities with the public invited as a recruitment strategy; tours for child-care centers or similar programs to acquaint parents and students with magnet schools; events, e.g., teas or neighborhood open houses, where magnet parents invite prospective parents to discuss magnet programs; and events with business partners; etc.)*

Table 11. Year 2 Publicity to Recruit Students for 2003-04

School EVENT/ITEM	Brooks	Joyner	Millbrook	Powell	Moore Sq.
System Magnet Brochure					
# Distributed	480	25		35	160
Staff Hours to Develop	2	4		0	0
School Magnet Brochure					
# Distributed	450	250	400	215	1200
Staff Hours to Develop	10	30	10	16	15
Magnet Videos					
Est. # Times Used	Na	13		49	30
Staff Hours to Develop	na	20		36	18
PowerPoint Presentation					
Est. # Times Used	12	Used video instead	5	5	25
Staff Hours to Develop	8	Used video instead	7	8	8
School Web Page					
# Page Views during Recruitment (Aug. 02-Feb. 03	13,618	8,868	3,189	18,569	*107,181
Staff Hours/month to Develop and Maintain	6	20	10	24	10
System/School Newsletters					
# Magnet Articles	3	4	3	15	10
Staff Hours to Develop		8	3	22	20
Newspaper, TV, Radio Coverage					
# Ads, Articles	4	0	4	2	8
Staff Hours to Develop	12	0	1	9	3
Direct Mail Contacts					
# Mailed	4,769	5,151	4,930	6,019	7,266
School Tours (Aug. 02-Feb. 03)					
# Occurring	12	15	18	9	28
Est. # Visitors	63	88	31	27	288
Est. # Staff Involved	8	5	5	8	5
Phone Inquiries (Aug. 02-Feb. 03)					
Est. # Per Month	13	10	6	10	35

*(Moore Square's page view number is much higher than others because its website is the internet portal for faculty and students)

The magnet recruiter, who plans and helps publicize recruitment events for all magnet schools, provided extra assistance to project schools during the recruitment season for Year 3. The recruiter gave them advice to increase the effectiveness for their schools of recruitment events such as:

- the magnet schools fair;
- magnet school open house sessions;
- evening magnet information sessions;
- presenting at local childcare centers and moms groups;
- inviting prospective magnet families to the Magnet Resource Center; and
- participating in the PTA Council Exhibition, the Carolina Parent Camp and Education Fair, and other local festivals and events.

Additionally, the typical number of recruitment events was expanded to include:

- an additional open house day for all elementary and middle magnet schools,
- a "new to magnet" principal workshop to discuss issues related to recruiting, and
- 10 additional information sessions on magnet school options.

Project schools participated fully in all of the usual annual activities to advertise the WCPSS magnet program. These included:

- updating the system's magnet brochure and magnet web page;
- publishing a monthly magnet newsletter;
- circulating the magnet brochure and fliers announcing magnet events to every child in the system;
- distributing the magnet brochure to childcare centers, preschools, mothers' groups, civic organizations, local libraries, and bookstores; and
- advertising on television, radio, and in the newspapers.

New during the recruitment season for the 2003-04 school year were the magnet recruiter's participation in a television interview to promote the magnet fair and her work to publicize magnet school information among local realtors and businesses. The recruiter also worked with a local marketing and advertising firm to improve communication to reach the magnet target audience with cost-effective strategies. The date of the annual magnet fair was moved from February to November. This meant that the recruitment process started earlier for all magnet schools, and it motivated prospective magnet families to begin making magnet school inquiries in the fall, rather than waiting until spring. Almost 5,000 people attended the magnet fair.

In September 2002, the magnet recruiter began a series of special activities that focused on schools in this project. She conducted two consecutive recruiting workshops during meetings of the project leadership team. At the first workshop, each team member received a recruiting notebook, with the 2002-03 timeline of activities to recruit for the 2003-04 school year. Also included were:

- a list of frequently asked magnet questions and answers;
- guidelines and suggestions for the magnet fair, open house sessions, and information sessions,;
- a list of recruiting ideas, web site recommendations, and vendors; and
- a county map showing the magnet recruiting area of each project school.

The recruiter reviewed and discussed all of these items with leadership team members. The second recruiting workshop, conducted by a marketing consultant, focused on improving the recruitment focus of web sites at project schools.

In addition to assisting them with all of the usual marketing strategies, the recruiter also added an important new strategy for project schools. She collaborated with a graphic artist to design postcards for each school in the project. Tailored to the theme of each school, the postcards announced dates of upcoming recruitment information sessions, open houses, and other school activities. Over 28,000 postcards were mailed in January 2003 (Table11). Within the transportation area of each project school, the postcards targeted to suburban households with children and to high growth areas of the county.

The WCPSS student assignment process in effect since January 2000 uses a school's percentage of students on free/reduced-price lunch and percentage of students below grade level to maintain diversity. This race-neutral process has continued to affect minority/nonminority enrollment percentages at schools throughout the district, as well as at the magnet schools in this project. Although effective for economic and academic diversity within and among schools, the policy tends to have a negative impact on the ability of project schools to have nonminority students who are recruited to the program actually be assigned to them. Produced by the WCPSS Growth Management Department (formerly Student Assignment), the following table provides recruitment statistics, overall and by race, for the 2002-03 school year.

Table 12. Project Schools' Recruitment Statistics for the 2002-03 School Year

BROOKS ELEMENTARY SCHOOL									
	Overall			By Race					
Grade	Number of available seats outside base nodes	Number of applicants from outside base nodes	Number of applicants from outside base nodes accepted	Number of Asian applicants from outside base nodes	Number of Black applicants from outside base nodes	Number of American Indian applicants from outside base nodes	Number of Hispanic applicants from outside base nodes	Number of White applicants from outside base nodes	Number of Multi-Racial applicants from outside base nodes
K	18	15	11	0	3	0	0	12	0
1	11	5	2	0	3	0	1	1	0
2	2	7	3	0	2	0	0	3	2
3	10	10	3	0	2	0	0	8	0
4	10	7	2	0	2	0	1	3	1
5	10	3	1	0	2	0	0	1	0
Total	61	47	22	0	14	0	2	28	3

JOYNER ELEMENTARY SCHOOL									
	Overall			By Race					
Grade	Number of available seats outside base nodes	Number of applicants from outside base nodes	Number of applicants from outside base nodes accepted	Number of Asian applicants from outside base nodes	Number of Black applicants from outside base nodes	Number of American Indian applicants from outside base nodes	Number of Hispanic applicants from outside base nodes	Number of White applicants from outside base nodes	Number of Multi-Racial applicants from outside base nodes
K	50	23	22	1	4	0	5	12	1
1	5	7	5	0	3	0	4	0	0
2	7	7	8	0	2	0	2	3	0
3	6	10	8	0	4	1	3	2	0
4	7	12	11	0	3	0	4	4	1
5	15	7	5	0	3	0	1	2	1
Total	90	66	59	1	19	1	19	23	3

MILLBROOK ELEMENTARY SCHOOL

Grade	Overall			By Race					
	Number of available seats outside base nodes	Number of applicants from outside base nodes	Number of applicants from outside base nodes accepted	Number of Asian applicants from outside base nodes	Number of Black applicants from outside base nodes	Number of American Indian applicants from outside base nodes	Number of Hispanic applicants from outside base nodes	Number of White applicants from outside base nodes	Number of Multi-Racial applicants from outside base nodes
K	30	32	27	4	8	0	2	14	4
1	15	16	9	0	6	0	0	4	6
2	10	15	11	0	6	0	2	6	1
3	10	13	6	0	9	0	0	2	2
4	5	10	5	1	2	0	0	5	2
5	5	2	2	0	1	0	0	1	0
Total	75	88	60	5	32	0	4	32	15

POWELL ELEMENTARY SCHOOL

Grade	Overall			By Race					
	Number of available seats outside base nodes	Number of applicants from outside base nodes	Number of applicants from outside base nodes accepted	Number of Asian applicants from outside base nodes	Number of Black applicants from outside base nodes	Number of American Indian applicants from outside base nodes	Number of Hispanic applicants from outside base nodes	Number of White applicants from outside base nodes	Number of Multi-Racial applicants from outside base nodes
K	33	50	34	3	15	0	0	29	3
1	13	16	8	1	10	0	0	4	1
2	9	13	7	1	3	0	1	7	1
3	4	15	4	0	8	0	0	7	0
4	12	14	6	1	9	0	0	3	1
5	11	11	6	0	6	0	0	5	0
Total	82	119	65	6	51	0	1	55	6

MOORE SQUARE MIDDLE SCHOOL

Grade	Overall			By Race					
	Number of available seats outside base nodes	Number of applicants from outside base nodes	Number of applicants from outside base nodes accepted	Number of Asian applicants from outside base nodes	Number of Black applicants from outside base nodes	Number of American Indian applicants from outside base nodes	Number of Hispanic applicants from outside base nodes	Number of White applicants from outside base nodes	Number of Multi-Racial applicants from outside base nodes
6	141	141	147	2	29	2	1	110	3
7	81	43	38	0	10	0	0	28	0
8	0	20	0	0	0	0	0	0	0
Total	222	204	185	2	39	2	1	138	3

PROGRESS IN ACHIEVING PURPOSE 2 OBJECTIVES

MSAP PURPOSE 2: *The development and implementation of magnet school projects that will assist local educational agencies in achieving systemic reforms and providing all students the opportunity to meet challenging State content standards and challenging State performance standards.*
MSAP OBJECTIVE 2: *Federally funded magnet programs promote national, state, and local systemic reforms and are aligned with challenging State content standards and student performance standards.*

Information on progress during the second year of this project toward achieving the MSAP objectives for Purpose 2 is reported in this section. It is organized according to the specific project objectives through which schools are implementing Purpose 2. Included are Project Objectives 2-1 a-e, 2-2.1 a-e, and 2-2.2 a-e.

The North Carolina state curriculum, the North Carolina Standard Course of Study (NCSCS), embodies national and state standards and is revised regularly to reflect reform-based approaches for each content area and grade level. The Wake County Public School System (WCPSS) Curriculum and Instruction department expands upon this document to provide more specific instructional guidelines that reflect the district's local standards. Reforms underway at every project school are closely aligned with the NCSCS and the district's additions to it.

Staff development, vital for Purpose 2, occurred not only at the schools, but also centrally. Coordinating teachers from project schools, the project Gateways Leadership Team, met regularly to focus on implementation issues and to participate in professional development seminars. Their training for key project areas, e.g., leadership skills, equity issues, and arts integration, equipped them to plan and conduct the staff development programs at their schools more effectively. Within the framework of these meetings, they also made site visits to tour each other's schools. These day-long excursions began with a formal presentation by grant staff to give an overview of project activities at the school being observed. The team then broke then into groups to tour classrooms, technology labs, electives, and special activities.

In addition to central leadership team meetings of project schools' coordinating teachers twice each month, core team meetings were held quarterly at each school. The magnet grant director requested that each school form a core team consisting of the grant coordinating teachers, the principal and assistant principal, and the instructional resource teacher. Each school's core team met at least once a quarter with the project director, recruiter, budget analyst, and evaluator to share information, develop consensus around critical issues, and work out specific details related to project implementation.

The three project objectives related to Purpose 2, along with their associated MSAP performance indicators, are stated in the Benchmark Charts that follow. Descriptions of and

tabulated data about Year 2 accomplishments related to each objective are then provided. The Benchmark Charts juxtapose actual achievements for each objective with the levels expected and compare this information to determine whether or not benchmarks have been attained. For any benchmarks that are not met, this report outlines actions and adaptations that are planned so that sufficient progress can be made to compensate for Year 2 shortfalls and meet the levels benchmarked for Year 3.

BENCHMARK CHART 2-1 a-e

WCPSS Project Objectives 2-1 a-e:	By June 30, 2004, **Moore Square Museums Magnet Middle School, Brooks Museums Magnet Elementary School, Millbrook Magnet Elementary School: An International Baccalaureate Primary Years Programme, Joyner Language Explorations Magnet Elementary School,** and **Powell Visual and Performing Arts Magnet Elementary School** will implement new and significantly revised magnet themes to assist the district in achieving national, state, and local reforms, as evidenced by: • sections of the annual project report describing reforms and how they are implemented at the school; • professional development documents for the magnet theme showing a 100% correlation with state standards; • staff participation rate of 95% in professional development related to the theme; • surveys of staff members' agreement that they have learned to use new instructional methods; and • surveys of staff members' familiarity with specific reform-based instructional approaches being used to implement the theme.			
Indicator 2-1	**Year 2 Benchmark**	**Year 2 Actual**	**Benchmark Met? Yes/No**	
National, state, and local reforms. Magnet programs play an active role in implementing national, state, and local reforms.	• Annual project report will describe how reforms continue to be implemented at each school	• Narrative paragraphs in this report describe implementation of reforms at each school and, at Brooks and Moore Square, how planning has proceeded for effective implementation in Year 2	Brooks Joyner Millbr. Powell Moore Sq.	Yes Yes Yes Yes Yes
	• Any new professional development offerings are 100% correlated with state standards (which reflect local and national reforms)	• Tables in Appendix A show 100% correlation of professional development documents with state standards (which reflect local and national reforms); planned staff development for Brooks and Moore Square is 100% correlated with state standards	Brooks Joyner Millbr. Powell Moore Sq.	Yes Yes Yes Yes Yes
	• 90% of all staff will participate in professional development related to the theme, (90% of critical* staff for Brooks and Moore Sq.)	• Tables in Purpose 2 show high levels of staff participation in professional development related to the theme	Brooks Joyner Millbr. Powell Moore Sq.	Yes Yes Yes Yes Yes

BENCHMARK CHART 2-1 a-e continued

Indicator 2-1	Year 2 Benchmark	Year 2 Actual	Benchmark Met? Yes/No	
National, state, and local reforms. Magnet programs play an active role in implementing national, state, and local reforms.	• 80% of staff agree that they have learned to use new instructional methods, (70% for Brooks and Moore Sq.)	• Spring 2003 staff survey shows 80% (70% for Brooks and Moore Square) of staff *agree/strongly agree* they have learned to use new methods Brooks 95% Joyner 67% Millbr. 89% Powell 84% Moore Sq. 93%	Brooks Joyner Millbr. Powell Moore Sq.	Yes No Yes Yes Yes
	• 80% of staff are familiar with reform-based instructional methods used to implement the theme, (70% for Brooks and Moore Sq.)	• Spring 2003 staff survey shows 80% (70% for Brooks and Moore Square) or more of staff *familiar/very familiar* with the majority of reform-based instructional methods at 3 of 5 project schools	Brooks Joyner Millbr. Powell Moore Sq.	Yes No Yes No Yes

Moore Square Middle School, Project Objective 2-1a

Implementing National, State, and Local Reforms: On July 29, 2002, the newly constructed Moore Square Museums Magnet Middle School opened its doors to students. In its first year of operation (Year 2 of the MSAP project), 6th and 7th graders were enrolled. When 7th graders move up to 8th grade in 2003-04, the school will have a full complement of students in grades 6 through 8. Along with effective opening of the physical plant, Moore Square faculty successfully implemented their museums theme. The theme incorporates national, state, and local standards by using the Paideia approach to learning. All units planned during Year 1 were put into use this year. They were expanded into school-wide activities that encompassed all subject areas, the arts, and technology.

The Paideia approach involved students in the process of learning and the production of real world products. Instructional strategies that they experienced included

- project-based learning;
- seminars;
- discovery learning and problem solving;
- critical thinking, essential questions, and inquiry techniques; and
- guided exploration and discovery.

State-of-the-art technology and visual and performing arts were incorporated throughout the curriculum.

At the start of the year, Moore Square's museums coordinating teacher provided a "Magnet Minute" notebook for every teacher. Materials included information about the MSAP project, a full description of the museums theme, a list of museums partners, information about museums, study trip forms, transportation forms, and various articles related to museums. The coordinating teacher also scheduled a regular "Magnet Minute" slot on the staff meeting agenda throughout the year. She used this time to answer project-related questions and brief staff on up-coming activities. The project coordinator and project evaluator attended an initial faculty meeting to outline the project fully and clarify evaluation expectations for the staff.

One requirement of the project evaluation plan was that critical staff members be identified during Moore Square's inaugural year. The in-depth involvement of these individuals in Year 2 provided a foundation for dissemination of the theme throughout the school. In addition to the project-funded positions of museums coordinator and technology coordinator, Moore Square critical staff included the principal, assistant principal, global studies teacher, and curriculum integration coordinator. This group met regularly and each member worked intensively on project-related activities. Once every quarter, the project coordinator, recruiter, budget analyst, and evaluator met with the critical staff. When convened, this group was called the Core Team. Meetings of Moore Square's Core Team were an effective venue for talking about accomplishments and concerns. Discussions occurred in a timely fashion so that successes could be shared and problems forestalled or worked out.

A Museums Board was formed to help promote Moore Square's museums theme. Members included representatives of area museums, the school principal, the museum coordinator, and a curriculum planner. The work of this group contributed to successes in Year 2 and will contribute to further achievements in Year 3. School staff members shared Moore Square's School Improvement Plan with board members and provided a curriculum overview for them. Thus, museum personnel on the board were able to share this information with other staff members at their respective museums. More importantly, they could discuss their involvement at Moore Square and thereby promote interest and involvement of other museum personnel.

<u>Professional Development to Support the Theme</u>: The National Paideia Center, which offered initial training to Moore Square faculty and administrators during the planning year, provided additional staff development and technical assistance in Year 2. Eight staff development opportunities were offered using the Paideia seminar approach. The center also provided six onsite visits. Paideia software, including the *Paideia: Key Seminar Library*, was installed on teachers' laptop computers. In addition to Paideia staff development activities, the North Carolina Museum of Art sponsored a workshop in Object Based Learning. This training was complemented by 15 hours of professional development designed to introduce faculty to the variety of technology resources available at the new school. The "Tech Tuesdays" workshop series afforded after-school opportunities for in-depth technology training in specific areas targeted to teachers' needs.

With Moore Square in the initial year of project implementation, there was not a Year 2 professional development attendance benchmark for the entire staff. Rather, 90% of critical staff (i.e., the Core Team) were expected to participate in appropriate staff development activities. Of the Moore Square Core Team members — the museums coordinator, the technology coordinator,

the principal, the assistant principal, the global studies teacher, and the curriculum integration coordinator — each one did attend (or in some instances, teach) appropriate staff development activities related to Paideia and/or the museums theme. Previous experience and their particular role in the project meant that different training activities were appropriate for different Core Team members. Examples of workshops in which Core Team members were involved during Year 2 include the following:

- Introduction to the NC Museum of Art, the NC Museum of History, the NC Museum of Natural History, and the Raleigh City Museum
- Smart Board Technology
- Internet Resources
- Baldrige Quality Tools
- Object-based Learning
- Paideia Seminars
- Diversity/Closing the Achievement Gap
- School Grants Contact Training
- Differentiation Strategies
- Innovative Teaching Training
- Curriculum Writing Training

The titles, dates, and contact hours of Paideia and other major training activities for the 2002-03 school year are listed in Table 13. Professional development related specifically to technology is listed in Table 14. All professional development is tied to the NCSCS because these activities must prepare teachers to help their students meet state standards (Tables 13 and 14).

Table 13. Moore Square Year 2 Professional Development Titles and Alignment with State Curriculum (NCSCS)

Professional Development Title	Dates Scheduled	Total Hours Offered	Alignment with NCSCS Goals and Objectives
WCPSS Diversity Training Program/ Closing the Achievement Gap Conference	Jan.-April 03	10	Goals: All grade 6, 7 and 8 NCSCS subject-area goals addressed through this training, because awareness of diversity issues strengthens teachers' ability to meet the needs of diverse learners.
Museum Based Learning	Aug. 02-Jan. 03	15	Goals: All grades 6-8 NCSCS goals and objectives addressed through inquiry-based instructional delivery of the museums magnet program
Innovative Teaching (student-led conferencing, writing , EOG, stems across all subject areas, curriculum mapping)	June 02-June 03	6	Goals: Relates to all grades 6-8 NCSCS subject area goals and objectives, also arts and technology goals
Introduction to Continuous Improvement in the Classroom (Baldrige and Quality Tools with follow-up school visit)	Oct. 02-March 03	17	Goals: Relates to all grade 6-8 NCSCS subject areas goals and objectives; strengthens teachers' success in delivering lessons that meet the needs of all learners
Differentiation Strategies	Nov. 02-Jan. 03	12	Goals: Relates to all grades 6-8 NCSCS goals and objectives by strengthening teachers' ability to met the needs of diverse learners in a mixed-ability classroom setting
Teaching Powerful Writing	Aug.-Sept. 02	6	Goals: Language Arts: The learner will use language to express individual perspectives through analysis of personal, social, cultural, and historical issues.
CRISS Training (Creating Independence Through Student-Owned Strategies)	Sept. 02-Feb. 03	15	Goals: Information Skills Goal 3: The learner will relate ideas and information to life experiences. Information Skills Goal 5: The learner will communicate reading, listening, and viewing experiences.
WOW Training (Working on the Work)	Jan. 03	15	Goals: Relates to all grades 6-8 NCSCS goals and objectives but developing habits of mind that incorporate quality student work standards and engaging lesson plans in their units of study.
North Carolina Council for the Social Studies Conference Sessions	2/20/03 2/21/03	12	Goals: Social Studies: The learner will analyze changes in ways of living and investigate how and why these changes occur.
Magnet Schools of America National Conference Sessions	April 03	30	Goals: Relates to all grades 6-8 NCSCS goals and objectives offering collaboration with other magnet schools while enriching the instructional program of the museums magnet theme
Staff Development Contact Training	Aug. 02 May 03	25	Goals: Relates to all grades 6-8 NCSCS goals and objectives offering professional development opportunities, which strengthens teachers' ability to provide quality instruction for improved student performance.
Continuous Improvement Conference	Aug. 02	6	Goals: Relates to all grades 6-8 NCSCS goals and objectives
Reading Acceleration for Struggling Readers	Oct. 02	6	Goals: Relates to all grades 6-8 NCSCS goals and objectives

Table 14. Moore Square Technology Professional Development Year 2 and Alignment with State Computer/Technology Skills Curriculum

Professional Development Title	Dates Scheduled	Total Hours Offered	Alignment with NCSCS Goals and Objectives
Curriculum Writing Training	Nov. 02-Feb. 03	3	Goals: Relates to all grades 6-8 NCSCS goals and objectives
Southern Coastal Heritage Workshop (NCSU, ECU, and UNC-Wilmington)	July 03	30	Goals: Social Studies 8th grade: The learner will assess the influence of geography on the economic, social, and political development of North Carolina Science 8th Grade Goal: The learner will build an understanding of the hydrosphere.
THJHA Annual Convention (North Carolina Museum of History)	April 03	6	Goals: Social Studies 8th Grade: The learner will analyze changes in ways of living and investigate how and why these changes occur.
NCWISE—Electronic Student Data Management System	Aug. – Nov. 2002.	16	Technology Goal : Aligns visual tools with fundamental thinking skills across all disciplines Technology Goal : The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate
Computer Technology Training	Aug. 02-May 03	16	Technology Goal: The learner will demonstrate knowledge and skills in using computer technology Technology Goal: The learner will use a variety of computer technologies to access, analyze, interpret, synthesize, apply and communicate
TAO (Totally Automated Office) and Excel Data Base Training	Feb. 2002	16	Technology Goal : Aligns visual tools with fundamental thinking skills across all disciplines Technology Goal : The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate
Laptop Orientation	Sept. 2002	1	Goals: Relates to all grade 6 and 7 NCSCS Technology goals
NC Wise Training	Oct. 02-Apr. 03	6	Goals: Relates to all grade 6 and 7 NCSCS Technology goals
Internet Resources	Jan. 03	1	Goals: Relates to all grade 6 and 7 NCSCS Technology goals
Using the Shared Drive	Jan. 03	1	Goal : The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate
Digital Cameras	November 19, 2002	1	Goals: Use multimedia tools to develop classroom assignments/projects/products
"Learn to Burn" Introduction to writing CD's	February 11, 2003,	1	Goals: Select and use technology tools to collect, analyze, and display data
Technology Resources at M2M3	April, 2003	2	Goals: Relates to all grade 6 and 7 NCSCS subject-area goals, also arts and technology goals
Media Center Resources at M2M3	February 25, 2003	1	Goals: Relates to all grade 6 and 7 NCSCS subject-area goals, also arts and technology goals
SmartBoard Training	August 7, 2002	1	Goal: Use multimedia tools to develop classroom assignments/projects/products

The preceding tables focus on staff development offerings at Moore Square in Year 2 and validate their alignment with the NCSCS. Moore Square's results from the WCPSS evaluation and research department 2003 staff survey are used in the tables that follow. For each school, a similar pattern will be followed in this section. Professional development tables will be

presented, followed by staff survey results. For Objective 2-1, each school has two benchmarks that apply to the survey items on professional development. The first benchmark deals with the item on learning to use new instructional methods. Eighty percent (70% for Brooks and Moore Square, in their first year of implementation) or more of those responding are expected to give positive answers to this item. The second benchmark, also set at the 80% or above level (70% for Brooks and Moore Square), is based on a series of items. Of the eleven new approaches used across all project schools, each school received items dealing with the 5 to 8 approaches specific to their school. The decision rules below were use to determine, across each school's specific set of items, whether the benchmark was met. Although a school's items were considered together for the benchmark decision, percentages on individual items were used to make recommendations for improvements in Year 3.

Decision Rules Used to Assess Objective 2-1 Benchmarks (Staff Survey, New Instructional Approaches)	
Item-Level Analysis	School Analysis
If 80% (70% for Brooks and Moore Square) or more of respondents are *familiar or very familiar* with an item on new instructional approaches, that item meets the benchmark.	If half or more of the items across all new instructional approaches listed as being used at that school meet the benchmark, the school meets the benchmark.

Moore Square's extensive staff development program in Year 2 afforded teachers multiple opportunities to understand the museums theme and ways to implement it through new instructional approaches. They could also acquire appropriate technology skills. On the annual staff survey conducted by the WCPSS evaluation and research department in spring 2003, 93% of Moore Square staff members who responded *agreed or strongly agreed* that they had learned to use instructional methods related to the theme. They were also asked to rate their level of familiarity with six specific instructional approaches being used for the project. Well over 70% were *familiar or very familiar* with the first four new instructional approaches. But less than 70% reported that they were *familiar or very familiar* with the last two — inquiry learning and constructivist approaches (Table 15). Based on the decision rules for staff survey results (see above), Moore Square did meet its Year 2 staff survey benchmarks. However, although Moore Square was successful in building familiarity with the museums theme, Paideia, project-based learning, and technology integration, project staff members must make plans to increase teachers' familiarity with inquiry learning and constructivist approaches in Year 3.

Table 15. Moore Square Middle School Year 2 Staff Survey Results Related to Professional Development

Survey Item	*Percent Agree/Strongly Agree
Through the magnet grant, I have learned to use new instructional methods.	93%
New Instructional Approaches	**Percent Familiar/Very Familiar**
Museums-Based Learning	89%
Paideia	93%
Integration of Technology into Instruction	81%
Project-Based Learning	89%
Inquiry Learning	67%
Constructivist Approaches	56%

*Survey response rate = 64%

Moore Square's positive staff survey response about teacher familiarity with museums-based learning, was echoed by a survey that the museums coordinating teacher conducted at the beginning and end of the school year. One item on that survey asked, "Have you taken students to a museum?" When school started, only 7% of teachers responding said *Yes*; 93% said *No*. By the end of the school year, 84% of responding teachers marked *Yes*, and only 16% chose *No*.

Brooks Elementary School, Project Objective 2-1b

Implementing National, State, and Local Reforms: August 2002 began the second year of this project but the first year of implementation at Brooks Elementary. Planning activities completed during Year 1 allowed successful operation of the school's Museums magnet theme in Year 2. During the planning phase, Brooks chose the Paideia Program as a strategy to ensure that all students would benefit from national, state, and local reforms embodied in the museums theme. Professional development in Year 1 through the National Paideia Center was reinforced and expanded in Year 2. Teachers developed sufficient expertise to plan and implement project-based Paideia coached units with their students. They were also able to begin using Paideia seminars in their classes. As an adjunct to Paideia, the curriculum coordinator conducted overview sessions for every class on Howard Gardner's theory of multiple intelligences. Students, teachers, and paraprofessionals will be actively engaged in learning more about and applying the multiple intelligences approach to learning in Year 3.

The Museums program coordinating teacher and the instructional technology/multimedia coordinating teacher, who were on the planning team last year, oversaw implementation of the project this year. They maintained communication with the staff on a variety of levels and provided opportunities for dialogue regarding the new magnet theme. A two-day staff retreat that they planned and carried out focused on specific strands of the museums theme. This included the following classroom strategies: approaches for an effective first 6 weeks of school, use of the "Morning Meeting" as a communication tool, and other methods for developing a caring, responsive classroom community. There were also activities to foster collaboration and

cooperation within and between grade levels. The retreat provided a foundation for curriculum integration during the school year.

Because school-wide planning time was scheduled three times each month, the collaboration and curriculum integration begun at the retreat continued throughout the school year. To aid in the process, the two coordinating teachers developed a planning tool that reflected components of the museums theme – curriculum integration, essential questions, Paideia coached-project units, Paideia seminars, and museum connections. One wall adjacent to the school entry foyer was designated the Coached Project Wall, and outlines of coached project units were displayed there for other teachers, parents, and visitors to see.

One result of the planning process was a whole-school unit with a museums focus, which provided guided study experiences for all students. As well as the usual field trips to museums, every grade participated in at least one trip that featured guided study related to the museum they visited. The school-wide unit was used to tie these experiences together and ensure that they related to the grade-level curriculum. Next year, all museum trips will be study trips rather than field trips. Each one will be directly tied to classroom instructional units. In many cases, the museum visit will be used as the entry point into the unit.

In Year 2, the appearance of Brooks also changed from that of a traditional school to a Museums School. The following measures were used to create a museums environment within the building.

- Hanging banners to identify gallery areas for each grade level. Additional banners displayed and emphasized aspects of the museums theme -- *Create, Communicate, Reflect.*
- Dedicating a room as Museum Gallery to house student exhibitions.
- Designating space as a Paideia Seminar Room that teachers can reserve for their classes.
- Repainting walls throughout the school in soft white to increase light and provide a suitable background for student exhibits.
- Purchasing and hanging frames to exhibit student art work. Contemporary frames were used in the new wing of the building, with traditional frames in the original wing. Over 100 pieces of student art were framed and exhibited.
- Providing 53 4-by-10-foot display boards for class exhibits.
- Posting framed professional belief statements written by each staff member in front of teachers' classrooms.

In addition to provisions for new signage and exhibition space throughout the school, classrooms also used other museums techniques. On a weekly basis, each class designated two docents whose duty it was to greet guests and provide a bird's eye view of what was happening in the classroom at the time of the visit. This developed pride, awareness, and poise in the students who understood that docents needed to knowledgeable about classroom activities and also be able describe them to visitors. During the year, 5th grade students worked with the art teacher to create a mural for the front lobby. The piece, which will be permanently installed, reflects specific strands of the 5th grade art and social studies curriculum as well as important aspects of the museums theme.

Year 2 of the project was Brooks' first year in the North Carolina Museum of Science UTOTES (Using the Outdoors to Teach Environmental Science) program. Through UTOTES, a team of teachers designed and created gardens on the campus. The gardens will be integrated into the hands-on science curriculum at Brooks. In summer 2003, two staff members will attend a week-long UTOTES Field Institute at which schools from across the state will share their UTOTES projects and activities. They will learn about the ecology of school grounds and have field experiences on North Carolina plant and animal communities. Information on curriculum integration and leadership skills will also be included.

In Year 3, the museums coordinating teacher will further strengthen Brooks' partnerships with area museums. School-wide planning sessions will take various forms next year, and one of those will be for the staff to meet at the museums. Time to work in the museum setting will facilitate teachers' ability to integrate exhibits into the units of study that they are planning or revising. A presentation by the education director of the North Carolina Museum of Art is scheduled for the first staff workday next year. His theme will be the value of "object-based" learning and its impact on student success. Brooks may also write a proposal for a "Magic Museum School Bus" grant.

Technology was a critical component of the museums theme at Brooks. Implementation in Year 2 focused on effective integration of technology into classroom instruction. Another technology focus was appropriate use of Internet resources. Teachers and students must know how to effectively and efficiently search for information and how to organize and process information once it is obtained. Staff were also trained to use technology appropriately as a tool for communication. The school is moving from paper to email communiqués. Teachers and students used technology to develop and distribute classroom newsletters. All staff learned to use Blackboard, the district's communications software, for sharing information with students and parents. Every grade level and/or teacher also developed a course on Blackboard. Others wishing to cover the same content area can then access the course on Blackboard.

Technology acquired to support these efforts included both centralized and classroom equipment. In addition to the 28 computers and LCD projector in the computer laboratory, there are 8 computers in the Spanish room, and 12 Internet-ready stations in the media center. Classrooms each have 4-6 computers, 1 color printer, and one video camera. Every grade level has its own LCD projector and video camera.

<u>Professional Development to Support the Theme</u>: Professional development opportunities in Year 2 built on Year 1. Staff had studied the basics of lesson planning for Paideia and could now focus on Paideia coached projects and seminars. As in Year 1, technology was again an important component of staff development. To support new teaching methods and software packages, the technology integration coordinator planned and co-taught sessions with other staff members. The coordinator and her co-teachers modeled the new approaches and gave staff members opportunities for practice, rather than just delivering information to them. In addition to the courses below (Table 16), which they either taught or arranged to have taught, the grant coordinating teachers were invited to give presentations at two national conferences: the National Paideia conference and the Magnet Schools of America annual meeting. Brooks' principal also contributed to the Magnet Schools of America presentation.

Like Moore Square, Brooks had a planning team in Year 1 and was slated to have a team of "critical staff" members in Year 2. However, the functions that these members would have fulfilled — laying the base for dissemination of the theme throughout the school — were filled instead by the Core Team. This consisted of the principal, assistant principal, and the two coordinating teachers. In addition to its regular meetings, this group also met on a quarterly basis with the director, recruiter, budget analyst, and evaluator of this project. Core Team meetings were very effective for planning and sharing information. Accomplishments could be recognized and problems solved at an early stage. Benchmarks for Year 2 require that 90% of Brooks critical staff (i.e., Core Team) participate in staff development related to the theme. That is, in fact, what happened. Table 16 lists project-related workshops that Core Team members attended along with the positions of those attending.

Table 16. Brooks Elementary School Year 2 Core Team Professional Development

Professional Development Title	Core Team Member Attending
State Conference: Closing The Achievement Gap	Principal, Coordinating Teachers
Multimedia Training	Coordinating Teachers
Harvard Graduate School of Education: Project Zero Multiple Intelligences Workshop	Coordinating Teachers
Cognitively Guided Instruction	Coordinating Teachers
Civil Rights: School Desegregation in North Carolina	Coordinating Teachers
WCPSS Continuous Improvement Conference	Coordinating Teachers
Grade Three-Five Mathematics Achievement Project	Coordinating Teachers
A Framework for Understanding Poverty	Coordinating Teachers
Leadership Training: National Paideia Center	Principal

Since Brooks is in its first year of project implementation, there was no Year 2 benchmark pertaining to staff development attendance requirements for the entire staff. However, attendance was high at both theme-related (Table 17) and technology (Table 18) training opportunities offered in Year 2. In keeping with the curriculum mapping process that Brooks uses for grades K-5, professional development offerings for the magnet theme were aligned with the NCSCS (Table 17). Technology staff development was keyed to the WCPSS Educational Technology Plan 2001-2005, which in turn is related to the NCSCS (Table 18).

Table 17. Brooks Elementary School Year 2 Professional Development Titles and Alignment with State Curriculum (NCSCS)

Professional Development Title	Dates	Total Hours Offered	Alignment with NCSCS Goals and Objectives
The Responsive Classroom • Morning Meeting • The First 6 Weeks of School	June 2002	16	Goals: Relates to all NCSCS subject-area goals for grades K-5, also arts and technology goals
NC Reading Association	Spring 2003	10	Goals: Relates to all NCSCS subject-area goals for grades K-5, also arts and technology goals
Building Consensus in Scoring Running Records	Fall 2002	10	Goals: Relates to all NCSCS subject-area goals for grades K-5, also arts and technology goals
Infrastructure for Science Education	Oct. 2002	8	Goals: Relates to all NCSCS subject-area goals for grades K-5, also arts and technology goals
Journey Through The Arts	Oct. 2002-Feb.2003	20	Goals: Relates to all NCSCS subject-area goals for grades K-5, also arts and technology goals
Creating Integrated Paideia Units of Instruction	Oct. 2002-May 2003	20	Goals: Relates to all NCSCS subject-area goals for grades K-5, also arts and technology goals
Intellectual Coaching and the Coached Project	Nov. 2002	16	Goals: Relates to all NCSCS subject-area goals for grades K-5, also arts and technology goals
UTOTES (Using the Outdoors to Teach Environmental Science)	Aug. 2002-May 2003	30	Goals: Relates to all NCSCS subject-area goals for grades K-5, also arts and technology goals
Choosing Text for Paideia Seminars: Pre- and Post-Seminar Activity	Dec. 2002	16	Goals: Relates to all NCSCS subject-area goals for grades K-5, also arts and technology goals
Increasing Student Achievement	Jan. 2003	8	Goals: Relates to all NCSCS subject-area goals for grades K-5, also arts and technology goals
Evidence of Intellectual Coaching	Jan. 2003	6	Goals: Relates to all NCSCS subject-area goals for grades K-5, also arts and technology goals
Museums Magnet "Where are We in the Process"	Jan. 2003	2	Goals: Relates to all NCSCS subject-area goals for grades K-5, also arts and technology goals
CGI Math Cognitively Guided Math Instruction	Jan.-March 2003	16	Goals: Relates to all NCSCS subject-area goals for grades K-5, also arts and technology goals
MAP (Mathematics Achievement Project) Workshop	Jan.-Feb. 2003	20	Goals: Relates to all NCSCS subject-area goals for grades K-5, also arts and technology goals
A Framework for Understanding Poverty	March 2003	8	Goals: Relates to all NCSCS subject-area goals for grades K-5, also arts and technology goals
Baldrige Tools	March 2003	14	Goals: Relates to all NCSCS subject-area goals for grades K-5, also arts and technology goals
Closing the Gap Conference	March 2003	20	Goals: Relates to all NCSCS subject-area goals for grades K-5, also arts and technology goals
Development of Paideia Integrated Coached Projects	Aug. 2003	30	Goals: Relates to all NCSCS subject-area goals for grades K-5, also arts and technology goals

Table 18. Brooks Elementary School Year 2 Technology Professional Development and Alignment with Technology Curriculum (NCSCS)

Professional Development Title	Dates	Total Hours Offered	Alignment with WCPSS Educational Technology Plan 2001-2005
Buddy Training (New staff partnered with experienced staff to learn to: log into network, use to TAO email and enter NC Wise attendance)	Aug. 6 & 7, 2002	8	Goal 3: By 2005, all WCPSS instructional, administrative, and support personnel will demonstrate proficiency in the use of technology to improve communication as evidenced through telecommunications, shared access to online resources, and Internet and World Wide Web tools.
W.O.W. TAO (Wonderful Operations With TAO - creating Private Mail Lists, Local Mail Options, etc.)	Aug. 28, 2002	2	Goal 3: By 2005, all WCPSS instructional, administrative, and support personnel will demonstrate proficiency in the use of technology to improve communication as evidenced through telecommunications, shared access to online resources, and Internet and World Wide Web tools.
Accelerated Reader Management (Input students, set individual reading goals, & manage reports)	Sept. 11, 2002	2	Goal 1: By 2005, all students will demonstrate proficiency in the use of technology as a tool to improve learning as measured by appropriate local and state assessment instruments Goal 2: By 2005, all instructional personnel and assistants will demonstrate proficiency in the use of technology to improve classroom effectiveness and will promote the infusion of technology into teaching and learning as evidenced by computer competency models and surveys, lesson plans, products, classroom management, use of online instructional resources and assessment instruments and models.
Larson's Leapfrog Math & Report Cards (Input students, set pre-assessment options for differentiation purposes, managing reports, & downloading report cards from the Intranet-every teacher used Excel Report Cards this year)	Sept. 16 & 25, 2002	4	Goal 1: By 2005, all students will demonstrate proficiency in the use of technology as a tool to improve learning as measured by appropriate local and state assessment instruments. Goal 2: By 2005, all instructional personnel and assistants will demonstrate proficiency in the use of technology to improve classroom effectiveness and will promote the infusion of technology into teaching and learning as evidenced by computer competency models and surveys, lesson plans, products, classroom management, use of online instructional resources and assessment instruments and models.
Intro. to Blackboard (What is Blackboard and what can I do with it?)	Oct. 2, 2002	1	Goal 2: By 2005, all instructional personnel and assistants will demonstrate proficiency in the use of technology to improve classroom effectiveness and will promote the infusion of technology into teaching and learning as evidenced by computer competency models and surveys, lesson plans, products, classroom management, use of online instructional resources and assessment instruments and models. Goal 3: By 2005, all WCPSS instructional, administrative, and support personnel will demonstrate proficiency in the use of technology to improve communication as evidenced through telecommunications, shared access to online resources, and Internet and World Wide Web tools.

