Public Schools of North Carolina
State Board of Education
Department of Public Instruction

Report to the Joint Legislative Education Oversight Committee

Plan to Track Dropouts/Reduce Rates

Senate Bill 1275, Section 1(a)

Strengthen Enrollment Opportunities with Community Colleges

Senate Bill 1275, Section 2(b)

Date Due: June 15, 2003
Report # 17 and #18 in October 2002-December 2003
DPI Chronological Schedule

NC Department of Public Instruction

Michael E. Ward, State Superintendent

301 North Wilmington Street • Raleigh, North Carolina 27601-2825 • Website: www.ncpublicschools.org

Executive Summary

Senate Bill 1275, Dropout Reduction/LEA Accountability, was ratified on September 23, 2002, and requires the State Board of Education to study and/or report on five components of the law. Two of these sections required reports on December 15, 2002, and were submitted to the Joint Legislative Education Oversight Committee in December. The December submission included a preliminary report on Section 1. (a)., the State Board's statewide plan to improve the tracking of dropout data so that accurate and useful comparisons can be made over time; and the complete report on section 2. (b)., identification of technical high schools and career centers currently in operation and recommendations to strengthen concurrent enrollment opportunities between technical high schools and career centers and community colleges. This component must be accomplished in collaboration with the State Board of Community Colleges.

This report will include final recommendations for Section (1) (a) and findings for Section 2(c), which directs the State Board of Education to study the relationship between academic rigor and reducing the school dropout rate. As part of this study, the Board shall include the following components:

1) The development of a proposal to accelerate the learning of students able to complete high school in three years;
2) The elimination of low-level classes at the middle and high school levels; and
3) The examination of the appropriateness of electives and exploratory courses at the middle school level.

This report also provides in the appendix the activities that the State Board of Education implemented to comply with the listed components of Section 2 (c) of SB 1275, as well as the supporting information and research data.

Following action by the State Board of Education in June, the final report will be forwarded to the Joint Legislation Education Oversight Committee.

Introduction

For the 2001-02 school year, 2,135 students, or nearly 10.0% of all dropout occurrences in North Carolina (21,789) were attributed to academic problems. Other reasons for dropping out (such as attendance problems, choice of work over school, enrolling in a community college, discipline problems, health problems and the necessity of work) also contributed to academic problems that can lead to dropping out. This statistic demonstrates that academic rigor, or in many instances the lack of academic rigor, often influences a student's decision to drop out of school. Both the State Board of Education and Department of Public Instruction are committed to increasing academic rigor in all schools. In an earlier study (May 2001), *Increasing Opportunity to Learn via Access to Rigorous Courses and Programs: One Strategy for Closing the Achievement Gap for At-Risk and Ethnic Minority Students,* the researchers received surveys from approximately one-half of North Carolina's high schools. From those respondents, approximately one-half allow self-selection into Honors courses (57%), AP courses (48%), and dual enrollment into college/community college courses (42%). However, about one-fourth of the high schools surveyed reported that qualified students decline placement in AP courses "often or very often." In addition, not all high schools are able to offer a large number of advanced courses for logistical and other reasons. So the challenges to academic rigor appear both in terms of access and placement as well as student motivation. [1]

Until 1960, more than one-third of all the production jobs in the United States were held by high school dropouts. As late as 1973, in fact, education and employment were only loosely related. In that era, students with or without high school diplomas, particularly males, could get fairly decent jobs in the manufacturing economy and in our state in the agricultural economy. Widely available blue-collar jobs paid attractive wages and benefits, supported families, bought new cars fairly regularly, and put the children of working men and women through college. In many instances these children were the first generation in their families to attend college. Those days and jobs are now gone in North Carolina. Indeed those types of jobs are no longer available in our country. According to the National Commission on the High School Senior Year, the proportion of professional jobs in our country is about the same as it was twenty years ago, but the proportion of skilled jobs has nearly tripled. Most significantly, the proportion of unskilled jobs has fallen drastically. These conditions of modern life demand that all students graduate from a rigorous program that equips them with the knowledge and skills needed to succeed in both post-secondary education and careers. Over the past 10 years, in North Carolina, 40% of students who have completed a vocational education sequence have indicated that taking vocational education courses has been the main reason for their remaining in school.

The Department of Public Instruction and the State Board of Education continue to work to ensure that all students meet rigorous academic standards and to have the support mechanisms in place to allow them to be successful in meeting those standards.

---

[1] Darity, Jr., William et al. *Increasing Opportunity to Learn via Access to Rigorous Courses and Program: One Strategy for Closing the Achievement Gap for at-Risk and Ethnic Minority Students.* North Carolina Department of Public Instruction, May 2001.

Report on Final Recommendations for
Section 1. (a): Reducing School Dropout Rates

Subsection (27a) of Section 1.(a). of Senate Bill 1275 states that "The State Board of Education shall develop a statewide plan to improve the State's tracking of dropout data so that accurate and useful comparisons can be made over time. The plan shall include, at a minimum, how dropouts are counted and the methodology for calculating the dropout rate, the ability to track students' movements among schools and districts, and the ability to provide information on who drops out and why."

A Statewide Plan to Improve Tracking of Dropout Data

Goals	Strategies	Timeline	Recommendations
1. Improve the tracking of dropout data state-wide by providing a student information management system that is interconnected among all schools in the state.	Fully implement the North Carolina Window of Information for Student Education (NCWISE) as a replacement for the current SIMS. NCWISE will assign a unique student identification number which can be tracked wherever the student moves within the state, among schools both within and outside of the LEAs	Full implementation by 2007-2008	1. Implement a student information management system (NCWISE) that assigns a unique student identification number and provides interconnectivity among schools and with DPI. 2. Ensure that system personnel are trained in the use of the student information system and that users and trainers speak a common language. 3. Establish support positions in LEAs to record, track, and document dropouts. 4. Implement a more efficient dropout data collection and notification procedure at DPI using a secure web site for communication with LEAs. This project will require funding support for implementation in the next reporting cycle (fall 2003).