Table 18. (continued) **Brooks Elementary School Year 2 Technology Professional Development and Alignment with Technology Curriculum (NCSCS)**

Professional Development Title	Dates	Total Hours Offered	Alignment with WCPSS Educational Technology Plan 2001-2005
Blackboard Training (Teachers set up their Blackboard courses, learned new functions, and updated)	Oct. 2002 – April 2003	15	Goal 2: By 2005, all instructional personnel and assistants will demonstrate proficiency in the use of technology to improve classroom effectiveness and will promote the infusion of technology into teaching and learning as evidenced by computer competency models and surveys, lesson plans, products, classroom management, use of online instructional resources and assessment instruments and models. Goal 3: By 2005, all WCPSS instructional, administrative, and support personnel will demonstrate proficiency in the use of technology to improve communication as evidenced through telecommunications, shared access to online resources, and Internet and World Wide Web tools.
Laptop Training (How to use the new equipment as network vs. stand alone, how to use remote access, saving to CD-RW)	Nov. 6, 13, 22, 2002	3	Goal 2: By 2005, all instructional personnel and assistants will demonstrate proficiency in the use of technology to improve classroom effectiveness and will promote the infusion of technology into teaching and learning as evidenced by computer competency models and surveys, lesson plans, products, classroom management, use of online instructional resources and assessment instruments and models. Goal 3: By 2005, all WCPSS instructional, administrative, and support personnel will demonstrate proficiency in the use of technology to improve communication as evidenced through telecommunications, shared access to online resources, and Internet and World Wide Web tools.
Nifty Newsletters (Creating parent newsletters using MS Publisher or MS Word)	Dec. 11, 2002	1	Goal 2: By 2005, all instructional personnel and assistants will demonstrate proficiency in the use of technology to improve classroom effectiveness and will promote the infusion of technology into teaching and learning as evidenced by computer competency models and surveys, lesson plans, products, classroom management, use of online instructional resources and assessment instruments and models. Goal 3: By 2005, all WCPSS instructional, administrative, and support personnel will demonstrate proficiency in the use of technology to improve communication as evidenced through telecommunications, shared access to online resources, and Internet and World Wide Web tools.
Inspiration & Kidspiration (Intro. to mapping software, explore and practice, sharing of integration ideas)	Jan. 22 & 29, 2003	2	Goal 1: By 2005, all students will demonstrate proficiency in the use of technology as a tool to improve learning as measured by appropriate local and state assessment instruments. Goal 2: By 2005, all instructional personnel and assistants will demonstrate proficiency in the use of technology to improve classroom effectiveness and will promote the infusion of technology into teaching and learning as evidenced by computer competency models and surveys, lesson plans, products, classroom management, use of online instructional resources and assessment instruments and models.

Table 18. (continued) **Brooks Elementary School Year 2 Technology Professional Development and Alignment with Technology Curriculum (NCSCS)**

Professional Development Title	Dates	Total Hours Offered	Alignment with WCPSS Educational Technology Plan 2001-2005
LCD Projectors (How to install an LCD projector to my laptop for use in the classroom)	Feb. 12, 26, 2003	2	Goal 2: By 2005, all instructional personnel and assistants will demonstrate proficiency in the use of technology to improve classroom effectiveness and will promote the infusion of technology into teaching and learning as evidenced by computer competency models and surveys, lesson plans, products, classroom management, use of online instructional resources and assessment instruments and models.
Parents Get Web Wise (Online educational resources workshop for Title I parents)	March 1, 2003	2	Goal 1: By 2005, all students will demonstrate proficiency in the use of technology as a tool to improve learning as measured by appropriate local and state assessment instruments.
PowerPoint (How to use PowerPoint as a teaching tool, sharing of integration ideas)	April 2 & 16, 2003	2	Goal 1: By 2005, all students will demonstrate proficiency in the use of technology as a tool to improve learning as measured by appropriate local and state assessment instruments. Goal 2: By 2005, all instructional personnel and assistants will demonstrate proficiency in the use of technology to improve classroom effectiveness and will promote the infusion of technology into teaching and learning as evidenced by computer competency models and surveys, lesson plans, products, classroom management, use of online instructional resources and assessment instruments and models.

Efficient planning in Year 1 and appropriate staff development offered in Years 1 and 2, produced positive results for Brooks on the WCPSS spring 2003 staff survey. Ninety-five percent of Brooks staff members who responded to the survey, agreed or strongly agreed that they had learned to use new instructional methods. They also reported high levels of familiarity with eight specific new instructional approaches that were listed on the survey for Brooks (Table 19). Thus, Brooks met both of its benchmarks for staff development items on the survey.

Table 19. Brooks Elementary School Year 2 Staff Survey Results Related to Professional Development

Survey Item	*Percent Agree/Strongly Agree
Through the magnet grant, I have learned to use new instructional methods.	95%
New Instructional Approaches	**Percent Familiar/Very Familiar**
Museums-Based Learning	93%
Paideia	93%
Integration of Technology into Instruction	90%
Curriculum Mapping	85%
Multiple Intelligences	78%
Project-Based Learning	83%
Inquiry Learning	83%
Constructivist Approaches	78%

*Survey response rate = 75%

Millbrook Elementary School, Project Objective 2-1c

Implementing National, State, and Local Reforms: During Year 2, faculty at Millbrook have continued to implement their International Baccalaureate Primary Years Programme (IB PYP) theme effectively. For this theme, they use an inquiry, project-based approach to learning which reflects national, state, and local reforms. The "Program of Inquiry" developed last year was fully implemented this year. This series of curriculum units for grades K-5 reflects the PYP's emphasis on inquiry, global education, international understanding, and responsible citizenship. North Carolina's state content and performance standards are reflected in each unit. As teachers implemented this curriculum in Year 2, they reflected on the strengths and weaknesses of each unit. Successes were shared with fellow staff members, and areas needing improvement were addressed. Technology is not just an add-on, it is integrated into the curriculum. Teachers and students use computers to gather data, record findings, and make judgments based on the information obtained. They also have opportunities to document their progress through electronic portfolios.

Millbrook positions funded for this project are the IB PYP coordinator, the instructional technology coordinating teacher, the science resource teacher, and a half-time instructional technology support technician. The same individuals filled these positions this year as last, which contributed to effective working relationships. Last year, they worked with "critical staff" members to build a strong foundation for the program. The critical staff base meant that resources and expertise could be disseminated throughout the school this year. In Year 2, a 10-member core group, consisting of the three full-time positions funded by the project, the principal, the assistant principal, the instructional resource teacher, and one teacher each from kindergarten, 1st grade, 2nd grade, and 5th grade was formed. Advice of this group was invaluable to the coordinating teachers in Year 2. Members of the group were able to serve as resource persons to other staff members at the school to help expand and strengthen the program. In quarterly Core Team meetings, a subgroup of this group (the instructional technology coordinating teacher, the science resource teacher, the instructional resource teacher, the principal, and the assistant principal) met on a quarterly basis with the project director, recruiter, budget analyst, and evaluator to discuss progress and identify problems.

Millbrook is going through the process of obtaining formal authorization for its IB PYP from the International Baccalaureate Organization (IBO). As part of that process, the IBO conducted an official site visit during Year 2 of the project to evaluate the effectiveness of Millbrook's PYP program and assess the level of progress in implementing it. The site visitor conducted numerous classroom observations and interviewed the PYP coordinator, administrators, teachers, and students. The site visit report included a list of commendations on positive practices and recommendations for improvements. Commendations included:

- the commitment of the administration, school district, and the PYP coordinator to move the program forward;
- teachers' efforts to bring about meaningful change in the delivery of inquiry instruction; and
- a rich core curriculum with programs in the arts, drama, music, and physical education.

Recommendations included:

- further development of teacher questions for the inquiry units,
- integration of unit assessments,
- broadening teacher understanding of inquiry based instruction, and
- more emphasis on internationalism.

The second site visit for the IBO authorization process will occur in Year 3.

Professional Development to Support the Theme: Year 2 began with a two-day full faculty workshop on structured inquiry, facilitated by a noted specialist on inquiry methods. The focus of this retreat was on incorporating student needs and interests into structured inquiry and use of inquiry as a framework for teaching and learning. The teachers learned that inquiry units, as opposed to thematic units, broaden conceptual understanding.

Last year's professional development focus on curriculum planning was extended this year with formal opportunities to review and revise units that had been developed for the school's Program of Inquiry. In regularly-scheduled meetings, teachers revisited every PYP unit, or IB *planner*, and reviewed all curriculum maps created in Year 1. They reassessed curriculum connections, reflected on unit success, and aligned *planners* more closely to the curriculum. The alignment emphasized significant goals and took into account the relevance of specific content objectives to each unit. In addition, teachers moved away from the idea of *planners* as simply thematic units and began to focus on inquiry-based learning.

During Year 2, teachers expanded their skills through professional development at out-of-state workshops offered by the IB organization as well as in sessions at Millbrook (Table 20). Twenty-six teachers and specialists attended 3- and 5-day intermediate and advanced PYP training sessions. The PYP coordinator was invited by the International Baccalaureate Organization, North America, to become a national trainer for other PYP schools. Over 90% of Millbrook teachers and specialists are now trained in best practices for teaching and learning, internationalism, and structured inquiry.

Further development of technology and science skills was also an important focus in Year 2. The science resource teacher, media specialist, and technology specialist, whose roles are to enhance project-based learning for the PYP, gained additional expertise and in turn offered this expertise to other staff members. In Year 2, the science resource teacher completed 83 hours of science related training, including 39 hours of "Science Kit" training (Table 22). The technology specialist offered a very successful "Wired Wednesdays" series covering a variety of technology skills tailored to teachers' specific needs (Table 21).

All staff development for the PYP must equip teachers to more effectively achieve the NCSCS goals with their students. To verify this, Millbrook's coordinating teachers have cited the NCSCS goals and objectives to which all of the professional development activities in Tables 20-22 are aligned.

Table 20. Millbrook Elementary Year 2 Professional Development and Alignment with State Curriculum

Professional Development Title	Dates	Total Hours	Alignment with NCSCS Goals and Objectives
Inquiry Training – Kathy Short	Aug. 2002	16	All K-5 Subject-Area Goals Addressed: Aligned with all NCSCS subject area goals for elementary grade levels. Grade level groups and specialists learned how to weave inquiry into all subject areas for all grade levels.
PYP Planner Development: Create, Review, and Revise Overall Unit Plans for Entire School Year	Nov 2002	15	All K-5 Subject-Area Goals Addressed: Aligned with all NCSCS subject-area goals for elementary grade levels. Teachers work in grade-level teams with Specialists to identify units of study that align specific curriculum objectives to a central idea.
	Feb 2003	15	
	Apr 2003	15	
PYP Workshops Intermediate Training: Charlotte, NC	Nov 2002	20	All K-5 Subject-Area Goals Addressed: Enabled participants to develop grade-level and subject-specific planners, which, represent related goals and objectives of NCSCS while also addressing the IBPYP overarching principles of inquiry, global education, international understanding and responsible citizenship.
PYP Workshops Houston, TX	Feb 2003	28	
PYP Workshops Advanced Training: Myrtle Beach, SC	June 2003	40	
PYP Training for Arts, Science, Technology, Physical Education, and Spanish Specialists	Monthly	5	All K-5 Subject-Area and Arts, PE, Science, Technology, and Spanish Goals Addressed: Enables participants to enhance grade level units of study through incorporating NCSCS objectives for Art, Music, PE, Dance and Drama, Science, Technology, Media, Healthful Living and Spanish.
Staff Development: Rubrics	Sept 2002	8	All K-5 Subject Area and Arts, PE, Science, Technology, and Spanish Goals Addressed: Addressed assessment of all PYP planners in all content areas.
Student-led Conferences	Aug, Oct, Jan 2002/2003	15	All K-5 Subject-Area Goals Addressed: Emphasis on conferencing content mastered with parents.
Book Club: Discipline with Dignity	Nov, Dec 2002	12	All K-5 Subject-Area Goals Addressed: Emphasis on PYP attitudes and student profile, health and social education skills.
Spanish Survival for Teachers	Jan – April, 2003	24	All K-5 Second Language Competency Goals Addressed: Emphasis on oral development, comparing language and culture, and connections to grade level curriculum.
Grade Level Professional Development Meetings	August – May 2002/2003	36	All K-5 Subject-Area Goals Addressed: through building on curriculum mapping and inquiry training, all subject areas and covered.

Table 21. Millbrook Elementary Year 2 Technology Professional Development and Alignment with State Technology Curriculum

Professional Development Title	Dates	Total Hours	Alignment with NCSCS Technology Goals and Objectives
Wired Wednesdays @ Millbrook Elementary: Sessions 1, 2, and 3	Aug. 2002-May 2003	30	K.1.2: Identify the physical components of a computer system. K.1.4: Demonstrate correct care and use of computers. 1.1.2: Discuss ownership of computer-created work. 1.1.4: Identify the Internet as a source of information. 2.2.1: Identify essential computer terms. 2.2.4: Use word processing to enter, save, print and retrieve text. 3.2.10: Create a multimedia project as a group/class activity. 3.3.4: Evaluate the usefulness of information obtained using telecommunication technologies. 4.2.1: Use technology tools used to collect, analyze and display data. 4.2.10: Use search strategies to locate information electronically. 4.2.9: Use e-mail as a means of communication. 5.1.2: Recognize the need for protection of software and hardware from computer viruses and vandalism. 5.1.4: Describe the use of Acceptable Use Policy (AUP). 5.3.3: Select search strategies to obtain information. 5.3.7: Evaluate information found via telecommunications for appropriateness, content, and usefulness.
North Carolina Educational Technology Conference (NCetc)	Dec. 2002	10	Aligned with all K-5 Technology goals and objectives
Videography: Avio Video Editor	Dec. 2002	6	K.2.4: Recognize the characteristics of multimedia. 1.3.2: Gather, organize and display data. 4.2.1: Use technology tools used to collect, analyze and display data. 5.1.3: Recognize video conferencing as a method of interactive communication. 5.2.1: Use technology tools to collect, analyze and display data. 5.3.5: Create a multimedia presentation citing sources of copyrighted material.
Tech. Facilitators' Performance Appraisal Instrument Training	Oct. 2002	3.5	Aligned with all K-5 Technology goals and objectives
PHP/MySQL Webmaster Training	Sept.-Oct. 2002	16	K.2.4: Recognize the characteristics of multimedia. 1.1.1: Identify uses of technology at home and at school. 3.2.1: Identify the technology tools used to collect, analyze and display data. 3.2.8: Create a multiple-outcome storyboard as a class activity. 4.1.4: Recognize the correct use of copyrighted materials in multimedia products. 5.2.1: Use technology tools to collect, analyze and display data. 5.3.5: Create a multimedia presentation citing sources of copyrighted materials.

Table 21. (continued) **Millbrook Elementary Year 2 Technology Professional Development and Alignment with State Technology Curriculum**

Professional Development Title	Dates	Total Hours	Alignment with NCSCS Technology Goals and Objectives
Blackboard Training	Sept. 2002	16	K.1.1: Identify the computer as a machine that helps people work and play. K.2.4: Recognize the characteristics of multimedia. 1.1.1: Identify uses of technology at home and at school. 3.2.1: Identify the technology tools used to collect, analyze and display data. 3.2.8: Create a multiple-outcome storyboard as a class activity. 3.2.9: Identify the difference between linear and nonlinear multimedia presentation. 4.1.4: Recognize the correct use of copyrighted materials in multimedia products. 5.2.1: Use technology tools to collect, analyze and display data. 5.3.5: Create a multimedia presentation citing sources of copyrighted materials.
Dreamweaver Class	April 2003	16	K.1.1: Identify the computer as a machine that helps people work and play.
			K.2.4: Recognize the characteristics of multimedia.
			1.1.1: Identify uses of technology at home and at school.
			3.2.1: Identify the technology tools used to collect, analyze and display data.
			3.2.10: Create a multimedia project as a group/class activity.
			3.2.8: Create a multiple-outcome storyboard as a class activity.
			3.2.9: Identify the difference between linear and nonlinear multimedia presentation.
			4.1.4: Recognize the correct use of copyrighted materials in multimedia products.
			5.2.1: Use technology tools to collect, analyze and display data.
			5.3.5: Create a multimedia presentation citing sources of copyrighted materials.
Wirelessly Winding Up the Year	June 2002	10	K.1.1: Identify the computer as a machine that helps people work and play.
			K.2.4: Recognize the characteristics of multimedia.
			1.1.1: Identify uses of technology at home and at school.
			1.2.5: Participate in the creation of a class multimedia sequential/linear story.
			2.2.7: Identify and use electronic drawing tools to combine graphics and text.
			2.2.8: Participate in the planning and creation of a class multimedia story which includes student narration.
			3.2.1: Identify the technology tools used to collect, analyze and display data.
			3.2.10: Create a multimedia project as a group/class activity.
			3.2.8: Create a multiple-outcome storyboard as a class activity.
			3.2.9: Identify the difference between linear and nonlinear multimedia presentation.
			4.1.4: Recognize the correct use of copyrighted materials in multimedia products.
			4.2.3: Recognize word processing terms and functions.
			5.2.1: Use technology tools to collect, analyze and display data.
			5.2.4: Use word processing applications to create and format a document.
			5.3.5: Create a multimedia presentation citing sources of copyrighted materials.

Table 22. Millbrook Elementary Year 2 Science Professional Development and Alignment with State Technology Curriculum

Professional Development Title	Dates	Total Hours	Alignment with NCSCS Science Goals and Objectives
Science Kit Training: Balance and Motion	Sept. 2002	3	Goal K.3: Build an understanding of the properties/movement of common objects and organisms. Goal 1.4: Build an understanding of actions of objects
Science Kit Training: Magnetism and Electricity	Sept. 2002	3	Goal 4.3: Increase an understanding of electricity and magnetism. Goal 5.2: Build an understanding of forms and sources of energy.
Science Kit Training: Air and Weather	Sept. 2002	3	Goal K.2: Build an understanding of weather concepts. Goal 2.2: Build an understanding of changes in the weather Goal 5.4 Increase and understanding of weather and climate.
Science Kit Training: Pebbles, Sand, and Silt	Oct. 2002	3	Goal 1.2: Build an understanding of solid earth materials. Goal 3.2: Build an understanding of soil concepts.
Science Kit Training: Sound	Oct. 2002	3	Goal 2.4: Increase and understanding of the concepts of sound.
Science Kit Training: Plant Growth and Development	Oct. 2002	3	Goal K.1: Build an understanding of similarities and differences in plants and animals. Goal 1.1: Build and understanding of needs of living organisms. Goal 2.1: Build an understanding of plant and animal life cycles. Goal 3.1:Build and understanding of plant growth and adaptations. Goal 5.1: Build and understanding of the interdependence of plants and animals
North Carolina Museum of Natural Sciences "Wild Weather"	Oct. 2002	3	Goal K.2: Build an understanding of weather concepts. Goal 2.2: Build an understanding of changes in the weather Goal 5.4 Increase and understanding of weather and climate.
North Carolina Science Teacher's Association Conference	Nov. 2002	20	Goals K-5: Aligned with K-5 science goals on the NCSCS
Science Kit Training: Landforms	Feb. 2003	3	Goal 5.3: Increase and understanding of landforms.
Science Kit Training: Heat and Light	Feb. 2003	3	Goal 3.4: Increase an understanding of light and heat concepts.
Science Kit Training: Ideas and Inventions	Feb. 2003	3	Goal 4.4: Increase and understanding of technological designs.
Science Kit Training: Soil	Feb. 2003	3	Goal 2.2: Build and understanding of solid earth materials. Goal 3.2: Build and understanding of soil concepts.
Science Kit Training: Animal Studies	Feb. 2003	3	Goal K.1: Build and understanding of similarities and differences in plants and animals. Goal 1.1: Build and understanding of needs of living organisms. Goal 2.1: Build and understanding of plant and animal life cycles. Goal 4.1: Build and understanding of animal growth and adaptations concepts. Goal 5.1: Build and understanding of the interdependence of plants and animals.

Table 22. (continued) **Millbrook Elementary Year 2 Science Professional Development and Alignment with State Technology Curriculum**

Professional Development Title	Dates	Total Hours	Alignment with NCSCS Science Goals and Objectives
Science Kit Training: Ecosystems	Feb. 2003	3	Goal K.1: Build and understanding of similarities and differences in plants and animals. Goal 1.1: Build and understanding of needs of living organisms. Goal 2.1: Build and understanding of plant and animal life cycles. Goal 4.1: Build and understanding of animal growth and adaptations concepts. Goal 5.1: Build and understanding of the interdependence of plants and animals.
Science Kit Training: Animals 2X2	Mar. 2003	3	Goal K.1: Build and understanding of similarities and differences in plants and animals. Goal 1.1: Build and understanding of needs of living organisms. Goal 2.1: Build and understanding of plant and animal life cycles. Goal 4.1: Build and understanding of animal growth and adaptations concepts. Goal 5.1: Build and understanding of the interdependence of plants and animals.
Infrastructure for Science Education Science Notebook Writing	April 2003	6	Goals K-5: Using Scientific Method of observation and recording information through an Inquiry approach to learning

When quality professional development is offered, staff members can benefit only if they attend. Therefore, one of the Year 2 staff development benchmarks required that 90% or more of eligible staff members participate in activities appropriate for them. Millbrook's grant coordinating teachers considered teachers' roles in the PYP theme along with their previous level of training to determine which offerings were essential for each staff member. To calculate an attendance rate, they compared the list of who should have attended each workshop with records of who actually attended. One-hundred percent of eligible staff members at Millbrook attended those staff development sessions deemed essential for them (Table 23).

Table 23. Millbrook Elementary Year 2 Professional Development Attendance Rates

Professional Development Title	# Staff at School	# Staff *Eligible for Training	% Eligible Staff Attending
PYP Planner Development: Creating Unit Plans for Entire School Year (November, February and April)	46	24	100
PYP Training: Charlotte NC	46	12	100
PYP Training: Houston, TX	46	1	100
PYP Training: Myrtle Beach, SC	46	13	100
Millbrook Elem. Magnet School Specialist Training	46	9	100
MSAP Trainings	46	3	100
Book Club: Discipline with Dignity	46	14	100
Spanish Survival for Teachers	46	28	100
Grade Level Professional Development Meetings	46	27	100
Wired Wednesdays @ Millbrook Elementary: Sessions 1-3	46	37	100
NCetc—North Carolina Educational Technology Conference	46	1	100
Videography: Avio Video Editor	46	1	100
PHP/MySQL Webmaster Training	46	1	100
Blackboard Training	46	2	100
Dreamweaver Class	46	1	100
Wirelessly Winding Up the Year	46	37	N/A
Tech. Facilitators' PAI Training	46	2	100
Science Kit Training: Sessions on Balance and Motion; Magnetism and Electricity; Air and Weather; Pebbles; Sand and Silt; Sound; Ideas and Inventions; Animal Studies	46	1	100
Science Kit Training: Sessions on Plant Growth and Development; Landforms; Heat and Light; Soil; Ecosystems; Animals 2X2	46	2	100
North Carolina Museum of Natural Science: Wild Weather Presentation	46	2	100
North Carolina Science Teachers' Association Conference	46	1	100
NBC Weathernet Classroom Workshop	46	2	100
North Carolina Infrastructure for Science Education: Science Notebook Writing	46	3	100

*(Staff member has not previously completed similar training, and the training includes skills essential for their role in the project.)

Training in Year 2 provided faculty at Millbrook with targeted, sustained staff development to support the school's PYP theme. Their attitudes about the new instructional methods included in their training are reflected in their responses to the WCPSS spring 2003 staff survey. The Year 2 benchmark of 80% was exceeded, because 89% or respondents *agreed or strongly agreed* that they had learned to use new instructional methods with their students. Millbrook teachers were also surveyed about their level of familiarity with six specific new instructional approaches related to the IB PYP theme. Millbrook met this benchmark because respondents' familiarity levels for three out of the six approaches — International Baccalaureate, technology integration, and inquiry learning — were above 80%. For the three approaches with which less than 80% of Millbrook staff were *familiar or very familiar* — curriculum mapping,

project-based learning, and constructivist approaches — coordinating teachers must plan and identify methods to increase staff familiarity.

Table 24. Millbrook Elementary School Year 2 Staff Survey Results Related to Professional Development

Survey Item	*Percent Agree/Strongly Agree
Through the magnet grant, I have learned to use new instructional methods.	89%
New Instructional Approaches	**Percent Familiar/Very Familiar**
International Baccalaureate Programme	86%
Integration of Technology into Instruction	81%
Curriculum Mapping	70%
Project-Based Learning	68%
Inquiry Learning	95%
Constructivist Approaches	61%

*Survey response rate = 72%

Joyner Elementary School, Project Objective 2-1d

Implementing National, State, and Local Reforms: This year, Joyner continued the national, state, and local reforms begun last year through its significantly revised Language Explorations theme. Its theme features a learning environment in which inquiry and project-based learning are key components of classroom instruction. Multimedia technology continues to support project-based learning at Joyner, so that students can create, plan, design, and produce projects related to the theme.

From kindergarten through 5th-grade, students have numerous opportunities to learn Spanish. In addition to regular Spanish instruction, Joyner's dual-language Spanish/English program is offered voluntarily for students in grades K through 5. Implemented in Year 1 in a single class at each grade level, the dual-language program has expanded this year to include all three kindergarten classes. Included also are one class on each grade level for 1st through 4th grades. The dual-language program is designed to address the learning needs of both language-minority students and native English-speakers. For these students, literacy skills were taught in English, but mathematics, science, and social studies concepts (following the NCSCS) were taught in Spanish. Students in this program were expected to develop high levels of proficiency in their first and second languages, and their academic performance was expected to be at or above grade level in both languages. Staff have noted that the program has promoted other positive student outcomes including higher levels of self-esteem, positive cross-cultural attitudes, and peer leadership skills.

Because of the importance of language learning at Joyner, staff members, parents, and central office staff had the opportunity to take the course, "Hola, Joyner." Didactic instruction was based on the text Spanish for Educators (Harvey, 1998). More importantly, participants

benefited from a variety of Spanish-language activities and studied Hispanic/Latino traditions and culture as well. They were encouraged to take part in real-world activities related to the course and could choose from experiences such as listening to Spanish radio; watching Spanish television, videos, or movies; learning Mexican dances; ordering meals in Spanish; cooking Spanish recipes; and memorizing the Pledge of Allegiance in Spanish.

"Many Threads, One Fabric," successful as the Year 1 focal unit, continued this year as the school-wide theme. Teachers again worked with students throughout the year to create projects interpreting the theme. May 23rd was set aside in late spring 2003 for students to share their projects with other classes and grade levels. Through "Many Threads, One Fabric," students demonstrated involvement in and expertise with technology, Spanish, and writing in projects such as the following.

- Several grade levels shared research projects in which they used Power Point, Hyperstudio, and Kid Pix software to present information in two languages.
- Third graders shared their unit on economics around the world in a unique way. Visitors first learned about several different Spanish-speaking countries, their products, and their money. Then they reviewed the Spanish numbers from 1-10 and learned the names of three hand-made products they would have the opportunity to buy in an open air market. The process of bargaining was explained and they were then sent off to the "mercado"(market) to use their Joyner money (made for the occasion to bargain and secure a product to keep) and purchase their favorite item. Buyers of all ages loved learning and bought most of what the 3rd grade vendors had made. Items available in the "mercado" included tissue-paper flowers, serape bookmarks, and "ojos de Dios" (eyes of God").
- Fourth graders shared several Mexican folk dances they had learned. All in all, it was a wonderful sharing and learning experience for everyone.

Two *writers-in-residence* spent extended time at Joyner during Year 2. This afforded opportunities for students to improve their writing by interacting with professional authors. Mimi Herman spent time in the fall with 4th and 5th grades focusing on haiku poems related to their unit on landforms. Suzanne Newton visited in the spring to work with the 2nd and 3rd graders, encouraging them to write about feelings. Staff members were very pleased with the enthusiasm displayed by students who worked with these writers. In addition to student experiences, staff members also had access to a resident specialist. They worked with *literacy specialist-in-residence* Carol Welle, who coached them in using a "Balanced Literacy" approach to teach reading and writing in their classrooms.

Active in getting Joyner's program off to a strong start in Year 1, the coordinating teacher for Spanish and English and the instructional technology/multimedia coordinating teacher continued to work effectively in these positions in Year 2. Because of the base they had established in Year 1, most faculty were fully involved in Year 2. Eight administrators and teachers had served as "critical staff" in Year 1 to assist the coordinating teachers in establishing the program. Although the project evaluation plan did not require that critical staff be identified for Year 2, several members of this group continued to meet with the coordinating teachers throughout the second year of the project. The project director, recruiter, budget analyst, and evaluator joined these meetings of the Joyner Core Team, which became a very effective method for planning and sharing information.

Professional Development to Support the Theme: To continue its success with the Language Explorations theme, Joyner again offered numerous professional development opportunities for its staff. Topics included literacy, foreign language, subject-area content, classroom management, instructional planning (Table 25), and technology (Table 26). Regardless of the topic, all workshops were aligned with NCSCS goals and objectives. Curriculum alignment is essential because staff participation in this training must in turn assist teachers in helping their students meet state standards (Tables 25 and 26).

Table 25. Joyner Elementary School Year 2 Professional Development and Alignment with State Curriculum

Professional Development Title	Dates	Total Hours	Alignment with NCSCS Goals and Objectives
Our Discussion on Grading	Oct.10, Nov. 4, 2002 April 3, 2003	12	K-5 Information Skills Goals 1-5: Aligned with all NCSCS information skills goals for elementary grade levels. (Exploring, identifying, using, communicating information) K-5 English Language Arts Goals 1-5: Aligned with all NCSCS goals (oral and written communication) for elementary grade levels.
Hola Joyner (Spanish Survival Activities)	Nov. 16, 2002- May 16, 2003	10	K-5 Second Language Goal 1: Engage in conversation, exchange information, and opinions orally and in writing in 2nd language. K-5 Second Language Goal 2: Interpretive communication. K-5 Second Language Goal 3: Presentational communication. Teachers need to be able to communicate in Spanish with parents and their students.
Spanish Part 2 (Wake Tech. Community School)	Sept. 9-Nov. 25, 2002	30	K-5 Second Language Goals 1-7: Aligned with all NCSCS goals in Second Languages for all elementary grade levels. Teachers in the Dual Language Program need to develop strategies, expertise.
Spanish Part 3 (Wake Tech. Community School)	Jan. 27, 02-April 14, 03	30	K-5 Second Language Goals 1-7: Aligned with all NCSCS goals in Second Languages for all elementary grade levels. Teachers in the Dual Language Program need to develop strategies, expertise.
Foreign Language Association of North Carolina Conference	Oct. 24-26, 2002	10	K-5 Second Language Goals 1-7: Aligned with all NCSCS goals in Second Languages for all elementary grade levels. Spanish teachers need additional strategies, expertise.
Kinder Training (Kinder Years Psychological Training and Teaching)	Feb.20-May 28, 2003	15	K-5 Information Skills Goal 1: Explore sources and formats for reading, listening and viewing purposes. K-5 Information Skills Goal 2: Identify and use criteria for excellence to evaluate information and formats. K-5 Information Skills Goal 4: Explore and use research processes to meet information needs.
Success for All Students	Jan. 2003	10	K-5 English Language Arts Goals 1-5: Aligned with all NCSCS goals (oral and written communication) for elementary grade levels. Understanding of strategies and skills needed to facilitate success for all students.
Eclipse Math Training	Oct. 2002	10	Mathematics, Grade 5, Goals 1-4: Aligned with NCSCS goals 1-4 for fifth grade (numeration, measurement, relationships, data analysis)
Best Practices for K-2 Literacy Teachers	Sept. 27, 2002-Jan. 10, 2003	26	K-5 English Language Arts Goals 1-5: Aligned with all five English Language Arts goals for kindergarten , first and second grade levels. (Strategies that lead to oral and written communication)
ALP 2/Title 1 Literacy Teachers	Aug. 6, 2002	5	K-5 English Language Arts Goals 1-5: Aligned with all five English Language Arts goals for all elementary levels. (Strategies that lead to oral and written communication)
Meeting Needs of Students with Special Needs	May – June 2003	30	K-5 Guidance Goals 1, 7: Aligned with Guidance goals 1 and 7 (attitudes, knowledge and skills necessary for respect and learning) for all elementary levels
Repeat Training for all new ALPII/ Title 1 Literacy Teachers	Aug. 23, 2002	18	K-5 English Language Arts Goals 1-5: Aligned with all five English Language Arts goals(Strategies that lead to oral and written communication) for all elementary grade levels.
New ALP II/ Title 1 Literacy Teacher Training	Oct. 11, 02–Jan. 10, 03	15	K-5 English Language Arts Goals 1-5: Aligned with all five English Language Arts goals(Strategies that lead to oral and written communication) for all elementary grade levels.

Table 25. (continued) **Joyner Elementary School Year 2 Professional Development and Alignment with State Curriculum**

Professional Development Title	Dates	Total Hours	Alignment with NCSCS Goals and Objectives
Curriculum Writing	Jan. 03	6	K-5 Information Skills Goals 1-5: Staff will employ skills from goals 1-5 (exploring, identifying, using, relating/communicating ideas through the use of NCSCS curricula units written)
Literacy Review, Planning, and Implementation	Sept. 16, 02 – Feb. 17, 03	20	K-5 English Language Arts Goals 1-5: Aligned with all five English Language Arts goals for all elementary levels. (Strategies that lead to oral and written communication) For some of our staff, this built upon understandings from last year's "Teaching Literacy in a Bilingual Setting"
California Association of Bilingual Education Conference	Feb. 12-15, 03	30	K-5 Second Language Goals 1-7: Aligned with all NCSCS goals in Second Languages for elementary grade levels. Spanish teachers need to develop additional strategies, increase expertise.
National Association of Bilingual Education Conference	Jan. 29 – Feb. 1, 03	30	K-5 Second Language Goals 1-7 : Aligned with all NCSCS goals in Second Languages for elementary grade levels. Spanish teachers need additional strategies , expertise.
2003 NCSU ESL Symposium	May 30-31, 03	10	K-5 Second Language Goals 1-7 : Aligned with all NCSCS goals in Second Languages for elementary grade levels. Involved teachers need additional strategies , expertise.
TESOL (Teaching English to Speakers of Other Languages)	Mar. 26-28, 03	30	K-5 Second Language Goals 1-7 : Aligned with all NCSCS goals in Second Languages for elementary grade levels. Involved teachers need additional strategies , expertise.

Table 26. Joyner Elementary School Year 2 Technology Professional Development and Alignment with State Technology Curriculum

Professional Development Title	Dates	Total Hours	Alignment with NCSCS Goals and Objectives
MEGA (**M**iddle **E**ducators **G**lobal **A**ctivities)	Sept 26, 02 – April 30, 03	30	K-5 Computer/Technology Skills Goal 3: Use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information. K-5 Information Skills Goal 3: Relate ideas and information to life experiences.
MentorNet Technology Workshop	June – Nov, 02	30	K-5 Computer/Technology Skills Goal 3: Use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information. K-5 Information Skills, Goal 3: relate ideas and information to life experiences K-5 English Language Arts, Goal 3: make connections with text thru use of oral lang., written lang., and media and technology
TI-15 Calculator Workshop	Nov. 14, 02-Feb. 24, 03	10	K-5 Computer/Technology Skills Goal 3: Aligned with NCSCS goals in Technology Skills for elementary grade levels. Mathematics Skills Goals 1 and 4: Numerical Operations, data , statistics for grades 1-5
Designing Webhomes for Instruction	April 16, 03	5	K-5 Computer/Technology Skills Goal 3: Use a variety of technologies to access, analyze, interpret, apply and communicate information.
Using the Internet to Improve Student Achievement	Nov. 02	10	K-5 Computer/Technology Skills Goals 1-3: Aligned with all NCSCS goals in Computer Technology Skills for all elementary grade levels. Use of internet provides optimum motivation.
Technology Planning and Integration	Dec. 16, 02 – May 2, 03	30	K-5 Computer/Technology Skills Goals 1-3: Aligned with all NCSCS goals in Computer Technology Skills for all elementary grade levels. All teachers must develop and/or improve expertise in technology.
NCetc—North Carolina Educational Technology Conference	Dec. 2-5, 2002	15	K-5 Computer/Technology Skills Goals 1-3: Aligned with all NCSCS goals in Computer Technology Skills for elementary grade levels. All teachers must develop and/or improve expertise in technology.
Computer Technology in the K-12 Curriculum	Aug. 2, 2002- Jan. 3, 2003	30	K-5 Computer/Technology Skills Goals 1-3 : Aligned with all NCSCS goals in Computer Technology Skills for elementary grade levels. All teachers need to develop and/or improve expertise in technology.
Understanding your Laptop System (Title 1 Teachers Only)	Dec. 5, 2002	12	K-5 Computer/Technology Skills Goals 1-3 : Aligned with all NCSCS goals in Computer Technology Skills for elementary grade levels. All teachers need expertise in technology.

Not all professional development offerings in Tables 25 and 26 were essential for every staff member at Joyner. In Year 2, faculty and staff were expected to choose sessions that most suited their needs and interests, given their particular role in implementing the project and their previous level of training. Based on this information, the grant coordinating teachers determined which professional development offerings were appropriate. They then used attendance records to determine the number and percentage of staff members present at events appropriate for them (Table 27).

Project benchmarks set a target of 90% or higher for staff attendance at workshops essential to their role. Table 27 shows that for the 13 workshops in which staff members were expected to participate, attendance rates were 100%. Five of the offerings were appropriate for

most of the professional staff and were attended by those eligible and expected to attend. The remaining eight were attended by 100% of those eligible to attend. For example, the North Carolina Educational Technology Conference (NCetc) was open to the two technology specialists and the grant coordinator. All three attended, so the percentage of eligible staff attending was 100%. Three workshops -- Technology Planning and Integration, Literacy Review, and *Hola Joyner* – were appropriate for all or most staff members at Joyner, and all eligible staff did attend.

Administrators and project staff at Joyner were mindful not only of offering effective staff development but also of informing staff members that their attendance was essential. Therefore, Joyner was effective in planning and conducting numerous staff development offerings beneficial for all staff members, as well as in attracting faculty and staff to workshops appropriate for them.

Table 27. Joyner Elementary School
Year 2 Professional Development Attendance

Professional Development Title	# Staff at School	# Staff *Eligible for Training	% *Eligible Staff Attending
Mentor Net Technology Workshop for Cooperating Teachers	50	1	100
MEGA (Middle Educators Global Activities)	50	2	100
Technology Planning and Integration	50	40	100
NCetc – NC Educational Technology Conference	50	3	100
TI-15 Calculator Workshop	50	33	100
Our Discussion on Grading	50	33	100
Literacy Review, Planning & Implementation	50	26	100
Foreign Language Association of NC Conference	50	2	100
Hola Joyner (Spanish Survival Activities)	50	38	100
Success for All Students (Wynn & Rusch)	50	2	100
California Association of Bilingual Education Conference	50	5	100
TESOL (Teaching English to Speakers of Other Languages) Conference	50	3	100
National Association of Bilingual Education Conference	50	2	100

*(Staff member has not previously completed similar training, and the training includes skills essential for their role in the project.)

Based on their staff development experiences in Year 2, Joyner faculty could further their knowledge of the Language Explorations theme and gain additional skills to implement it effectively. Year 2 benchmarks required that 80% or more of Joyner's staff give positive

responses on the spring 2003 staff survey. With only 67% of respondents agreeing that they had learned to use new instructional methods, this benchmark was not met.

When queried about particular instructional approaches, over 80% of respondents were *familiar or very familiar* with foreign or second-language learning and curriculum mapping. But less than 80% expressed familiarity with the three other approaches listed for Joyner: technology integration, multiple intelligences, and project-based learning. Joyner did not meet its benchmark for staff familiarity with new instructional approaches. Opportunities for studying and using project-based learning and inquiry approaches must be emphasized next year. Staff members also need to make and carry out plans to improve teachers' familiarity with strategies for effective technology integration.