Goals	Strategies	Timeline	Recommendations
2. Clarify definitions and terms used in dropout data collection and reporting procedures	Conduct regional meetings to disseminate information. Publish dropout data collection and procedures manual. Disseminate information on specific and commonly used terms and definitions related to dropout data, collection and procedures, to include: • Annual or Event Rate • Completion/Retention Rate • Dropout Status or Census Rate • Duplicated vs. Unduplicated Dropout Count • ABCs Dropout Rate	2002-2003	5. Continue to disseminate information to LEAs, schools, and the public on the nuances of defining dropouts and calculating rates. 6. Provide information upon request to clarify confusion regarding the various rates and definitions.
3. Analyze the pros and cons of adjusting the North Carolina dropout definition and method of counting dropouts to comply with the National Center for Education Statistics' Common Core of Data (CCD) guidelines.	Review legislative and policy mandates currently in place and identify those in conflict with CCD guidelines, i.e., counting permanent expulsions as dropouts and more explicit procedures regarding counting community college and adult education enrollees in the dropout count. Conduct regional meetings to discuss proposed changes and elicit input on adjustments to *school year, summer dropouts, students, and five racial categories.* Collect feedback from LEAs on issues related to compliance, i.e., applying for federal funds under national dropout prevention program.	2003-2004	7. Encourage dialogue on benefits of closer alignment with the federal guidelines in two areas: Counting summer dropouts and tracking GED completers. See Table 1. 8. Advocate for alternative to either dropping out or earning the GED, i.e., concurrent enrollment and/or accelerated learning opportunities.

Goals	Strategies	Timeline	Recommendations
4. Improve accuracy, precision and uniformity in documenting reasons for dropping out.	Conduct regional meetings to develop a plan for revising reason codes and assigning reasons. Revamp dropout reason codes to better capture the conditions and causes leading to students' dropping out of school.	2003-2004	9. Collapse attendance "reasons" into one for next reporting cycle.
5. Coordinate services to better track move-ment of migrant and foreign students.	Establish dialogue with migrant education coordinators. Recommend procedures for reporting movement of migrant students. Do not count students who leave the United States as dropouts.	2003-2004	10. Encourage better communication and greater cooperation between migrant education coordinators and dropout prevention coordinators to effectively track migrant students who drop out. 11. Provide a reporting feature on the DPI data collection web site (proposed project) to flag migrant students who drop out. 12. Do not count students who leave the U.S., as *documented by a responsible adult, e.g., dropout prevention coordinator, social worker, or migrant recruiter*, as dropouts.

Table 1
Advantages and disadvantages of dropout reporting using federal guidelines

Component	Advantages	Disadvantages
1. Summer dropouts are reported with subsequent school year, and are attributed to the grade and school where they would have reported.	1. Federal dropout prevention grants require that LEAs submit dropout rates that are in compliance with federal guidelines for counting dropouts. 2. The NC dropout rate would be reported in the Common Core of Data[1]. Currently, we are performing two separate "counts." One is done to calculate the NC rate and the other satisfies the federal reporting guidelines. 3. LEA dropout coordinators favor the idea of ending the dropout count at the end of the academic school year. The no-shows (students who fail to report at the opening of the next school year) are attributed to the next school year. This eliminates the counting of a student as a dropout from the grade/year that he/she completed. This allows more time to document student whereabouts and may lead to greater accuracy.	1. Schools will be responsible for student dropouts that they have never seen. Eighth grade dropouts would be attributed to the high school, thus impacting the high school's ABC dropout rates. 2. Would require changes in collection procedures. There would have to be a phase-in to allow for collection of ABCs dropout data (we would need two years' data for reporting the changes in dropout rates).
2. Students who drop out during the reporting year but obtain a completion credential (GED) or adult high school diploma before Day 20 of the subsequent school year are <u>NOT</u> reported as dropouts.	1. Some LEA dropout prevention coordinators fail to see logic in counting students as dropouts if they subsequently receive their high school diploma from the community college. This measure offers students an alternative completion that counts as success. 2. The LEA can monitor the student's progress with assistance from the community college.	2. Does not differentiate between certificate of completion, GED, or adult high school diploma. 3. May send a message that we are advocating the GED as a viable alternative to staying in school.

---

[1] *The National Center for Education Statistics collects and reports a Common Core of Data that provides a comprehensive national database of all public elementary and secondary schools and education agencies.*

Report on the Findings from Studying the Relationship Between Academic Rigor and the Dropout Rate as Required by Final Recommendation on Section 2. (c): Academic Rigor

Section 2(c) of Senate Bill 1275 directs the State Board of Education to study the relationship between academic rigor and reducing the school dropout rate. As a part of this study the Board shall include the following:

Component	Findings
(1) The development of a proposal to accelerate the learning of students able to complete high school in three years.	According to the final report of the National Commission in the High School Senior Year in October 2001, the high school senior year often represents a lost opportunity to link students with either post-secondary studies or work. States such as Illinois and New York have begun procedures and guidelines that encourage capable students to accelerate their high school graduation from four years to three years. These programs also remove the stigma that is often attached to students who take longer than the traditional four years to graduate from high school. These programs have the flexibility to allow accelerated (three years), traditional (four years) and extended (five years) pathways to fulfill high school graduation requirements. Current policies allow students to graduate within three years, especially in schools having block schedules. Accelerated learning programs must take into account the maturity of the student.
(2) The elimination of low-level classes at the middle and high school level.	Students taking non-college preparatory courses in academic subjects such as mathematics, English and science have fewer options when they graduate. Research from the Southern Regional Education Board (SREB) shows that curriculum blending essential content of college-preparatory mathematics, science, language arts and social studies with modern career-technical studies in grades 9-12 improve student achievement. Schools that enroll more students in college-preparatory classes have success rates similar to schools that enroll significantly fewer students in higher-level classes. Enrolling significantly more ninth grade students in higher-level courses does not raise failure rates in the SREB's network of schools. It does raise student achievement. Students who read more in the eighth grade are more likely to be enrolled in college preparatory English in ninth grade. Data from other SREB sources indicate that improved performance in high school English is associated with reading at least ten books each year. Teachers matter enormously; middle grade students who have teachers as advisers are more likely to have educational goals and plans for high school.

Component	Findings
(2) The elimination of low-level classes at the middle and high school level (continued).	An effective advisor/advisee program is a fundamental component for a well-rounded middle school program. These programs emphasize the importance of career exploration, academic advisement and educational planning for all students through a structured approach that connects adult advisers and students. The programs also place importance on helping students and parents to understand high school graduation requirements, as well as knowledge and skills needed for success in post-secondary education or employment. Structured work-based learning, such as co-op or apprenticeships, has positive results on achievement versus students just having a job. In each case, work should not be over 15 hours. Programs, such as Middle College High School, are designed to help students (in many instances formerly unsuccessful students) to earn their high school diploma and to plan for their future beyond high school. Most of the programs are designed for students who are capable of doing honors level work but for a variety of reasons have not achieved success in a traditional high school setting.
(3) The examination of the appropriateness of electives and exploratory courses at the middle school level.	High performing middle schools challenge all students to use their minds well; remain sensitive to the unique needs and challenges of early adolescents and are socially equitable, democratic and fair. Programs such as the National Middle School Association "Schools to Watch" and the Southern Regional Education Board's "Making Middle Grades Work" emphasize that the self-knowledge gained through exploratory curricula and activities help students to prepare for adult life, not only in terms of vocation; but also as family members and citizens. Research indicates that transition from elementary to middle school or middle school to high school, unless well-planned and implemented, can result in an achievement lag. With each transition to a new school building, families seem to become less connected to schools. To ease these transitions, teachers and administrators must work together as equal partners to prepare and inform families about expectations, policies and practices to make sure that expectation, content and standards are aligned between sending and receiving schools. A recent study of 56 Georgia and Florida high schools found that schools with extensive transition programs have significantly lower failure and dropout rates than schools that provided students with few alternative activities. The best program included a variety of activities, particularly school counseling, school visits and special summer courses to help introduce the students to the new environment.

Appendices

(1).   The development of a proposal to accelerate the learning of students able to complete high school in three years.

(2).   The elimination of low-level classes at the middle and high school levels.

(3).   The examination of the appropriateness of electives and exploratory courses at the middle school level.

(1). The development of a proposal to accelerate the learning of students able to complete high school in three years.

Section (1)

1. **The development of a proposal to accelerate the learning of students able to complete high school in three years.**

    Activities:

    a. Survey other states to determine what they are doing to help very capable students to complete high school in time periods other than the traditional four-year cycle such as three or five years.

    b. Review findings and recommendations from "The Lost Opportunity of Senior Year: Finding a Better Way," the report of the National Commission on the High School Senior Year published in January 2001.

    c. Review a variety of data from the North Carolina Community College system. This data will include the following:
        - Concurrent enrollment
        - Huskins enrollment
        - High school age students obtaining a GED
        - High school age students attending adult high school

    d. Examine research available on exemplary high school programs such as the Southern Regional Education Board's (SREB) High Schools that Work program.

    e. Research the financial implications of early graduation from high school.

    f. Review a variety of data from the University of North Carolina system such as the graduation rate for the past five years and remediation needed by entering freshmen for the past five years.

    g. Review findings of such exemplary high school and college transitional programs as the middle college program. Investigate local examples of these programs such as the one in Guilford County.

Activity Documentation

1.A. Survey other states to determine what they are doing to help very capable students to complete high school in time periods other than the traditional four-year cycle such as three or five years.

State: New Mexico: 21st Century Diverse Pathway to the High School Diploma
It is the New Mexico State Board of Education's vision to create an environment for high school students that allows them to enter into an educational program that is flexible and can result in a student's ability to succeed whenever they choose to exit the K-12 system.

Have done a detailed study of their high school program of study and have begun the development of more rigorous high school graduation requirements.

State: West Virginia
Does not offer students any graduation "options." Students who enter the 9th grade are expected to graduate within four years.

State: Florida
Florida's statutes are silent about uniform program to have students to graduate in three years, but districts are required to accept credits from Florida Virtual School. Florida does have articulation and acceleration mechanisms that include dual enrollment and Advanced Placement. Most of the mechanisms are designed "to get students out of college faster, but do include early admissions."

State: Georgia
Georgia has no overall policy that outlines high school graduation requirements for a three-year period of study. The state does support virtual learning courses (Rule 160-4-2-03). Georgia also has a Post-secondary Options Program for students who wish to take courses at college while they are still in high school (Rule 160-4-2-34).

State: Chicago, Illinois
Program called "A.C.E. Flexible High School Plan" (accelerated three years), Classical (four years), and Extended (five years). Plan was developed to help students meet more rigorous requirements.
- Launched program in the fall of 2001.
- School staff identify students in middle grades who might have trouble graduating in the traditional four years. Their class schedules are designed so they can cover the high school material in five years.
- More advanced students are given the choice in seventh and eighth grades and during the summers to take extra courses so they could graduate in three years.
- Program has been scaled back because of funding issues. It is not fully operational in the middle grades.
- 1,750 students out of 15,000 took five years to complete high school from Chicago's 77 high schools in June 2002. Five-year program allows students who have difficulty with certain courses, such as math or science, to complete them over a year and a half or two years instead of one.
- No figures are available for students who completed high school in three years.

State: Rochester, New York
        Program called "Pathways to High School Success"
        - Program created because of concerns about meeting the needs of struggling students, who face additional state graduation requirements in 2003.
        - More than 6% of students currently need between 4.5 and 6 years to graduate.
        - In the new 5-year program, students will be able to take courses for a longer period of time each year, possibly spending double class periods in certain subjects.
        - In 2001, about 28 Rochester students completed their high school requirements in three years.
          1. Students who wish to graduate early can begin to take high school courses in eighth grade.
          2. Students in three and five-year programs may take summer school.
        - Lack of funding has hindered the full implement of Pathways.