Table 28. Joyner Elementary School Year 2 Staff Survey Results Related to Professional Development

Survey Item	*Percent Agree/ Strongly Agree
Through the magnet grant, I have learned to use new instructional methods.	67%
New Instructional Approaches	**Percent Familiar/ Very Familiar**
Foreign- or Second-Language Learning	92%
Integration of Technology into Instruction	78%
Curriculum Mapping	86%
Multiple Intelligences	63%
Project-Based Learning	76%
Inquiry Learning	63%

*Survey response rate = 87%

Powell Elementary School, Project Objective 2-1e

Implementing National, State, and Local Reforms: Initiated successfully in Year 1, Powell's significantly revised Visual and Performing Arts magnet theme has been strengthened this year. Numerous research-based national, state, and local reforms still underlie the theme, and staff have kept up-to-date on new references in the field (see Purpose 3). Powell has continued its commitment to offer each student experiences and opportunities necessary to perform at the highest level, both artistically and academically. Teachers and arts specialists focus on the total child, with an emphasis on multiple intelligences, project-based learning, inquiry, and other brain-based instructional methods. Students' rich, authentic experiences in the visual and performing arts provide ample opportunities to develop their talents and showcase their work. Core teachers and arts specialists have used curriculum mapping to ensure connections to the arts across all subject areas and grade levels. The school's gifted and talented (GT) electives program offers additional courses in visual and performing arts as well as academic enrichment

for all students in the school. Powell's partnerships with the arts community give its visual and performing arts program access to unique resources. Staff at the school continue to encourage parental participation and involvement.

Powell's community arts liaison teacher and instructional technology/multimedia coordinating teacher continued to oversee implementation of the Visual and Performing Arts theme. In Year 1 they established a "critical staff" team of teachers, specialists, and administrators who helped build a solid foundation for the theme. In Year 2 this team has become the Arts Advisory Committee and continues to make decisions and provide support toward meeting the goals of the project. Their knowledge of the project and interactions with other staff members have helped broaden and strengthen the project in Year 2. In addition to the two coordinating teachers, the committee included the principal, assistant principal, media specialist, one visual arts teacher, one dance teacher, the instructional support technician, and one classroom teacher each from 1st through 5th grades.

The Arts Advisory Committee served as the steering group for several successful arts events that were presented in Year 2. They worked closely with teachers and specialists throughout Powell to plan and conduct these events. Two such events were the Winter Solstice Festival and the Spring Arts Festival. The Winter Solstice event was new this year, but a Spring Arts Festival was held both this year and last. Both of these festivals are week-long events through which students showcased works and performances related to the Powell's Visual and Performing Arts. Parents and members of Powell's surrounding community are invited to attend. Because they are successful venues to exhibit student work, both events will be scheduled annually.

Selected members of the Arts Advisory Committee also served on Powell's School Improvement Team. This team was charged with developing Powell's School Improvement Plan (SIP) for the next three years. The plan officially establishes and maintains the school-wide statement of values, and the school vision and mission. It also sets annual goals for the school and helps build staff commitment toward achieving the goals. The close alignment of Powell's 2003-2005 SIP with the goals of its MSAP project will further strengthen the Visual and Performing Arts theme.

Five members of the Arts Advisory Committee — the two coordinating teachers, the technology specialist, the principal, and the assistant principal — also served on Powell's Core Team for this project. As at other schools, the Core Team also included the project coordinator, recruiter, budget analyst, and evaluator. At their meetings each quarter, this group reviewed ongoing project activities, discussed budget issues, and made plans for any needed improvements. This format proved very effective for keeping school-based and central-office staff in touch with each other and abreast of important issues.

Professional Development to Support the Theme: As in Year 1, individual professional development activities and conferences related to Powell's magnet theme were available to staff members. In addition, five extended school-wide professional development workshops were offered during Year 2 (Table 29). Because these were long-term offerings that affected the whole school, each of the five workshops is described briefly in the paragraphs below.

Depending on the content of the workshops, each of them should have prepared teachers to help their students meet specific NCSCS goals and objectives. State curriculum goals and national arts objectives for each workshop are listed in Table 29.

Powell's Instructional Resource Teacher conducted the Continuous Improvement Workshop, the first extended professional development offering. Consisting of several sessions, it included training for all grade level teachers across subjects such at 1st grade centers, use of the TI15 calculator, math best practices, and a guided reading workshop. The second school-wide professional development workshop was Gateways to Curriculum Planning. This series consisted of workshops for single grade levels, for multiple grade levels, and for the entire staff. Through this combination of grade level and full staff meetings, teachers were able to compare curriculum within and across grades, and to collaborate with teachers from their own grade level as well as those from different grades. They could also work with arts specialists to forge curricular connections between core subjects and the arts. They developed quarterly themes to facilitate integration of core subjects with the arts curriculum and provide opportunities for students to transfer knowledge across subject areas. Each grade level developed detailed curriculum maps to ensure effective coordination and coverage of all content areas. Powell's curriculum maps, used as a teacher or parent resource, are available on the school web site, http://powelles.wcpss.net/pstcurmap.htm.

As a continuation of last year's training, Part 2 of Teaching the Arts with the Brain in Mind was held this year. During this weekend retreat, Powell's teaching and support staff interacted with professional artist/educators and technology educators. These presenters were able to communicate their excitement for and expertise in arts and technology integration. Activities at the retreat built upon the Year 1 workshops and also capitalized on the curriculum that planning staff members had completed earlier in Year 2. A primary focus was to develop better communication for grade-level teams and to establish new "vertical" teams consisting of arts specialists along with representatives from all grade levels. These groups will work to ensure the integration of curriculum, arts, media, and technology. They began this process at the retreat with team-building activities. Vertical teams also developed quarterly themes for the 4th quarter of Year 2 and the 1st quarter of Year 3.

The Gateways to Technology workshop series was open to all certified staff and teacher assistants. Technology topics in this series of workshops related to new and existing equipment and software. Twice-weekly sessions from September 2002 through May 2003 provided over 20 technology contact hours for each participant. Basic sessions included an overview of computer management operations, network connections, use of e-mail for staff communications, use of remote access from home to instructional Internet sites, and use and management of the school system's new grading software. Advanced sessions focused on new arts-related technologies such as digital movie making and slideshow presentation software, as well as the use of scanners, digital cameras, digital video cameras, and digital video recording.

Our Discussion on Grading, another extended staff development offering in Year 2, was conducted by the Instructional Resource Teacher. Open to all grade level teachers and teacher assistants, the workshop focused on the new system-wide electronic report card process. There are numerous state standards, especially in the arts, for which teachers must use subjective

measures to assess performance. Therefore, training sessions also included development of rubrics to assess performance, methods to measure open-ended projects, and ways to evaluate creativity and participation.

Table 29. Powell Elementary School Year 2 Professional Development Titles and Alignment with State Curriculum (NCSCS)

Title	Dates	Total Hours
Powell Continuous Improvement: Literacy & Math	Sept. 02-May 03	34
Aligned with the following NCSCS Goals and Objectives:		
Language Arts Competency Goal 1: The learner will apply enabling strategies and skills to read and write. Competency Goal 2: The learner will apply strategies and skills to comprehend text that is read, heard, and viewed. Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. **Math** ***Number Sense, Numeration, and Numerical Operations*** Competency Goal 1: The learner will understand and compute with rational numbers.	*Spatial Sense, Measurement, and Geometry* Competency Goal 2: The learner will demonstrate an understanding and use of the properties and relationships in geometry, and standard units of metric and customary measurement. *Patterns, Relationships, and Functions* Competency Goal 3: The learner will demonstrate an understanding of patterns, relationships, and elementary algebraic representation. *Data, Probability, and Statistics* Competency Goal 4: The learner will demonstrate an understanding and use of graphing, probability and data analysis.	
Title	**Dates**	**Total Hours**
Our Discussion on Grading	Sept. 02-May 03	10
Aligned with the following NCSCS Goals and Objectives:		
Language Arts Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. Language Arts Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. Theater Arts Competency Goal 2: The learner will act by interacting in improvisations and assuming roles. (National Standard 2) Theater Arts Competency Goal 3: The learner will design and produce theatre by conceptualizing and realizing artistic interpretations for informal or formal productions. (National Standard 3) Dance Competency Goal 3: The learner will understand that dance can create and communicate meaning. (National Standard 3) Dance Competency Goal 7: The learner will make connections between dance and other content areas. (National Standard 7) Dance Competency Goal 8: The learner will understand dance as an art form with a range of opportunities for involvement.	Social Studies (Citizenship) Competency Goal 1: The learner will exhibit good citizenship in the classroom, school, and community. (Political Science) Competency Goal 1: The learner will exhibit good citizenship in the classroom, school, and community. Music Competency Goal 8: The learner will understand relationships between music, the other arts, and content areas outside the arts. (National Standard 8) Visual Arts Competency Goal 1: The learner will develop critical and creative thinking skills and perceptual awareness necessary for understanding and producing art. Visual Arts Competency Goal 7: The learner will perceive connections between visual arts and other disciplines. (National Standard 6) Computer/Technology Skills Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit ethical behavior in the use of computer and other technologies Information Skills Competency Goal 3: The learner will relate ideas and information to life experiences.	

Table 29. (continued) **Powell Elementary School Year 2 Professional Development Titles and Alignment with State Curriculum (NCSCS)**

Title	Dates	Total Hours
Powell Gateways to Curriculum Planning	Sept. 02-May 03	10
Aligned with the following NCSCS Goals and Objectives:		
Social Studies Grade 5 & 4 *Anthropology/ Psychology/ Sociology* Competency Goal 1: The learner will analyze the characteristics of people of the Western Hemisphere/Grade 4 –North Carolina. Competency Goal 2: The learner will assess the influence of major religions, ethical beliefs, and aesthetic values on life in the United States, Canada, and Latin America/Grade 4 –North Carolina. *Geography* Competency Goal 3: The learner will locate major physical features and suggest the influence of location on life in the Western Hemisphere/Grade 4 –North Carolina. Competency Goal 4: The learner will assess the significance of physical and cultural characteristics of regions within the Western Hemisphere/Grade 4 –North Carolina. Competency Goal 5: The learner will evaluate ways the people of the Western Hemisphere//Grade 4 –North Carolina use, modify and adapt to the physical environment. Competency Goal 6: The learner will evaluate the significance of the movement of people, goods, and ideas from place to place. *Political Science* Competency Goal 7: The learner will examine the relationship of the United States, Canada, and Latin America to other nations and to world affairs. Competency Goal 7: Grade 4 The learner will analyze the effectiveness of government agencies and political institutions in North Carolina. Competency Goal 8: The learner will examine ways the people of the United States, Canada, and Latin America/Grade 4 –North Carolina govern themselves. *Economics* Competency Goal 9: The learner will determine ways societies in the Western Hemisphere make decisions about the allocation and use of economic resources. Competency Goal 10: The learner will analyze economic relationships in the Western Hemisphere/Grade 4 –North Carolina.	*History* Competency Goal 11: The learner will analyze changes in ways of living and investigate why and how these changes occurred. Competency Goal 12: The learner will trace developments in the history of the United States, Canada, and Latin America/Grade 4 –North Carolina and assess their impact on the lives of people today. **Social Studies Grade 3** *Citizenship* Competency Goal 1: The learner will exhibit good citizenship in the classroom, school, and community. *Anthropology/Psychology/Sociology* Competency Goal 2: The learner will infer that individuals, families, and communities are and have been alike and different. Competency Goal 3: The learner will analyze the multiple roles that individuals perform in families, workplace, and communities. *Political Science* Competency Goal 4: The learner will apply concepts of authority, responsibility, and justice in a democratic society. Competency Goal 5: The learner will evaluate relationships between people and their governments *History* Competency Goal 6: The learner will evaluate change in different settings Competency Goal 7: The learner will analyze religious and other cultural traditions in a variety of communities Competency Goal 8: The learner will apply basic geographic concepts and terminology. Competency Goal 9: The learner will apply geographic themes to communities. *Economics* Competency Goal 10: The learner will apply basic economic concepts to communities studied Competency Goal 11: The learner will evaluate the uses of economic resources in different communities	

Table 29. (continued) **Powell Elementary School Year 2 Professional Development Titles and Alignment with State Curriculum (NCSCS)**

Title	Dates	Total Hours
Arts with the Brain in Mind (Part 2)	April 2003	10
Aligned with the following NCSCS Goals and Objectives:		
Theater Arts Competency Goal 2: The learner will act by interacting in improvisations and assuming roles. (National Standard 2) Theater Arts Competency Goal 3: The learner will design and produce theatre by conceptualizing and realizing artistic interpretations for informal or formal productions. (National Standard 3) Theater Arts Competency Goal 4: The learner will direct through planning and presenting informal or formal productions. (National Standard 4) Theater Arts Competency Goal 5: The learner will research by finding information to support informal or formal productions. (National Standard 5) Theater Arts Competency Goal 6: The learner will compare and integrate art forms by analyzing traditional theatre, dance, music, visual arts, and new art forms. (National Standard 6) Theater Arts Competency Goal 7: The learner will analyze, critique, and construct meaning from informal and formal theatre, film, television, and electronic media productions. (National Standard 7) Music Competency Goal 6: The learner will listen to, analyze, and describe music. (National Standard 6) Music Competency Goal 7: The learner will evaluate music and music performances. (National Standard 7) Music Competency Goal 8: The learner will understand relationships between music, the other arts, and content areas outside the arts. (National Standard 8) Dance Competency Goal 1: The learner will identify and demonstrate elements and skills in dance. (National Standard 1) Dance Competency Goal 3: The learner will understand that dance can create and communicate meaning. (National Standard 3)	Dance Competency Goal 5: The learner will demonstrate and understand dance in various cultures and historical periods. (National Standard 5) Dance Competency Goal 7: The learner will make connections between dance and other content areas. (National Standard 7) Dance Competency Goal 8: The learner will understand dance as an art form with a range of opportunities for involvement. Visual Arts Competency Goal 1: The learner will develop critical and creative thinking skills and perceptual awareness necessary for understanding and producing art. Visual Arts Competency Goal 5: The learner will understand the visual arts in relation to history and cultures. (National Standard 4) Visual Arts Competency Goal 6: The learner will reflect upon and assess the characteristics and merits of their work and the work of others. (National Standard 5) Visual Arts Competency Goal 7: The learner will perceive connections between visual arts and other disciplines. (National Standard 6) Language Arts Competency Goal 1: The learner will apply enabling strategies and skills to read and write. Language Arts Competency Goal 2: The learner will apply strategies and skills to comprehend text that is read, heard, and viewed. Language Arts Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. Language Arts Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. Language Arts Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively.	
Title	**Dates**	**Total Hours**
NCaect-North Carolina Educational Technology Conference	March 2003	Varied
Aligned with the following NCSCS Goals and Objectives:		
Computer/Technology Skills Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit ethical behavior in the use of computer and other technologies. Computer/Technology Skills Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies. Computer/Technology Skills Competency Goal 3: The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information.	Information Skills Competency Goal 1: The learner will explore sources and formats for reading, listening and viewing purposes. Information Skills Competency Goal 2: The learner will identify and use criteria for excellence to evaluate information formats. Information Skills Competency Goal 4: The learner will relate ideas and information to life experiences. Information Skills Competency Goal 5: The learner will communicate reading, listening and viewing experiences.	

Table 29. (continued) **Powell Elementary School Year 1 Professional Development Titles and Alignment with State Curriculum (NCSCS)**

Title	Dates	Total Hours
Powell Gateways to Technology	Sept 02-May 03	25 hours
Aligned with the following NCSCS Goals and Objectives:		
Computer/Technology Skills Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit ethical behavior in the use of computer and other technologies. Computer/Technology Skills Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies. Computer/Technology Skills Competency Goal 3: The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information. Information Skills Competency Goal 1: The learner will explore sources and formats for reading, listening and viewing purposes. Information Skills Competency Goal 2: The learner will identify and use criteria for excellence to evaluate information formats. Information Skills Competency Goal 3: The learner will relate ideas and information to life experiences. Information Skills Competency Goal 4: The learner will communicate reading, listening and viewing experiences. English/Language Arts Competency Goal 1: The learner will develop and apply enabling strategies and skills to read and write. English/Language Arts Competency Goal 2: The learner will develop and apply strategies and skills to comprehend text that is read, heard, and viewed.	English/Language Arts Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. English/Language Arts Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. English/Language Arts Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. K Science Competency Goal 4: The learner will increase his/her understanding of how the world works by using tools. Grade 4 Science Competency Goal 3: The learner will build an understanding of electricity and magnetism. Grade 4 Science Competency Goal 4: The learner will build an understanding of technological designs. Information Skills Competency Goal 1: The learner will explore sources and formats for reading, listening and viewing purposes. Information Skills Competency Goal 2: The learner will identify and use criteria for excellence to evaluate information formats. Information Skills Competency Goal 4: The learner will relate ideas and information to life experiences. Information Skills Competency Goal 5: The learner will communicate reading, listening and viewing experiences.	
Title	**Dates**	**Total Hours**
Magnet Schools of America Conference	April 2003	36
Aligned with the following NCSCS Goals and Objectives:		
Visual Arts Competency Goal 1: The learner will develop critical and creative thinking skills and perceptual awareness necessary for understanding and producing art. Visual Arts Competency Goal 2: The learner will develop skills necessary for understanding and applying media, techniques, and processes. (National Standard 1) Visual Arts Competency Goal 3: The learner will organize the components of a work into a cohesive whole through knowledge of organizational principles of design and art elements. (National Standard 2) Visual Arts Competency Goal 4: The learner will choose and evaluate a range of subject matter and ideas to communicate intended meaning in artworks. (National Standard 3) Visual Arts Competency Goal 5: The learner will understand the visual arts in relation to history and cultures. (National Standard 4) Visual Arts Competency Goal 6: The learner will reflect upon and assess the characteristics and merits of their work and the work of others. (National Standard 5) Visual Arts Competency Goal 7: The learner will perceive connections between visual arts and other disciplines. (National Standard 6)	English/Language Arts Competency Goal 2: The learner will develop and apply strategies and skills to comprehend text that is read, heard, and viewed. English/Language Arts Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. English/Language Arts Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. Social Studies Competency Goal 1: The learner will exhibit good citizenship in the classroom, school, and community. Social Studies Competency Goal 3: The learner will analyze the multiple roles that individuals perform in families, workplace, and communities. Social Studies Competency Goal 4: The learner will apply concepts of authority, responsibility, and justice in a democratic society. Social Studies Competency Goal 6: The learner will evaluate change in different settings.	

The Year 2 project benchmark for staff development required that at least 90% of staff attend workshops deemed appropriate for them. In most instances, this occurred at Powell (Table 30). Of the seven professional development offerings essential for staff, five of them had over 90% of eligible staff attending. "Gateways to Technology" had less then 90% of eligible staff attending. This workshop series was held after school and on workdays throughout the entire year. When a record-breaking ice storm necessitated rescheduling of some "Gateways to Technology" sessions, the new timeslots conflicted with previously scheduled events for some teachers. Two of the six teachers registered to attend the NCect conference were unable to attend due to illness. Their registration fees were refunded. However, grant staff still considered them as eligible for this event, as noted in Table 30 below.

Table 30. Powell Elementary School Year 2 Staff Professional Development Attendance

Professional Development Title	# Staff at School	# Staff *Eligible for Training	% *Eligible Staff Attending
Continuous Improvement Workshop	64	46	91
Gateways to Curriculum Planning	64	46	100
Teaching the Arts with the Brain in Mind (Part 2)	64	36	92
Gateways to Technology	64	16	86
Our Discussion on Grading	64	46	100
NCect-North Carolina Association for Educational Communications & Technology	64	6	83
Magnet Schools of America	64	4	100

*(Staff member has not previously completed similar training, and the training includes skills essential for their role in the project.)

Because of their professional development participation in Year 2, Powell staff members had opportunities to learn more about instructional methods for implementing the Visual and Performing Arts theme. Their level of familiarity with approaches embodied in the theme should also have increased. As reported below (Table 31), results of the WCPSS spring 2003 staff survey indicate that 84% of Powell staff members responding to the survey *agreed or strongly agreed* that they had learned to use new instructional methods. This met the project benchmark which required 80% or greater agreement that Powell staff had learned new instructional methods. The survey listed five new instructional approaches used for Powell's theme. Over 80% of responding staff members were *familiar or very familiar* with two of these — integration of visual and performing arts and multiple intelligences. Because staff familiarity with three of the five listed approaches was below 80%, this benchmark was not attained. In these areas — technology integration, curriculum mapping, and project-based learning — Powell's coordinating teachers need to develop and carry our plans to increase staff familiarity by the end of Year 3.

Table 31. Powell Elementary School Year 2 Staff Survey Results Related to Professional Development

Survey Item	*Percent Agree/ Strongly Agree
Through the magnet grant, I have learned to use new instructional methods.	84%
New Instructional Approaches	**Percent Familiar/ Very Familiar**
Integration of Technology into Instruction	73%
Integration of the Visual and Performing Arts	84%
Curriculum Mapping	76%
Multiple Intelligences	89%
Project-based learning	53%

*Survey response rate= 72%

BENCHMARK CHART 2-2.1 a-e

WCPSS Project Objectives 2-2.1 a-e:	By June 30, 2004, program curricula for the new and significantly revised magnet themes at **Moore Square Museums Magnet Middle School**, **Brooks Museums Magnet Elementary School, Millbrook Magnet Elementary School: An International Baccalaureate Primary Years Programme, Joyner Language Explorations Magnet Elementary School,** and **Powell Visual and Performing Arts Magnet Elementary School** will be 100% aligned with the state's challenging content *(N.C. Standard Course of Study—NCSCS*) and performance standards (*N.C. State Accountability System—ABCs*) as evidenced by: • reviews of all new curriculum documents by Curriculum Specialists verifying the correlation of curricular materials with the state curriculum (NCSCS) and • reviews by Evaluation Specialists of official *Public Schools of North Carolina End-of-Grade Tests Grade-Level Reading and Mathematics Summary Goal Reports* to assess the percent of items correct for each *NCSCS* reading and math goal measured in the state accountability system.			
Indicator 2-2	**Year 2 Benchmark**	**Year 2 Actual**	**Benchmark Met? Yes/No**	
State content and performance standards. Project designs explicitly provide evidence of the use of challenging State content standards and student performance standards. These are reflected in the program curriculum and in planned student assessments aligned to the curriculum.	• Curriculum Specialists verify that <u>all new and revised</u> curriculum documents align with challenging state content standards (NCSCS)	• In fall 2003, Curriculum Specialists verify that <u>all</u> new curriculum documents align with challenging state content standards (NCSCS)	Brooks Joyner Millbr. Powell Moore Sq.	Yes Yes Yes Yes Yes
	• Evaluation Specialists verify that <u>all new and revised</u> curriculum documents align with state performance standards (ABCs) by reviewing the percent of End-of-Grade Reading and Math test items correct for each NCSCS goal and objective	• In fall 2003, Evaluation Specialists verify that <u>all</u> new curriculum documents align with state performance standards (ABCs) by reviewing the percent of End-of-Grade Reading and Math test items correct for each NCSCS goal and objective	Brooks Joyner Millbr. Powell Moore Sq.	Yes Yes Yes Yes Yes
	• Schools' EOG Goal Summary Report percent of items correct will <u>equal or exceed</u> the district	• In fall 2003, the Project Evaluator will determine if schools' EOG Summary Goal Report percent of items correct <u>equal or exceed</u> the district	Brooks Joyner Millbr. Powell Moore Sq.	*? ? ? ? ?

[***PLEASE NOTE**: End-of-Grade (EOG) results will be sent as an addendum to this report as soon as the state Board of Education makes the state accountably system results official.]

In addition to completing professional development training related to this project's new and significantly revised magnet themes, staff members are also developing new curriculum documents to support these themes. Project benchmarks in the following section of this report covering Objective 3-1 spell out the specific number of curriculum units that schools are expected to complete in Years 1, 2, and 3. This section, for Objective 2-2.1, lists the titles of all curriculum documents completed and reviewed in Year 1 and all of those planned for Year 2. The completion deadline for all Year 2 units is August 31, 2003. In fall 2003, both curriculum and evaluation specialists will review each Year 2 unit to verify its alignment with the content and performance standards of the NCSCS. Results of their reviews will be included in the Year 3 Performance Report.

Moore Square Middle School, Project Objective 2-2.1a

During Year 2, Moore Square implemented the "It's All Greek to Me" unit developed during the planning year. This integrated curriculum document includes five subject-area components -- language arts, mathematics, science, social studies, and the arts. In fall 2002, the project coordinator and project evaluator conducted reviewed each unit to assess its alignment with NCSCS goals and objectives and state assessment standards. The review process results given in Table 32 are supplemented with the listing of goals and objectives for each unit provided in Appendix A.

Table 32. Moore Square Middle School
Curriculum Units Completed in Year 1 and Reviewed in Year 2

Title	Pilot Date	Com-pletion Date	Review Date	Alignment with	
				NCSCS (see Appendix A)	Assess-ment Standards
It's All Greek to Me Language Arts Component	Sept. 03	8/31/02	9/30/02	Yes	Yes
It's All Greek to Me Mathematics Component	Sept. 03	8/31/02	9/30/02	Yes	Yes
It's All Greek to Me Science Component	Sept. 03	8/31/02	9/30/02	Yes	Yes
It's All Greek to Me Social Studies Component	Sept. 03	8/31/02	9/30/02	Yes	Yes
It's All Greek to Me Arts Component	Sept. 03	8/31/02	9/30/02	Yes	Yes

In Year 2, an eight-member curriculum writing committee continued the curriculum development process. The committee carefully discussed its mission and made a commitment to the development of a Curriculum Guide Notebook for every subject taught at Moore Square. Curriculum units developed for the notebooks will be written to accommodate at least two full weeks of instruction for one subject area. They will include a combination of Paideia principles and teaching methods (didactic, coached project, and seminar) plus an innovative instructional component related to the museums theme. Each unit will:

- reflect interdisciplinary planning at team, department, and school levels;
- provide lessons based on national, state, and local standards;
- use approved Moore Square templates of lesson plan design;
- include rubrics and supplemental teaching materials; and
- be continuously evaluated, revised, and improved.

The school's AG (academically gifted) Resource Teacher/Social Studies Specialist, a member of the curriculum writing committee, provided curriculum development training for the committee and others who will develop units. Writers will use the *backward design process* described in Understanding by Design (Wiggins and McTighe, 1998) to identify desired results, determine acceptable evidence, and plan learning experiences and instruction. They have

reviewed numerous techniques that will be helpful in their units. These include Thinking Maps, Quality Tools, Learning/Differentiation Strategies, Multiple Intelligences, Cooperative Learning, Authentic Assessments, and CRISS (Creating Independence Through Student Owned Strategies). They can also consult Moore Square's Evaluation Checklist for Curriculum Units for more ideas for improving their curriculum documents.

Members of the curriculum writing committee and other faculty members at Moore Square are at work on a total of 11 documents that will be completed by August 31, 2003 (Table 33); they have also identified 3 units with 15 components to be developed in 2003-04. In compliance with project benchmarks, all curriculum documents finished in Years 2 and 3 will be reviewed by curriculum and evaluation specialists to ensure their alignment with the NCSCS.

Table 33. Moore Square Year 2 Curriculum Units

Title of Curriculum Units	Targeted Completion Date
Tools for Success (Habits of mind, Technology Tools, Thinking Maps)	Aug. 31, 2003
The Human Body	Aug. 31, 2003
Journeys in Space (Soviet Challenges, Connections with NC and US)	Aug. 31, 2003
Harmony in Nature (Brazil and Neighbors, Diversity and Adaptation)	Aug. 31, 2003
Signs of Our Time (Middle East Conflict, Shabanu, Historic Fiction)	Aug. 31, 2003
Transformations (Egypt, Life Cycles)	Aug. 31,2003
African Diversity (Cultural Diversity, Weather Patterns	Aug. 31, 2003
Human Rights (China, Heredity, Animal Rights)	Aug. 31, 2003
Apples, Herbs, and I Spy (Colonial North Carolina)	Aug. 31, 2003
Technology and American History Day	Aug. 31, 2003
Organization and Study Skills	Aug. 31, 2003

Brooks Elementary School, Project Objective 2-2.1b

Although there were no formal curriculum development requirements for Year 1 (their planning year), Brooks staff members completed three curriculum units by the end of August 2002. In September 2003, these units were reviewed to ensure alignment with the NCSCS. Results of the review process are summarized in Table 34, with specific NCSCS goals and objectives for each unit listed in Appendix A.

Table 34. Brooks Elementary Year 1 Curriculum Units

Title	Pilot Date	Completion Date	Review Date	Alignment with	
				NCSCS (see Appendix A)	Assess-ment Standards
A Taste of North Carolina	Fall 2003	8/31/02	11/13/02	Yes	Yes
Introduction to Problem Solving	Fall 2003	8/31/02	11/6/02	Yes	Yes
Simple Machines and Inventions	Fall 2003	8/31/02	11/6/02	Yes	Yes

In Year 2, 12 curriculum units were piloted and are scheduled for final completion by August 31, 2003 (Table 35). Most units feature Paideia coached projects based on Paideia staff development sessions provided by the project. In fall 2003, the NCSCS alignment of all of these units will be confirmed.

Table 35. Brooks Elementary Year 2 Curriculum Units

Title	Pilot Date	Completion Date	Review Date
Kindergarten Cares for The Community	Oct. 2002	Aug. 31, 03	Sept. 2003
Our Earth Rocks!	Oct. 2002	Aug. 31, 03	Sept. 2003
Let's Talk, Let's Listen, Let's Hear!	Oct. 2002	Aug. 31, 03	Sept. 2003
Celebrate Diversity	Oct. 2002	Aug. 31, 03	Sept. 2003
Life's An Adventure!	Oct. 2002	Aug. 31, 03	Sept. 2003
Connections!	Oct. 2002	Aug. 31, 03	Sept. 2003
Time for Change	Jan. 2003	Aug. 31, 03	Sept. 2003
The Way It Is!	Jan. 2003	Aug. 31, 03	Sept. 2003
Who is in Control Here?	Jan. 2003	Aug. 31, 03	Sept. 2003
Changes All Around!	Jan. 2003	Aug. 31, 03	Sept. 2003
Survival!	Jan. 2003	Aug. 31, 03	Sept. 2003
The World of Transformers!	Jan. 2003	Aug. 31, 03	Sept. 2003

Millbrook Elementary School, Project Objective 2-2.1b

The IB Primary Years Programme curriculum that Millbrook Elementary faculty members completed in Year 1 and revised in Year 2 reflects IB's inquiry approach. The 36-unit Program of Inquiry includes six transdisciplinary courses for each grade level. Grade-level units reflect the following themes: who we are, where we are in place and time, how we express ourselves, how we organize ourselves, how the world works, and sharing the planet. Themes are listed by grade in Table 36, with the specific course titles for that grade level listed parenthetically following the each theme. All 36 units were reviewed by the project evaluator and project coordinator, who determined that they reflect appropriate assessment practices and are aligned with appropriate subject-area competency goals of the NCSCS (Table 36). The specific goals with which each unit aligned are cited in Appendix A.

Table 36. Millbrook Elementary School
Curriculum Units Completed in Year 1 and Reviewed in Year 2

Theme and Grade-Specific Unit Title	Pilot Date	Completion Date	Re-view Date	Alignment with	
				NCSCS (see Appendix A)	Assess-ment Standards
Grade K: Who We Are (Marvelous, Marvelous Me)	2001-02	8/31/02	9/30/02	Yes	Yes
Where We Are in Place &Time (Munch, Munch, Munch)	2001-02	8/31/02	9/30/02	Yes	Yes
How We Express Ourselves (Tell Me a Story)	2001-02	8/31/02	9/30/02	Yes	Yes
How the World Works (Exploring the Toy Box)	2001-02	8/31/02	9/30/02	Yes	Yes
How We Organize Ourselves (A Circle of Friends)	2001-02	8/31/02	9/30/02	Yes	Yes
Sharing the Planet (Caring and Sharing)	2001-02	8/31/02	9/30/02	Yes	Yes
Grade 1: Who We Are (Where Do You Hang Your Hat?)	2001-02	8/31/02	9/30/02	Yes	Yes
Where We Are in Place & Time (Are You My Mummy?)	2001-02	8/31/02	9/30/02	Yes	Yes
How We Express Ourselves (Author! Author)	2001-02	8/31/02	9/30/02	Yes	Yes
How the World Works (Commotion in Motion)	2001-02	8/31/02	9/30/02	Yes	Yes
How We Organize Ourselves (Show Me the Money!)	2001-02	8/31/02	9/30/02	Yes	Yes
Sharing the Planet (They Have Needs Too!)	2001-02	8/31/02	9/30/02	Yes	Yes
Grade 2: Who We Are (Hello Friend)	2001-02	8/31/02	9/30/02	Yes	Yes
Where We Are in Place & Time (Won't You Be My Neighbor?)	2001-02	8/31/02	9/30/02	Yes	Yes
How We Express Ourselves (Let's Make Some Noise)	2001-02	8/31/02	9/30/02	Yes	Yes
How the World Works (Weather or Not)	2001-02	8/31/02	9/30/02	Yes	Yes
How We Organize Ourselves (Money Doesn't Grow on Trees)	2001-02	8/31/02	9/30/02	Yes	Yes
Sharing the Planet (The Circle of Life)	2001-02	8/31/02	9/30/02	Yes	Yes

Table 36. (continued) **Millbrook Elementary School**
Curriculum Units Completed in Year 1 and Reviewed in Year 2

Theme and Grade-Specific Unit Title	Pilot Date	Completion Date	Re-view Date	Alignment with	
				NCSCS (see Appendix A)	Assess-ment Standards
Grade 3: Who We Are (I Have an Attitude and I Know How to Use It)	2001-02	8/31/02	9/30/02	Yes	Yes
Where We Are in Place & Time (Those Were the Days)	2001-02	8/31/02	9/30/02	Yes	Yes
How We Express Ourselves (Would You Believe?)	2001-02	8/31/02	9/30/02	Yes	Yes
How the World Works (Bright Ideas)	2001-02	8/31/02	9/30/02	Yes	Yes
How We Organize Ourselves (Who's In Charge Here?)	2001-02	8/31/02	9/30/02	Yes	Yes
Sharing the Planet (The Earth Beneath our Feet)	2001-02	8/31/02	9/30/02	Yes	Yes
Grade 4: Who We Are (It Takes All Kinds)	2001-02	8/31/02	9/30/02	Yes	Yes
Where We Are in Place & Time (Are We There Yet?)	2001-02	8/31/02	9/30/02	Yes	Yes
How We Express Ourselves (Beam Me Up!)	2001-02	8/31/02	9/30/02	Yes	Yes
How the World Works (Creative Contraptions)	2001-02	8/31/02	9/30/02	Yes	Yes
How We Organize Ourselves (No Man is and Island)	2001-02	8/31/02	9/30/02	Yes	Yes
Sharing the Planet (Amazing Animals)	2001-02	8/31/02	9/30/02	Yes	Yes
Grade 5: Who We Are (Rites of Passage)	2001-02	8/31/02	9/30/02	Yes	Yes
Where We Are in Place & Time (Oh, the Places We'll Go)	2001-02	8/31/02	9/30/02	Yes	Yes
How We Express Ourselves (Express Yourself)	2001-02	8/31/02	9/30/02	Yes	Yes
How the World Works (As the World Turns)	2001-02	8/31/02	9/30/02	Yes	Yes
How We Organize Ourselves (All in Favor, Say Aye!)	2001-02	8/31/02	9/30/02	Yes	Yes
Sharing the Planet (In the Dark)	2001-02	8/31/02	9/30/02	Yes	Yes

Joyner Elementary School, Project Objective 2-2.1d

By the end of Year 3, Joyner staff will have developed a total of 16 project-based curriculum units to support their Language Explorations theme. Three units were completed and reviewed for Year 1 (Table 37). Based on a review process conducted in fall 2002, the NCSCS goals and objectives with which these units align are listed in Appendix A. For Year 2, nine additional units are scheduled to be completed by August 31, 2003 (Table 38). Review of these units to ensure alignment with NCSCS content and assessment standards will take place in fall 2003. Curriculum being developed at Joyner through this project is designed to provide opportunities for students to create, plan, design, and produce meaningful projects linked to the NCSCS. Students also incorporate multimedia technology appropriately into their projects.

Table 37. Joyner Elementary School
Curriculum Units Completed in Year 1 and Reviewed in Year 2

Title	Pilot Date	Completion Date	Review Date	Alignment with	
				NCSCS (see Appendix A)	Assess-ment Standards
La Palabra de Joyner (Joyner's Word)	Jan. 03	8/31/02	9/30/02	Yes	Yes
Weaving the World: "An Exploration of World Cultures"	Sept. 02	8/31/02	9/2002	Yes	Yes
And the Winning Author Is …	Sept. 02	8/31/02	9/2002	Yes	Yes

Table 38. Joyner Elementary
Expected Language Explorations Curriculum Completion for Year 2

Title of Curriculum Document	Completion Date	Pilot Date	Alignment Review Date
Caribbean Cruise: an Integrated Social Studies Unit	Aug. 31, 2003	Sept. 2003	Sept. 2003
The Community/*La Comunidad*	Aug. 31, 2003	Sept. 2003	Sept. 2003
Circle of Life/*El Circulo de la Vida*	Aug. 31, 2003	Sept. 2003	Sept. 2003
Out of this World/*Fuera del Mundo*	Aug. 31, 2003	Sept. 2003	Sept. 2003
Native Americans: People of the Past and Present	Aug. 31, 2003	Sept. 2003	Sept. 2003
Creating Our Own Worlds: A Fiction Workshop	Aug. 31, 2003	Sept. 2003	Sept. 2003
The Shape of the Land	Aug. 31, 2003	Sept. 2003	Sept. 2003
Let's Be Healthy – Wise Food Choices	Aug. 31, 2003	Sept. 2003	Sept. 2003
Spanish Survival for Students: A Conversational Approach	Aug. 31, 2003	Sept. 2003	Sept. 2003

Powell Elementary School, Project Objective 2-2.1e

Faculty at Powell have completed five new courses for Powell's gifted and talented electives program (Table 39). Electives, which emphasize the visual and performing arts, are aligned with arts and core-area objectives or with technology objectives of the NCSCS (Appendix A).

Table 39. Powell Elementary Year 1 Curriculum Units

Title	Pilot Date	Com-plete Date	Re-view Date	Alignment with	
				NCSCS (See Appendix)	Assess-ment Stand.
School News Today	02-03	8/31/02	9/2002	Yes	No
Garden Design	02-03	8/31/02	9/2002	Yes	Yes
Advertising and Graphic Design	02-03	8/31/02	9/2002	Yes	Yes
Story-Spinning Radio Show	01-02	8/31/02	9/2002	Yes	Yes
Computer Webmasters	02-03	1/30/02	9/2002	Yes	Yes

When the project ends, Powell's gifted and talented electives program will include 15 new courses. Every student in the school participates in GT courses, choosing two electives each nine weeks of the school year. Electives emphasize the visual and performing arts, but also reflect the academic content of the NCSCS, as well as integrated technology studies. The five electives that Powell staff will complete by August 2003 are listed below (Table 40).