1.B. Review findings and recommendations from "The Lost Opportunity of Senior Year: Finding a Better Way," the report of the National Commission on the High School Senior Year published in January 2001.

Title of the Report:	"Raising Our Sights: No High School Senior Left Behind" final report of the National Commission on the High School Senior Year October 2001.
Purpose of the Commission	To examine students' experiences in the last year of high school and recommend ways to improve them.

Method of Research

A. Developed several major papers
- Transforming the Senior Year of High School Conceptual Framework – Michael C. Roberstein
- Evolution of the American High School
- Challenges Confronting American High Schools
- Addressing Challenges Confronting American High Schools
- Reforming the Senior Year to Building Student Motivation
  1. Conducted eight extensive focus groups with high school graduates.
  2. Reviewed relevant literature.
  3. Held three formal meetings with leading experts and stakeholders to discuss the senior year and heard testimony.

The Lost Opportunity of the Senior Year

First report of the Commission issued in January, 2001.
- Outlines the Commission's major findings.
- Made no recommendations.

Summary of Findings

A. A high school diploma, earned by taking non college-preparatory classes, leaves too many graduates trapped in low-paying jobs with unpromising futures.
- The proportion of professional jobs is about the same, but the proportion of skilled jobs has nearly tripled. The proportion of unskilled jobs has fallen by a factor of three. These conditions of modern life demand that all students graduate from a rigorous academic program that equips them to succeed in both post-secondary education and careers. p.3.
- The tyranny of low expectations devastates life choices for many students.
- Each part of the education system seems to operate in isolation from every other part – elementary, middle and secondary schools rarely communicate with one another about educational goals and purposes, and K-12 rarely collaborates with either post-secondary education or with the world of work.
- The majority of high school teachers in a recent SREB survey reported that they never interact with their peers from elementary and middle schools about crucial issues of curriculum alignment. p.5.

- The high school senior year too often represents a lost opportunity to link students with either post-secondary studies or work.
- Assessment systems are often ill timed.
- Competency test for high school diploma covers content drawn from 9th or 10th grade; this becomes the standard.
- Improving the professional lives of teachers is a prime consideration in improving the transition from high school to work and post-secondary education.
- Teaching out-of-field (18 to 28% of teachers in the core academic areas do not have the equivalent of even a college minor in those areas. p.9.

Recommendations: The Triple-A Program
- Improve Alignment – Establish a P-16 Council to increase student access to and success in post-secondary education.
- Raise Achievement – state should require school districts to obtain parental permission before assigning high school students to a level below "college-preparatory" courses of English, social studies, mathematics, and science
- Provide More (and More Rigorous) Alternatives – Complete a capstone project, perform an internship, complete a research project, participate in community services or take college-level courses.

1.C. Review a variety of data from the North Carolina Community College system. This data will include the following:

- **Concurrent enrollment**
- **Huskins enrollment**
- **High school age students obtaining a GED**
- **High school age students attending adult high school**

Huskins Bill and Concurrent Enrollment
Duplicated Headcount
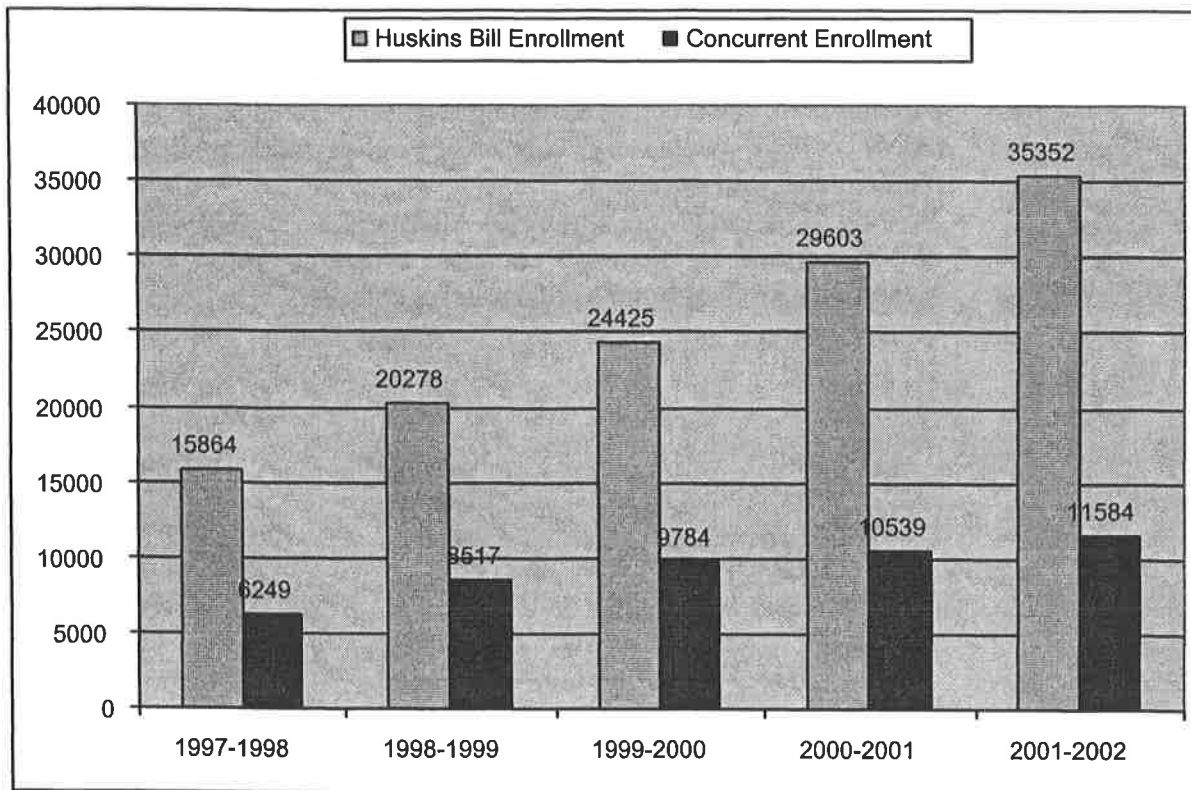
Adult High School Basic Education Enrollment by Age by Year						
Age	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01
16	2,518	3,165	3,315	3,604	3,634	3,503
17	3,559	4,541	5,041	5,204	5,095	4,897
18	5,038	5,330	5,716	6,216	6,083	7,071
19	3,559	4,239	4,271	4,486	4,849	5,757
Total	14,690	17,275	18,343	19,510	19,661	21,228

2001-2002 GED Enrollment by Age
(Unduplicated)

Age At First Course	Student Count
13	1
15	18
16	1,208
17	1,815
18	2,433

Source: NC Community College System

UNC Going Rate for North Carolina
High School Graduates, 1992-2002

Year	UNC Going Rate
1992	26.0%
1993	25.9%
1994	27.3%
1995	27.6%
1996	29.3%
1997	30.0%
1998	30.4%
1999	30.3%
2000	30.3%
2001	30.9%
2002	30.1%

Source: UNC Fall 2002 Enrollment Report

Students' Reasons for Staying in School

Of the students taking vocational education courses, the percent indicating access to vocational education was a main reason for staying in school.

School Year	Rate
1998	51%
1999	49%
2000	48%
2001	50%
2002	52%

Source: VEIS, NCDPI

1.D. Examine research available on exemplary high school programs such as the Southern Regional Education Board's (SREB) High Schools that Work program.

High Schools That Work Key Practices and Conditions Alignment with the Eleven CSR Components

Proven, scientific research-based methods and strategies: Documents listed at www.sreb.org describe research supporting the ten key practices and provide evidence of *High Schools That Work (HSTW)* effectiveness with schools. The *HSTW* program began in 1987, growing from 23 sites to over 1,100. The model continues to document success in urban, suburban, rural and technical school settings throughout the country. Profiles of successful sites are available upon request.

Comprehensive Design with Aligned Components: *HSTW* key practices and goals align with all aspects of comprehensive programs in the following manner:

1. Curriculum (*HSTW* Key Practices #1, #2 and #4)
   - The centerpiece of *HSTW* is a curriculum that blends essential content of college-preparatory mathematics, science, language arts and social studies courses with modern career/technical studies in grades nine through 12. The SREB-recommended curriculum includes:
     - Four credits in English courses with content and performance standards of college-preparatory English.
     - Four credits in mathematics courses with content and performance standards of college-preparatory Algebra I, geometry and Algebra II.
     - Three science courses, including two credits in courses with content and performance standards of college-preparatory biology, chemistry, physics or applied physics.
     - Three social studies courses with content and performance standards of college-preparatory courses.
     - At least four courses in an academic or a career/technical (CT) major
     - A technology course covering word processing, database, spreadsheets, presentation software and use of the Internet and e-mail.

2. Instruction (*HSTW* Key Practices #3, #6 and #7)
   - Key Practice #3: Increasing access to academic studies that are taught through functional and applied strategies.
   - Key Practice #6: Getting teachers to work together to integrate instruction.
   - Key Practice #7: Actively engage students in learning.

3. Assessment (*HSTW* Key Practice #10)
   - Using student assessment and program evaluation data to improve continuously the school climate, organization, management, curricula and instruction to advance student learning.
   - Members of the *HSTW* network participate in the *HSTW* Assessment every other year. The assessment includes the National Assessment of Educational Progress (NAEP) based reading, mathematics and science tests, student and faculty surveys and a transcript analysis.

4. Professional Development (*HSTW* Key Conditions)
   - A system superintendent and board members who support school administrators and teachers in carrying out the key practices. This commitment includes financial support for instructional materials, time for teachers to meet and plan together, and six to eight days per year of staff development on using the key practices to improve learning.

5. Parental Involvement (*HSTW* Key Practice #8)
   - Involving each student and his parents in a guidance/advising system that ensures completion of an accelerated program of study with an in-depth academic or CT major.

6. School Management (*HSTW* Key Condition)
   - An organizational structure and process ensuring continuous involvement by school administrators and teachers in planning strategies to achieve the key practices.

Professional Development: Administrators and teachers participate annually in a minimum of four days of staff development focused on topics determined by analysis of technical assistance (TA) visit data and assessment data. In addition, staff members participate in the *HSTW* National Summer Conference and leaders participate in the annual Local Leaders Retreat. Schools may also send participants to national workshops offered by SREB.

Measurable Goals and Benchmarks: Schools develop measurable goals and benchmarks using the *Benchmarks for New and Maturing Sites*. This document uses actions from the 10 key practices and becomes an integral part of the school improvement plan. Schools receive a TA visit to determine areas of most need and establish goals in each of these areas. In addition, the *HSTW* network has established achievement goals for students participating in the NAEP linked testing in the areas of reading, mathematics and science. Schools strive to have more students achieve at these goals:
- Reading goal: 279 (Scale: 1- 500);
- Mathematics goal: 297 (Scale: 1 - 500); and
- Science goal: 299 (Scale: 1- 500).

Support Within the School: *HSTW* requires staff to document that a minimum of 66 percent of the faculty support involvement in the network and agree to implement the key practices. The school must appoint a site coordinator to manage all activities, participate in a minimum of four days staff development on topics determined from the improvement plan, enlist district support for the initiative, and participate in both the *HSTW* Summer Conference and Leadership Retreat. All faculty and administration must participate in all staff development held at the school.