Table 40. Powell Elementary School Year 2 Visual and Performing Arts Magnet Theme Curriculum Development

Title of Curriculum Document	Completion Date	Pilot Date	Alignment Review Date
Introduction to Computers (Kinder Kompute)	Aug. 31, 2003	March. 2003	Sept. 2003
Computer Webmasters II	Aug. 31, 2003	Jan. 2003	Sept. 2003
Story Telling w/Video	Aug. 31, 2003	Oct. 2002	Sept. 2003
Cultural Kaleidoscope	Aug. 31, 2003	Oct. 2002	Sept. 2003
Wizards at Work	Aug. 31, 2003	Sept. 2003	Sept. 2003

BENCHMARK CHART 2-2.2 a-e

WCPSS Project Objectives 2-2.2 a-e:	By June 30, 2004, the new and significantly revised magnet themes at **Moore Square Museums Magnet Middle School, Brooks Museums Magnet Elementary School, Millbrook Primary Years An International Baccalaureate Magnet Elementary School, Joyner Language Explorations Magnet Elementary School,** and **Powell Visual and Performing Arts Magnet Elementary School** will assist the schools to meet or exceed both the growth and performance standards of North Carolina's state accountability system and to reach the WCPSS Board of Education Goal of having 95% of 3rd and 8th graders at or above grade level by 2003, as evidenced by: • official results from the annual *ABCs of Public Education: Growth and Performance of NC Schools* report of the state Board of Education; • official results from the WCPSS Evaluation and Research Department annual publication, *Measuring Up : Progress Towards the 95% Goal*; and • surveys of staff members' perceptions of the effectiveness of the schools' magnet programs in helping meet standards of the state ABCs accountability system and expectations of the WCPSS Board Goal.			
Indicator 2-2	**Year 2 Benchmark**	**Year 2 Actual**	**Benchmark Met? Yes/No**	
State content and performance standards. Project designs explicitly provide evidence of the use of challenging State content standards and student performance standards. These are reflected in the program curriculum and in planned student assessment aligned to the curriculum.	• Schools' ABCs **Performance Composites** will exceed the previous year's composite	• By the end of August 2003, the project evaluator will determine if schools' ABCs **Performance Composites** exceed the previous year's composites	Brooks Joyner Millbr. Powell Moore Sq.	Yes Yes Yes No NA
	• Schools' ABCs **Growth Composites** will meet expected growth and approach exemplary growth	• By the end of August 2003, the project evaluator will determine if schools' ABCs **Growth Composites** meet expected growth and show evidence of progress toward high growth	Brooks Joyner Millbr. Powell Moore Sq.	Yes Yes Yes Yes No
	• Schools' percent of 3rd and 8th graders at or above grade level in reading and math will equal or exceed the district, indicating progress toward WCPSS Goal 2003	• By the end of August 2003, project evaluator will determine if schools' percent of 3rd and 8th graders at or above grade level in reading **and** math equals or exceeds the district	Brooks Joyner Millbr. Powell Moore Sq.	No No No No NA
	• 80% of staff perceive that their school's magnet theme is effective in helping meet standards of the ABCs accountability system and WCPSS Goal 2003, (70% of Brooks and Moore Sq. staff)	• Spring 2003 staff survey percent *agree/strongly agree* Brooks 88% Joyner 78% Millbr. 86% Powell 76% Moore Sq. 93%	Brooks Joyner Millbr. Powell Moore Sq.	Yes No Yes No Yes

Moore Square Middle School and Brooks, Millbrook, Joyner, and Powell Elementary Schools, Project Objective 2-2.2 a-d

Schools in this project selected instructionally innovative magnet themes not simply for the sake of innovation, but because of the potential of those themes to help students meet national, state, and local standards. (See research citations provided for Objective 3-1.) Each year, North Carolina's state accountability system, the ABCs of Public Education, provides valuable information on student achievement. The benchmarks of this project that deal with student achievement are closely linked to the ABCs. In Year 2, each school's ABCs Performance Composite was expected to exceed that of the previous year. Their ABCs Growth Composite was expected to meet the state's standard for "expected growth" and show progress toward meeting the "high growth" standard.

Brooks, Joyner, and Millbrook all met their Performance Composite benchmarks because their 02-03 composites were higher than 01-02 (Table 41). The Powell 02-03 Performance Composite of 85.0 was only four-tenths lower than 01-02, but the evaluator interpreted the benchmark literally and did not count this benchmark as being met. Not only did the four elementary schools in the project meet "expected growth" in Year 2, they also achieved "high growth." Thus, all four schools met their Growth Composite benchmarks for Year 2. Moore Square opened in 02-03 and did not have an 01-02 composite to which its 02-03 composite could be compared. Its 02-03 Growth Composite did not meet the "expected growth" and was even farther behind the "high growth" standard.

The state End-of-Grade (EOG) test scores that are part of the ABCs accountability system were also used to set Wake County's Goal 2003 for student achievement, which specified that 95% of 3rd and 8th graders in the system would have EOG scores at or above grade level in reading and mathematics. Student performance benchmarks in Purpose 4 of this report also require that schools in the project meet this standard. Benchmarks here in Purpose 2, however, require that project schools' percent of 3rd and 8th graders at or above grade level in reading and math equal or exceed the system level. This was not the case at any of the four elementary schools in the project (Table 42). The benchmark could not be measured for Moore Square middle school because there were only 6th and 7th graders in the school's first year of operation.

Table 41. Year 2 ABCs Accountability System Growth and Performance Composites

School	ABCs Performance		ABCs Growth	
	2002-03 Performance Composite (compared to 01-02)	2001-02 Performance Composite	2002-03 Growth Composites (Composites ≥ 0.0 meet state standards)	
			Expected	High
Brooks Elementary	88.2 ↑	83.6	0.91	0.42
Joyner Elementary	86.1 ↑	79.0	1.80	1.34
Millbrook Elementary	85.0 ↑	76.4	1.34	0.83
Powell Elementary	85.0 ↓	85.4	1.10	0.62
Moore Square Middle	86.1 NA	NA	-0.05	-0.35

Table 42. Project Schools' Year 2 Success in Meeting WCPSS Goal 2003

School	Percent of 3rd (or 8th) Graders Scoring At or Above Grade Level					
	Reading			Mathematics		
	School	District	School ≥ District	School	District	School ≥ District
Brooks Elementary	77.9	89.0	No	83.1	93.5	No
Joyner Elementary	74.2	89.0	No	90.9	93.5	No
Millbrook Elementary	75.0	89.0	No	89.4	93.5	No
Powell Elementary	85.1	89.0	No	88.8	93.5	No
Moore Square Middle	NA	92.2	NA	NA	88.6	NA

Just as staff members at project schools were expected to show positive opinions about their staff development opportunities in Year 2, they were also expected to display positive attitudes about the project's effectiveness in helping students meet state standards. Objective 2-2.2 required that 80% or more of staff members surveyed would perceive their school's magnet theme as being effective in helping attain state standards. (The requirement is 70% positive responses for Brooks and Moore Square, which are in their first year of implementation.) Results of the system's spring 2003 staff survey indicate that Brooks, Millbrook, and Moore Square met the benchmark for positive staff attitudes about the project helping their schools meet expectations of the state ABCs (Table 43). Because Joyner and Powell did not meet this benchmark, administrators and project staff members at both schools need to consider why staff attitudes are not as positive as they might be. Once any potential problems are identified, they should plan to address them.

Table 43. Project Schools' Year 2 Staff Survey Results Related to ABCs Expectations

Survey Item	School	Percent Agree/ Strongly Agree
The magnet grant helps our school meet expectations of the state ABCs.	Brooks	88
	Joyner	78
	Millbrook	86
	Powell	76
	Moore Square	93

PROGRESS IN ACHIEVING PURPOSE 3 OBJECTIVES

MSAP PURPOSE 3:
The development and design of innovative educational methods and practices.

MSAP OBJECTIVE 3:
Federally funded magnet programs feature innovative educational methods and practices that meet identified student needs and interests.

BENCHMARK CHART 3-1 a-e

WCPSS Project Objectives 3-1 a-e:	By June 30, 2004, **Moore Square Museums Magnet Middle School, Brooks Museums Magnet Elementary School, Millbrook Magnet Elementary School: An International Baccalaureate Primary Years Programme, Joyner Language Explorations Magnet Elementary School,** and **Powell Visual and Performing Arts Magnet Elementary School** will have implemented new and significantly revised magnet themes that meet identified student needs and interests as evidenced by: • successful completion of at least 100 new curriculum documents; • sections of the annual project report outlining the research base of innovative educational methods and practices; • sections of the annual project report describing how innovative themes and elements are incorporated; • sections of the annual project report explaining how the themes and elements meet identified student needs and interests; • onsite observations showing 90% of staff implementing the theme appropriately; and • surveys of staff members' perceptions of the effectiveness of the program in meeting student needs and interests.				
Indicator 3-1	**Year 2 Benchmark**	**Year 2 Actual**		**Benchmark Met? Yes/No**	
Innovative themes. Magnet programs incorporate innovative themes and elements that meet identified student needs and interests.	• 78% (94 out of 120) of curriculum documents developed for innovative themes and elements	School / Number / Percent Brooks 15 71 Joyner 9 60 Millbr. 0 100 Powell 5 67 Moore Sq. 16 80		Brooks Yes Joyner Yes Millbr. Yes Powell Yes Moore Sq. No	
	• Annual project report: 1. Cites any new research related to themes and elements and indicates how it has been applied 2. Describes how themes and elements continue to be incorporated and expanded 3. Explains how new and on-going student needs and interests are identified and how themes and elements continue meet these needs	• Performance Report narrative sections for each school include: 1. New research sources related to themes and elements and explanation of their application 2. Description of ways in which themes and elements continue to be incorporated and expanded 3. Explanation of methods to identify new and continuing student needs and interests and of use of themes and elements to help address student needs		Brooks Yes Joyner Yes Millbr. Yes Powell Yes Moore Sq. Yes	

Indicator 3-1, continued	**Year 2 Benchmark**	**Year 2 Actual**	**Benchmark Met? Yes/No**	
	• Onsite observations showing 85% of all staff appropriately implementing the theme throughout the school, (80% for Brooks and Moore Sq.)	• Observations in representative classrooms of teachers indicate themes and elements are being piloted appropriately. (See Objective 3-2 a-e)	See Objective 3-2 a-e	
	• 80% of staff believe the themes and elements help them meet student needs and interests, (70% for Brooks and Moore Sq.)	• Spring 2003 staff survey results indicate 80% or more of respondents *agree/strongly agree* that the grant helps meet student needs and interests.	Brooks Joyner Millbr. Powell Moore Sq.	Yes Yes Yes Yes Yes

Project Objectives 3-1a-e, Brooks Elementary, Joyner Elementary, Millbrook Elementary, Powell Elementary, Moore Square Middle

Table 44 summarizes the total number and overall percent of curriculum units completed by each school in Year 2. Units already completed or to be completed by August 31, 2003 are included. Unit titles and completion dates are listed for each school earlier in this report (see Purpose 2). Project schools are on track to meet their curriculum development targets in Year 2 and to complete 100% of all required units by the end of Year 3. Brooks' number of units for Year 2 exceeds the requirement because, although no units were mandated, faculty at the school completed 3 units by the end of their planning year (Year 1). Its Year 3 benchmark stipulated that Moore Square meet the project requirement of 20 units by the end of Year 2. With the 5 units finished in Year 1 and the 11 units to be completed for Year 2, Moore Square's two-year total is 16 units. Although this does not meet the benchmarked level, the evaluator does not believe that the deficit of 4 units will pose a long-term problem. The school — which produces in-depth, integrated units — has already identified 15 units to be finalized in Year 3. With its active, well-trained curriculum development committee, Moore Square should be able to fulfill the requirement of 20 total units by the end of Year 3.

Table 44. Curriculum Developed in Year 2 to Support Innovative Themes and Elements

School	Number of Units Completed in Year 2		*Cumulative Percent of Year 1-3 Units Completed in Year 2	
	Benchmark	Actual	Benchmark	Actual
Brooks Elementary	13	15	63	71
Joyner Elementary	9	9	60	60
Millbrook Elementary	0	0	100 (Year 1)	100 (Year 1)
Powell Elementary	5	5	67	67
Moore Square Middle	20	16	100	80
TOTAL	47	45		

*By Year 3, cumulative percent will be 100% for all schools.

Moore Square Middle School, Project Objective 3-1 a

Research Base of Innovative Methods and Practices at Moore Square Middle School: Last year's planning process for Moore Square was grounded in the literature on effective middle school reform. Curriculum development in the planning year also incorporated exemplary instructional practices from the education research literature. References about museums education and the Paideia Program were particularly important. All of these sources were reviewed on pages 75 and 76 of the Year 1 Annual Performance Report. Staff at Moore Square continue to track research in the field and to put into practice approaches from it that are relevant to the museums theme and/or Paideia. Current citations and quotations from the research literature are listed below for the following areas: Museums, Paideia/Constructivism, General.

Museums References

- *For some adolescents, volunteering or participating in an enrichment class at the museum may help provide some of the necessary ingredients for success: the support of many caring adults, positive peer groups, a variety of adult role models, safe places to experiment with new attitudes and behaviors, academic and social competencies, and support in providing service to their communities* (Deanna Banks Beane, "Museums and Healthy Adolescent Development: What We Are Learning From Research and Practice," Journal of Museum Education).

- *Constructivism provides the most comprehensive and elegant theory to consider how students can both use their previous beliefs and knowledge to construct new meanings and how they can carry out this process. The Constructivist Museum can maximize the possibility that students will make valuable meanings out of their museum experience* (George E. Hein, 2001, Learning in the Museum).

- *School staff, students, and museum personnel must recognize that students need to be prepared to handle public interaction effectively* (Museums News, September/October 1998, "Museums the Charter Schools Movement"). The authors list four developmental areas essential to students success:

    1. Students know how to communicate thoughts and information effectively in a diverse, global society,
    2. Students know how to employ the appropriate technology with the appropriate care for the appropriate ends,
    3. Students know how to conduct themselves respectfully and responsibly, and to work in a variety of environments with people different from themselves, and
    4. Students are aware of their thinking processes and recognize methods of improving their ability to master new concepts, skills, and attitudes.

- *Students preparing exhibits gain confidence in their research and problem solving skills while connecting with the subject matter. Additional skills include analyzing, points of view and, making collaborative decisions* (Peg Koetsch, Linda D'Acquistro, Allyn Kurin, Sonja Juffer, and Linda Goldberg, 2002, "Schools into Museums," Educational Leadership).

- *Object-based activities should require that museum visitors do something, find something, and/or respond to something. It should prompt them to think, to sort, to consider, and/or to decide. It has implications and applications beyond the specific examples that are being used for*

teaching, because object-based activities are meant to teach visitors skills for thinking in addition to object-specific information (Alan Gartenhaus, 2002, "Teaching That's More Engaging, Open and Fun," The Docent Educator).

- *Museum collections ignite the imagination. They are a rich resource for diverse experiences because of the many stories they tell, the varieties of information they convey, and the different ideas they suggest. While any object could be used to enhance creative thinking, museum objects are among the highest caliber of stimuli* (Alan Gartenhaus, 1999, Minds in Motion Using Museums to Expand Creative Thinking).

- *The World Wide Web abounds with online exhibits created by museums, historical societies, scholars, antiques dealers, and collectors. Students can experience three-dimensional objects in a two-dimensional environment. By combining technology and material cultural studies, teachers become partners with students in learning* (Charlene Mires, 2001, "Object Lessons: Material Culture on the World Wide Web," Magazine of History For Teachers of History).

- *Collaboration generates new responsibilities for partners from two different worlds. Museum staff see the same students over extended periods and they are concerned about the students' academic, social, and emotional development as well as their intellectual progress. Teachers work in gallery environments that are designed to provoke curiosity, contemplation, and conversation, and they must balance student excitement with the demands of discipline-based skills, content, and assessments* (Sonnet Takahisa, 1998, "A Laboratory for Museum Learning", Journal of Museum Education).

- *As teachers watch students who have problems with traditional learning models come alive in museums, they find new ways to reach these students. As directors and board members view education as a core principle of a museum, they endorse and actively support formation of long-term relationships with schools* (Diane B. Frankel, 1996, True Needs, True Partners, Museums and Schools Transforming Education).

- *Teachers can develop an understanding and a basis for deciding when and how to use museums experts effectively, when and how to utilize their own strengths in museum teaching situations, and to recognize that different combinations of personnel and activities are possible and appropriate depending on the goal of the field trip* (Helen Voris, 1986, Teach The Mind, Touch The Spirit: A Guide to Focused Field Trips).

- *When guiding tours for middle school students, docents are able to make their museum's collection both real and relevant when they allow students to bring their own interpretation to the event. And, their interpretation may give docents new insights if they are open to the experien*ce (Jackie Littleton, "Making It Real; Making It Relevant, 2002, The Docent Educator).

Paideia/Constructivism References

- *The natural role of the seminar in a middle school is to unite teams of teachers and students around a common learning event and to help those same teams plan and present a truly integrated curriculum. After planning collaboratively, the teachers use common texts and sets of questions to address thematically linked units of study that cut across all the core subjects areas* (Terry Roberts, 1998, The Power of Paideia Schools).

- *Thematic instruction offers a host of opportunities for students to actively engage in a constructivist approach to learning. It offers a variety of meaningful learning opportunities tailored to the students' needs and interests. Children are given the chance to make important choices about what they learn, as well as about how they learn. Thematic instruction provides the means to integrate the entire curriculum while involving students in a multiplicity of learning opportunities and ventures* (Anita Meyer Meinbach, Anthony Fredricks, and Liz Rothlein, 2000, The Complete Guide To Thematic Units: Creating the Integrated Curriculum).

- *The challenge for teachers is to link what to teach with what really matters to students, to engage the whole body and mind of students in the classroom so that their natural learning capacities become fully engaged in the subject. Teachers can create short, carefully designed units that fully engage students and prepare the way for active learning* (Geoffrey Caine, Renate Nummela Caine, and Carol McClintic, 2002, "Guiding the Innate Constructivist", Educational Leadership).

- *Research is the process of critical thinking and solving problems. It is this ability that sets humans apart from all other forms of living things. Research is simply the use of the human mind to search for and seek answers* (Harry K. Wong, Rosemary T. Wong, 1998, How To Be An Effective Teacher, The First Days Of School).

- *In an integrated approach the guiding premise is the organization of learning in a way that is reflective of, and most easily transferable to, real-world situations. It is based on an understanding of the world as a system, in which the full meaning of any topic or subject matter can be gleamed through exploring its relationships with other phenomena. The curriculum is organized around broad themes or issues, through which the knowledge and skills of traditional subjects are taught in interconnected ways* (Graham Pike, David Selby, 1999, In the Global Classroom).

General References

- *The structure of a school is founded upon its policies, procedures, programs, and rules. The culture is founded upon the assumptions, beliefs, values, expectations, and habits that drive the day-to-day work of the school and shape how its people think, feel and act* (Richard DuFour, 2003,Through New Eyes).

- *School personnel must seek substantive and continuous preparation in multicultural education. Educators must be prepared in multicultural education so that multicultural education can become fully integrated into the educational process* (Donna Ford and John Harris, 1999, Multicultural Gifted Education).

Innovative Educational Methods and Practices Incorporated into the Moore Square Museums Theme: The Moore Square curriculum was planned to incorporate appropriate instructional practices from the research literature. Because instructional approaches of the Paideia program were chosen for implementing the museums theme, staff members attended intensive training in the summer of 2002 to learn how to use Paideia coached projects with their students. They also studied methods for conducting effective Paideia seminars in their classrooms.

This professional development enabled them to conduct the school-wide interdisciplinary unit, It's All Greek to Me, at the beginning of Year 2. In addition to instruction in core subjects, the unit featured Paideia seminars, Paideia coached projects, and connections with local museums. It culminated with a Greek Festival offering students a number of options for exhibiting unit-related products or participating in performances. Students on the theatre publicity committee designed a brochure for the festival. Performing and visual arts students worked together to create sculptures and vases from the period. Writing students authored a modern-day tragedy employing all the elements of an ancient Greek play. Theatre arts students made renderings of ancient Greek costumes and designed masks and shoes to go with them. They designed sets for performing selected scenes from Greek plays. Theatre students and dance students worked together on an Olympic dance-a-thon.

Following the same school-wide interdisciplinary method, an Egyptian Festival, a Celtic Festival, a WAVES Festival, and a Renaissance Festival were held during Year 2. The Renaissance Festival was a successful partnership with Raleigh's Burning Coal Theatre Company. Educators from the theatre worked closely with Moore Square staff and students. The result was a festival that featured dramatic readings and performances, period music, and dance and artwork from the Italian, English, French and Spanish Renaissance. More than 100 students participated in the performance, with more than 300 students, faculty and parents in attendance.

Moore Square brought museums personnel and museum-related experiences into the school and its curriculum; there were also learning experiences for teachers and students in the museums themselves. By visiting area museums, students and staff were taught to analyze and appreciate numerous exhibits. They were asked to think about aspects of their visits that they would take with them and how they would incorporate their learnings into their lives at school and at home. Museum personnel at the Raleigh City Museum, the North Carolina Museum of History, the North Carolina Museum of Natural Sciences, Exploris, and the African American Cultural Center provided guided tours. Staff at the North Carolina Museum of Art also conducted behind-the-scenes visits and interactive gallery tours. Three of these museums — the North Carolina Museum of History, the North Carolina Museum of Art, and the Raleigh City Museum — hosted open houses for curriculum writers. In behind-the-scenes sessions with graphic artists, photographers, designers, and carpenters, teachers learned how exhibits are developed and constructed and how objects are conserved, stored, and documented.

An article from the North Carolina Museum of Art Magazine (Nov./Dec. 2002) describes well a typical experience for Moore Square students at that museum.

> *North Carolina's capital city is blessed with cultural riches that few middle-sized cities can equal. These art, history, and nature resources will fascinate students at the new Moore Square Museums Magnet Middle School. The museums' collection will provide primary sources of learning for the students….. NCMA Tour and Docent Coordinator, Cynthia Dopko, participated in the school's summer Paideia learning seminar and worked closely with teachers and planners for the school's first North Carolina Museum of Art gallery experience. The students learned about gallery design from Head Designer Doug Fisher, explored the many mythological collections in the galleries, and drew their own conclusions after considering a series of study questions. Someone in this first class may one day return as a staff member, and all of these students on their future visits will see museum objects with an insider's eye.*

Exploris Museum offered numerous occasions for students and staff to attend events at the museum as well as opportunities to attend its IMAX theatre. Objectives aligned with the North Carolina Standard Course of Study are provided for all IMAX movies shown at Exploris. The following excerpt from an article in the News and Observer, Raleigh's local newspaper, characterizes well the types of museum experiences in which Moore Square students were involved through the project.

> *Maybe it's not that unusual for 11-year-old students to go with their class to an IMAX movie. But how many have the run of the theater and hang out in the projection booth? "You can't do this when you're with a regular school group, but you can walk around and see what the theater is like," Lisa Townsend, a visitor services senior associate at Exploris, told Moore Square Museums Middle School students as they visited the museum's large screen format IMAX theater. "The surround sound is awesome." That kind of hands-on, behind the scenes learning experience is what was envisioned when Wake County began offering the museums magnet theme at Moore Square Middle and Brooks Elementary. By partnering with local museums and using the nontraditional Paideia approach of student led instruction, it was hoped the schools would attract families who didn't want to learn conventionally. Both schools have incorporated museum visits into their lessons. For instance, Moore Square students will enhance their study of Chinese culture by visiting Exploris and participating in the activities offered on the Chinese New Year. "We're a field trip for most schools," said Jennifer Ernisse, director of exhibit and group programs for Exploris. "But it's not a field trip for them. It's an integrated part of their curriculum."*

The scope of Moore Square's involvement with area museums in Year 2 is further illustrated by instances such as the following. The Museum of Natural Sciences selected Moore Square students to become curators for the museum's state-wide Pi Day event. The North Carolina Museum of History was the setting for the Moore Square Drama students' performance of Tom Sawyer. The North Carolina Museum of Art invited Moore Square staff to participate in a meeting, "The Museum Park Pond: Education Through Art in Nature Community Forum."

Moore Square students' off-campus educational experiences in Year 2 were not limited to museums. Student groups were invited to participate in the International Cultural Festival at North Carolina State University. Student groups also spent time in the North Carolina State University Meteorology Lab. Carolina Ballet invited Moore Square students to attend a delivery of props and a dress rehearsal. Seventh grade science students created interactive exhibits for a Children's Science Museum and spent a day at Brooks Elementary sharing these with K-5 classes. The News and Observer invited students to tour their building and to participate an editorial meeting, where they were able to see first-hand the selection process that makes headline news.

In an after-school timeframe, the Contemporary Art Museum (CAM) collaborated with Moore Square on two important projects. In the first of these, students created a series of art installations and projects focusing on the theme of exploring and documenting the Moore Square community. They reviewed archival imagery of the history of Moore Square; documented the nearby vicinity with journal writings, drawings, photos, and videos; and interviewed members of the neighborhood that borders the school. For this 7-week project, approximately 22 6th- and 7th-grade students worked after school with local artist Lee Moore. Students' completed installations were displayed in windows of local businesses. The mayor of Raleigh attended the opening reception for the project at Exploris Museum and congratulated students on their success. Through a second project, CAM was involved in an after-school mural project that ran for 6 weeks. Students worked with an artist facilitator and facilitator assistant from CAM to

design and paint a mural. CAM hosted an unveiling reception for students and families at the xx North Carolina College of Education.

A *Living Museum* event at the end of the school year was a fitting culmination to students' numerous in- and out-of-school museum experiences in Year 2. In a unique in-school study trip, Native American Clint Chartier presented his Living Museum program at Moore Square. His presentation incorporates the history, art, music, and customs of his ancestors into his own way of living. Its goal is to help students appreciate the diversity of other cultures and to understand why history, culture, and the quest for knowledge are important to personal growth. Students were able to access aspects of the Native American experience through hands-on participation in the ways of the Navaho. They further considered these ideas in Paideia seminars conducted as a follow-up activity.

Using Innovative Educational Methods to Meet Student Needs and Interests: It is the goal of Moore Square to increase the achievement of all students. The school promotes academic achievement through parent and community involvement while focusing on area museums as laboratories of learning. This focus helps students develop an understanding of and appreciation for their world and their relationship to it. By using Paideia methods to implement the museums theme, teachers at Moore Square are able to deliver a clearly defined, rigorous curriculum that engages students with original textual and source materials and enables them to produce meaningful projects.

For effective discussions in a Paideia seminar, students must study the text carefully, listen closely to the comments of others, think critically for themselves, and articulate both their own thoughts and their responses to the thoughts of others. This means that Paideia seminars and coached projects are effective tools for meeting a variety of student learning needs. From the students' point of view, the seminar differs from most other formal classroom experiences in that it asks them to voice and examine their own thinking at a sophisticated level, not just to replay the thoughts of the teacher or the textbook. As a resource for seminars, the "Paideia: Key Seminar Library Software" is available on all staff laptops. The program provides access to classic texts from literature, history, science, mathematics, fine arts, music, biography, and mythology. Teachers are able to select appropriate seminar materials to meet the needs and interests of all students.

All students at Moore Square receive technology training that enables them to effectively use the school's state-of-the art technology equipment. They can also join the school's chapter of the Technology Student Association (TSA), a non-profit national organization devoted to technology education for young people. TSA members at Moore Square increased their technology competencies and developed problem solving skills while completing projects for the North Carolina Central Region TSA competition. Projects of several Moore Square students received first place awards and were eligible for the state competition. One Moore Square student received a second place trophy at the state conference.

A group of Moore Square students used skills similar to those for Paideia coached projects to participate in National History Day. The National History Day program promotes excellence in the teaching and learning of history and targets students' critical thinking and

research skills in all subject areas. Participants from Moore Square worked throughout the school year to research, create, and present original projects on this year's theme of "Rights and Responsibilities in History." The education director of the North Carolina Archives and History department briefed teachers and students on the program and assisted Moore Square students with project-related research during the year. Projects of 22 students won awards in the district competition. At the state level, a group of five Moore Square students won an award and this summer in the national competition.

Brooks Elementary School, Project Objective 3-1b

Research Base of Innovative Methods and Practices at Brooks Elementary School: Coordinating teachers at Brooks have facilitated staff development with the entire faculty focusing the museums theme and Paideia instructional methods. One goal for Year 2 was to get the school year off to a strong start and to provide an engaging format for students throughout the year. Two books, The First Six Weeks of School (2000, P. Denton & R. Kriete) and The Morning Meeting (2002, R. Kriete & L. Bechtel) provided a strong focus at the beginning of the year. During a retreat prior to the start of school, staff members read and discussed these books, and grade levels were then given time to use this information in planning the first 6 weeks of the new school year. Once school started, classroom teachers were assigned a *buddy* staff member to help implement actual morning meeting format in their classrooms. With morning meeting procedures establishing at the onset of the year, students felt ownership early on and were able to show respect, affirmation and acceptance for themselves and others. In classrooms, morning meeting is a short, introductory part of the day. But a similar format has been useful at faculty and administrative team meetings.

Paideia is a significant strategy at Brooks, thus administrators and staff have continued to track and use resources about the program. Two National Paideia Center publications have been quite useful this year: The Paideia Seminar: Active Thinking Through Dialogue in the Elementary Grades and Intellectual Coaching and the Coached Project. The latter has been helpful in developing a format for student coached projects. The coached-project format includes space for relating each project to appropriate NCSCS goals and objectives. In addition to books from the National Paideia Center, Brooks has also had center representatives provide feedback about developing questions for Paideia seminars and about planning Paideia coached projects.

The Wiggins and McTighe book Understanding by Design has been very useful for curriculum development. A team of staff members planned 12 Paideia Coached Units using their "backward design" approach. Enduring understandings, essential questions, and authentic assessment modalities, also from Wiggnis and McTighe, are key components of these units. Each unit also incorporates materials for Paideia seminars. Teachers will be able to use the units to shift their role from imparting knowledge to facilitating and guiding students' acquisition of knowledge.

Brooks' coordinating teachers continue to read and develop their understanding of instructional approaches that are appropriate for the museums theme. Four articles from the September 2002 issue of Educational Leadership have been particularly helpful. These are:

"Learning to Care, Careing to Learn" by Terry Roberts, "Lessons to Learn," by Carol Ann Tomlinson, "Guiding the Innate Constructivist" by Caine, Caine, and McClintic, and "Schools into Museums" by Koetsch, et al.

Because technology is important to effectiveness of the museums theme, the technology coordinator keeps abreast of resources in the field. She has used information from How Teachers Learn Technology Best and Planning Good Change with Technology and Literacy by Jamie McKenzie and has supplemented this with attending a workshop presented by the author. She used this information as a guide for developing the technology plan at Brooks. She also presented many of McKenzie's ideas and theories to Brooks' Media/Technology Committee and implemented many practices in the school.

Innovative Educational Methods and Practices Incorporated into the Brooks Museums Theme: Staff members who work at Brooks have all signed letters stating their commitment to the magnet theme. This year they finalized a site-specific definition of the museums theme. They consider the school itself to be a museum of student work exhibited within the school as well as projects displayed outside the school. The curriculum focuses on projects that represent true learning. As part of the magnet theme, teachers at Brooks understand that museums house a wealth of information and artifacts (primary sources) that support, expand, and pique students' curiosity. However, difficulties with transportation limit access for Brooks students to museums in the downtown area. In writing about museums education, Howard Gardner mentions the challenges of bridging the geographic and psychological distances between the school and the museums. One of Brooks' solutions has been to create a museum of student work within the school.

The administrative structure of Brooks has facilitated the work of the project. The coordinating teacher/planner and instructional technology coordinator participate in meetings of the school leadership team. They also meet twice monthly with the administrative team, which includes the principal, assistant principal, instructional technology teacher, and the guidance counselor. As chairperson of the school improvement committee, the instructional technology coordinating teacher has been able to incorporate objectives of the project into the school improvement plan which is in effect for the next three years. The instructional technology coordinator worked with selected administration and faculty members to develop a school technology plan. The plan includes existing and new technology resources and also identifies the training needed to ensure all staff members are competent with the equipment. They must have a comfort level that allows them to integrate technology in their classrooms and to use multimedia resources effectively. Last year planners noted that Brooks' media center was lacking in resources. This year numerous new books have been purchased to augment and up date the collection, and a computer research station has been added.

The team building initiated at the beginning of the year is vital to success of the program. The entire staff needs to be committed to and informed about Brooks' magnet theme. A concerted effort has been made to provide regular meeting times and to ensure that specialist teachers and classroom teachers have opportunities to plan and interact. Representative K-5 classroom professionals sit on the Museum Integration Team along with the art, music, physical education, media, and Spanish specialists. Through the Resource Integration Team, classroom

teachers meet with teachers in the cross-categorical resource (CCR), Chapter I, and academically gifted programs. Regular meetings have kept these groups in touch and facilitated the curriculum integration process. Parent education is also an important part of the project at Brooks. Parents have been invited to evening information sessions about the museums theme and the Paideia methods. During these sessions, parents have been able to participate in Paideia seminars.

Using Innovative Educational Methods to Meet Student Needs and Interests: The museums theme was chosen because it has the potential to interest many different types of learners. Delivering this theme through Paideia techniques provides a variety of instructional experiences for students. In the quest to improve achievement for all students, teachers have studied diverse teaching strategies for diverse learners. State test results and system performance assessments help identify areas where students need assistance and enrichment. Teachers differentiate their instruction to meet these needs.

Teachers develop rubrics for many of their lessons. Thus, they are able to clarify expectations for students and allow insight for them into areas of excellence and areas needing improvement. Students keep logs of and reflections on their progress. These help students become involved in their own learning process. In 2003-2004, classes at Brooks will be self-contained, except for math. Faculty feel that this will allow for more effective integration of the curriculum and enhance student success.

Millbrook Elementary School, Project Objective 3-1c

Research Base of Innovative Methods and Practices at Millbrook Elementary School: In "Becoming International" (October 2002, Educational Leadership), Singh reflects on how elementary schools seek to develop students of the world. The IBO has defined a student profile, which lists 10 attributes of an international person in response to the crucial question, "What do we want students to learn?" Every aspect of the curriculum at Millbrook Elementary Magnet School focuses on moving PYP students towards becoming people who exemplify these characteristics.

The cornerstone of Millbrook's Primary Years Programme (PYP) is a constructivist approach that incorporates structured inquiry techniques and project-based learning. Constructivism emphasizes the importance of the learner's engagement in the task and is based on Dewey's notion that learning involves engagement with the world rather than the passive acceptance of knowledge (Arts in Education, 2002). Learners construct knowledge for themselves as they learn. Inquiry and project-based learning are important aspects of constructivism as applied at Millbrook. The PYP curriculum units that faculty members developed in Year 1 and revised this year include specific strategies to involve students in the process of inquiry (Lindfors, 1999, Children's Inquiry). Most units also feature project-based learning opportunities (Katz, 1993, Engaging Children's Minds: The Project Approach).

Collaborative planning is highly recommended by the International Baccalaureate Organisation for schools that use inquiry learning (Newmann, 1994, Issues in Restructuring Schools). During collaborative planning time in Year 2, grade-level teams at Millbrook used the NCSCS to identify central ideas for inquiry learning in each PYP unit. Curriculum mapping

completed in Year 1 ensured that all appropriate content was included and that units did not overlap. In Year 2 teachers adapted the units to better engage students in the learning process. They added different learning modalities, used flexible pacing for instruction, and varied the complexity of the content (Tomlinson, 1999, The Differentiated Classroom).

Through this project, Millbrook seeks to develop a culture of inquiry in its classrooms. Inquiry learning encourages children to form deep understandings of important concepts (Brooks and Brooks, 1993, The Case for Constructivist Classrooms). It emphasizes the role of the teacher as mentor or guide, not just conveyor of knowledge (Boyer, 1995, The Basic School: A Community for Learning). Inquiry is a valuable means of addressing students' learning needs within a classroom as they ask questions, construct ideas, and formulate explanations (Morgan and Saxton, Asking Better Questions, 1994). In well-planned inquiry lessons, students conceive questions, think critically, contextualize facts and events, make generalizations, and generate new questions (Bourne, 2000, Taking Inquiry Outdoors; Barell, 2003, Developing More Curious Minds). The National Science Education Standards (2003) state that inquiry is basic to science education and should be a controlling principle in the ultimate organization and selection of student activities.

Making The PYP Happen (2000, International Baccalaureate Organisation) has continued to be a guiding force for staff members at Millbrook. This collection of sound practices for PYP classrooms outlines objectives and instructional methods that are appropriate for PYP. A second document, Primary Years Programme Assessment Document (2001), has also been very useful. It examines the purposes and principles of assessment and emphasizes the importance of formative and summative assessment of student progress. Based on this information, several staff development sessions have focused on improving the assessments for each curriculum unit. Teachers have developed rubrics and designed student self-assessments to be added to the units. Students in selected classes are beginning to collect and their preserve their work in electronic portfolios use these for presentations to classmates, teachers, and parents and other students.

Innovative Educational Methods and Practices at Millbrook Elementary School: In Year 1, the staff at Elementary School created a *Program of Inquiry*, a framework for Millbrook's PYP curriculum. This program, consisting of six transdisciplinary inquiry-learning modules for grades K-5, with a total of 36 curriculum units, was fully implemented in Year 2. Teachers had regular opportunities to reflect on the strengths and weaknesses of the units as they implemented them. They collaborated within and across grade levels to revise and improve the units.

Staff development in Year 2 focused on extending the *Program of Inquiry* — revisiting central ideas, improving inquiry methods, developing key questions, adding assessment activities — to ensure each unit was relevant, meaningful, and engaging. Revisions were minor for some grade levels and extensive for others. One grade level remapped all six of their units in relation to the NCSCS and changed the focus of instruction from thematic units to structured inquiry units. A few teachers, along with the PYP coordinator, began an exploration into student-led conferencing and incorporated these into the regular conference schedule. Students in their 1st, 3rd, and 4th grade classes were able to share structured inquiry activities with their parents and become actively involved in setting goals for themselves.

The *Program of Inquiry* continues to be greatly enhanced by Millbrook's science resource teacher, whose position is funded by the project. In order to offer students a broad-based perspective of the world around them, science is integrated throughout the day and is the basis of many inquiry units of study. In Year 1, the resource teacher worked closely with faculty to select and purchase resource materials in the sciences. In Year 2, over 20 additional science kits were purchased to allow students to "learn science by doing science." These resources enable Millbrook teachers to provide the hands-on, inquiry-based science explorations that teachers have planned as part of the *Program of Inquiry*. The school's leveled book room has been enhanced with texts appropriate for science based inquiry units. The science resource teacher and two classroom teachers attended a Science Kit workshop series in Year 2. They then assisted other teachers to use science kits to improve their science units and better assess their students' understandings in science.

Millbrook students' access to technology increased from a 5:1 ratio of students to computers in Year 1 to 2½:1 in Year 2. The most exciting technology improvement in Year 2 was the acquisition of two wireless mobile laptop computer laboratories. Each laboratory cart houses 15 laptop computers. All classes in grades K-5 completed laptop orientation, and teachers used the carts to bring the laboratory directly into their classrooms. Additional technology acquisitions in Year 2 included: 10 laser printers, 8 inkjet printers, 29 wireless laptops, 1 laptop cart, 12 digital cameras, 45 CD players, 147 headphones, 1 LCD projector, 30 mice, 15 desktop computers, 1 wide format printer, 4 scanners, 1 camcorder, Larson's math software program, 1 audio mixer, 1 audio/video mixer, 2 TV/VCR combos, and a set for TV productions.

The technology specialist oversees the selection and purchasing of all project-related hardware and software. In Year 2 she had also edited, enhanced and expanded the school website. A major duty in addition to these tasks was to provide appropriate training so that teachers were able to effectively integrate technology into their instruction. The technology specialist continued the "Wired Wednesday" sessions begun in Year 1. These after-school sessions are available on 18 Wednesdays interspersed throughout the year. Teachers received individualized training on technology skills applicable in their classrooms. Sessions in Year 2 included topics such as electronic report cards, class newsletters with desktop publishing, development of classroom websites, and integrated technology activities for PYP units. The technology specialist also offered training on individual pieces of software during grade-level planning times.

The technology specialist worked closely with the media specialist to provide technology-rich projects for all grade levels. Examples of successful Year 2 projects include:

- Student-developed ABC book for an inquiry unit on the five senses,
- 1st-grade — Power Point project on travel to Egypt,
- 3rd-grade — slideshow accessed through a shared directory, 3rd-grade Excel spreadsheets based on a student body vote,
- 4th-grade — research project on animals of the world, and a 4th-grade Power Point project on students family trees, and
- 5th-grade — project using Inspiration software to develop a graphic organizer on natural disasters.

Electronic portfolio development was slower than anticipated in Year 2. A day-long workshop on portfolios was cancelled due to inclement weather, and the school calendar was too full to allow rescheduling. This lag must be made up in Year 3. Teacher training will allow them to assist students in organizing, displaying, and archiving classroom products to represent their PYP achievements. In preparation for that, digital cameras were used extensively at all grade levels this year to capture three-dimensional projects, and scanners were employed to digitize student work.

A second language is a major component of the PYP, and Millbrook's two Spanish teachers work regularly with classroom teachers to plan and improve inquiry units. Numerous second-language resources have been added in Year 2 to enhance Year 1 purchases. New bilingual books and music, teacher resources, games, interactive activities, and displays support the *Program of Inquiry* as well as the Spanish language curriculum. Additional bilingual books, compact disks, videos, and movies have also been added to the media center.

PYP units require an action component. As they did in Year 1, many teachers and students chose a community service project to meet this requirement in Year 2. Service projects in Year 2 included collections for a food bank, organizing and running student government elections, and initiating a can recycling program campus wide.

As the name *International* Baccalaureate implies, international awareness of and appreciation for world diversity are important to the program. Thus PYP units are designed so that the central idea could be taught anywhere in the world. For example, a 2nd-grade inquiry unit focused on comparing weather conditions in five different world communities. Another unit on the science of sound featured international folk instruments. An inquiry into history prompted the 3rd grade students to invite alumni back to campus to share recollections of their years at Millbrook. The class also created a display board showing the history of changes over time at Millbrook. The school's daily news broadcast regularly incorporates international themes. The international kiosk created in Year 1 was augmented in Year 2 with two computers for online to access foreign languages, atlases, and music. The student council conducted another very successful fundraiser to purchase more international flags, which will be added to those already displayed on the school grounds.