Support for teachers, administrators, and staff: As a part of SREB, *High Schools That Work* provides teachers and administrators with quality materials, research, and coaching to effectively implement actions to address key practices. The Site Development Workshop and Orientation Workshop provide all school personnel with an opportunity to actively develop improvement plans, review current school data, and determine next steps. Schools visit high-performing *HSTW* sites with similar demographics to determine strategies likely to impact student achievement. *HSTW* school improvement consultants provide continuous on-site, electronic and telephone support.

Parental and Community Involvement: (*HSTW* Key Practices #8 and Key Condition #5)
- Involving each student and his parents in a guidance and advisement system that ensures the completion of an accelerated program of study with an in-depth academic or CT major.
- Giving students and their parents the choice of a system that integrates school and work-based learning. The system should span both high school and post-secondary studies with planning done by educators, employers and employees.
- Requiring as a key condition leadership from the superintendent and school board to involve employers and postsecondary institutions in the design and implementation of a school and work-based program to prepare students for employment and postsecondary education.

External Technical Support and Assistance: Schools host a TA visit during the first year of service for collection of baseline data. The visit involves a group of experienced educators, district office personnel, state department of education personnel, community members and *HSTW* leaders in analyzing school and classroom practices. Schools develop improvement plans based on the analysis, and *HSTW* provides ongoing assistance and support as schools implement their improvement plan. Interim visits during the second and third year provide schools with continuous status checks.

Evaluation Strategies: The evaluation process is a two-part process with an evaluation of reform implementation and analysis of student achievement gains.
- A follow-up TA visit takes place during the third year to determine effectiveness of school staff in addressing challenges within the initial TA report. Schools will document efforts to implement the key practices of *HSTW*.
- Students participate in the *HSTW* NAEP-based assessment in the initial year of participation for baseline data. A follow-up assessment will take place every other year to monitor achievement gains and determine effective strategies.
- Schools conduct extensive follow-up to staff development to ensure implementation in classrooms.

Coordination of Resources: *HSTW*'s goal is to advance state and local policies and leadership initiatives necessary to sustain a continuous improvement effort. *HSTW* consultants assist schools in determining additional funding sources and efficient uses of current funds. Schools within *HSTW* states become active members of the state network upon initial involvement and continue participation at the state level following the end of CSR funding.

Evidence supporting improved student achievement: *HSTW's* external research is conducted by Research Triangle Institute (RTI) and MPR Associates to support improved student achievement within the *HSTW* network. *HSTW* also conducts numerous research projects within SREB to determine actions most likely to impact student achievement. Specific research briefs are available at www.sreb.org. Recent results for schools completing three years in the Comprehensive School Reform project show improved student achievement in reading, mathematics and science. Results were based upon the 2000 NAEP-linked assessment as baseline data and 2002 assessment to determine progress.
- Employs proven methods and strategies based on scientifically based research
- Integrates a comprehensive design with aligned components
- Provides ongoing, high-quality professional development for teachers and staff
- Includes measurable goals and benchmarks for student achievement
- Is supported within the school by teachers, administrators and staff
- Provides support for teachers, administrators and staff

- Provides for meaningful parent and community involvement in planning, implementing and evaluating school improvement activities
- Uses high-quality external technical support and assistance from an external partner with experience and expertise in school wide reform and improvement
- Plans for the evaluation of strategies for the implementation of school reforms and for student results achieved, annually
- Identifies resources to support and sustain the school's comprehensive reform effort
- Has been found to significantly improve the academic achievement of students or demonstrates strong evidence that it will improve the academic achievement of students

1.E. Research the financial implications of early graduation from high school

NOTE ON FISCAL IMPACT OF ALLOWING GRADUATION FROM HIGH SCHOOL IN THREE YEARS

1. A significant number of students are graduating from high school in less than four years already. These students are reported as the 11th grade homeroom graduates. Since they never enter in the ADM of the 12th grade in the year they are supposed to be in their fourth year, they do not cost any money in the year when their cohorts reach 12th grade.

2. Encouraging and allowing some students to graduate early will have initially very little or no impact on the students in schools with regular schedules, because they need all the time available over the four high school years to meet the graduation requirements. If the early graduation is encouraged, some students in schools with normal schedules may structure and sequence their courses to complete the high school in less than four years. But this adjustment, if it ever happens, will take place over some number of years. How fast this occurs and how many students will be part of this trend is impossible to predict.

3. The real potential is in schools that follow a 4x4 schedule when students complete high school graduation requirements during or before their 12th year. Therefore, most of this discussion and potential fiscal impact will be based on this group.

It is estimated that over 75 percent of high schools follow block schedules, but the Agency does not maintain a list of schools that are on 4x4 schedule. Furthermore, some schools may have a mixture of standard and 4x4 schedules in the same school. Thus, a list of schools in itself would not be sufficient to determine the exact number of students who are on this schedule.

The E.O.G. test records have an entry that identifies the schedule of the student who takes the tests. Since Algebra I is required for high school graduation, all students have to take it. The data below is extracted from the 2002 administration of these tests. It shows the number of students who took the Algebra I test by grade of students.

Total number of students taking ALGEBRA I in 2002 by grade

Grade	Students
7	16
8	2,198
9	36,525
10	13,988
11	4,761
12	1,609
Total	59,097

Source: Statistical Profile, NCDPI

1.F. Review a variety of data from the University of North Carolina system such as the graduation rate for the past five years and remediation needed by entering freshmen for the past five years.

Post-Secondary Education Remedial Rates for
North Carolina High School Graduates

Community College System*

Subject	Year of Graduation			
	2000	**1999**	**1998**	**1997**
Mathematics	38.2%	39.9%	38.2%	34.7%
English	26.5%	27.5%	26.6%	23.4%
Reading	18.0%	18.7%	18.2%	16.8%

Source: NC Community College System

* North Carolina Community Colleges have different cut-off scores to determine whether a student must enroll in a remedial mathematics, English, or reading course.