Using Innovative Educational Methods to Meet Student Needs and Interests: The inquiry process is an educational mainstay of the PYP. As part of the process, teachers guide students in generating key questions for each unit of study. Questions evolve from student interests and needs; this strengthens student engagement with each unit. Lessons are carefully structured to allow active student participation in and direction for their learning, with the teacher serving as facilitator. Later in the unit students collectively agree upon an action component related to their question. They develop a plan, carry out the action, and reflect on its success after completion.

At weekly team meetings, teachers take time to reflect on student needs and develop activities to deepen their interest in and understanding of each unit. Integrating a second language at an early age also helps Millbrook meet student needs and interests. Students beginning in kindergarten take Spanish a minimum of twice each week for 30 minutes. The Spanish specialists work with classroom students to enhance each PYP unit using Spanish

vocabulary, culture, art, history, and so forth based on student inquiry for each unit. Second language teaching approaches are designed to help students become actively involved in learning.

Based on testing results from Year 1 that showed reading as an area of need, the staff chose reading comprehension as a school-wide focus for Year 2. Each teacher and specialist emphasized reading in every subject area. To assist in this effort, Millbrook applied for and received a $4500 United Arts Council grant to bring in artists and musicians. To link the arts and reading, these resource persons chose a single piece of children's literature to focus on particular reading objectives. Individual reading goals were developed for each student on a monthly basis. Students received incentives for reaching their goals. Leveled books purchased with Year 2 funds were used for weekly small group reading comprehension groups.

Joyner Elementary School, Project Objective 3-1d

Research Base of Innovative Methods and Practices at Joyner Elementary School: As in Year 1, inquiry and project-based learning have been key components of classroom instruction for Joyner's Language Explorations theme during Year 2. With this approach, lessons are structured to allow students to recognize problems and form questions ("The Art of Questioning," D. Wolf, Connect Magazine). The inquiry process is organized around the problems identified and questions related to them. Projects provide opportunities for students and student groups to formally structure, pursue, and present inquiry results (J. Polamn, 2000, Designing Project-Based Science: Connecting Learners Through Guided Inquiry). Multimedia tools are integrated into the inquiry process to complement students' learning styles and tap into the multiple intelligences (H. Gardner, 1993, Multiple Intelligences: The Theory in Practice; 1983, Frames of Mind). Teachers' lessons provided an overall structure, but students were able to choose project topics and identify traditional or multimedia formats best suited to presenting those topics (D. Moursund, 1999, Project-Based Learning Using Information Technology).

Because of the selection and purchase of appropriate hardware and software in Year 1, Joyner now has two different computer laboratories — the PC lab and the Mac lab — fully in use. Housing multimedia computers, scanners, and digital video and still cameras, these well-equipped laboratories helped students to produce products appropriate for their inquiry projects. The PC lab is large enough to allow whole-class instruction, and the smaller Mac lab allows small groups of students to work on written publications or produce iMovies. Depending on the project, students were able to incorporate video, graphics, and text, which could be hyperlinked to other text, graphics, or sound. The multimedia technology skills that students acquired enhanced the content knowledge gained from their projects (L. Katz & S. Chard, 2000, Engaging Children's Minds: The Project Approach). Regardless of the modality students used to present a project, the primary emphasis remained the content of the project (W. Penuel, B. Means, & M. Simpkins, 2000, "The Multimedia Challenge," Educational Leadership).

The magnet program at Joyner also focuses on inquiry and project-based learning methods. Its students have access to multimedia technology to develop higher-order thinking skills and address the multiple intelligences. The program addresses language learning needs of

language-minority students as well as native English-speakers. Its goal is for language minority students to acquire proficiency in English while maintaining and increasing proficiency in their primary language (S. Krashen, 1991). In addition, English-only students gain proficiency in a second language while maintaining high levels of academic achievement in English (Gillespie & Dickinson, 2002, *Two Way Immersion, A Title III Model Program*; Genesee, 1987; Harley, Allen, Cummins, & Swain, 1990). Research indicates that developmental two-way (dual language) immersion programs are more effective than traditional bilingual and English as a second language programs (W. P. Thomas & V. P. Collier, 1997, *School Effectiveness for Language Minority Students*). Joyner's bilingual environment supports development of both Spanish and English, an approach that should enhance students' self-esteem and cross-cultural understanding (Christian, 1994). In addition to academic success, the dual-language program continued to help students' social achievement (Cazabon, Lambert, & Hall, 1992, "Amigos").

Innovative Educational Methods and Practices Incorporated into the Joyner Language Explorations Theme: Joyner's two-way, or dual language, immersion program, again this year provided content instruction based on the North Carolina Standard Course of Study in two languages. Math, social studies, and science were offered in Spanish, and literacy skills (language arts and communication) were taught in English. Students developed proficiency in both Spanish and English by receiving instruction in both languages in classrooms comprised of both native English speakers and native Spanish speakers.

In Year 2, teachers at Joyner continued to use a constructivist approach that allowed students to actively construct new knowledge based on their prior knowledge. The following paragraphs give two examples.

1. Kindergarten students constructed a classroom community, building the walls with pictures of daily activities and pictures of staff members with whom they interacted, and a roof with an open framework. They learned a song in English and Spanish about the community they knew at school, which provided them "windows to the world outside."
2. Because of the way the "Country Project" was structured, 1st graders were able to expand their understanding of community from the neighborhood to the city, state, and then to countries. In working on the project, the were able to use their understandings, reflect upon them, and construct new knowledge. Students' research led to selection of data about cities, states and countries. They wrote about their findings in both English and Spanish. As a culminating activity to compare and contrast different countries, they created Hyper Studio projects about diversities and similarities. Students invited their families to Joyner for the presentations, and they also shared them with other first-grade classes. Thus, writing, Spanish, and technology — all three strands of Joyner's magnet theme — were represented in this project. This type of approach typified much of Joyner's project implementation in Year 2.

Successful in Year 1, the "Writer's Wall of Fame" bulletin board was continued in Year 2. Some 136 students had their works displayed during the year. In responding to a writing prompt given each month, students used their creativity and writing skills to author a story. The class and teacher then helped select that month's most exemplary work from each class to be featured on the Wall of Fame. Located in an often-used hallway, the wall displays work to be enjoyed as students, staff, parents, and visitors pass by each month.

As in Year 1, student clubs and activities were effective this year in extending Joyner's writing focus beyond the subject-area core curriculum. Representative activities are described below.

- Last year students produced Joyner's World or *La Palabra,* the bilingual newsletter for the school. This year, instead of publishing a school-wide newspaper, students worked with their Spanish teachers to write articles and produce classroom newspapers. Some of the student writings were included in parent newsletters.
- Friday club offered other opportunities to write in the second language (English for native Spanish speakers and Spanish for native English speakers).
- Technology, Spanish and writing were integrated when students of one Spanish teacher communicated electronically with students in the teacher's home country — Colombia. Both in class and through clubs, they emailed regularly and sent photographs and personal messages back and forth. These keypals (or "teclamigos") continue to grow in their ability to communicate effectively in their second language.

Joyner's Odyssey of the Mind team researched load-bearing structures and built a balsa wood structure to meet very specific size and weight limitations. They discovered how walls and bridges support weight. The structure that they created for the regional competition supported 658 pounds before it collapsed, earning the team the right to go on to the state level. They then placed in the state competition and went on to the world competition. As part of these competitions, the Odyssey of the Mind Team also trained for and competed in cooperative thinking tasks. Teams were required to work together, thinking through a problem and solving it in a given period of time.

In Year 2, parent volunteers continued to staff Joyner's JAG (Joyner's Authors' Guild) Publishing Center, which is an invaluable resource to the school. Thirty-seven volunteers donated a total of 1,158 hours to the center in Year 2. They assisted in publishing 377 individual works and 75 anthologies. Through JAG, students were able to see their work published in books, which could be checked out through the media center circulation desk. At the end of the school year, students were allowed to keep their published books. With 425 of Joyner's 433 students published in Year 2 either as individual authors or within anthologies, the center's goal that every student become a published writer in the course of the year was almost attained.

Faculty continue to see appropriate peer interactions as critical to the growth and development of all students at Joyner. With project-based learning, students have had opportunities to work individually and in groups. Peer interactions within and among groups can enhance students' ability to communicate and cooperate. Effective peer interactions are particularly important for student groups that work together on school-wide activities such as Joyner's bilingual television news show, *Buenos Días, Joyner*.

Buenos Días, Joyner, which featured segments in English and Spanish, is produced and broadcast from Joyner's video production studio — WJWD. The two daily news shows produced last year, one in Spanish and one in English, were combined in Year 2. With assistance from Joyner's two technology specialists, students manage the production, man the control room, and run the cameras. Students take turns doing Spanish and English segments.

Production is a hands-on learning experience, with a crew of students responsible for the news, weather, special reports, interviews, birthdays, and guest presenters. To gain a variety of experiences, students rotate through various tasks and positions. A conscientious effort was made in Year 2 to involve as many students as possible. Membership on the news crews rotates among 4th and 5th grade students. Students from all grade levels had an opportunity to lead the Pledge of Allegiance in both Spanish and English. Student authors, whose publications were posted monthly on the Joyner's Writers Wall of Fame, were also invited to read and discuss their work on the TV show. Students presented classroom projects and shared research findings about them. By the end of the year, 381 students from all grade levels had been part of the show.

The 3-5 Buddy Classes also provided opportunities to learn and reinforce effective student-to-student interaction skills. Students in grades 3-5 read with their K-2 counterparts during the school year. As the year progressed and the K-2 students gained proficiency in reading, the roles sometimes reversed, with K-2 students reading to their 3-5 buddies. Before the state End-of-Grade tests for grades 3-5, each K-2 class performed a cheer at Joyner's academic pep rally to encourage students in their Buddy Class to do their best on the test.

Fourth graders had opportunities to practice real-world skills. In a Free Enterprise Day activity, they learned about marketing, business relationships, supply and demand, and ethical behavior. Fourth graders in the Dual Language class had the opportunity to interview for the position of Center Facilitator in one of the Dual Language kindergarten classes. Applicants had to fill out a written application in Spanish giving their qualifications and explaining why they wanted to obtain "the job". Then they were interviewed by a Spanish speaking teacher assistant who determined the levels of proficiency in Spanish. Those who were "hired" enjoyed sharing the teaching role and the interaction possible with kindergarteners. They have developed their peer leadership skills in the process.

Whenever possible, technology and Spanish specialists worked together on class and small-group projects. They wanted to allow broad participation and optimum performance for all students. In one project, an animal study in 1st-grade, students conducted research on-line, wrote reports in English, and then used circle maps (a type of *Thinking Map*) to share the same information in Spanish. The project was displayed at the annual Science Fair so participants could have access to it in both languages.

<u>Using Innovative Educational Methods to Meet Student Needs and Interests:</u> The three points below from Joyner's recently adopted Value Statements formalize the school's commitment to meet student needs and interests.

- Providing a clean, safe, caring, nurturing and enriching environment that allows children to follow their dreams and grow to their maximum potential.
- Utilizing research-based best practices and technology to support quality instruction and meet individual student learning needs so that each child will achieve academically.
- Welcoming the contributions of students, staff, families and the community to foster the educational, social, and emotional development of our students.

There are numerous ways in which Joyner students can express themselves in both English and Spanish and even more ways for them to gain knowledge and understanding. Utilizing two

languages for instruction — teaching in two languages, instead of merely teaching two languages — can foster abstract and creative thinking, mental flexibility, and concept formation. Faculty members employ a variety of teaching strategies to ensure that each child has opportunities to create meaningful products, solve problems, and develop new knowledge. Students' motivation increases because they become engaged in their own learning. They make their own decisions about how they solve problems and find answers. The multimedia lab, challenging computer software, and the use of video technology also expand teaching and learning opportunities beyond the traditional classroom.

Powell Elementary School, Project Objective 3-1e

Research Base of Innovative Methods and Practices at Powell Elementary School: Powell's Visual and Performing Arts program provides an optimal learning experience for students. New technologies aid the integration of arts instruction into the core curriculum. The Year 1 Performance Report provided citations of the education research literature upon which Powell's program is based. Additional references of current literature are cited for this year's report.

Sources in the Year 1 report describe the positive academic and social benefits or music and arts education. These studies note improved overall academic performance of students participating in the visual arts, music, dance, and drama often. The Champions of Change (1999, E. B. Fiske) study, which offered the first comprehensive investigation of the relationship between arts education and achievement, was cited. Recent studies have shown that proper lessons in music education can increase aptitude in mathematics and science. They also suggest that performance art in all its forms (theater, music, and film) can assist emotional development and give students the social skills and flexibility to deal with challenges (Comerford, J., 2003, "Technology in Arts Education," PC Teach It).

Eric Jensen's Arts with the Brain in Mind (2001) and the works of Howard Gardner (e.g., 1983, Frames of Mind: The Theory of Multiple Intelligences; 1993, Multiple Intelligences: The Theory into Practice) continue to be important to the program. The Powell Visual and Performing Arts program strives to benefit all students by using active learning practices to teach and assess the arts in varied ways. In Year 2, students have continued to gain and present information through visual, interactive, nonlinear formats. They are actively engaged in the instructional process and can learn to be responsible for their own learning.

As explained in the Year 1 report, constructivist theories are important to the program at Powell. Students have opportunities to construct personal meaning based on their life experiences, both in and out of school (Bednar, et al, 1991, "Theory into Practice: How Do We Link?"). They learn through the use of practical application (McMahon, et al, 1993, "Hypermedia and Constructivism: Three Approaches to Enhanced Learning").

Advances in digital technology have influenced the visual arts to an enormous degree, and the educational process for learning about different forms of arts has changed accordingly. Vast amounts of material about any kind of art are available to anyone at any time (Comerford, J., 2003, "Technology in Arts Education," PC Teach It). Through this project, teachers' technology skills are expanded. They are prepared to access digital materials in a meaningful ways and supported in incorporating new technologies into project-based learning for their

students. Technology is "a powerful tool for instilling the values of inquiry, critical thinking, and action" (Elfrank-Dana, J. 2001, 'Teacher Vision in the New Media Classroom," Learning and Leading with Technology). With appropriate training and experience, teachers at Powell can guide their students in selecting and organizing the myriad of information available to them.

Just as teachers at Powell have access to and training in appropriate technologies through this project, students also have greater accessibility to computers and other new technologies. Increasing evidence supports one-to-one computing, that is one child per one computer. Research indicates that students with greater access to computers, particularly students assigned to laptops, "score higher in reading and writing assessments, demonstrate improved research and analysis skills, and engage in more collaborative work"(Carter, K. 2001, "Laptop Lessons: Exploring the Promise of One-to-One Computing," Technology and Learning). Powell's aim is to continue to increase accessibility of technology for its students as well as to build their skills for using it appropriately.

Innovative Educational Methods and Practices Incorporated into Powell's Visual and Performing Arts Theme: In Year 2, Powell has continued to offer an integrated instructional program that includes varied modes of intelligences and learning styles. The theory of multiple intelligences is applied through project-based learning, and technology is incorporated into both the core content areas and elective courses. The learning process includes authentic experiences — movement, music, interaction, hands-on activities, listening, talking, reading, and observing — to ensure that students acquire the understanding necessary for learning to take place.

The three strands of Powell's Visual and Performing Arts theme are: arts in the academic classroom, the arts elective program, and the infusion of community arts participation. As in Year 1, interaction of all three of these programmatic strands helped staff at Powell to create new ways to learn though the arts. One innovation in Year 2 provided a unique opportunity for kindergarten students. During the second semester, arts, physical education, and technology specialists at Powell worked in teams with classroom teachers. They planned and taught lessons that integrated two or more subject areas such as drama and physical education with language arts.

Training continued in Year 2 to enable teachers to enhance the core curriculum through high-quality arts experiences in their classrooms. Building on professional development in Year 1, the entire staff, including classroom teachers, teacher assistants, administrators, and arts specialists completed sessions in Year 2 that incorporated multiple intelligences (MI) approaches and team building. Participants were involved in active, hands-on training. Divided into teams, participants selected a school slogan and then worked together to dramatize it. Another approach was added to staff training in Year 2, with purchase of the *The Arts in Every Classroom: A Video Library, K-5, (*Annenberg/CPB). Teachers viewed these tapes either individually or within their grade levels. Next year, they will have scheduled opportunities during staff meetings to view and discuss selected tapes. Training will be expanded with opportunities to practice and reinforce these skills on the tapes.

In Year 2, artists-in-residence visited grade-level classrooms, not just arts classes. In Year 2, artists worked with language arts, cultural arts, and folk art groups, in addition to the

visual and performing arts. As well as working in the regular classroom, the language arts artist-in-residence taught two elective courses. Students' read their final products from this elective to a standing-room-only audience at the "Winter Solstice Arts Festival."

To increase its effectiveness in Year 3, the Arts Advisory Committee will expand its membership to include representatives from both community arts organizations and other area educational institutions. Its most effective work in Year 2 was to build on the program of two separate levels of arts-based electives that it established in Year 1. The program features exploratory arts electives and electives within the "Arts School." The exploratory electives, available to both the grade K-2 and the 3-5 levels, introduce students to some of the disciplines within the arts and are tied closely to the arts curriculum. In Year 2, four new exploratory electives were added: the Powell Radio Show, Graphic Arts and Advertising, Telling Stories with Video, and Garden Design. The more in-depth "Arts School" electives include performance classes and classes that integrate different art forms. These electives are intended to allow students and teachers to experience new educational methods and new performance levels. New "Arts School" electives offered in Year 2 were Broadway Bound, Good Morning School News, Web Design, Cultural Kaleidoscope, and Digital Photography.

After school Art Shops have been a successful addition to the Visual and Performing Arts program. Three, six-week after-school sessions were offered to students in Year 2. The number of students who attended was greater than expected, with the Art Shops serving approximately 90 students in Year 2. The Art Shops sessions offered two arts and technology courses: Midi Keyboard Composition and Movie Making. Instructors from the arts community were invited to teach the Art Shops. Powell was able to contract with a professional videographer to teach the the Movie Making Art Shop. The coordinating teachers are currently seeking additional arts professionals as instructors for the expanded Arts Shops program in Year 3, which will include visual arts and dance.

The Visual and Performing Arts program has also been strengthened this year by additional partnerships between Powell and professional arts community in Raleigh and the surrounding area. Fostering and strengthening arts connections continues to be a major focus of the Arts Coordinator. The variety and number of visiting artists and performing arts troupes that have come to Powell in Year 2 have helped raise student and faculty awareness of the ways in which arts can be integrated into the curriculum. In comparison to Year 1, more Powell students have become involved this year with off-campus performances at community festivals, music competitions, arts showcases, and visual arts exhibits.

<u>Using Innovative Educational Methods to Meet Student Needs and Interests</u>: Students at Powell go through the process of selecting electives at the beginning of the first and third quarters. Students, parents, and teachers, attend an elective "fair" in which they are acquainted with the content, approach, and organization of each elective to be offered during the upcoming quarters. The teacher and parents determine which elective offerings would best fit the child's educational needs, and then the child is given the options from which to choose.

Students in K-2 are given two electives choices per quarter, and students in grades 3-5 are given three. In addition, K-2 students attend one class per week in each of the arts disciplines.

In Year 2, schedules of specialists who would be teaching electives were adapted to address the needs of students entering kindergarten. During semester one, kindergarten students went to the specialists' classroom for their first elective. For the second elective, specialist teachers came to their classrooms. This schedule had several benefits. Going to the specialist's classroom enabled students to work in a studio-like setting. However, when specialists came to the students' classroom, they could get to know their specialist teachers in a familiar learning environment. This also provided an opportunity for the classroom teacher to observe how the specialists work with students, to see what s/he actually does. Finally, the classroom teacher was able to observe her or his students' interactions and artistic strengths while someone else was teaching.

Students in grades 3 to 5 attended a class in one of the arts each Friday. It was during these "arts specials" that students were identified by the arts specialists for participation in the "Arts School" elective program. During Year 2, the Friday afternoon "Arts Block" begun in Year 1 was continued. This block of 1½ hours provided time when students could participate in extended rehearsals, special arts field trips, or visiting artists' residencies. This was also a time when arts specialists could meet to integrate offerings within their disciplines.

Project Objectives 3-1a-e, Brooks Elementary, Joyner Elementary, Millbrook Elementary, Powell Elementary, Moore Square Middle

The preceding paragraphs describe various strategies that project schools used to identify student needs and interests. School staff members' opinions about the project's ability to help meet these needs and interests were assessed in the WCPSS Evaluation and Research department spring 2003 staff survey. As reported in Table 45, 80% or more of staff members responding *agreed* or *strongly agreed* that the grant was of assistance in this area. The Year 2 benchmark was 80% staff agreement at Joyner, Millbrook, and Powell and 70% at Brooks and Moore Square. These levels were met or exceeded by all five schools.

Table 45. Year 2 (Spring 2003) Staff Survey Results Related to Student Needs and Interests

Survey Item	School	Percent Agree/ Strongly Agree
The magnet grant assists us in meeting the needs and interests of our students.	Brooks	95
	Joyner	84
	Millbrook	93
	Powell	89
	Moore Square	96

BENCHMARK CHART 3-2 a-e

WCPSS Project Objectives 3-2 a-e:	By June 30, 2004, **Moore Square Museums Magnet Middle School, Brooks Museums Magnet Elementary School, Millbrook Magnet Elementary School: An International Baccalaureate Primary Years Programme, Joyner Language Explorations Magnet Elementary School,** and **Powell Visual and Performing Arts Magnet Elementary School** will have implemented innovative classroom methods and practices which promote student achievement as evidenced by: • annual project report describing the degree to which new classroom methods and practices are research-based, innovative, and promote student achievement; • classroom observations showing that 90% of staff are effectively incorporating innovative educational methods and practices; • surveys of staff members' perceptions of the effectiveness of innovative methods in promoting student achievement; and • surveys of parents' perceptions of the effectiveness of innovative methods in promoting student achievement.		
Indicator 3-2	**Year 2 Benchmark**	**Year 2 Actual**	**Benchmark Met? Yes/No**
Innovative educational methods and practices. Magnet programs incorporate innovative educational methods and practices that promote student achievement.	• Annual project report references and annotates any new research available about innovative educational methods and provides current descriptions of classroom innovations in use at each school	• The previous section of this report (Objective 3-1 a-e) present narrative sections for each school, that update the research base, give current information about themes and elements, and explain how student needs and interests continue to be identified and met.	See Objective 3-1 a-e
	• 85% of critical* staff will be observed incorporating innovative educational methods and practices effectively in their classrooms, with 90% of the remaining** staff observed piloting them appropriately, (80% of critical* staff at Brooks and Moore Sq. will be observed piloting innovative educational methods and practices in their classrooms)	SCHOOL / Number Observed / Percent Implementing Brooks 7 100 Joyner 6 100 Millbr. 6 100 Powell 6 100 Moore Sq. 3 100	Brooks Yes Joyner Yes Millbr. Yes Powell Yes Moore Sq. Yes
Note: Critical* staff, identified in Year 1, are teachers, specialists, and administrators who provide a foundation for dissemination of the theme throughout each school in Years 2 and 3. In Year 2, few critical staff were actually teaching in the classroom; thus, most classroom observations involved remaining** staff, 90% of whom were expected to be piloting their school's theme appropriately.	• 80% staff believe that the program's innovative educational methods promote student achievement, (70% of Brooks and Moore Sq. staff)	• Spring 2003 staff survey results indicate 80% or more of respondents *agree/strongly agree* that grant innovations promote student achievement.	Brooks Yes Joyner Yes Millbr. Yes Powell Yes Moore Sq. Yes
	• 80% of parents believe that each school's innovative educational methods and practices promote student achievement, (70% at Brooks and Moore Sq.)	• Spring 2003 parent survey results indicate 80% or more of respondents *agree/strongly agree* education program is high quality and schools are *excellent/good* at helping their children learn	Yes Brooks Yes Joyner Yes Millbr. Yes Powell Yes Moore Sq.

Project Objectives 3-2 a-e, Brooks Elementary, Joyner Elementary, Millbrook Elementary, Powell Elementary, Moore Square Middle

Year 2 benchmarks for this objective required that teachers implement innovative educational methods and practices effectively in their classrooms. Classroom observations were used to verify appropriate utilization of educational innovations related to the project. At Brooks and Moore Square, the two schools in their first implementation year, 80% of critical staff members were expected to be observed effectively incorporating innovations. As explained earlier, critical staff for these schools was comprised of core team members. Due to the fact that few core team members taught classes, the evaluator asked Brooks and Moore Square coordinates to select a small sample of teachers to showcase practices for her observations. At Joyner, Millbrook, and Powell, 90% of teachers were expected to effectively implement project innovations. From a list of all classroom teachers at each of these schools, the evaluator selected a random sample of teachers and alternates from each grade level. In February and March 2003, she conducted a total of 28 observations lasting from 45 minutes to 2 hours each.

Prior to the observations, the evaluator reviewed the project proposal to identify elements that each school had listed as essential for its theme. A school's identified elements were then compiled into an observational checklist containing a rating scale to assess the effectiveness with which teachers implemented each element during the observation period. Factors such as classroom management, classroom arrangement, and teacher/student interactions were listed along with a rating scale to evaluate their effectiveness. Because Year 2 was the first implementation year at Brooks and Moore Square, the evaluator used field notes for classroom observations at these schools. This was consistent with the method used in the three schools who were then in their first year of operation during Year 1.

Tables 47 through 51 report results of individual observations at each school. Across all 28 observations, the evaluator concluded that theme-related elements and classroom practices were being used effectively (Table 46). Brooks and Millbrook also had additional classroom observations during Year 2. A Paideia consultant observed in every classroom at Brooks. She took extensive notes and provided feedback to individual teachers and to the museums coordinating teacher. Classroom observations were part of Millbrook's IB authorization site visit as well. Teachers found feedback from the IB site visitor to be very helpful.

Table 46. Year 2 Classroom Observations of Selected Teachers Piloting Innovative Educational Methods and Practices

School	# Teachers Observed	# Teachers Implementing Theme Appropriately
Brooks Elementary	7	7
Joyner Elementary	6	6
Millbrook Elementary	6	6
Powell Elementary	6	6
Moore Square Middle	3	3

Table 47. Brooks Elementary School Year 2 Classroom Observations

Observational Checklist Description	Observation Date	Grade Level and/or Subject Area	Observer and Outcome
Museums coordinator/planner identified one critical staff member and a representative sample of other teachers across subjects and grade levels. Evaluator's field notes were used to determine the level of progress in implementing the theme.	3/4/03	Kindergarten Morning Meeting	Observer: Project Evaluator Outcome: Good progress in implementing theme.
	3/4/03	Kindergarten Morning Meeting	Observer: Project Evaluator Outcome: Good progress in implementing theme.
	3/4/03	3rd Grade Mathematics	Observer: Project Evaluator Outcome: Good progress in implementing theme.
	3/5/03	5th Grade AG Math	Observer: Project Evaluator Outcome: Good progress in implementing theme.
	3/5/03	4th Grade Science, Technology	Observer: Project Evaluator Outcome: Good progress in implementing theme.
	3/5/03	4th Grade Paideia Seminar	Observer: Project Evaluator Outcome: Good progress in implementing theme.
	3/5/03	4th Grade Art	Observer: Project Evaluator Outcome: Good progress in implementing theme.

Table 48. Joyner Elementary School Year 2 Classroom Observations

Observational Checklist Description	Observation Date	Grade Level and/or Subject Area	Observer and Outcome
Statements of 7.essential elements and 6 classroom factors and that support innovations for Joyner's theme were taken from the project proposal and incorporated into a Classroom Observation Checklist. The observer rated the level of effectiveness of implementation for each factor and element.	3/10/03	Kindergarten Math, Literacy, English, Spanish	Observer: Project Evaluator Outcome: Effective implementation of essential elements and classroom factors to support innovation
	3/10/03	2nd Grade Literacy	Observer: Project Evaluator Outcome: Effective implementation of essential elements and classroom factors to support innovation
	3/10/03	4th Grade Language/Social Studies	Observer: Project Evaluator Outcome: Effective implementation of essential elements and classroom factors to support innovation
	3/10/03	5th Grade Reading	Observer: Project Evaluator Outcome: Effective implementation of essential elements and classroom factors to support innovation
	3/11/03	3rd Grade Literacy	Observer: Project Evaluator Outcome: Effective implementation of essential elements and classroom factors to support innovation
	3/11/03	1st Grade Science (taught in Spanish)	Observer: Project Evaluator Outcome: Effective implementation of essential elements and classroom factors to support innovation

Table 49. Millbrook Elementary School Year 2 Classroom Observations

Observational Checklist Description	Observation Date	Grade Level and/or Subject Area	Observer and Outcome
Statements of 9 essential elements and 6 classroom factors that support innovations for Millbrook's theme were taken from the project proposal and incorporated into a Classroom Observation Checklist. The observer rated the level of effectiveness of implementation for each factor and element.	3/12/03	Kindergarten Circle time, Phonics, Centers	Observer: Project Evaluator Outcome: Effective implementation of essential elements and classroom factors to support innovation
	3/12/03	3rd Grade History, Literacy	Observer: Project Evaluator Outcome: Effective implementation of essential elements and classroom factors to support innovation
	3/12/03	4th Grade North Carolina History	Observer: Project Evaluator Outcome: Effective implementation of essential elements and classroom factors to support innovation
	3/12/03	5th Grade Science	Observer: Project Evaluator Outcome: Effective implementation of essential elements and classroom factors to support innovation
	3/13/03	1st Grade Science	Observer: Project Evaluator Outcome: Effective implementation of essential elements and classroom factors to support innovation
	3/11/03	2nd Grade Science	Observer: Project Evaluator Outcome: Effective implementation of essential elements and classroom factors to support innovation

Table 50. Powell Elementary School Year 2 Classroom Observations

Observational Checklist Description	Observation Date	Grade Level and/or Subject Area	Observer and Outcome
Statements of 9 essential elements and 6 classroom factors that support innovations for Powell's theme were taken from the project proposal and incorporated into a Classroom Observation Checklist. The observer rated the level of effectiveness of implementation for each factor and element.	3/25/03	3rd Grade Literature Circles	Observer: Project Evaluator Outcome: Effective implementation of essential elements and classroom factors to support innovation
	3/25/03	4th Grade Math (Fractions demonstrated with performances)	Observer: Project Evaluator Outcome: Effective implementation of essential elements and classroom factors to support innovation
	3/25/03	1st Grade Math	Observer: Project Evaluator Outcome: Effective implementation of essential elements and classroom factors to support innovation
	3/26/03	2nd Grade Language Arts	Observer: Project Evaluator Outcome: Effective implementation of essential elements and classroom factors to support innovation
	3/26/03	Kindergarten Language Arts	Observer: Project Evaluator Outcome: Effective implementation of essential elements and classroom factors to support innovation
	3/26/03	5th Science	Observer: Project Evaluator Outcome: Effective implementation of essential elements and classroom factors to support innovation

Table 51. Moore Square Middle School Year 2 Classroom Observations

Observational Checklist Description	Observation Date	Grade Level and/or Subject Area	Observer and Outcome
Museums coordinator identified three typical classes, one traditional and two with a museums focus. Evaluator's field notes were used to determine level of progress in implementing the theme.	2/27/03	7th Grade Social Studies (Museum Visit and Classroom Follow-up)	Observer: Project Evaluator Outcome: Good progress in implementing theme.
	2/27/03	7th Grade Mathematics	Observer: Project Evaluator Outcome: Good progress in implementing theme.
	2/28/03	6th Grade Social Studies (Museum Visit)	Observer: Project Evaluator Outcome: Good progress in implementing theme.

In addition to using innovations in their classrooms, staff members at project schools were also expected to believe that these new methods would help promote student achievement. The benchmarked staff survey expectation for Year 2 was that 80% or more of staff members responding at Joyner, Millbrook, and Powell would *agree* or *strongly agree* that this was the case. At Brooks and Moore Square the benchmark was 70%. Positive opinions among staff members at all five schools were above 80% (Table 52) indicating that they were all successful in meeting this benchmark.

Table 52. Year 2 (Spring 2003) Staff Survey Results Related to Student Achievement

Survey Item	School	Percent Agree/ trongly Agree
The magnet grant helps promote student achievement.	Brooks	93
	Joyner	88
	Millbrook	95
	Powell	82
	Moore Square	96

The WCPSS Evaluation and Research department also conducts parent surveys. Project benchmarks for the spring 2003 parent survey stipulated that at least 80% of Joyner, Millbrook, and Powell parents would feel that innovations underway at these schools help their children learn in the subject areas, the arts, and technology. The required percentage for Brooks and Moore square was 70%. Opinions expressed by parents were very favorable for all schools. In most instances, 80% or more of parents responding expressed positive opinions, with numerous instances of more that 90% agreement about the high quality of the educational programs at project schools (Table 53). Therefore, the Year 3 parent survey benchmarks were deemed to have been met (See decision rules below).

Decision Rules Used to Assess Objective 3-2 Benchmarks (Parent Survey, Quality of Instruction)	
Item-Level Analysis	School Analysis
If 80% (70% for Brooks and Moore Square) or more of respondents choose *agree/strongly agree* or *excellent/good* for an item, that item meets the benchmark.	If half or more of all items for a school meet the benchmark, the school meets the benchmark.

The three items on which less than 80% of respondents expressed positive opinions were visual and/or performing arts at Millbrook (74%), computers and technology at Millbrook (79%), and science at Powell (75%). Visual and performing arts are not a major emphasis of the IB PYP at Millbrook, but computers and technology are very important. Technology training of teachers in Year 2 was successful, and students had numerous opportunities to use computers in and for their learning. Staff at Millbrook will want to consider why parent opinions about computers and technology are not more positive and take steps to demonstrate to parents the technology capabilities of students and teachers at the school. During their instructional planning sessions for Year 3, administrators and teachers at Powell need to be aware that parents' opinions about science learning at their school are not nearly as positive as they are for other subject areas. They must consider the reasons for this and make plans to ensure that their science program is an effective one. They should also determine whether their thematic emphasis on the performing arts is affecting either the quality of or perceptions about the science program.

Table 53. Year 2 Parent Survey Results (Spring 2003)

Brooks Overall Survey Items	Brooks *% Agree/Strongly Agree*
My child's school provides a high quality educational program.	94
My child is given challenging work in all classes.	89
Brooks Content-Specific Survey Items	**Brooks**
Rate this school in helping your child learn:	*%Excellent/Good*
Reading	92
Writing	89
Mathematics	91
Social studies	88
Science	86
Visual and/or performing arts	81
Computers and technology	81

Table 53 (continued)**. Year 2 Parent Survey Results (Spring 2003)**

Joyner Overall Survey Items	**Joyner** *% Agree/Strongly Agree*
My child's school provides a high quality educational program.	92
My child is given challenging work in all classes.	90
Joyner Content-Specific Survey Items	**Joyner** *%Excellent/Good*
Rate this school in helping your child learn:	
Reading	92
Writing	93
Mathematics	94
Social studies	89
Science	84
Visual and/or performing arts	86
Computers and technology	85
Millbrook Overall Survey Items	**Millbrook** *% Agree/Strongly Agree*
My child's school provides a high quality educational program.	93
My child is given challenging work in all classes.	92
Millbrook Content-Specific Survey Items	**Millbrook** *%Excellent/Good*
Rate this school in helping your child learn:	
Reading	88
Writing	88
Mathematics	92
Social studies	87
Science	86
Visual and/or performing arts	74
Computers and technology	79
Powell Overall Survey Items	**Powell** *% Agree/Strongly Agree*
My child's school provides a high quality educational program.	91
My child is given challenging work in all classes.	86
Powell Content-Specific Survey Items	**Powell** *%Excellent/Good*
Rate this school in helping your child learn:	
Reading	89
Writing	85
Mathematics	91
Social studies	80
Science	75
Visual and/or performing arts	94
Computers and technology	89

Table 53 (continued). **Year 2 Parent Survey Results (Spring 2003)**

Moore Square Overall Survey Items	Moore Square *% Agree/Strongly Agree*
My child's school provides a high quality educational program.	86
My child is given challenging work in all classes.	85
Moore Square Content-Specific Survey Items	**Moore Square**
Rate this school in helping your child learn:	***%Excellent/Good***
Reading	89
Writing	83
Mathematics	81
Social studies	91
Science	83
Visual and/or performing arts	92
Computers and technology	83

PROGRESS IN ACHIEVING PURPOSE 4 OBJECTIVES

MSAP PURPOSE 4: *Courses of instruction within magnet schools that will substantially strengthen the knowledge of academic subjects and the grasp of tangible and marketable vocational skills of students attending such schools.*
MSAP OBJECTIVE 4: *Federally funded magnet programs strengthen students' knowledge of academic subjects and skills needed for successful careers in the future.*

The preceding two sections describe successful programmatic activities undertaken by project schools during Year 2 so that they are better able to strengthen students' academic knowledge and skills for future careers.

- Purpose 2 outlines the continuing implementation of instructional innovations during the second year of the project and verifies the alignment of related Year 2 professional development to the state curriculum. Generally favorable staff survey results about learning new instructional methods through Year 2 staff development are also cited. Curriculum developed in Year 1 was reviewed in Year 2 to verify its alignment with state content and performance standards.
- Purpose 3 summarizes new research sources added in Year 2 to supplement and extend the research base for each school's theme. Survey results indicate that high percentages of staff members at each school agree that the project is assisting them to meet student needs and interests. They also believe that instructional innovations at their school promote student achievement. Classroom observations indicate that project innovations are being implemented appropriately. Respondents to the parent survey believe that these innovations are helping their children learn.

Results from North Carolina's End-of-Grade tests that are part of the state ABCs accountability system are used to determine if Year 2 student achievement benchmarks for grades 3-8 were met. For students in grades K-2, results of the WCPSS literacy and mathematics assessment profiles are used. Benchmark Charts related to each Purpose 4 objective summarize successes and shortfalls in meeting expectations for Year 2. In the far right-hand column of the Benchmark Charts, a "Yes" or "No" denotes whether or not each benchmark in that chart was met. Figures following each chart depict the actual data points used to evaluate individual benchmarks.

All four elementary schools met the state ABCs High Growth standard and had from 85 to 88% of students scoring at or above grade level on the EOG tests. Moore Square did not meet the state's Expected or High Growth standard, but did have 86% of students performing on or above grade level. In spite of this, participating schools met only 14 of the 48 student achievement benchmarks established for Year 2. To a certain extent, this lack of success with over two-thirds of the achievement benchmarks is an artifact of the high performance level of the system as a whole. With 97% of schools reaching Expected or High Growth and 91% of students on or above grade level, Wake County is one of the highest performing districts in the state. Project benchmarks, calibrated to this high standard, require that participating schools reach or exceed the system levels. Nevertheless, administrators and staff members at all five schools in the project take any benchmark shortfalls seriously. They carefully review the evaluation results, use them to identify specific areas of weakness, and implement plans for improvement. These efforts are described at the end of Purpose 4.

BENCHMARK CHART 4-1.1 a-e

WCPSS Project Objectives 4-1.1 a-e:	By June 30, 2004, as a result of the implementation of new and significantly revised magnet themes, the state ABCs accountability district Growth Composite for **Moore Square Museums Magnet Middle School, Brooks Museums Magnet Elementary School, Millbrook Magnet Elementary School: An International Baccalaureate Primary Years Programme, Joyner Language Explorations Magnet Elementary School,** and **Powell Visual and Performing Arts Magnet Elementary School** will exceed the Growth Composite for elementary and middle schools in the district as a whole; the schools' ABCs Performance Composites will be equal to or greater than district elementary and middle schools; and the schools will meet or exceed the WCPSS Board of Education Goal 2003 of having 95% of 3rd and 8th graders performing at or above grade level by 2003, as measured by: • scale scores and performance levels on the state accountability district End-of-Grade Reading and Mathematics tests (grades 3-8); • focused holistic scores on the state accountability district writing assessment (grades 4 and 7); and • official results from the WCPSS Evaluation and Research Department annual publication, *Measuring Up : Progress Towards the 95% Goal*.		
Indicator 4-1	**Year 2 Benchmark**	**Year 2 Actual**	**Benchmark Met? Yes/No**
Improved student achievement. Magnet students show achievement gains in core subjects, as well as in applied learning skills, which meet or exceed the gains for students in the district as a whole. (Applied learning skills include: higher order thinking skills, individual problem-solving ability, communication skills, computer skills, and ability to contribute to group projects.)	**ABCs Growth Composite** • Schools' ABCs Expected Growth Composite will equal or exceed the Expected Growth Composite for the district as a whole • When results are dis-aggregated by minority status: Schools' Expected Growth Composite will equal or exceed that of the district for both minority and nonminority students	All Students (Figure 1) Brooks Expected Growth > District Joyner Expected Growth > District Millbr. Expected Growth > District Powell Expected Growth > District Moore Sq. Expected Growth < District Minority Students (Figure 1) Brooks Expected Growth < District Joyner Expected Growth > District Millbr. Expected Growth > District Powell Expected Growth > District Moore Sq. Expected Growth < District Nonminority Students (Figure 1) Brooks Expected Growth > District Joyner Expected Growth > District Millbr. Expected Growth > District Powell Expected Growth < District Moore Sq. Expected Growth < District	All Students Brooks Yes Joyner Yes Millbrook Yes Powell Yes Moore Sq. No BOTH Minority and Nonminority Brooks No Joyner Yes Millbrook Yes Powell No Moore Sq. No

Indicator 4-1, continued	Year 2 Benchmark	Year 2 Actual	Benchmark Met? Yes/No
	ABCs Performance Composite • Schools' ABCs Performance Composite will equal or exceed that of the district as a whole	All Students (Figure 2) Brooks *Performance Composite < District Joyner Performance Composite < District Millbr. Performance Composite < District Powell Performance Composite < District Moore Sq. Performance Composite < District Minority Students (Figure 2) Brooks Performance Composite < District Joyner Performance Composite < District Millbr. Performance Composite < District Powell Performance Composite < District Moore Sq. Performance Composite < District Nonminority Students (Figure 2) Brooks Performance Composite = District Joyner Performance Composite = District Millbr. Performance Composite < District Powell Performance Composite > District Moore Sq. Performance Composite > District *(see Decision Rules in Table 34)	All Students Brooks No Joyner No Millbrook No Powell No Moore Sq. No BOTH Minority and Nonminority Brooks No Joyner No Millbrook No Powell No Moore Sq. No
	• When Performance Composite results are disaggregated by minority status: 1. Schools' Performance Composite will equal or exceed that of the district for both minority and nonminority students 2. Both groups will be expected to gain, with gains reviewed to determine if differences in proficiency between minority and nonminority students at the schools are less than the previous year	Minority and Nonminority Gains (Figure 3) Min. Nmin. Gap Brooks Y Y Y Joyner Y Y Y Millbr. Y Y Y Powell N Y N Moore Sq. ΔNA NA NA Δ(No 01-02 comparison scores because Moore Sq. opened in 02-03.)	Minority/Non-minority Brooks Yes Joyner Yes Millbrook Yes Powell No Moore Sq. NA

Indicator 4-1, continued	Year 2 Benchmark	Year 2 Actual	Benchmark Met? Yes/No
	Board Goal 2003 • 95% of 3rd/8th graders will be at or above grade level on the End-of-Grade Reading and Math tests overall and by minority status	*All Students (Figures 4 and 5) Gr Read. Math Brooks 3 N N Joyner 3 N N Millbr. 3 N N Powell 3 N N Moore Sq 8 ΔNA NA Minority Students (Figures 4 and 5) Gr Read. Math Brooks 3 N N Joyner 3 N N Millbr. 3 N N Powell 3 N N Moore Sq 8 NA NA Nonminority Students(Figures 4 and 5) Gr Read. Math Brooks 3 N Y Joyner 3 Y Y Millbr. 3 N Y Powell 3 Y Y Moore Sq 8 NA NA *(see Decision Rules in Table 36) Δ(In 2002-03, its initial year, Moore Square enrolled 6th and 7th but not 8th graders.)	Brooks No Joyner No Millbrook No Powell No Moore Sq. NA Brooks No Joyner No Millbrook No Powell No Moore Sq. NA Brooks No Joyner Yes Millbrook No Powell Yes Moore Sq. NA
	• Annual project report will describe planned adjustments to the project based on evaluation outcomes	Planned project adjustments based on evaluation results are described at the end of Purpose 4.	

ABCs Expected Growth Composite

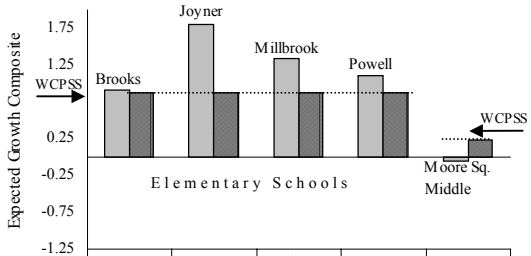
The majority of student achievement benchmarks for Purpose 4 are based on results from North Carolina's ABCs accountability system. The End-of-Grade (EOG) Reading and Mathematics tests that are part of the system measure attainment of goals and objectives of the state curriculum. Both the ABCs Growth and Performance composites are being used to evaluate student achievement at project schools. The first benchmark for Purpose 4, Objective 4-1.1, is based on the ABCs Expected Growth Composite. For each project school, the benchmark anticipates that the Expected Growth Composite for students overall, as well as minority and nonminority students, will equal or surpass district composites for these same groups. As explained in the Project Status section of this report, the state accountability system employs EOG test results to calculate a growth composite for each school in the state. This pre/post-test model gauges student performance against the previous year. Schools achieve Expected Growth if the composite indicates, on average, one year's growth for one year of instruction. Because the model looks at differences between pre- and post-test scores, a growth composite of 0.0 or greater indicates that Expected Growth has been met.

Expected Growth Composites for WCPSS and project schools are reported in Figure 1. Year 2 benchmarks require not only that project schools meet the state's expected growth standard but also that their Expected Growth Composites equal of exceed the district. With data aggregated for all students, the four elementary schools in the project attained ABCs Expected Growth Composites that exceeded the composite for all students in the system, thereby meeting their Year 2 benchmarks. With data disaggregated by minority/nonminority status, Joyner and Millbrook also met the Year 2 benchmark because their Expected Growth Composites for <u>both</u> minority and nonminority students were above WCPSS. Neither Brooks' nor Powell's expected growth was at or above the district for both of these groups. Expected growth at Brooks outpaced the system for nonminority students only; whereas, at Powell, only growth for minority students was greater than for minority students in the system as a whole (Figure 1).

Moore Square's negative Expected Growth Composite (Figure 1) meant that the school did not meet the state standard, nor did it meet the project benchmark of having students' expected growth equal to or greater than WCPSS. With scores disaggregated by minority status, Moore Square did not meet the state standard or make the project benchmark for either minority or nonminority students. Steps that Moore Square has taken and will take to pinpoint and deal with growth shortfalls are described at the end of this section. Year 2 of the project was the school's initial year to enroll students. Enrollment included grades 6 and 7, but not 8th grade. It is possible that the school's Expected Growth was adversely affected by the absence of 8th graders. In most WCPSS middle schools, a substantial number of 8th graders are enrolled in Algebra I for which the state Algebra I End-of-Course test is required. Because students taking Algebra I in 8th grade have placed into it early (i.e., before 9th grade), many of them score well on the Algebra I test. These scores, which are factored into the growth composite, have a positive impact on growth composites for many middle schools. Without 8th-grade students, this could not occur for Moore Square.

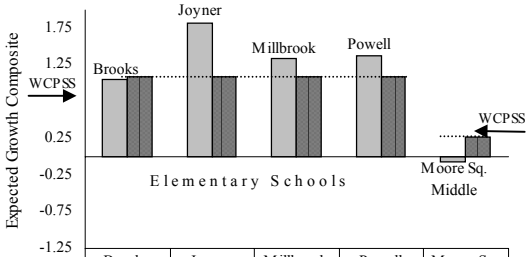
Figure 1. School and District Year 2 ABCs Expected Growth Composites All Students and Disaggregation by Minority Status

All Students



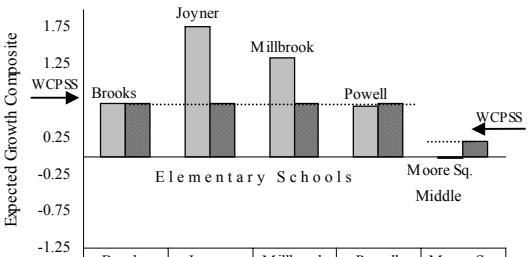
	Brooks	Joyner	Millbrook	Powell	Moore Sq.
School	0.91	1.8	1.34	1.1	-0.05
WCPSS	0.87	0.87	0.87	0.87	0.23

Minority Students



	Brooks	Joyner	Millbrook	Powell	Moore Sq.
School	1.06	1.82	1.34	1.37	-0.08
WCPSS	1.09	1.09	1.09	1.09	0.26

Nonminority Students



	Brooks	Joyner	Millbrook	Powell	Moore Sq.
School	0.73	1.77	1.34	0.68	-0.02
WCPSS	0.73	0.73	0.73	0.73	0.21

ABCs Performance Composite

Objective 4-1.1 benchmarks employ the ABCs Performance Composite. This composite does not use a pre/post model, but looks instead at performance within the current school year. The state applies pre-established cut points to convert EOG scale scores to level scores classifying student performance into four categories: well below, below, on, or above grade level. Each school then receives a Performance Composite representing its percent of students on or above grade level in reading and mathematics for the current school year. Performance Composite benchmarks for this project required that participating schools' composites equal or exceed those of the system, which was not the case for any of the four elementary schools in the project, or for Moore Square middle school (Figure 2).

Schools' composites were also supposed to be on a par with or above the district for both minority and nonminority students. This did not occur at Brooks, Joyner, Millbrook, or Powell elementary schools, or at Moore Square middle. Thus, no school met the benchmark for disaggregated results (Figure 2). Although not sufficient to meet the benchmark for disaggregated results, project elementary schools' Performance Composites for minority students, which ranged from 78.0% to 81.5%, were close to the WCPSS minority composite of 82.4%. For nonminority elementary students, Brooks' and Joyner's Performance composites of 97.2% and 96.8%, respectively, were approximately equal to the districtwide nonminority composite of 96.9%. Powell's nonminority composite of 98.4 exceeded the district. Schools are aware of these deficits, and the plans they have made to deal with them are described at the end of this chapter.

As discussed earlier, the growth of students at Moore Square from the 01-02 to the 02-03 school year was not sufficient to meet the state's Expected Growth Composite. However, the school's percentage of students who were proficient on the 02-03 EOG tests was relatively high and fairly similar to the district (Figure 2). At 86.1%, the school's Performance Composite for students overall was relatively close to the district's 89.4%. Moore Square's 77.7% composite for minority students was also similar to 78.8% for minority students in district middle schools. The 97.8% Performance Composite for nonminority students at Moore Square was above WCPSS, which had 96.1% nonminority composite.

Figure 2. School and District Year 2 ABCs Performance Composites All Students and Disaggregation by Minority Status

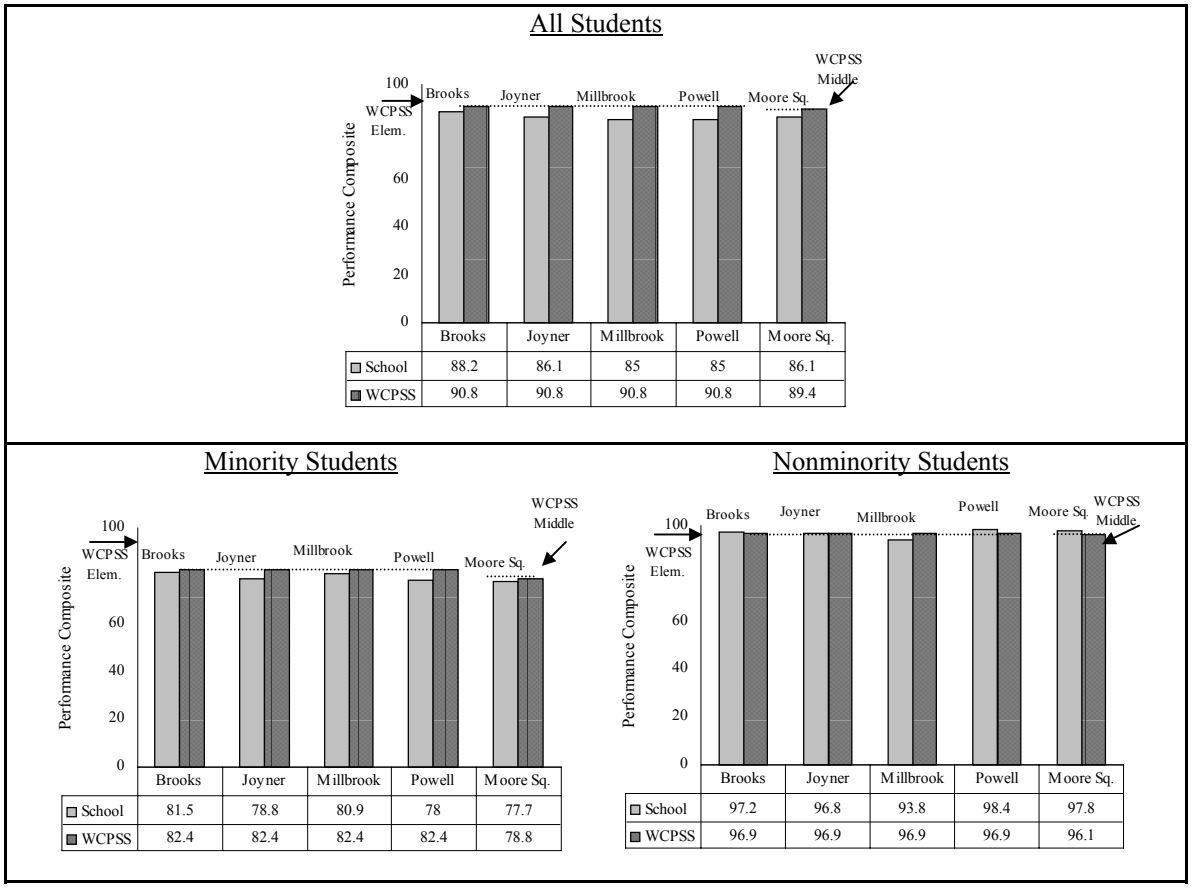


Table 34. Decision Rules to Compare WCPSS and Schools' Performance Composites

Adjudicating WCPSS versus Project Schools' Performance Composites
(Figure 2)

- In its reports on the state ABCs, the WCPSS Evaluation and Research Department customarily rounds Performance Composite percentages to the nearest tenth. Because of this precedent, one decimal place is retained in this report, and is considered the *full Performance Composite*.
- In the majority of judgments about whether or not a school's Performance Composite is equal to or greater than the WCPSS Performance Composite, the school and district *full Performance Composites* are compared.
- In the few instances where a school's *full Performance Composite* is within five tenths of a percent of the district *full Performance Composite*, the school and district composites are judged to be equivalent.

In addition to setting student achievement targets for Year 2, the ABCs Performance Composite benchmarks for the project also specify standards for minority and nonminority student performance in 2001-02 as compared to 2002-03. The expectation is not only that both groups will gain from one year to the next but also that the differences between minority and nonminority students' 2002-03 Performance Composites will be less than 2001-02, i.e., a decrease in the minority/nonminority performance gap. Table 35 provides Performance Composite statistics for 2001-02 and 2002-03 and calculations of differences between minority and nonminority students. This information is more effectively depicted in Figure 3, which charts minority and nonminority gains or losses from 01-02 to 02-03 and depicts increases or decreases in the gap between the two groups.

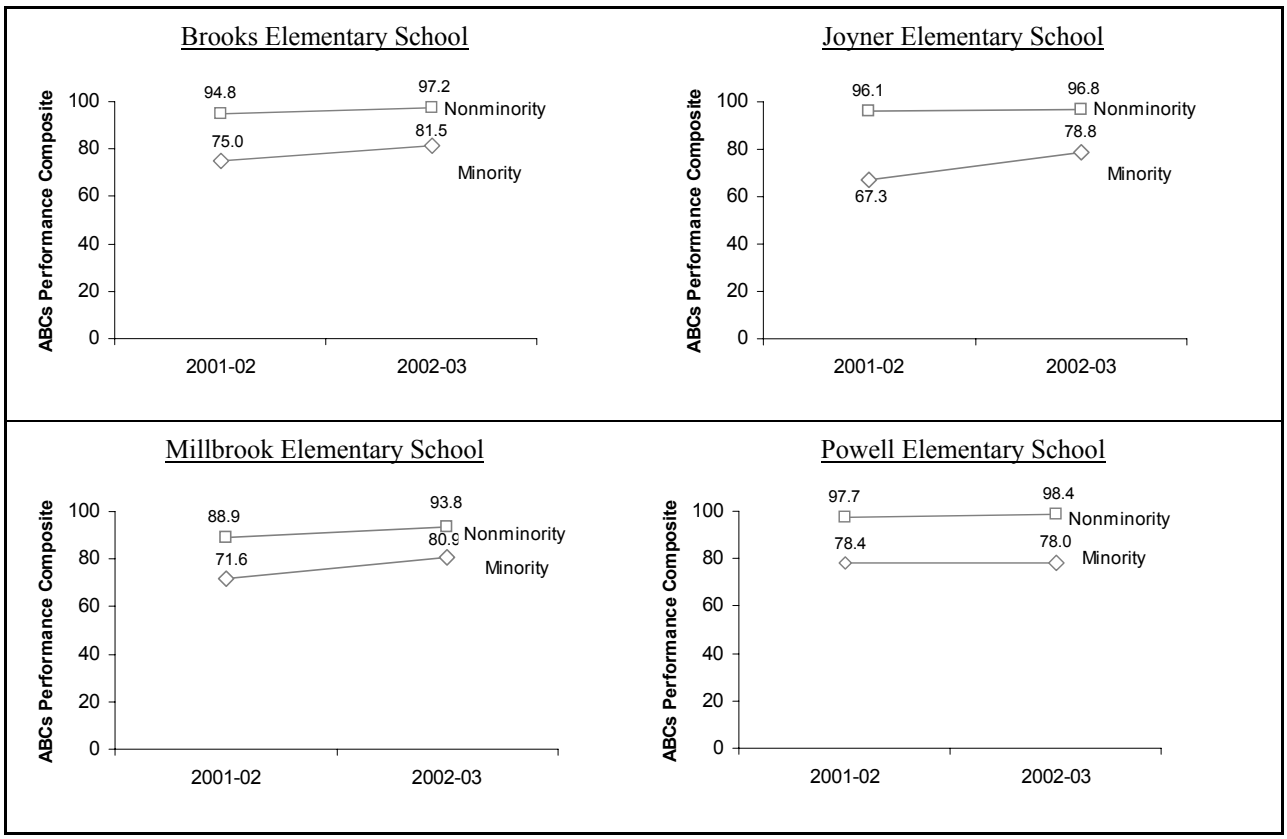
Table 35. Year 2 and Year 1 Performance Composites and Minority and Nonminority Differences

Performance Composite Differences				
School	**Group**	**Year 2 (02-03) Performance Composite**	**Year 1 (01-02) Performance Composite**	**Comparison of 02-03 and 01-02 Performance Composites**
Brooks	Minority	81.5	75.0	02-03 > 01-02
	Nonminority	97.2	94.8	02-03 > 01-02
Joyner	Minority	78.8	67.3	02-03 > 01-02
	Nonminority	96.8	96.1	02-03 > 01-02
Millbrook	Minority	80.9	73.9	02-03 > 01-02
	Nonminority	93.8	88.9	02-03 > 01-02
Powell	Minority	78.0	79.5	02-03 < 01-02
	Nonminority	98.4	97.7	02-03 > 01-02
Moore Sq.	Minority	77.7	*NA	NA
	Nonminority	97.8	NA	NA
Comparison of Performance Composite Differences				
School	**Group**	**02-03 Minority/Nonminority Difference**	**01-02 Minority/Nonminority Difference**	**Comparison of 02-03 and 01-02 Minority/Nonminority Differences**
Brooks	Minority vs. Nonminority	-15.7	-19.8	02-03 difference < 01-02
Joyner	Minority vs. Nonminority	-18	-28.8	02-03 difference < 01-02
Millbrook	Minority vs. Nonminority	-12.9	-17.3	02-03 difference < 01-02
Powell	Minority vs. Nonminority	-20.4	-19.3	02-03 difference > 01-02
Moore Sq.	Minority vs. Nonminority	*NA	NA	NA

*(No 01-02 scores for comparison because Moore Sq. was not in operation during 01-02.)

Three criteria had to be satisfied for a school to meet this benchmark: an increase in the Performance Composite of minority students from 01-02 to 02-03, an increase in the Performance Composite of nonminority students from 01-02 to 02-03, and a decrease in the 02-03 gap between performance of minority and nonminority students as compared to 01-02. Brooks, Joyner, and Millbrook all met these criteria. Powell's minority 02-03 Performance Composite was slightly below its 01-02 level; whereas, the 02-30 Performance Composite for nonminority students rose a bit. This resulted in a small increase in the gap between minority and nonminority students' composites from 01-02 to 02-03. Because Moore Square opened in 02-03, comparison scores will not be available to assess this benchmark until the end of this school year.

Figure 3. Changes In and Gap Between Baseline (00-01) and Year 2 (01-02) Performance Composites for Minority and Nonminority Students



WCPSS Board of Education Goal 2003

Goal 2003, established by the Wake County Board of Education in 1998, stipulated that 95% of district 3rd and 8th graders would be performing at or above grade level by the end of the 2002-03 school year. Project benchmarks related to Goal 2003 use results of the state's 3rd (or 8th) grade EOG reading and mathematics tests. Targets for Year 2 require that 95% of students at the five project schools must score at or above grade level. The 95% requirement also applies when scores are disaggregated by minority/nonminority students.

Generally, project schools did not meet Goal 2003 benchmarks for students overall or for minority students (Figures 4 and 5). With reading and mathematics considered separately, nonminority 3rd graders at Joyner and Powell did attain the benchmark in reading (Figure 4). In mathematics, nonminority students at all four elementary schools reached the benchmark (Figure 5). Moore Square's 2002-03 student body was comprised of 6th and 7th graders, so the Goal 2003 benchmark was not applicable for Year 2. The Year 3 benchmark does require that 95% of Moore Square 8th graders score at or above grade level.

Project schools were not alone in falling short of Goal 2003. Only 10 of the 79 elementary schools in WCPSS met this ambitious standard in both reading and mathematics. Even so, the superintendent deemed the goal a success because it focused schools' resources on improving achievement for all students. Although most did not have 95% of students at or above grade level, almost every school made substantial gains in student proficiency between 1998 and 2003. With both reading and math EOG results for grades 3 through 8 considered, 81.9% of students were at or above grade level in 1998. By 2003, this had risen to 91.3%. Although the 2002-03 school year has ended, WCPSS schools will continue the quest to have 95% of students their students proficient on EOG tests. Benchmarks for Year 3 commit schools in this project to reach or exceed that level by the end of the 2003-04 school year.

Figure 4. Year 2 Percent of 3rd Graders Scoring At or Above Grade Level on the End-of-Grade Reading Test

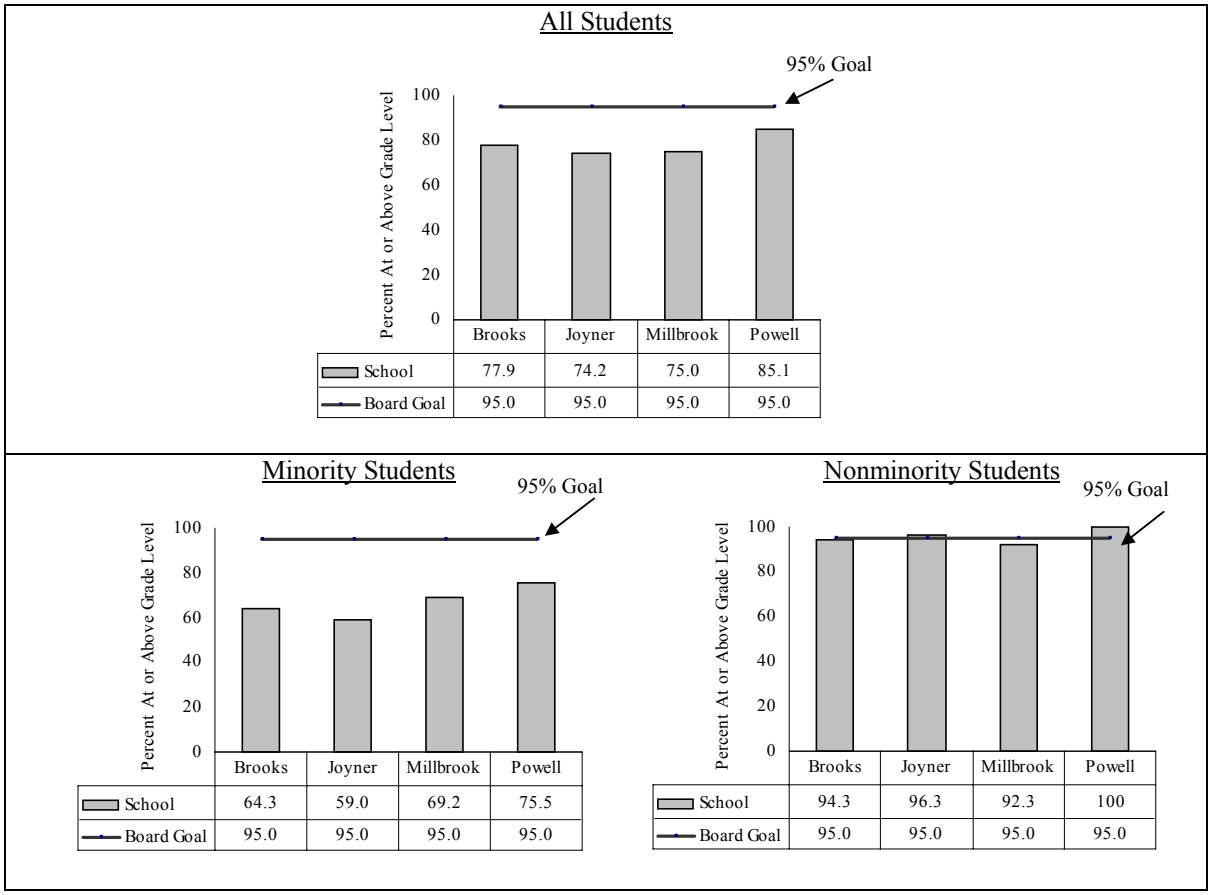


Figure 5. Year 2 Percent of 3rd Graders Scoring At or Above Grade Level on the End-of-Grade Mathematics Test

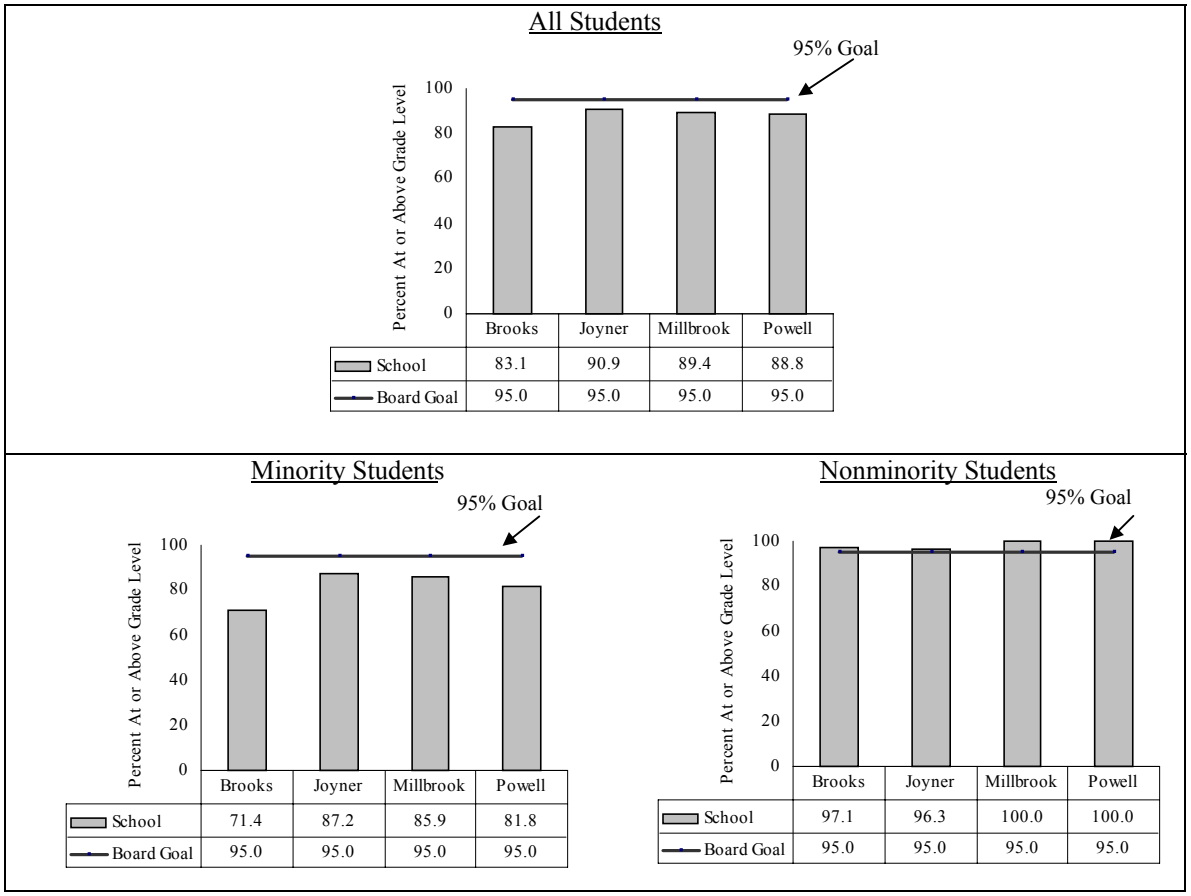


Table 36. Decision Rules to Assess Board Goal 2003 Benchmarks

3rd Grade EOG Reading Test (Figures 4 and 5)	**3rd Grade EOG Mathematics Test** (Figures 4 and 5)
• If the school's percent at or above grade level for 3rd grade Reading equals or exceeds 95%, then the school receives a Y (yes) for Reading, otherwise the school receives an N (no).	• If the school's percent at or above grade level for 3rd grade Mathematics equals or exceeds 95%, then the school receives a Y (yes) for Mathematics, otherwise the school receives an N (no).
EOG Reading and Mathematics Tests	
• **School:** If the school receives a Y for both 3rd grade Reading and 3rd Grade Mathematics, then the school receives a ***Yes*** for meeting the benchmark, otherwise the school is marked ***No*** for not meeting the benchmark.	

BENCHMARK CHART 4-1.2 b-e (Grades K-2 Literacy and Math Assessments)

WCPSS Project Objectives 4-1.2 b-e:	By June 30, 2004, as a result of the implementation of their new or significantly revised magnet themes, achievement of kindergarten through second-grade students at **Brooks Museums Magnet Elementary School, Millbrook Magnet Elementary School: An International Baccalaureate Primary Years Programme, Joyner Language Explorations Magnet Elementary School,** and **Powell Visual and Performing Arts Magnet Elementary School** on the district's Literacy, Writing, and Math Assessment Profiles will exceed that of students in the district as a whole as measured by: • official results from the Evaluation and Research Department's annual *Grade K-5 Assessment Data Capture Form*.		
Indicator 4-1	**Year 2 Benchmark**	**Year 2 Actual**	**Benchmark Met? Yes/No**
Improved student achievement. Magnet students show achievement gains in core subjects, as well as in applied learning skills, which meet or exceed the gains for students in the district as a whole. (Applied learning skills include: higher order thinking skills, individual problem-solving ability, communication skills, computer skills, and ability to contribute to group projects.)	• Elementary schools' results for grade K-2 students on the district Literacy and Math assessment profiles will equal or exceed those of the district as a whole • When Literacy and Math assessment results are disaggregated by minority/ nonminority status, project schools' results will equal or exceed those of the district for both minority and nonminority students • Annual project report describes project adjustments based on evaluation outcomes	***All Students, School ≥ District** Gr / Liter. / Math / Both Brooks (Fig. 6): K Y N N; 1 Y Y Y; 2 N N N Joyner (Fig. 7): K Y Y Y; 1 N N N; 2 N N N Millbr. (Fig. 8): K Y Y Y; 1 N N N; 2 N N N Powell (Fig. 9): K Y N N; 1 N N N; 2 Y N N ***Minority, School ≥ District** Gr / Liter. / Math / Both Brooks (Fig. 6): K Y Y Y; 1 Y Y Y; 2 Y N N Joyner (Fig. 7): K Y Y Y; 1 N N N; 2 N N N Millbr. (Fig. 8): K Y Y Y; 1 N Y N; 2 N Y N Powell (Fig. 9): K Y N N; 1 N N N; 2 Y N N ***Nonminority, School ≥ District** Gr / Liter. / Math / Both Brooks (Fig. 6): K Y Y Y; 1 N N N; 2 Y Y Y Joyner (Fig. 7): K Y Y Y; 1 Y Y Y; 2 Y Y Y Millbr. (Fig. 8): K N N N; 1 N N N; 2 N N N Powell (Fig. 9): K Y N N; 1 N N N; 2 Y Y Y *(see Decision Rules in Table 37)	Brooks No Joyner No Millbrook No Powell No Brooks Yes Joyner No Millbrook No Powell No Brooks Yes Joyner Yes Millbrook No Powell No

WCPSS K-2 Literacy and Mathematics Assessment Profiles

Objective 4-1.2 benchmarks for Kindergarten through 2nd Grade are based on the district Literacy and Mathematics assessment profiles. Developed by the WCPSS Curriculum and Instruction Department (C&I), the assessments are used to monitor student progress in grades K-2, where norm-referenced testing is not used. C&I has established standards for these performance-based assessments which include cut points for on-grade performance at each grade level. The profiles contain behaviors that are representative of all major strands of the state reading or mathematics curriculum and allow teachers to rate student progress on each strand.

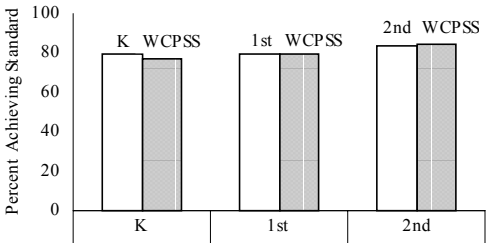
With results for four elementary schools disaggregated for three student groups (all, minority, nonminority) there are twelve separate benchmarks for this objective (see last column of Benchmark Chart 4-1.2). The expectation for each benchmark is that the percentage of students proficient on the schools' profiles will equal or exceed district percentages. Student groups for various grade levels did meet individual benchmarks for reading or mathematics. To meet the overall benchmarks for all, minority, or nonminority students, a school's performance had to exceed the district of both literacy and mathematics for two out of the three grade levels assessed (Table 3#). Only Brooks and Joyner were able to succeed at this level. Brooks met the benchmark for minority and nonminority students, and Powell met its nonminority benchmark. (Figures 6-8). Performance deficits in the primary years may impede success in later grades. The steps staff members are taking to identify and address need are enumerated at the end of Purpose 4.

Table 37. Decision Rules to Assess K-2 Literacy and Mathematics Benchmarks

Adjudicating WCPSS versus Project Schools' Literacy and Mathematics Assessments (Figure 2)	
• The WCPSS Evaluation and Research Department customarily rounds the percent of students scoring at or above grade level on the literacy and mathematics assessments to the nearest tenth. Thus, one decimal place is retained in this report, and is considered the *full percent achieving standard*. • In the majority of judgments about whether or not a school's literacy and mathematics assessments are equal to or greater than WCPSS, the school and district *full percent achieving standard* are compared. • In the few instances where a school's *full percent achieving standard* is within five tenths of a percent of the district *full percent at standard*, the school and district composites are judged to be equivalent.	
Literacy Profile (Figures 6-8)	**Mathematics Profile** (Figures 6-8)
• If the grade-level percent achieving the literacy standard equals or exceeds the district percent for that grade level, then the grade receives a Y (yes) for literacy, otherwise the grade receives an N (no).	• If the grade-level percent achieving the mathematics standard equals or exceeds the district percent for that grade level, then the grade receives a Y (yes) for mathematics, otherwise the grade receives an N (no).
Literacy and Mathematics Profiles	
• **Grade Level:** If a grade level receives a Y in Literacy and Mathematics, that grade level receives a Y (yes) for "Both," otherwise the grade level receives an N (no). • **School:** If 2 out of 3 grade levels in a school receive Y for "Both," then the school receives a ***Yes*** for meeting the benchmark, otherwise the school is marked ***No*** for not meeting the benchmark.	