Public Colleges/Universities

Subject	Year of Graduation				
	1999	**1998**	**1997**	**1996**	**1995**
Remedial English	3.9%	5.3%	4.3%	4.7%	5.5%
Remedial Math	16.6%	17.8%	15.1%	14.5%	14.2%
Taking one or more Remedial Classes	11.5%	14.0%	14.9%	15.7%	15.8%

Source: UNC General Administration

1.G. **Review findings of such exemplary high school and college transitional programs as the middle college program. Investigate local examples of these programs such as the one in Guilford County.**

What is Middle College High School

The concept is designed to help students (in many instances – formerly unsuccessful students) to earn their high school diploma and to plan for their future beyond high school. Most of the programs are designed for students who are capable of doing honors level work but for a variety of reasons have not achieved success in a traditional high school setting.

- Students earn high school and college credit simultaneously.
- Eligible students customarily have these characteristics:
  - Rising juniors or seniors who are achieving below their academic potential.
  - Students who feel disengaged from school, even considering dropping out.
  - Students who have relatively high scores on standardized tests, but grades don't reflect their academic potential.
  - Gifted students who attendance and rate of course completion are spotty or poor.
  - Students who demonstrate the maturity to cope with the freedom of a college campus.

History of Middle College High Schools

A. Founded in 1974 by Janet Lieberman on the campus of LaGuardia Community College in New York City.
B. Designed to meet the needs of potential dropout adolescents.
- 1981, the Ford Foundation helped to underwrite other imitations of the model around the country.
- Since 1991, over 30 middle college high schools have opened.

Curriculum of Middle College High School

A. High school classes fulfill state requirements for graduation.
1. Attend college classes, receiving college credit that also counts toward high school diploma (dual enrollment).
2. Portfolios containing work relating to classes and career pathways.
4. Full access to the college facilities.
5. Peer focus groups are often required.
6. Parents sometimes must sign contracts for students to be involved.
7. Home visits 2-3 times a year.

Examples of Middle College High School in North Carolina

Guilford County

A. Middle College at Bennett College
   - Partnership with Bennett College to create a Middle College Program for high school girls on Bennett campus. Functions as an all female school for students at-risk of not finishing high school.

B. Middle College at Greensboro College
   - Open to 10th, 11th, and 12th graders. Students attend school between 8:00 a.m. and 4:00 p.m. each day. College courses are available during these hours also. The offices and student lounge are located in a converted historic home on campus.

C. Middle College at Guilford Technical Community College (GTCC)
   - At GTCC, student applicants must be at least 16 years old and have the academic standing of a junior or senior. High school classes are taught from 11:00 a.m. until 5:00 p.m. in Persy Sears Applied Technologies Building located on the GTCC campus. Students may enroll in courses in the morning, evening or during regular school hours as schedules allow.

D. Wilkes County – K-14 initiatives
   - Students may take college courses at their high school via the cyber classrooms on their campus or the WCC campus. Cyber classrooms have been provided by the Wilkes County Schools at each high school to reduce the travel obstacle that occurs for many students because of the geography (size) of Wilkes County.
   - WCC courses (as the demand occurs) are offered on site in the high schools.
   - Eligible high school students may participate in concurrent enrollment by enrolling in courses at the WCC campus.
   - High school students in the College Tech Prep program may receive college credit for high school courses taken at their school (articulated credit).
     A "map" for achieving up to one year of a two-year AA degree at WCC or the freshman year in the North Carolina University System is identified and offered for students participating in the Middle College program via the cyber classrooms at their high schools. These courses offered in the student's high school cyber classroom collectively equal 24 semester hours of college credit articulated (transferable) between he North Carolina University System (16 member campus), many private colleges/universities, and the North Carolina Community Colleges. The savings for a student's family resulting from free college tuition and coverage of textbook costs could easily equal $8,000 or more in the North Carolina University System full-time residency enrollment.
     The College Tech Prep component of the program includes an articulation agreement between Wilkes County Schools and WCC that currently allows for 22 high school courses to be eligible for WCC credit through local and state articulation agreements. Students must have a "B" average or above and a raw score of 80

27

or higher on their North Carolina VoCATS test (a standard for student performance and assessment process). Students can earn their college credits in their high school College Tech Prep courses and move to the next technical skill level when they enroll in WCC.

An additional initiative, **Teaching Academy**, an enhancement of the Middle College concept, was introduced in Spring 2002. Students passing the prerequisites may take a four-credit hour articulated course, "**Introduction to Education**" that provides them classroom and lab knowledge of a potential career as an educator. Students participate in the classroom component and then intern in Wilkes County Schools for three hours each week. The lab offers students an opportunity to observe learning theories, current educational philosophies, and classroom trends. With current teacher shortages, the program is also serving as a recruitment tool for future teachers in Wilkes County.

Success indicators include an increase of participation in concurrent enrollment opportunities. The current enrollment of over 150 students represents a significant increase from the 1999 enrollment of 75 students.

2. The elimination of low-level classes at the middle and high school levels

(2) The elimination of low-level classes at the middle and high school levels.

Activities:

a. Review Southern Regional Education Board's data on rigor in middle level course offerings in their consortium states.

b. Review research on the effectiveness of transition programs for ninth graders such as Ninth Grade Academies on increasing the readiness of students for more rigorous high school course work.

c. Review trend data for the following:
   - Enrollment in nationally recognized honors programs such as Advanced Placement and
   - International Baccalaureate
   - Enrollment and graduation rates in each of our state's high school diploma courses of study: career, college technical preparation and university preparation.

d. Review enrollment figures for Algebra I, Algebra IA and Algebra IB.

2.A. **Review Southern Regional Education Board's data on rigor in middle level course offerings in their consortium states.**

<u>Background</u>

National Middle School Association's Position Statement on Academic Achievement

The middle school concept embraces academic achievement as a priority responsibility. National Middle School Association's major position paper, *This We Believe: Developmentally Responsive Middle Level Schools*, identifies as one of five foundational characteristics, "High Expectations for All." In the elaboration of this item the document says in part:

"Educators in developmentally responsive middle level schools hold and act upon high expectations for all students, and the students themselves have expectations for success. Such confidence promotes positive attitudes and behaviors and serves as motivation for students to achieve; low expectations lead to alienation, discouragement, and lack of effort...