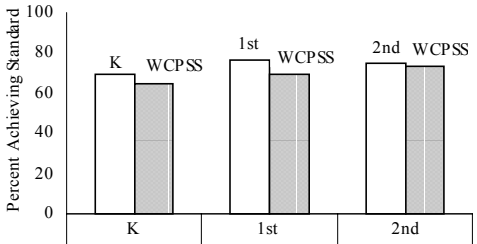
Figure 6. Brooks Elementary Year 2 Literacy and Mathematics Assessment Profile Results Compared to WCPSS Outcomes

LITERACY PROFILE
All Students



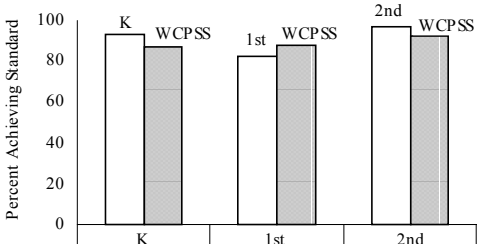
	K	1st	2nd
Brooks	79.2	79.7	83.6
WCPSS	76.9	79.8	84.2

Minority Students



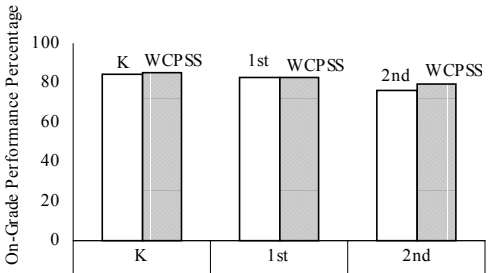
	K	1st	2nd
Brooks	69.0	76.7	74.4
WCPSS	64.6	69.7	73.1

Nonminority Students



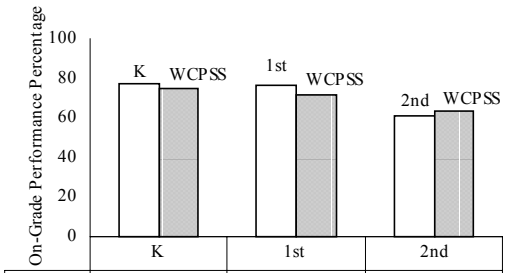
	K	1st	2nd
Brooks	93.0	82.8	96.7
WCPSS	87.0	87.9	92.4

MATHEMATICS PROFILE
All Students



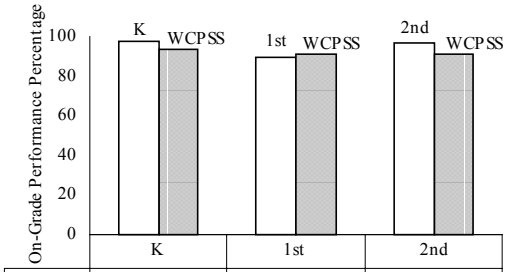
	K	1st	2nd
Brooks	84.1	83.1	76.6
WCPSS	85.1	82.6	79.5

Minority Students



	K	1st	2nd
Brooks	77.6	76.7	61.4
WCPSS	74.9	71.7	63.8

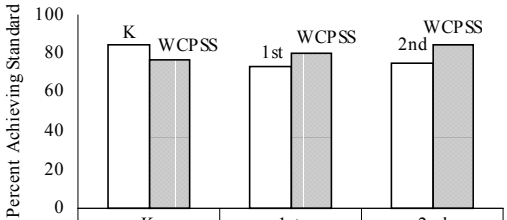
Nonminority Students



	K	1st	2nd
Brooks	97.7	89.7	97.0
WCPSS	93.5	91.4	91.1

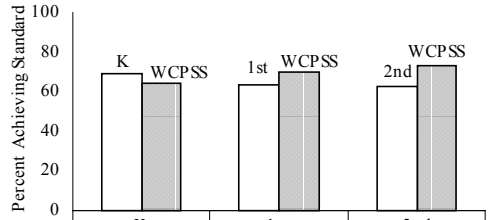
Figure 7. Joyner Elementary Year 2 Literacy and Mathematics Assessment Profile Results Compared to WCPSS Outcomes

LITERACY PROFILE
All Students



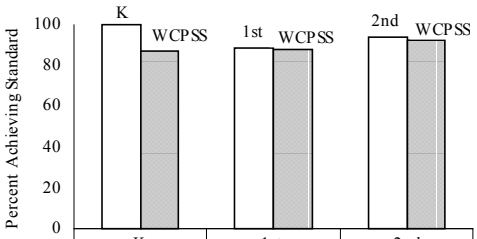
	K	1st	2nd
Joyner	84.1	72.9	74.7
WCPSS	76.9	79.8	84.2

Minority Students



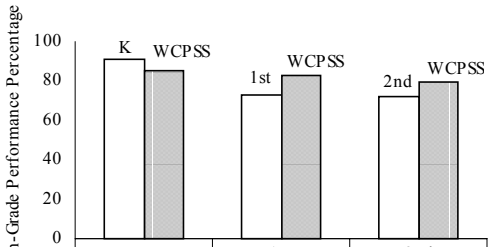
	K	1st	2nd
Joyner	69.4	63.3	62.5
WCPSS	64.6	69.7	73.1

Nonminority Students



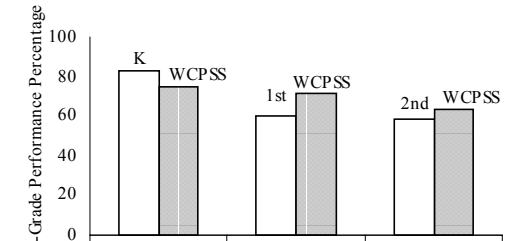
	K	1st	2nd
Joyner	100	88.9	93.6
WCPSS	87.0	87.9	92.4

MATHEMATICS PROFILE
All Students



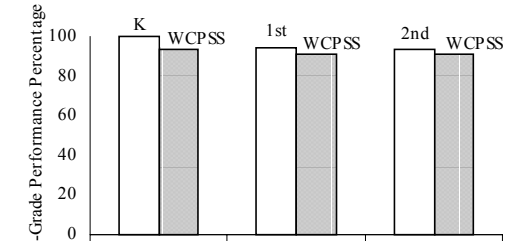
	K	1st	2nd
Joyner	91.3	72.9	72.2
WCPSS	85.1	82.6	79.5

Minority Students



	K	1st	2nd
Joyner	83.3	60.0	58.3
WCPSS	74.9	71.7	63.8

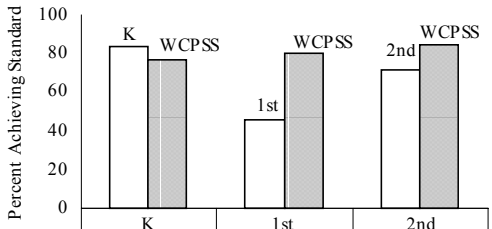
Nonminority Students



	K	1st	2nd
Joyner	100.0	94.4	93.6
WCPSS	93.5	91.4	91.1

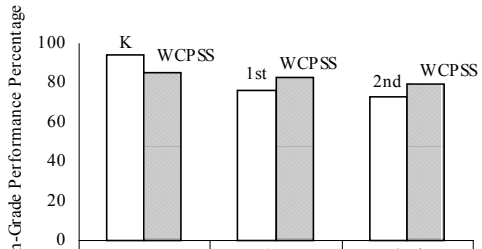
Figure 8. Millbrook Elementary Year 2 Literacy and Mathematics Assessment Profile Results Compared to WCPSS Outcomes

LITERACY PROFILE
All Students



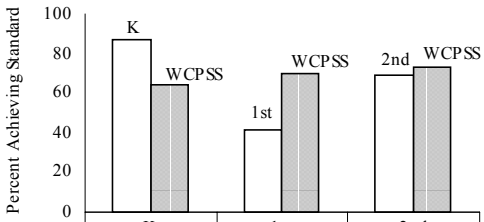
	K	1st	2nd
Millbrook	83.8	45.6	71.3
WCPSS	76.9	79.8	84.2

MATHEMATICS PROFILE
All Students



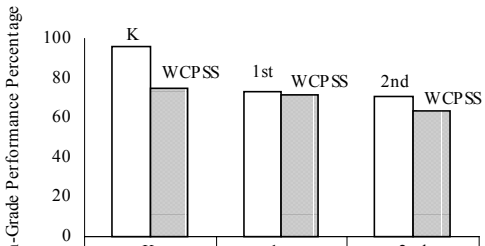
	K	1st	2nd
Millbrook	94.3	76.5	73.2
WCPSS	85.1	82.6	79.5

Minority Students



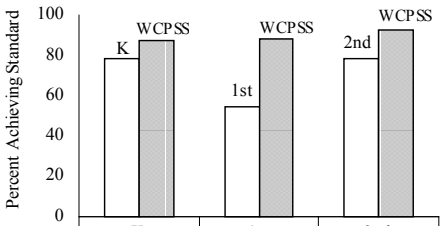
	K	1st	2nd
Millbrook	86.8	41.2	69.4
WCPSS	64.6	69.7	73.1

Minority Students



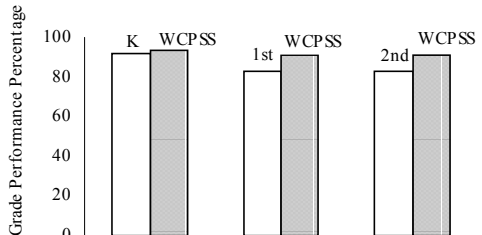
	K	1st	2nd
Millbrook	95.6	73.1	70.6
WCPSS	74.9	71.7	63.8

Nonminority Students



	K	1st	2nd
Millbrook	78.4	54.3	78.3
WCPSS	87.0	87.9	92.4

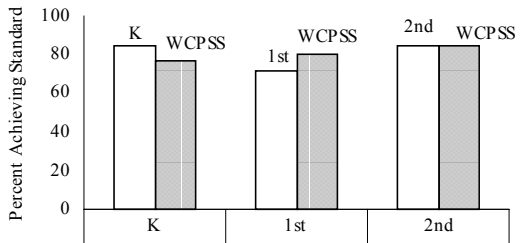
Nonminority Students



	K	1st	2nd
Millbrook	92.1	82.9	82.6
WCPSS	93.5	91.4	91.1

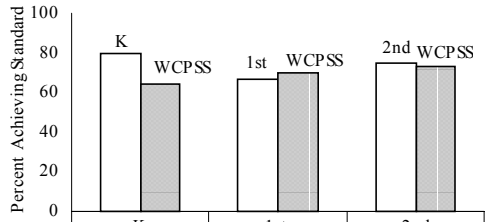
Figure 9. Powell Elementary Year 2 Literacy and Mathematics Assessment Profile Results Compared to WCPSS Outcomes

LITERACY PROFILE
All Students



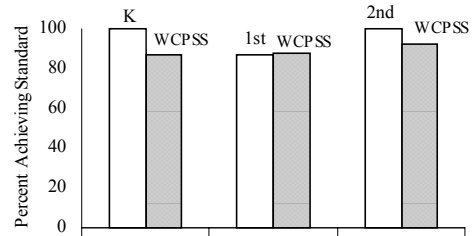
	K	1st	2nd
Powell	84.8	71.4	84.3
WCPSS	76.9	79.8	84.2

Minority Students



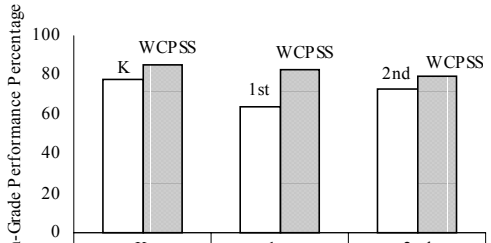
	K	1st	2nd
Powell	80.0	66.7	75.0
WCPSS	64.6	69.7	73.1

Nonminority Students



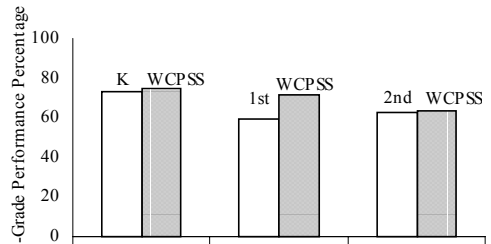
	K	1st	2nd
Powell	100	86.7	100.0
WCPSS	87.0	87.9	92.4

MATHEMATICS PROFILE
All Students



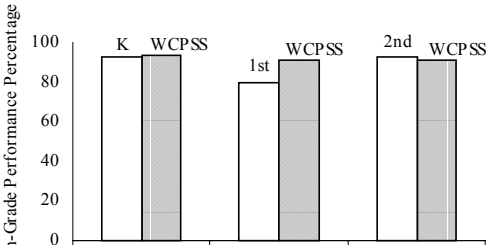
	K	1st	2nd
Powell	78.0	64.1	73.2
WCPSS	85.1	82.6	79.5

Minority Students



	K	1st	2nd
Powell	73.3	59.2	62.2
WCPSS	74.9	71.7	63.8

Nonminority Students



	K	1st	2nd
Powell	92.9	80.0	92.3
WCPSS	93.5	91.4	91.1

BENCHMARK CHART 4-1.3 a-e

WCPSS Project Objectives 4-1.3 a-e:	By June 30, 2004, as a result their new and revised magnet themes, proficiency of 4th or 7th grade students at **Moore Square Museums Magnet Middle School, Brooks Museums Magnet Elementary School, Millbrook Magnet Elementary School: An International Baccalaureate Primary Years Programme, Joyner Language Explorations Magnet Elementary School,** and **Powell Visual and Performing Arts Magnet Elementary School** on the North Carolina Writing Assessment will exceed that of 4th or 7th graders in the district as a whole and proficiency of 8th grade students on the NC Tests of Computer Skills and Proficiency will be higher than district 8th graders as evidenced by: • the state *Writing Assessment Local Education Agency Summary Report* published by the North Carolina Department of Public Instruction and • WCPSS mainframe files of Computer Skills scores and the state's *Summary Statistics on Computer Performance Scores*.		
Indicator 4-1	**Year 2 Benchmark**	**Year 2 Actual**	**Benchmark Met? Yes/No**
Improved student achievement. Magnet students show achievement gains in core subjects, as well as in applied learning skills, which meet or exceed the gains for students in the district as a whole. (Applied learning skills include: higher order thinking skills, individual problem-solving ability, communication skills, computer skills, and ability to contribute to group projects.)	• Proficiency of 4th/7th grade students at each school on the North Carolina Writing Assessment will equal or exceed that of 4th/7th graders in the district as a whole • When Writing assessment results are disaggregated by minority status: 1. Proficiency of 4th/7th graders each school will equal or exceed that of the district for minority and nonminority students 2. Both groups will be expected to gain, with gains reviewed to determine if differences in proficiency between minority and nonminority students at the schools are less than the previous year	North Carolina's 4th and 7th grade writing tests are being revised due to concerns about the quality of these assessments and the effectiveness of methods for scoring them. The 2002-03 school year was the pilot year for the new assessments. Although schools received student rosters, the state did not provide data files to school districts. Thus, writing assessment benchmarks for Year 2 cannot be assessed.	All Students Brooks NA Joyner NA Millbrook NA Powell NA Moore Sq. NA Minority Students Brooks NA Joyner NA Millbrook NA Powell NA Moore Sq. NA Nonminority Students Brooks NA Joyner NA Millbrook NA Powell NA Moore Sq. NA
	• Proficiency of 8th grade students at the middle school on the North Carolina Computer test will equal or exceed that of 8th graders in the district as a whole • When 8th grade computer assessment results are disaggregated by minority status: 1. Proficiency 8th graders will equal or exceed that of the district for minority and nonminority students 2. Both groups will be expected to gain, with gains reviewed to determine if differences in proficiency between minority and nonminority students at the schools are less than the previous year	During 2002-03, Moore Square had students in grades 6 and 7, but not in 8th grade — the grade at which the North Carolina Computer test is administered.	All Students Moore Sq. NA Minority Students Moore Sq. NA Nonminority Students Moore Sq. NA

State 4th and 7th Grade Writing Assessments

The NC Department of Public Instruction piloted a revised state writing assessment in spring 2003. Schools received rosters of student scores for informational purposes only; these will not go into students' permanent records. Outcomes of the pilot assessment may not be used for formal evaluation purposes. They were not included in the 02-03 ABCs accountability model and districts did not receive data files for their schools. It is also inappropriate to use data from the pilot year to evaluate Year 2 writing assessment benchmarks. With the assessment in official use for the 2003-04 school year, the evaluator will be able to report on the writing benchmarks for Year 3. These benchmarks anticipate that proficiency of 4th and 7th graders at project schools will exceed that of 4th and 7th graders in the district as a whole.

State 8th-Grade Computer Test

The NC Tests of Computer Skills and Proficiency, required for a high-school diploma, are administered annually to all 8th graders. Students in higher grades who have not yet passed the tests also have opportunities in spring and fall to re-take them. Because Moore Square did not have an 8th grade 2002-03, the computer tests benchmarks cannot be assessed until Year 3. They require that proficiency of 8th-grade students at Moore Square equal or exceed that of 8th graders in the district as a whole. This same requirement applies when scores are disaggregated by minority status.

Instructional Planning Based on Evaluation Outcomes

WCPSS planners set high expectations for the district's MSAP projects. Benchmarks require that participating schools score as well as or better than the district on all components of the state ABCs accountability system — for students overall and disaggregated by minority status. The fact that WCPSS is one of the highest-performing school systems in the state amplifies these expectations. Decision rules used to evaluate student performance benchmarks are also very strict. To be deemed successful, a school must not only attain or surpass benchmarks for all students, but it must also reach or exceed the benchmarked level for both minority and nonminority students. For benchmarks across grade levels, the mark must be met by more than half of the grades for the school to succeed. For example, to meet the overall benchmark for the K-2 Literacy and Mathematics profiles (Figures 6-8), a school's percentage of students proficient must equal or exceed the district in *both* literacy and mathematics for *at least two out of the three* grade levels.

With high standards stringently assessed, the project is unlikely to meet all of its benchmarks. Because implementation went well in the project's second year, staff members anticipated more success in meeting 2002-03 benchmarks than actually occurred. As they did with evaluation findings for Year 1, they used Year 2 data in a formative manner to plan for Year 3. They looked at Year 2 results, found areas of need, made plans to fill these needs, and set their plans in motion so that improvements would occur.

Formative evaluation procedures in Year 2 were similar to approaches that were successful in Year 1. At that time, when Joyner Elementary did not meet ABCs Expected Growth, the principal pointed out shortfalls at a faculty meeting before school started. He and the project evaluator then met with grade level teams early in the first nine weeks to pinpoint all deficit areas and plan needed improvements. One area of emphasis was to ensure that instruction at all grade levels and in every subject area was closely aligned to the state curriculum, which is the basis of the EOG tests. To follow up on the principal and evaluator's meetings, the instructional resource teacher met regularly with teams during the year to emphasize the importance of curriculum alignment in the core subjects, as well as in the arts, technology, and physical education. In Year 2, Joyner achieved High Growth, and 88% or its students performed at or above grade level. Careful review of Year 1 outcomes allowed teachers to confront and understand any deficits and plan proactively to alleviate them.

A similar approach was used at Moore Square at the beginning of Year 3. Because the school did not make Expected Growth in 2002-03, a key item of business when the 2003-04 school year began was to study ABCs results, pinpoint all deficit areas, and plan needed improvements. This process began with the principal's review of growth and performance outcomes with the faculty during teacher workdays before school opened. It continued with grade-level team meetings conducted by the project evaluator. The museums coordinating teacher and school testing coordinator sat in on every meeting in order to fully understand areas of strength and weakness and to provide follow-up support to the teams. Team members worked with the evaluator to scrutinize school, grade, teacher, and student-level results. They also examined results disaggregated by ethnicity group, previous high or low test performance, disability status, and eligibility for free or reduced-price lunch.

An obvious area of weakness in Moore Square's growth composite was 6th-grade reading. The 6th grade teams discussed the need for more effective instruction in this area during 2003-04 and scheduled future meetings to make specific plans. One solution they identified is the need to stress reading skills across subject areas, not just in language arts. Seventh-grade teams were alerted that many current 7th graders did not make 6th grade expected growth in reading. The 7th-grade teams must identify and implement methods to accelerate these students and also ensure that they make appropriate growth in 7th grade.

In Year 2, three of the four elementary schools in the project improved the performance of both their minority and nonminority students while also decreasing the gap between the two groups. (Without comparison data from 01-02, Moore Square's ability to decrease the achievement gap cannot be determined until Year 3.) Although Performance Composites ranged from 85 to 88% across the five participating schools, none reached the WCPSS level of 91% of students at or above grade level. Nor did any of the four elementary schools reach Goal 2003 by having 95% of 3rd graders at or above grade level in reading and mathematics. Thus, it reamins essential for all five schools to focus on further improvements in student achievement.

The Evaluation and Research Department and the project evaluator make certain that overall and disaggregated test results reach the schools in a timely, accurate, and accessible manner. School administrators, grant coordinating teachers, and instructional resource teachers then work at the school level to review results with staff members and use them to make meaningful changes in instruction. Schools examine all areas in which federal (e.g., benchmarks for this project), state, and local standards are not met. They plan and implement targeted adjustments. Activities aimed at improving results are monitored and adjusted as needed throughout the year.

Materials received by the schools enable them to diagnose strengths and weaknesses in overall test outcomes. More importantly, they can use these resources to trace shortfalls to the grade, class, and student levels and then target resources appropriately. Grade level and subject area scores make it possible to identify specific areas of strength or weakness in reading or mathematics for particular grades. Disaggregated information makes it possible to compare the growth of various minority groups to majority students. Teachers can also note whether or not students whose previous achievement was high continued to achieve well or whether those who scored low in earlier years improved in the current year.

The state EOG Goal Summary Reports are also very useful. For every major goal and objective of the state curriculum, this report identifies the number and percentage of items answered correctly on the reading and mathematics tests. Reports are prepared at the school, grade, and teacher level. For each grade, teachers can use this information to pinpoint areas of the curriculum where high and low percentages of items were answered correctly and incorporate this information into planning for the coming year. Areas where students did well on the tests can be reinforced, leaving time to focus on improvement for goals and objectives where fewer answers were correct. Within a team, teachers receive their own goal summary reports and can analyze strengths and weaknesses in content coverage for their own students during the

preceding year. Team members can then share ideas among themselves to duplicate successes and make improvements in problem areas.

Administrators and teachers at Wake County's MSAP schools apply ABCs results in specific, constructive ways to inform the instructional planning process and tailor project reforms to better meet the needs of all students. In so doing, they also increase the likelihood of reaching and surpassing the district's high standards and attaining the benchmarks of this project.

IV. BUDGET INFORMATION

In Year 2 of Wake County's MSAP grant, funds were used as they were intended with few exceptions. This section notes any unusual or unforeseen circumstances that may have budget implications.

The table below reflects expenditures as of June 30, 2003.

	Budget Categories	Obligations
A	Personnel	791,008.11
B	Fringe Benefits	137,992.45
C	Travel	1,887.97
D	Equipment	
E	Supplies	872,997.62
F	Contractual	225,347.48
G	Construction	
H	Other	
I	Total Direct Costs (Line A-H)	**2,029,233.63**
J	Indirect Costs	109,156.14
K	Training Stipends	(Included in Other)
L	Total Expenditures (Line I-K)	**2,138,389.77**

By the end of the second budget year, the Wake County Public School System (WCPSS) intends to use all Year 2 funds provided (leaving no funds unobligated) for the purposes and objectives stated in its approved MSAP grant proposal. Audited financial data for WCPSS will be based on the fiscal year ending on June 30, 2003.

The table above does not reflect any of the proposed expenditures for the months of July and August 2003. During these summer months before Year 2 of the grant closes, remaining funds will be used for salaries, planned summer staff development, curriculum writing, supplies to support new courses, Spanish texts to enhance the dual language theme, several conferences and out-of-state workshops, and indirect costs associated with processing purchases. It should be noted that "equipment" is currently defined by the State as items costing more than $5000. Therefore, the space in the table indicating equipment expenditures remains blank, and all "equipment" related purchases are included on the *supplies* line.

Three of the five project schools are still undergoing major construction and renovation. Construction began at Joyner Elementary in the middle of the 2001-2002 school year. This building project is scheduled to be completed on December 24, 2003. Upon completion of the construction project, Joyner will have one additional wing and two renovated hallways. Nine classrooms will be added, and the need for mobile units will be eliminated. At Powell Elementary construction that began in June of last year is continuing. It has been the consensus of decision-makers that several grant projects and purchases should be delayed until construction is completed. Millbrook Elementary has been able to continue the implementation of its grant project as planned despite construction delays. Their new buildings and renovations will be completed in fall of 2003.

(1) At Powell the plans and supplies for outdoor performance areas (including modifications to the landscape, installation of outdoor electrical circuits, and platform risers) have again been postponed until renovations for the entire school are completed in the fall of 2003 and mobile units are removed. Related to this change is the decision to delay until the end of the construction project (projected date October 2003) the production of the video/DVD showcasing the school program, the purchase of glass display cabinets for the lobby, and the production/ placement of a new school sign at the front of the building. Administration and staff wanted videos and DVDs to show Powell at its best, and not in its present state of disruption. The staff at Powell has been diligent about showcasing the school in other ways using the front lobby to display continuous computer-generated projects, Imac movies, and special presentations. The I-movie studio planned for Powell has been set up in a new area adjacent to the media center. Additional equipment for this studio has been delivered and local renovation funds have been used to install appropriate wiring and to network computers. Construction at the school has taken place in stages and has allowed staff to make progress in setting up other labs and studios, delays notwithstanding. School staff members have requested again this year that approximately $86,000 of grant funds be rolled into Year 3 to be used for planned outdoor school improvements (mentioned above) as soon as construction and landscaping in key areas have been completed.

(2) Renovation and the building of a new wing at Joyner Elementary has made it necessary to pack/unpack and move equipment and supplies from place to place. There will be a delay in purchasing additional computers and related equipment until the school's situation becomes more stable. A fall completion date of Joyner's construction project will allow the staff to purchase and place additional equipment early in Year 3. Because of the construction occurring at Joyner, instructional space is a major issue. Areas that might have been useful for activities and special programming have been full of stored equipment and/or furniture. The Language and Culture Center has not yet been

accomplished because the space was needed temporarily for a technology lab. The program planned for this area will not be realized until space problems are resolved in Joyner's changing, expanding facility.

(3) Millbrook Elementary has postponed the purchase of a new sign for the school and the creation of a recruitment video until Year 3 when construction will be completed. This decision was encouraged as the most effective way to present the impressive appearance of the school while at the same time emphasizing the notable features of the International Baccalaureate Programme. The good news is that Millbrook is in the process of obtaining authorization as an IB Primary Years Programme school and will have an authorization team visit in the fall of 2003. Anticipation of this visit has prompted an acceleration of planning that includes the purchase of materials, resources, and library reference books to have in place by the beginning of the 2003-2004 school year.

Moore Square Middle opened on schedule in July 2002. The Tower of Learning is a work in progress, i.e., the structure is complete with slight modifications to the original plan and designs for the projection system are underway. Equipment and related hardware for the tower has been ordered, but not all pieces have been received. The adjusted plan is to install projection equipment in the fall of 2003 and to begin displaying student generated presentations and animated programs by December 2003.

Again this year, only *essential* travel was approved across the school system from February through the end of June 2003. Therefore, planned MSAP staff development involving travel outside the district has not completely been accomplished. The case was made for opening up training opportunities specified by the grant as well as trips to exemplary schools of similar themes for this year and the coming year in a good faith effort to accomplish the objectives set forth for these five schools. Fortunately, school system administrators have been open and accommodating concerning the need to carry out objectives of the grant that involved travel to out-of-system training sites. Many of the training opportunities outlined in the WCPSS proposal were approved in Year 2, and as a result many teachers were able to benefit from those experiences. Funds not spent on training by the time this report is submitted will be used before the beginning of Year 3 for with increased efforts to reach and improve all critical staff as a new school year begins.

V. SUPPLEMENTAL INFORMATION/CHANGES

There are few changes to report in the planned activities that are now in progress at the five currently funded MSAP schools. The narrative below explains minor modifications to the original Wake County proposal.

Moore Square Middle and Brooks Elementary have completed their first year as a museums magnet schools. In June 2002, all teachers from both staffs participated in four days of extensive training in the Paideia approach to teaching and learning. Although not outlined in the original proposal, the Paideia method includes much of the philosophy and pedagogy of constructivism and the inquiry approach. The Paideia method contained all of the separate training practices originally proposed and provided a forum for initiating new approaches to curriculum development. Continued study of the Paideia method will be an essential part of both schools implementation efforts.

Major construction projects taking place at three schools have presented significant challenges for faculty and staff. Staying on site while construction is occurring caused parents to have concerns about the impact of disruption on the learning environment. For example, at Joyner large equipment, noise from vehicles and construction, and occasional lapses of electricity have raised questions about safety and security. Some families have been worried about the presence of workmen, the security of unlocked doors, and the possibility of dust and fiberglass remnants too near the classroom. Other parents have been concerned about noise from saws and hammers being a distraction to students. Most of these worries have been handled admirably by a patient staff, but they have had a definite impact on the recruitment efforts of the school. There is still an optimism that pervades the teaching staff. They feel that the worries of the community will fade as the school becomes a much more attractive and efficient facility.

It should perhaps be mentioned here that the principal of Joyner Elementary believes that the reassignment issue from three years ago with its accompanying damaging press continues to have a negative effect on the ability of the school to attract new families. At that time there was a considerable wave of “white flight.” The principal explains that even though the school has moved beyond those days he still is “fighting ghosts,” and that incoming and prospective parents still ask about that time and remember the detrimental newspaper articles that harmed the school. Unfortunately, some realtors in the area continue to tell their clients about those events when they are considering moving into the neighborhood.

Powell Elementary reports problems that have affected the implementation of the grant project. The major problem at Powell has been building construction. The school has undergone a major renovation and asbestos removal project. This upheaval caused the daily schedule to be disrupted due to power, phone, network and in-house cable failures. Although these problems generally did not affect the student body, oftentimes meetings, after school training, and the like were rescheduled or canceled. Another source of disruption was the need for teachers to move their entire classrooms twice during the school year. Computer labs moved three times and the entire media center moved once. This repeated transitioning from building to trailer and back to building was stressful and caused many days that could have been used for training to become moving days instead.

In addition to these scheduling problems, the construction has slowed down the progress of other grant initiatives. As a school of Visual and Performing Arts, Powell plans to renovate the courtyard and front entrance. The courtyard is to become a multipurpose outdoor stage, picnic, and exercise area. The front entrance, which will include outdoor landscape and stonework, is to become more inviting, and the entire area will enhance the school's curb appeal. These plans cannot move forward until the construction is complete in October or November of 2003.

For all the schools an unusual circumstance that has affected the progress of grant projects has been the excessive loss of instructional days due to snow and ice before the winter break. All of the teacher workdays thereafter became weather make-up days. Much of the staff development that had been originally planned for teacher workdays had to be rescheduled or cancelled. Some sessions were added to the afternoons following full school days and were considered less effective.

Overall the projects have gone well in all the school and school-level coordinators report positive attitudes, high interest on the part of students, and an atmosphere of hope and expectation for the coming year. The benefits of the construction projects at several of the schools will far outweigh temporary disadvantages with the emergence of new classroom wings, brighter and better media centers, beautiful learning spaces and inviting entryways. High achievement on the part of all students continues to be the overarching goal. Teachers, principals, and the schools communities continue to work diligently to make that goal a reality.

Appendix A

Table A1. NCSCS Competency Goals of Moore Square Year 1 Curriculum Units

Unit Title	NCSCS (Competency Goals are stated, followed by objective numbers in parentheses. See full text of objectives at **www.ncpublicschools.org/curriculum.**)
It's All Greek to Me Language Arts Component	**Language Arts** 6th Grade Competency Goal 1: The learner will use language to express individual perspectives drawn from personal or related experience. (1.01, 1.02, 1.03) 6th Grade Competency Goal 2: The learner will explore and analyze information from a variety of sources. (2.01, 2.02) 6th Grade Competency Goal 4: The learner will use critical thinking skills and create criteria to evaluate text and multimedia (4.01) 6th Grade Competency Goal 5: The learner will respond to various literary genres using interpretive and evaluative processes. (5.01, 5.02) 6th Grade Competency Goal 6: The learner will apply conventions of grammar and language usage. (6.01)
It's All Greek to Me Mathematics Component	**Mathematics** 6th Grade Competency Goal 1: Number Sense, Numeration, and Numerical Operations .0 The learner will understand and compute with rational numbers. (1.08) 6th Grade Competency Goal 3: Patterns, Relationships, and Functions .0 The learner will demonstrate an understanding of patterns, relationships, and algebraic representations. (3.01, 3.04, 3.06)
It's All Greek to Me Science Component	**Science** 6th Grade Competency Goal 3: The learner will build understanding of the Solar System. (3.01, 3.02, 3.03)

Unit Title	NCSCS (Competency Goals are stated, followed by objective numbers in parentheses. See full text of objectives at **www.ncpublicschools.org/curriculum.**)
It's All Greek to Me Social Studies Component	**Grade 6 Social Studies** 7.02 Examine the causes of key historical events in selected areas of South America and Europe and analyze the short and long range effects on political, economic, and social institutions. 8.01 Describe the role of key historical figures and evaluate their impact on past and present societies in South America and Europe. 8.02 Describe the role of key groups and evaluate their impact on historical and contemporary societies of South America and Europe. 12.01 Examine the major belief systems in selected regions of South America and Europe, and analyze their impact on cultural values, practices and institutions. 12.02 Describe the relationship between cultural values of selected societies of South America and Europe and their art, architecture, music and literature, and assess their significance in contemporary culture. 4.03 Examine key ethical ideas and values deriving from religious, artistic, political, economic, and educational traditions, as well as their diffusion over time, and assess their influence on the development of selected societies and regions in South America and Europe. 13.02 Describe the diverse cultural connections that have influenced the development of language, art, music, and belief systems in North Carolina and the United States and assess their role in creating a changing cultural mosaic. 11.02 Examine the basic needs and wants of all human beings and assess the influence of factors such as environment, values and beliefs in creating different cultural responses. 11.03 Compare characteristics of political, economic, religious and social institutions of selected cultures, and evaluate their similarities and differences. 12.01 Examine the major belief systems in selected regions of South America and Europe, and analyze their impact on cultural values, practices and institutions. 9.01 Trace the historical development of governments including traditional, colonial and national in selected societies and assess the effects on the respective contemporary political systems. 9.03 Identify the ways in which governments in selected areas of South America and Europe deal with issues of justice and injustice, and assess the influence of cultural values on their practices and expectations. 9.04 Describe how different governments in South America and Europe select leaders and establish laws in comparison to the United States and analyze the strengths and weaknesses of each. 12.03 Identify examples of cultural borrowing, such as language, traditions, and technology, and evaluate their importance in the development of selected societies in South America and Europe. 10.01 Trace the development of relationships between individuals and their governments in selected cultures of South America and Europe, and evaluate the changes that have evolved over time. 10.02 Identify various sources of citizens' rights and responsibilities, such as constitutions, traditions, and religious law, and analyze how they are incorporated into different government structures.

Unit Title	NCSCS (Competency Goals are stated, followed by objective numbers in parentheses. See full text of objectives at **www.ncpublicschools.org/curriculum.**)
It's All Greek to Me Arts Component	**Theatre Arts** 6th Grade Competency Goal 1: The learner will write based on personal experience and heritage, imagination, literature, and history. [National Standard 1] (1.01, 1.04) 6th Grade Competency Goal 2: The learner will act by interacting in improvisations and assuming roles. [National Standard 2] (2.01, 2.02) 6th Grade Competency Goal 3: The learner will design and produce theatre by conceptualizing and realizing artistic interpretations for informal or formal productions. [National Standard 3] (3.03, 3.04, 3.07) 6th Grade Competency Goal 6: The learner will compare and integrate art forms by analyzing traditional theatre, dance, music, visual arts, and new art forms. [National Standard 6] (6.01, 6.02, 6.03) 6th Grade Competency Goal 7: The learner will analyze, critique, and construct meaning from informal and formal theatre, film, television, and electronic media productions. [National Standard 7] (7.01, 7.05) 6th Grade Competency Goal 8: The learner will understand context by analyzing the role of theatre, film, television, and electronic media in the past and present. [National Standard 8] (8.01, 8.02, 8.03) **Visual Arts** 6th Grade Competency Goal 1: The learner will develop critical and creative thinking skills and perceptual awareness necessary for understanding and producing art. (1.01, 1.02, 1.03, 1.04, 1.05, 1.06) 6th Grade Competency Goal 2: The learner will develop skills necessary for understanding and applying media, techniques, and processes. [National Standard 1] (2.01, 2.02, 2.03, 2.04, 2.05) 6th Grade Competency Goal 3: The learner will organize the components of a work into a cohesive whole through knowledge of organizational principles of design and art elements. [National Standard 2] (3.01, 3.02, 3.03, 3.04, 3.05) 6th Grade Competency Goal 4: The learner will choose and evaluate a range of subject matter and ideas to communicate intended meaning in artworks. [National Standard 3] (4.01, 4.02, 4.03, 4.04, 4.05) 6th Grade Competency Goal 5: The learner will understand the in relation to history and cultures. [National Standard 4] (5.01, 5.02, 5.03, 5.04, 5.05, 5.06) 6th Grade Competency Goal 6: The learner will reflect upon and assess the characteristics and merits of their work and the work of others. [National Standard 5] (6.01, 6.02, 6.03, 6.04, 6.05) 6th Grade Competency Goal 7: The learner will perceive connections between and other disciplines. [National Standard 6] (7.01, 7.02, 7.03, 7.04) 6th Grade Competency Goal 8: The learner will develop an awareness of art as an avocation and profession. (8.01, 8.02) **Dance** 6th Grade Competency Goal 3: The learner will understand that dance can create and communicate meaning. [National Standard 3] (3.01, 3.02) 6th Grade Competency Goal 5: The learner will demonstrate and understand dance in various cultures and historical periods. [National Standard 5] (5.01, 5.02) **Music** 6th Grade Competency Goal 8: The learner will understand relationships between music, the other arts, and content areas outside the arts. [National Standard 8] (8.02)

Table A2. NCSCS Competency Goals of Brooks Year 1 Curriculum Units

Unit Title	NCSCS (Competency Goals are stated, followed by objective numbers in parentheses. See full text of objectives at **www.ncpublicschools.org/curriculum.**)
A Taste of North Carolina	**Social Studies** 4th Grade Competency Goal 1: The learner will analyze the characteristics of the people of North Carolina. (1.2) 4th Grade Competency Goal 3: The learner will locate major physical features and suggest the influence of location on life in North Carolina. (3.1, 3.2, 3.3) 4th Grade Competency Goal 4: The learner will assess the significance of physical and cultural characteristics of regions within North Carolina and the regions of which North Carolina is a part. (4.1, 4.2, 4.3, 4.4) **Language Arts** 4th Grade Competency Goal 2: The learner will apply strategies and skills to comprehend text that is read, heard, and viewed. (2.01, 2.07) 4th Grade Competency Goal 3: The learner will make connections with text through the use of oral language, written language, and media and technology. (3.05, 3.06) 4th Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.05, 4.06, 4.09, 4.10) 4th Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively.
Simple Machines and Inventions	**Science** 4th Grade Competency Goal 4: The learner will build an understanding of technological designs (4.01, 4.02, 4.03) **Social Studies** 4th Grade Competency Goal 8: The learner will examine ways North Carolinians govern themselves. (8.1) 4th Grade Competency Goal 9: The learner will evaluate how North Carolinians use economic resources to satisfy their wants and needs. (9.2) 4th Grade Competency Goal 10: The learner will analyze North Carolina's economic relationships. (10.3) 4th Grade Competency Goal 11: The learner will assess changes in ways of living over time and investigate why and how these changes occurred. (11.1, 11.2) **Mathematics** 4th Grade Competency Goal 1: The learner will read, write, model, and compute with rational numbers. (1.04, 1.14, 1.18) **Language Arts** 4th Grade Competency Goal 1: The learner will use word recognition strategies and skills and vocabulary knowledge to read and comprehend text that is appropriate for grade 4. (1.03, 1.05) 4th Grade Competency Goal 2: The learner will read and comprehend both narrative and expository text that is appropriate for grade 4. (2.04, 2.05, 2.06, 2.11 2.12) 4th Grade Competency Goal 3: The learner will use a range of strategies to read a wide variety of print and non-print text, to expand vocabulary to acquire new information, and to increase personal fulfillment. (3.01, 3.03) 4th Grade Competency Goal 4: The learner will apply the writing process to write literary, informational, and practical texts for different purposes and audiences. (4.07, 4.08)

Table A3. NCSCS Competency Goals of Millbrook Year 1 Curriculum Units

Theme and Grade-Specific Unit Title	NCSCS Competency Goals (Competency Goals are stated, followed by objective numbers in parentheses. See full text of objectives at **www.ncpublicschools.org/curriculum**.)
Grade K: Who We Are (Marvelous, Marvelous Me)	**Language Arts** Grade K Competency Goal 1: The learner will develop and apply enabling strategies and skills to read and write. (1.032) Grade K Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.01, 4.02) **Mathematics** Grade K Competency Goal 1: The learner will recognize, model, and write numbers through 10. (1.02, 1.03) Grade K Competency Goal 2: The learner will explore concepts of geometry and non-standard measurement. (2.04) Grade K Competency Goal 3: The learner will model simple patterns and sorting activities. (3.02) **[Unit also includes goals in the following curriculum content areas: Social Studies, Guidance, Computer/Technology Skills, Science, Information Literacy, Healthful Living, Theatre Arts, Dance, Music, Visual Arts.]**
Where We Are in Place &Time (Munch, Munch, Munch)	**Language Arts** Grade K Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.09) Grade K Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.011) **Mathematics** Grade K Competency Goal 1: The learner will recognize, model, and write numbers through 10. (1.02, 1.04) Grade K Competency Goal 2: The learner will explore concepts of geometry and non-standard measurement. (2.01) Grade K Competency Goal 3: The learner will model simple patterns and sorting activities. (3.04) **[Unit also includes goals in the following curriculum content areas: Social Studies, Computer/Technology Skills, Information Literacy, Healthful Living, Dance, Music, Visual Arts.]**
How We Express Ourselves (Tell Me a Story)	**Information Literacy** Grade K Competency Goal 1: The learner will EXPLORE sources and formats for reading, listening, and viewing purposes. (1.01, 1.09) Grade K Competency Goal 2: The learner will IDENTIFY and USE criteria for excellence to evaluate information and formats. (2.03) Grade K Competency Goal 3: The learner will RELATE ideas and information to life experiences. (3.01, 3.03) Grade K Competency Goal 5: The learner will COMMUNICATE reading, listening, and viewing experiences. (5.01) **[Unit also includes goals in the following curriculum areas: Healthful Living, Theatre Arts, Dance, Visual Arts.]**

Theme and Grade-Specific Unit Title	NCSCS Competency Goals (Competency Goals are stated, followed by objective numbers in parentheses. See full text of objectives at **www.ncpublicschools.org/curriculum**.)
How the World Works (Exploring the Toy Box)	**Language Arts** Grade K Competency Goal 1: The learner will develop and apply enabling strategies and skills to read and write. (1.011, 1.013, 1.021, 1.022, 1.031, 1.033) Grade K Competency Goal 2: The learner will develop and apply strategies and skills to comprehend text that is read, heard, and viewed. (2.01, 2.02, 2.08) Grade K Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. (3.01, 3.02, 3.03, 3.04) Grade K Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.04, 4.08) **Mathematics** Grade K Competency Goal 1: The learner will recognize, model, and write numbers through 10. (1.02, 1.05, 1.07, 1.09) Grade K Competency Goal 2: The learner will explore concepts of geometry and non-standard measurement. (2.02, 2.05) **[Unit also includes goals in the following curriculum content areas: Computer/Technology Skills, Science, Music, Visual Arts.]**
How We Organize Ourselves (A Circle of Friends)	**Language Arts** Grade K Competency Goal 1: The learner will develop and apply enabling strategies and skills to read and write. (1.015, 1.03, 1.034, 1.035, 1.04) Grade K Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.03, 4.061, 4.07) **Mathematics** Grade K Competency Goal 1: The learner will recognize, model, and write numbers through 10. (1.01, 1.06, 1.07) Grade K Competency Goal 2: The learner will explore concepts of geometry and non-standard measurement. (2.03, 2.04, 2.06) Grade K Competency Goal 3: The learner will model simple patterns and sorting activities. (3.04) **[Unit also includes goals in the following curriculum content areas: Social Studies, Guidance, Information Literacy, Healthful Living, Visual Arts.]**
Sharing the Planet (Caring and Sharing)	**Language Arts** Grade K Competency Goal 1: The learner will develop and apply enabling strategies and skills to read and write. (1.014, 1.023, 1.05, 1.06) Grade K Competency Goal 2: The learner will develop and apply strategies and skills to comprehend text that is read, heard, and viewed. (2.03, 2.04, 2.05, 2.06, 2.07, 2.09, 2.10) Grade K Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. (3.041, 3.042, 3.043) Grade K Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.05, 4.06,4.62, 4.10, 4.11, 4.12, 4.13, 4.14, 4.15) Grade K Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.012, 5.013, 5.014, 5.015, 5.016, 5.02, 5.03, 5.04, 5.05) **Mathematics** Grade K Competency Goal 1: The learner will recognize, model, and write numbers through 10. (1.08, 1.11) Grade K Competency Goal 3: The learner will model simple patterns and sorting activities. (4.01) **[Unit also includes goals in the following curriculum content areas: Computer/Technology Skills, Science, Information Literacy, Music, Visual Arts.]**

Theme and Grade-Specific Unit Title	NCSCS Competency Goals (Competency Goals are stated, followed by objective numbers in parentheses. See full text of objectives at **www.ncpublicschools.org/curriculum**.)
Grade 1: Who We Are (Where Do You Hang Your Hat?)	**Language Arts** 1st Grade Competency Goal 1: The learner will develop and apply enabling strategies and skills to read and write. (1.011, 1.012, 1.013) 1st Grade Competency Goal 2: The learner will develop and apply strategies and skills to comprehend text that is read, heard, and viewed. (2.03) 1st Grade Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. (3.01, 3.04) 1st Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.031, 4.032, 4.06, 4.07) 1st Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.012, 5.02, 5.082, 5.11) **Mathematics** 1st Grade Competency Goal 1: The learner will read, write, and model numbers through 100 and compute with whole numbers. (1.05, 1.14, 1.16, 1.18) 1st Grade Competency Goal 2: The learner will recognize, describe and identify simple geometric shapes and forms, and exhibit skills in using measurement. (2.03) 1st Grade Competency Goal 3: The learner will demonstrate an understanding of classification, patterning, and seriation. (3.02, 3.04-3.06) 1st Grade Competency Goal 4: The learner will demonstrate an understanding of data collection, display, and interpretation. (4.02) **[Unit also includes goals in the following curriculum content areas: Social Studies, Guidance, Computer/Technology Skills, Science, Information Literacy, Healthful Living, Theatre Arts, Visual Arts.]**
Where We Are in Place & Time (Are You My Mummy?)	**Language Arts** 1st Grade Competency Goal 1: The learner will develop and apply enabling strategies and skills to read and write. (1.024) 1st Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.01, 4.033) 1st Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.04, 5.05) **Mathematics** 1st Grade Competency Goal 1: The learner will read, write, and model numbers through 100 and compute with whole numbers. (1.11) 1st Grade Competency Goal 2: The learner will recognize, describe and identify simple geometric shapes and forms, and exhibit skills in using measurement. (2.07, 2.09, 2.12) **[Unit also includes goals in the following curriculum content areas: Computer/Technology Skills, Information Literacy, Music, Visual Arts.]**

Theme and Grade-Specific Unit Title	NCSCS Competency Goals (Competency Goals are stated, followed by objective numbers in parentheses. See full text of objectives at **www.ncpublicschools.org/curriculum**.)
How We Express Ourselves (Author! Author)	**Language Arts** 1st Grade Competency Goal 1: The learner will develop and apply enabling strategies and skills to read and write. (1.02, 1.023) 1st Grade Competency Goal 2: The learner will develop and apply strategies and skills to comprehend text that is read, heard, and viewed. (2.01, 2.02, 2.04, 2.06, 2.07) 1st Grade Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. (3.02, 3.042, 3.043, 3.05, 3.06, 3.07, 3.071) 1st Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.011, 4.012, 4.013, 4.03, 4.034 4.04, 4.08) 1st Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.06) **Mathematics** 1st Grade Competency Goal 1: The learner will read, write, and model numbers through 100 and compute with whole numbers. (1.04, 1.08, 1.09, 1.17, 1.22) 1st Grade Competency Goal 2: The learner will recognize, describe and identify simple geometric shapes and forms, and exhibit skills in using measurement. (2.01, 2.02, 2.03, 2.06) 1st Grade Competency Goal 3: The learner will demonstrate an understanding of classification, patterning, and seriation. (3.02, 3.03) **[Unit also includes goals in the following curriculum content areas: Computer/Technology Skills, Information Literacy, Theatre Arts, Dance, Music, Visual Arts.]**
How the World Works (Commotion in Motion)	**Language Arts** 1st Grade Competency Goal 1: The learner will develop and apply enabling strategies and skills to read and write. (1.021) 1st Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.05) 1st Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.01, 5.011, 5.03, 5.072, 5.081, 5.09) **Mathematics** 1st Grade Competency Goal 1: The learner will read, write, and model numbers through 100 and compute with whole numbers. (1.02, 1.07, 1.12, 1.22) 1st Grade Competency Goal 2: The learner will recognize, describe and identify simple geometric shapes and forms, and exhibit skills in using measurement. (2.04, 2.05) 1st Grade Competency Goal 3: The learner will demonstrate an understanding of classification, patterning, and seriation. (3.02, 30.5) 1st Grade Competency Goal 4: The learner will demonstrate an understanding of data collection, display, and interpretation. (4.01, 4.03, 4.04) **[Unit also includes goals in the following curriculum content areas: Social Studies, Computer/Technology Skills, Science, Information Literacy, Healthful Living, Theatre Arts, Dance, Music.]**

Theme and Grade-Specific Unit Title	NCSCS Competency Goals (Competency Goals are stated, followed by objective numbers in parentheses. See full text of objectives at **www.ncpublicschools.org/curriculum**.)
How We Organize Ourselves (Show Me the Money!)	**Language Arts** 1st Grade Competency Goal 1: The learner will develop and apply enabling strategies and skills to read and write. (1.014, 1.025, 1.03) 1st Grade Competency Goal 2: The learner will develop and apply strategies and skills to comprehend text that is read, heard, and viewed. (2.05, 2.08) 1st Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.014, 4.02) 1st Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.013, 5.014, 5.10) **Mathematics** 1st Grade Competency Goal 1: The learner will read, write, and model numbers through 100 and compute with whole numbers. (1.19-1.22) 1st Grade Competency Goal 2: The learner will recognize, describe and identify simple geometric shapes and forms, and exhibit skills in using measurement. (2.11) **[Unit also includes goals in the following curriculum content areas: Social Studies, Guidance, Computer/Technology Skills, Science, Information Literacy, Theatre Arts, Music.]**
Sharing the Planet (They Have Needs Too!)	Language Arts 1st Grade Competency Goal 1: The learner will develop and apply enabling strategies and skills to read and write. (1.01,) 1st Grade Competency Goal 2: The learner will develop and apply strategies and skills to comprehend text that is read, heard, and viewed. (3.041, 3.072, 3.073) 1st Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.07, 5.071, 5.08) **Mathematics** 1st Grade Competency Goal 1: The learner will read, write, and model numbers through 100 and compute with whole numbers. (1.01-1.04, 1.10, 1.14, 1.22) 1st Grade Competency Goal 2: The learner will recognize, describe and identify simple geometric shapes and forms, and exhibit skills in using measurement. (2.01, 2.02, 2.10) 1st Grade Competency Goal 3: The learner will demonstrate an understanding of classification, patterning, and seriation. (3.01, 3.03) **[Unit also includes goals in the following curriculum content areas: Social Studies, Science, Guidance, Computer/Technology Skills, Science, Information Literacy, Theatre Arts, Music.]**
Grade 2: Who We Are (Hello Friend!)	**Language Arts** 2nd Grade Competency Goal 2: The learner will develop and apply strategies and skills to comprehend text that is read, heard, and viewed. (2.06) 2nd Grade Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. (3.01, 3.05, 3.051, 3.052, 3.053) 2nd Grade Competency Goal 4 (4.03, 4.06, 4.08) 2nd Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.02, 5.021, 5.03, 5.04, 5.041-5.043, 5.10, 5.101) **Mathematics** 2nd Grade Competency Goal 1: The learner will read, write, and model numbers through 1000, and compute with numbers less than 1000. (1.01, 1.03, 1.05, 1.10, 1.16, 1.18) 2nd Grade Competency Goal 2: The learner will recognize, understand, and use basic geometric properties, and standard units of metric and customary measurement. (2.01, 2.05) 2nd Grade Competency Goal 4: The learner will demonstrate an understanding of data collection, display, and interpretation. (4.01, 4.02) **[Unit also includes goals in the following curriculum content areas: Social Studies, Guidance, Computer/Technology Skills, Science, Information Literacy, Healthful Living, Theatre Arts, Dance, Music, Visual Arts.]**

Theme and Grade-Specific Unit Title	NCSCS Competency Goals (Competency Goals are stated, followed by objective numbers in parentheses. See full text of objectives at **www.ncpublicschools.org/curriculum**.)
Where We Are in Place & Time (Won't You Be My Neighbor?)	**Language Arts** 2nd Grade Competency Goal 1: The learner will develop and apply enabling strategies and skills to read and write. (1.02) 2nd Grade Competency Goal 2: The learner will develop and apply strategies and skills to comprehend text that is read, heard, and viewed. (2.02) 2nd Grade Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. (3.06) 2nd Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.05, 4.07, 4.071, 4.072) 2nd Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.09) **Mathematics** 2nd Grade Competency Goal 1: The learner will read, write, and model numbers through 1000, and compute with numbers less than 1000. (1.02, 1.06, 1.10-1.12, 1.14, 1.16) 2nd Grade Competency Goal 2: The learner will recognize, understand, and use basic geometric properties, and standard units of metric and customary measurement. (2.01, 2.06) **[Unit also includes goals in the following curriculum content areas: Social Studies, Computer/Technology Skills, Information Literacy, Healthful Living, Theatre Arts, Dance, Music, Visual Arts.]**
How We Express Ourselves (Let's Make Some Noise)	**Language Arts** 2nd Grade Competency Goal 1: The learner will develop and apply enabling strategies and skills to read and write. (1.05) 2nd Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.01, 4.02, 4.09, 4.13) 2nd Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.022, 5.023, 5.05) **Mathematics** 2nd Grade Competency Goal 1: The learner will read, write, and model numbers through 1000, and compute with numbers less than 1000. (1.07, 1.13) 2nd Grade Competency Goal 2: The learner will recognize, understand, and use basic geometric properties, and standard units of metric and customary measurement. (2.03) 2nd Grade Competency Goal 3: The learner will demonstrate an understanding of classification, patterning, and seriation. (3.01, 3.05) 2nd Grade Competency Goal 4: The learner will demonstrate an understanding of data collection, display, and interpretation. (4.05) **[Unit also includes goals in the following curriculum content areas: Computer/Technology Skills, Science, Information Literacy, Healthful Living, Theatre Arts, Dance, Music, Visual Arts.]**

Theme and Grade-Specific Unit Title	NCSCS Competency Goals (Competency Goals are stated, followed by objective numbers in parentheses. See full text of objectives at **www.ncpublicschools.org/curriculum**.)
How the World Works (Weather or Not)	**Language Arts** 2nd Grade Competency Goal 1: The learner will develop and apply enabling strategies and skills to read and write. (1.01) 2nd Grade Competency Goal 2: The learner will develop and apply strategies and skills to comprehend text that is read, heard, and viewed. (2.03, 2.04, 2.05) 2nd Grade Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. (3.04) 2nd Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.04, 4.11, 4.14) 2nd Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.102, 5.103) **Mathematics** 2nd Grade Competency Goal 1: The learner will read, write, and model numbers through 1000, and compute with numbers less than 1000. (1.02, 1.03, 1.05, 1.09, 1.10, 1.11, 1.18-1.20) 2nd Grade Competency Goal 2: The learner will recognize, understand, and use basic geometric properties, and standard units of metric and customary measurement. (2.01, 2.02, 2.05, 2.06, 2.09) 2nd Grade Competency Goal 3: The learner will demonstrate an understanding of classification, patterning, and seriation. (3.01-3.07) 2nd Grade Competency Goal 4: The learner will demonstrate an understanding of data collection, display, and interpretation. (4.01, 4.02, 4.04) **[Unit also includes goals in the following curriculum content areas: Computer/Technology Skills, Science, Information Literacy, Healthful Living, Theatre Arts, Visual Arts.]**
How We Organize Ourselves (Money Doesn't Grow on Trees)	**Language Arts** 2nd Grade Competency Goal 1: The learner will develop and apply enabling strategies and skills to read and write. (1.02) 2nd Grade Competency Goal 2: The learner will develop and apply strategies and skills to comprehend text that is read, heard, and viewed. (2.01, 2.08, 2.09) 2nd Grade Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. (3.03, 3.054) 2nd Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.05-5.07) **Mathematics** 2nd Grade Competency Goal 1: The learner will read, write, and model numbers through 1000, and compute with numbers less than 1000. (1.15, 1.17) 2nd Grade Competency Goal 2: The learner will recognize, understand, and use basic geometric properties, and standard units of metric and customary measurement. (2.10-2.15) **[Unit also includes goals in the following curriculum content areas: Social Studies, Information Literacy, Healthful Living, Theatre Arts, Dance, Music, Visual Arts.]**

Theme and Grade-Specific Unit Title	NCSCS Competency Goals (Competency Goals are stated, followed by objective numbers in parentheses. See full text of objectives at **www.ncpublicschools.org/curriculum**.)
Sharing the Planet (The Circle of Life)	**Language Arts** 2nd Grade Competency Goal 1: The learner will develop and apply enabling strategies and skills to read and write. (1.03, 1.04) 2nd Grade Competency Goal 2: The learner will develop and apply strategies and skills to comprehend text that is read, heard, and viewed. (2.01, 2.07) 2nd Grade Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. (3.02) 2nd Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.03, 4.073, 4.10) 2nd Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.01, 5.043, 5.08) **Mathematics** 2nd Grade Competency Goal 1: The learner will read, write, and model numbers through 1000, and compute with numbers less than 1000. (1.04-1.11, 1.18, 1.19) 2nd Grade Competency Goal 2: The learner will recognize, understand, and use basic geometric properties, and standard units of metric and customary measurement. (2.04, 2.10-2.13) 2nd Grade Competency Goal 3: The learner will demonstrate an understanding of classification, patterning, and seriation. (3.03, 3.05, 3.06) 2nd Grade Competency Goal 4: The learner will demonstrate an understanding of data collection, display, and interpretation. (4.01-4.03) **[Unit also includes goals in the following Studies, Guidance, Computer/Technology Skills, Science, Information Literacy, Healthful Living, Theatre Arts, Dance, Music, Visual Arts.]**
Grade 3: Who We Are (I Have an Attitude and I Know How to Use It)	**Language Arts** 3rd Grade Competency Goal 2: The learner will apply strategies and skills to comprehend text that is read, heard, and viewed. (2.12, 2.121, 2.122) 3rd Grade Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. (3.02, 3.07) 3rd Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.07, 4.09) **Mathematics** No math objectives. **[Unit also includes goals in the following curriculum content areas: Social Studies, Guidance, Character Traits, Information Literacy, Healthful Living, Theatre Arts, Music, Visual Arts.]**
Where We Are in Place & Time (Those Were the Days)	**Language Arts** 3rd Grade Competency Goal 2: The learner will apply strategies and skills to comprehend text that is read, heard, and viewed. (2.01, 2.02, 2.021-2.023, 2.04-2.06, 2.062, 2.123) 3rd Grade Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. (3.04, 3.05) **Mathematics** 3rd Grade Competency Goal 2: The learner will recognize, understand, and use basic geometric properties, and standard units of metric and customary measurement. (2.05, 2.11) 3rd Grade Competency Goal 3: The learner will demonstrate an understanding of classification, patterning, and seriation. (3.06) **[Unit also includes goals in the following curriculum content areas: Social Studies, Computer/Technology Skills, Information Literacy, Theatre Arts, Dance, Visual Arts.]**

Theme and Grade-Specific Unit Title	NCSCS Competency Goals (Competency Goals are stated, followed by objective numbers in parentheses. See full text of objectives at **www.ncpublicschools.org/curriculum**.)
How We Express Ourselves (Would You Believe?)	**Language Arts** 3rd Grade Competency Goal 1: The learner will apply enabling strategies and skills to read and write. (1.01-1.07) 3rd Grade Competency Goal 2: The learner will apply strategies and skills to comprehend text that is read, heard, and viewed. (2.061, 2.08, 2.081-2.0810) 3rd Grade Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. (3.03, 3.06) 3rd Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.01, 4.02, 4.021-4.023, 4.03-4.06) 3rd Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.01, 5.011-5.014, 5.02-5.04, 5.041-5.045, 5.05-5.08) **Mathematics** 3rd Grade Competency Goal 3: The learner will demonstrate an understanding of classification, patterning, and seriation. (3.04) **[Unit also includes goals in the following curriculum content areas: Information Literacy, Theatre Arts, Dance, Music, Visual Arts.]**
How the World Works (Bright Ideas)	Language Arts 3rd Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.024-4.028) **Mathematics** 3rd Grade Competency Goal 2: The learner will recognize, understand, and use basic geometric properties, and standard units of metric and customary measurement. (2.12, 2.13) 3rd Grade Competency Goal 4: The learner will demonstrate an understanding of data collection, display, and interpretation. (4.02) **[Unit also includes goals in the following curriculum content areas: Computer/Technology Skills.]**
How We Organize Ourselves (Who's In Charge Here?)	**Language Arts** 3rd Grade Competency Goal 2: The learner will apply strategies and skills to comprehend text that is read, heard, and viewed. (2.09-2.11) 3rd Grade Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. (3.09) 3rd Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.08, 4.081-4.085, 4.10) **Mathematics** 3rd Grade Competency Goal 2: The learner will recognize, understand, and use basic geometric properties, and standard units of metric and customary measurement. (2.09) 3rd Grade Competency Goal 4: The learner will demonstrate an understanding of data collection, display, and interpretation. (4.01-4.06) **[Unit also includes goals in the following curriculum content areas: Social Studies, Computer/Technology Skills, Information Literacy, Visual Arts.**
Sharing the Planet (The Earth Beneath our Feet)	**Language Arts** 3rd Grade Competency Goal 2: The learner will apply strategies and skills to comprehend text that is read, heard, and viewed. (2.063, 2.07) **Mathematics** 3rd Grade Competency Goal 2: The learner will recognize, understand, and use basic geometric properties, and standard units of metric and customary measurement. (2.06, 2.08, 2.13) **[Unit also includes goals in the following curriculum content areas: Computer/Technology Skills, Information Literacy.]**

Theme and Grade-Specific Unit Title	NCSCS Competency Goals (Competency Goals are stated, followed by objective numbers in parentheses. See full text of objectives at **www.ncpublicschools.org/curriculum**.)
Grade 4: Who We Are (It Takes All Kinds)	**Language Arts** 4th Grade Competency Goal 1: The learner will apply enabling strategies and skills to read and write. (1.07) 4th Grade Competency Goal 2: The learner will apply strategies and skills to comprehend text that is read, heard, and viewed. (2.052-2.054, 2.06, 2.07, 2.071, 2.073, 2.08, 2.12, 2.121-2.123) 4th Grade Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. (3.01, 3.012-3.014, 2.02, 3.03) 4th Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.01, 4.02, 4.021-4.023, 4.028, 4.03, 4.05, 4.06) 4th Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.02, 5.04, 5.07, 5.071) **Mathematics** 4th Grade Competency Goal 1: The learner will read, write, model, and compute with rational numbers. (1.01-1.03, 1.10-1.15) 4th Grade Competency Goal 2: The learner will demonstrate an understanding and use of the properties and relationships in geometry, and standard units of metric and customary measurement. (2.08) 4th Grade Competency Goal 4: The learner will demonstrate an understanding and use of graphing, probability, and data analysis. (4.03) **[Unit also includes goals in the following curriculum content areas: Social Studies, Guidance, Computer/Technology Skills, Science, Information Literacy, Healthful Living, Theatre Arts, Dance, Music, Visual Arts.]**
Where We Are in Place & Time (Are We There Yet?)	**Language Arts** 4th Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.08, 4.081-4.083) 4th Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.041, 5.044, 5.08) **Mathematics** 4th Grade Competency Goal 1: The learner will read, write, model, and compute with rational numbers. (1.04-1.06) 4th Grade Competency Goal 2: The learner will demonstrate an understanding and use of the properties and relationships in geometry, and standard units of metric and customary measurement. (2.05, 2.07) 4th Grade Competency Goal 4: The learner will demonstrate an understanding and use of graphing, probability, and data analysis. (4.07) **[Unit also includes goals in the following curriculum content areas: Social Studies, Computer/Technology Skills, Science, Healthful Living.]**

Theme and Grade-Specific Unit Title	NCSCS Competency Goals (Competency Goals are stated, followed by objective numbers in parentheses. See full text of objectives at **www.ncpublicschools.org/curriculum**.)
How We Express Ourselves (Beam Me Up!)	**Language Arts** 4th Grade Competency Goal 2: The learner will apply strategies and skills to comprehend text that is read, heard, and viewed.(2.02, 2.021-2.023, 2.03-2.05, 2.051, 2.072, 2.074-2.076) 4th Grade Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. (3.011, 3.04-3.06) 4th Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.06, 4.07, 4.09, 4.10) 4th Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.01, 5.011-5.016, 5.06, 5.061, 5.062) **Mathematics** 4th Grade Competency Goal 1: The learner will read, write, model, and compute with rational numbers. (1.15) 4th Grade Competency Goal 2: The learner will demonstrate an understanding and use of the properties and relationships in geometry, and standard units of metric and customary measurement. (2.01, 2.02, 2.04, 2.07) 4th Grade Competency Goal 3: The learner will demonstrate an understanding of patterns and relationships. (3.01) 4th Grade Competency Goal 4: The learner will demonstrate an understanding and use of graphing, probability, and data analysis. (4.02, 4.03, 4.07) **[Unit also includes goals in the following curriculum content areas: Guidance, Computer/Technology Skills, Information Literacy, Theatre Arts, Visual Arts.]**
How the World Works (Creative Contraptions)	**Language Arts** 4th Grade Competency Goal 2: The learner will apply strategies and skills to comprehend text that is read, heard, and viewed. (2.09-2.11) 4th Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.024, 4.026, 4.027, 4.04, 4.084, 4.085) 4th Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.072, 5.075) **Mathematics** 4th Grade Competency Goal 1: The learner will read, write, model, and compute with rational numbers. (1.18) 4th Grade Competency Goal 3: The learner will demonstrate an understanding of patterns and relationships. (3.03, 3.04) 4th Grade Competency Goal 4: The learner will demonstrate an understanding and use of graphing, probability, and data analysis. (4.01-4.04) **[Unit also includes goals in the following curriculum content areas: Social Studies, Computer/Technology Skills, Information Literacy, Healthful Living, Dance, Visual Arts.]**
How We Organize Ourselves (No Man is and Island)	**Language Arts** 4th Grade Competency Goal 2: The learner will apply strategies and skills to comprehend text that is read, heard, and viewed. (2.01) 4th Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.05, 5.051-5.054, 5.063, 5.073) **Mathematics** 4th Grade Competency Goal 1: The learner will read, write, model, and compute with rational numbers. (1.08, 1.16, 1.17) 4th Grade Competency Goal 4: The learner will demonstrate an understanding and use of graphing, probability, and data analysis. (4.03, 4.05, 4.06) **[Unit also includes goals in the following curriculum content areas: Social Studies, Guidance, Computer/Technology Skills, Information Literacy, Healthful Living.]**

Theme and Grade-Specific Unit Title	NCSCS Competency Goals (Competency Goals are stated, followed by objective numbers in parentheses. See full text of objectives at **www.ncpublicschools.org/curriculum**.)
Sharing the Planet (Amazing Animals)	**Language Arts** 4th Grade Competency Goal 1: The learner will apply enabling strategies and skills to read and write. (1.01-1.06) 4th Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.03, 5.042, 5.09) **Mathematics** 4th Grade Competency Goal 1: The learner will read, write, model, and compute with rational numbers. (1.07, 1.09, 1.14) 4th Grade Competency Goal 2: The learner will demonstrate an understanding and use of the properties and relationships in geometry, and standard units of metric and customary measurement. (2.09, 2.10) 4th Grade Competency Goal 3: The learner will demonstrate an understanding of patterns and relationships. (3.02) **[Unit also includes goals in the following curriculum content areas: Social Studies, Guidance, Computer/Technology Skills, Science, Information Literacy, Healthful Living, Theatre Arts, Dance, Music, Visual Arts.]**
Grade 5: Who We Are (Rites of Passage)	**Language Arts** 5th Grade Competency Goal 2: The learner will apply strategies and skills to comprehend text that is read, heard, and viewed. (2.025) **Mathematics** No math objectives. **[Unit also includes goals in the following curriculum content areas: Guidance, Healthful Living, Theatre Arts, Dance, Visual Arts.]**
Where We Are in Place & Time (Oh, the Places We'll Go)	**Language Arts** 5th Grade Competency Goal 1: The learner will apply enabling strategies and skills to read and write. (1.03, 1.05) 5th Grade Competency Goal 2: The learner will apply strategies and skills to comprehend text that is read, heard, and viewed. (2.01, 2.02, 2.021-2.024, 2.031, 2.032, 2.034, 2.051-2.053, 2.06) 5th Grade Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. (3.013, 3.014) 5th Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.01, 4.024, 4.07, 4.08, 4.081-4.084, 4.09, 4.10) 5th Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.02, 5.033, 5.07, 5.08) **Mathematics** No math objectives. **[Unit also includes goals in the following curriculum content areas: Social Studies, Computer/Technology Skills, Information Literacy, Theatre Arts, Dance, Music, Visual Arts.]**
How We Express Ourselves (Express Yourself)	**Language Arts** 5th Grade Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. (3.01) 5th Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.04-4.06) 5th Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.01, 5.031, 5.032, 5.04, 5.041, 5.042, 5.05, 5.051-5.053, 5.06) **Mathematics** No math objectives. **[Unit also includes goals in the following curriculum content areas: Computer/Technology Skills, Information Literacy, Theatre Arts, Dance, Music, Visual Arts.]**

Theme and Grade-Specific Unit Title	NCSCS Competency Goals (Competency Goals are stated, followed by objective numbers in parentheses. See full text of objectives at **www.ncpublicschools.org/curriculum**.)
How the World Works (As the World Turns)	**Language Arts** 5th Grade Competency Goal 1: The learner will apply enabling strategies and skills to read and write. (1.01, 1.02, 1.04, 1.06) 5th Grade Competency Goal 2: The learner will apply strategies and skills to comprehend text that is read, heard, and viewed. (2.071-2.073, 2.08-2.10, 2.101-2.106, 2.11) **Mathematics** 5th Grade Competency Goal 2: The learner will demonstrate an understanding and use of the properties and relationships in geometry, and standard units of metric and customary measurement. (2.07, 2.09, 2.10) **[Unit also includes goals in the following curriculum content areas: Computer/Technology Skills, Information Literacy, Theatre Arts, Music.]**
How We Organize Ourselves (All in Favor, Say Aye!)	**Language Arts** 5th Grade Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. (3.03, 3.04, 3.071-3.074) 5th Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.022, 4.023, 4.025-4.028) **Mathematics** 5th Grade Competency Goal 1: The learner will understand and compute with rational numbers. (1.01, 1.10, 1.15) 5th Grade Competency Goal 2: The learner will demonstrate an understanding and use of the properties and relationships in geometry, and standard units of metric and customary measurement. (2.01-2.03) 5th Grade Competency Goal 3: The learner will demonstrate an understanding of patterns, relationships, and elementary algebraic representation. (3.03, 3.05) 5th Grade Competency Goal 4: The learner will demonstrate an understanding and use of graphing, probability and data analysis. (4.01-4.08) **[Unit also includes goals in the following curriculum content areas: Social Studies, Computer/Technology Skills, Information Literacy, Theatre Arts, Music.]**
Sharing the Planet (In the Dark)	**Language Arts** 5th Grade Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. (3.02, 3.05) 5th Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.03) **Mathematics** 5th Grade Competency Goal 3: The learner will demonstrate an understanding of patterns, relationships, and elementary algebraic representation. (3.03, 3.05) 5th Grade Competency Goal 4: The learner will demonstrate an understanding and use of graphing, probability and data analysis. (4.08, 4.09) **[Unit also includes goals in the following curriculum content areas: Social Studies, Guidance, Computer/Technology Skills, Information Literacy, Healthful Living, Dance, Music.]**

Table A4. NCSCS Competency Goals of Joyner Year 1 Curriculum Units

Title	Grade	NCSCS Competency Goals (Competency Goals are stated, followed by objective numbers in parentheses. See full text of objectives at **www.ncpublicschools.org/curriculum**.)
La Palabra de Joyner (Joyner's Word)	4-5	**Computer/Technology Skills** 4th Grade Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit ethical behavior in the use of computer and other technologies. (1.4) 4th Grade Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies. (2.1-2.4, 2.9-2.10) 4th Grade Competency Goal 3: The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information. (3.1, 3.4, 3.5) **English/Language Arts** 4th Grade Competency Goal 1: The learner will apply enabling strategies and skills to read and write. (1.04, 1.05) 4th Grade Competency Goal 2: The learner will apply strategies and skills to comprehend text that is read, hears, and viewed. (2.01, 2.02, 2.05, 2.07, 2.09) 4th Grade Competency Goal 3: The learner will make connections with text through the use of oral language, written language, and media and technology. (3.03, 3.05, 3.06) 4th Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.02-4.10) 4th Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.01-5.09) **Second Languages** 4th Grade Competency Goal 3: The learner will present information, concepts, and ideas to an audience of listeners or readers on a variety of topics in the target language. (3.01-3.05) 4th Grade Competency Goal 6: The learner will acquire, reinforce, and further his/her knowledge of other disciplines through the foreign language. (6.01-6.04)
Weaving the World: "An Exploration of World Cultures"	1	**Social Studies** – Compares one's own family life with that of a child living in another culture. **Social Studies** – Distinguishes similarities and differences among individuals and families. **Science** – Goal 1: The learner will build an understanding of needs of living organisms.
And the Winning Author Is **….**	3-5	**Computer Skills** 3rd Grade Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit ethical behavior in the use of computer and other technologies. 3rd Grade Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies. 3rd Grade Competency Goal 3: The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information. **Information Skills** 3rd Grade Competency Goal 1: The learner will explore sources and formats for reading. Listening, and viewing purposes. 3rd Grade Competency Goal 2: The learner will identify and use criteria for excellence to evaluate information and formats. 3rd Grade Competency Goal 4: The learner will explore and use research processes to meet information needs. **English/Language Arts** 3rd Grade Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology.

Table A5. NCSCS Competency Goals of Powell Year 1 Curriculum Units

Unit Title	NCSCS (Competency Goals are stated, followed by objective numbers in parentheses. See full text of objectives at **www.ncpublicschools.org/curriculum.**)
School News Today	**Information Skills** Competency Goal 1: The learner will explore sources and formats for reading, listening and viewing purposes. Competency Goal 2: The learner will identify and use criteria for excellence to evaluate information formats. Competency Goal 3: The learner will communicate reading, listening and viewing experiences. **Computer/Technology Skills** Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit ethical behavior in the use of computer and other technologies. Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies. Competency Goal 3: The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information. **English/Language Arts Curriculum** Competency Goal 1: The learner will develop and apply enabling strategies and skills to read and write. Competency Goal 2: The learner will develop and apply strategies and skills to comprehend text that is read, hears, and viewed. Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. **Science** 4th Grade Competency Goal 4: The learner will build an understanding of technological designs. **Visual Arts** Competency Goal 1: The learner will develop critical and creative thinking skills and perceptual awareness necessary for understanding and producing art. Competency Goal 2: The learner will develop skills necessary for understanding and applying media, techniques, and processes. (National Standard 1) Competency Goal 3: The learner will organize the components of a work into a cohesive whole through knowledge of organizational principles of design and art elements. (National Standard 2) Competency Goal 4: The learner will choose and evaluate a range of subject matter and ideas to communicate intended meaning in artworks. (National Standard 3) Competency Goal 5: The learner will understand the visual arts in relation to history and cultures. (National Standard 4) Competency Goal 6: The learner will reflect upon and assess the characteristics and merits of their work and the work of others. (National Standard 5) **Theatre Arts** Competency Goal 2: The learner will act by interacting in improvisations and assuming roles. (National Standard 2) Competency Goal 4: The learner will direct through planning and presenting informal or formal productions. (National Standard 4) Competency Goal 5: The learner will research by finding information to support informal or formal productions. (National Standard 5) Competency Goal 6: The learner will compare and integrate art forma by analyzing traditional theatre, dance, music, visual arts, and new art forms. (National Standard 6) **Social Studies** Competency Goal 1: The learner will exhibit good citizenship in the classroom, school, and community. Competency Goal 3: The learner will analyze the multiple roles that individuals perform in families, workplace, and communities. Competency Goal 4: The learner will apply concepts of authority, responsibility, and justice in a democratic society.

Unit Title	NCSCS (Competency Goals are stated, followed by objective numbers in parentheses. See full text of objectives at **www.ncpublicschools.org/curriculum.**)
Garden Design	**Science** 3rd Grade Competency Goal 1: The learner will build an understanding of plant growth and adaptations. (1.01, 1.02, 1.03, 1.04, 1.05) 3rd Grade Competency Goal 2: The learner will build an understanding of soil concepts. (2.01, 2.02, 2.03, 2.04) 5th Competency Goal 1: The learner will build an understanding of the interdependence of plants and animals. (1.01, 1.02, 1.03, 1.04, 1.05, 1.06) **Technology** 3rd Grade Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit ethical behavior in the use of computer and other technologies. (1.1, 1.3, 1.4) 3rd Grade Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies. (2.2, 2.3, 2.4) 3rd Grade Competency Goal 3: The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information. (3.1, 3.2) 4th Grade Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit ethical behavior in the use of computer and other technologies. (1.1) 4th Grade Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies. (2.1, 2.2, 2.3, 2.4, 2.10) 4th Grade Competency Goal 3: The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information. (3.1, 3.2, 3.4) 5th Grade Competency Goal 1: The learner will understand important issues of a technology-based society and will exhibit ethical behavior in the use of computer and other technologies. (1.1) 5th Grade Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies. (2.1, 2.3, 2.4) 5th Grade Competency Goal 3: The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply, and communicate information. (3.1, 3.3, 3.5)
Advertising and Graphic Design	**Language Arts** Competency Goal 3: The learner will make connections through the use of oral language and written language, and media and technology. Competency Goal 4: The learner will apply strategies and skills to create oral, written and visual texts. **Technology** Competency Goal 1: The learner will understand important issues of technology-based society and will exhibit ethical behavior in the use of computer and other technologies. Competency Goal 2: The learner will demonstrate knowledge and skills in the use of computer and other technologies. Competency Goal 3: The learner will use a variety of technologies to access, analyze, interpret, synthesize, apply and communicate information. **Visual Arts** Competency Goal 1: The learner will develop critical and creative thinking skills and perceptual awareness necessary for understanding and producing art. Competency Goal 2: The learner will develop skills necessary for understanding and applying media, techniques, and processes. Competency Goal 3: The learner will organize the components of a work into a cohesive whole through knowledge of organizational principles of design and art elements.

Unit Title	NCSCS (Competency Goals are stated, followed by objective numbers in parentheses. See full text of objectives at **www.ncpublicschools.org/curriculum.**)
Story-Spinning Radio Show	**Theatre Arts** 3rd Grade Competency Goal 1: The learner will write based on personal experience and heritage, imagination, literature, and history.(1.01, 1.02) (National Standard 1) 3rd Grade Competency Goal 2: The learner will act by interacting in improvisations and assuming roles. (2.02, 2.03, 2.04, 2.05) (National Standard 2) 3rd Grade Competency Goal 4: The learner will direct through planning and presenting informal or formal productions. (4.01, 4.05, 4.06, 4.08, 4.10) (National Standard 4) 3rd Grade Competency Goal 5: The learner will research by finding information to support informal or formal productions. (5.01, 5.03, 5.04, 5.05, 5.06, 5.08, 5.09, 5.10) (National Standard 5) 3rd Grade Competency Goal 6: The learner will compare and integrate art forms by analyzing traditional theatre, dance, music, visual arts, and new art forms. (6.01, 6.06) (National Standard 6) 3rd Grade Competency Goal 7: The learner will analyze, critique, and construct meaning from informal and formal theatre, film, television, and electronic media productions. (7.01, 7.03, 7.05, 7.07, 7.08) (National Standard 7) 3rd Grade Competency Goal 8: The learner will understand context by analyzing the role of theatre, film, television, and electronic media in the past and present. (8.03, 8.04, 8.05, 8.06) (National Standard 8) 4th Grade Competency Goal 1: The learner will write based on personal experience and heritage, imagination, literature, and history. (1.01, 1.02, 1.05, 1.06, 1.07) (National Standard 1) 4th Grade Competency Goal 2: The learner will act by interacting in improvisations and assuming roles. (2.02, 2.03, 2.04, 2.05, 2.07, 2.08, 2.09) (National Standard 2) 4th Grade Competency Goal 4: The learner will direct through planning and presenting informal or formal productions. (4.01, 4.03, 4.04, 4.05, 4.06, 4.07, 4.08, 4.09, 4.10) (National Standard 4) 4th Grade Competency Goal 5: The learner will research by finding information to support informal or formal productions. (5.01, 5.02, 5.03, 5.04, 5.06,5.07, 5.08) (National Standard 5) 4th Grade Competency Goal 6: The learner will compare and integrate art forms by analyzing traditional theatre, dance, music, visual arts, and new art forms. (6.01, 6.05) (National Standard 6) 4th Grade Competency Goal 7: The learner will analyze, critique, and construct meaning from informal and formal theatre, film, television, and electronic media productions. (7.01, 7.02, 7.03, 7.04, 7.05, 7.06, 7.07, 7.09) (National Standard 7) 4th Grade Competency Goal 8: The learner will understand context by analyzing the role of theatre, film, television, and electronic media in the past and present. (8.03, 8.04, 8.05, 8.06, 8.07) (National Standard 8) 5th Grade Competency Goal 1: The learner will write based on personal experience and heritage, imagination, literature, and history. (1.01, 1.02, 1.05, 1.06, 1.07) (National Standard 1) 5th Grade Competency Goal 2: The learner will act by interacting in improvisations and assuming roles. (2.01, 2.02, 2.03, 2.04, 2.05, 2.07, 2.08, 2.09) (National Standard 2) 5th Grade Competency Goal 4: The learner will direct through planning and presenting informal or formal productions. (4.01, 4.03, 4.04, 4.05, 4.06, 4.07, 4.08, 4.09, 4.10)(National Standard 4) 5th Grade Competency Goal 5: The learner will research by finding information to support informal or formal productions. (5.01, 5.02, 5.03, 5.04, 5.06, 5.07, 5.08) (National Standard 5) 5th Grade Competency Goal 6: The learner will compare and integrate art forms by analyzing traditional theatre, dance, music, visual arts, and new art forms. (6.01, 6.05) (National Standard 6) 5th Grade Competency Goal 7: The learner will analyze, critique, and construct meaning from informal and formal theatre, film, television, and electronic media productions. (7.01, 7.02, 7.03, 7.04, 7.05, 7.06, 7.07, 7.09) (National Standard 7) 5th Grade Competency Goal 8: The learner will understand context by analyzing the role of theatre, film, television, and electronic media in the past and present. (8.03, 8.04, 8.05, 8.06, 8.07) (National Standard 8)

Unit Title	NCSCS (Competency Goals are stated, followed by objective numbers in parentheses. See full text of objectives at **www.ncpublicschools.org/curriculum.**)
Story-Spinning Radio Show (continued)	**Language Arts** 3rd Grade Competency Goal 1: The learner will apply enabling strategies and skills to read and write. (1.06) 3rd Grade Competency Goal 2: The learner will apply strategies and skills to comprehend text that is read, heard, and viewed. (2.02, 2.03, 2.09) 3rd Grade Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. (3.01) 3rd Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.01, 4.03, 4.05, 4.07, 4.10) 3rd Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.03, 5.07) 4th Grade Competency Goal 1: The learner will apply enabling strategies and skills to read and write. (1.06) 4th Grade Competency Goal 2: The learner will apply strategies and skills to comprehend text that is read, heard, and viewed. (2.02, 2.03, 2.09) 4th Grade Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. (3.01) 4th Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.01, 4.03, 4.04, 4.07, 4.10) 4th Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. . (5.02, 5.08) 5th Grade Competency Goal 1: The learner will apply enabling strategies and skills to read and write. (1.05) 5th Grade Competency Goal 2: The learner will apply strategies and skills to comprehend text that is read, heard, and viewed. (2.02, 2.03, 2.09, 2.10) 5th Grade Competency Goal 3: The learner will make connections through the use of oral language, written language, and media and technology. (3.01, 3.04) 5th Grade Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts. (4.01, 4.03, 4.07, 4.10) 5th Grade Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively. (5.04, 5.08)
Computer Webmasters	Citations of NCSCS Technology Goals and Objectives for this unit were reviewed by the magnet curriculum coordinator and are kept on file in the Magnet Curriculum Office Electives Master File.