Effecting high academic achievement for all students is not simply a matter of "raising abstract standards." It means empowering students to learn, to become intellectually engaged, and to behave in keeping with responsible citizenship. It calls for them to develop initiative and responsibility so that they can become all they are capable of becoming."

A full understanding of youth in these years of rapid and changeable mood swings between 10 and 15 makes it clear that in order to gain the maximum academic achievement, schools must be sensitive to and responsive to the varied developmental issues that impact young adolescents. With young adolescents, academic achievement and developmental responsiveness are closely related, even interdependent.

During the middle school years, individuals undergo the most rapid and profound physical, social, and personal changes in the human life cycle. Just as they are coping with and adjusting to an erratically growing body, they must also form new social relationships with peers and adults. They face new academic demands that quite often do not coincide with their intellectual or mental development.

Therefore, while intellectual development is and must continue to be the basic responsibility of the middle school, the education and nurture of young adolescents has to be an integrated venture that provides a balance between academic rigor and humanness. The physical, social, emotional, and intellectual aspects of young adolescents are inexorably woven together in the fabric of their lives. One's readiness to achieve academically is heavily influenced by one's personal security and self-esteem. Though sometimes derided as a trite saying, the reality is the whole child does come to school. It is the individual that learns, and the individual is a total organism. If a student faces difficulties in his or her personal and out-of-school life, that student is seriously handicapped in mastering the school's lessons. Middle schools cannot just be schooling places; they are also growing places where much of the learning that occurs deals with social and personal aspects of life that are not part of the content of the formal curriculum.

Research Brief: *Middle Grades to High School: Mending a Weak Link.* **SREB, June 2002, Atlanta, Georgia.**

Staff from the Southern Regional Education Board (SREB) followed up on a group of eighth graders who had participated in the Middle Grades Assessment in the spring of 2000. The initial assessment included testing in reading, mathematics and science and surveys of both students and teachers. Following the 2000-01 school year, course assignment and performance information was gathered on over 3,100 students, about 60% of the original sample, which had completed their ninth grade year. To measure "readiness for high school," the follow up looked at ninth grade college preparatory classes. A grade of "C" in the course was considered "ready for high school."

About one in five students in SREB's network of middle grades schools fails at least one course in ninth grade, and about 10% do not earn enough credits to stay on track for graduation with their classmates.

Results indicated that "… schools which enrolled more students in college-preparatory classes had success rates similar to schools that enrolled significantly fewer students in higher-level classes. Enrolling significantly more ninth-grade students in higher-level courses does not raise failure rates in the SREB's network schools. It **does** raise student achievement."

This study also showed that there seemed to be three middle grades experiences that were associated with students who take and succeed in higher-level courses in grade nine. These are

- studying "something called algebra" in middle grades;
- reading a great number of books in eighth grade; and
- expecting to graduate from college.

Studying "Something Called Algebra"

Across all network schools, 62% of students who said they had a course with "algebra" in the title during the middle grades were enrolled in college-preparatory mathematics in ninth grade. Eighty-five percent of these students earned a "C" or above. High enrollment schools (25% of middle grades that had the greatest percentage of students in ninth grade college-preparatory classes at their receiving high school) had virtually the same success rates as schools with lower enrollments. Students who begin algebra earlier are more likely to succeed in an accelerated mathematics curriculum if high schools choose to enroll them in this curriculum.

Reading A Great Number of Books

Students who read more in the eighth grade are more likely to be enrolled in college preparatory English in ninth grade. Data from other SREB sources indicate that improved performance in high school English is associated with reading at least 10 books each year.

Number of Books Read in Eighth Grade	Enrollment in College-preparatory English Courses in Ninth Grade	
	All Schools	High Enrollment Schools
0-2 books	14%	31%
3-10 books	27%	59%
11 or more books	30%	66%

Expecting to Graduate from College

Surveys have found that students' educational expectations are generally higher than their teachers or parents, especially when it comes to college enrollment and graduation. High performing students are much more likely to talk with counselors several times about which classes to take in high school. Low-performing students who need the most help in developing educational goals are the least likely to have received such help. Approximately 20% of low-performing students (as compared to 7% of high performing students) do not know how much education they will receive. Approximately half of eighth graders who expect to graduate from college were not enrolled in the college preparatory mathematics courses they needed. Percentages in English and science were even higher.

Summary of Key Findings

- Many students who expect to go to college are not taking the necessary courses in high school.
- Some schools enroll many more students in college preparatory courses than others. The difference is not explained by differences in students or demographics.
- Enrollment in more demanding courses does not result in more failures. In fact, the evidence suggests that challenging content results in lower failure rates. It appears that many students in all kinds of schools can handle more challenging intellectual assignments than schools are willing to give them.
- Taking algebra or pre-algebra in middle grades leads to enrollment in higher-level mathematics courses in high school and does not increase failure rates.
- Middle grades schools that successfully prepare students for college preparatory courses in ninth grade provide extra help and link students with an adult mentor. Successful schools come in many sizes, and their students vary by ethnicity and socioeconomic status.
- Teachers matter enormously; middle grades students who have teachers as advisers are more likely to have educational goals and plans for high school.

RTI. Center for Research in Education. *Influence of School Practices on Students' Academic Choices.* **Pamela Frome, RTP, April 2002.**

In *Making Schools Work* research, 69% of eighth graders report that they plan to graduate from college. Another 11% plan to complete graduate school. Yet, many schools allow students to enter ninth grade without the skills to match their aspirations. The majority of high school teachers who teach ninth graders report that only 40% or fewer of students enter ninth grade prepared to be successful in college preparatory classes. Approximately 41% of teachers report that fewer than 20% of ninth graders are prepared and 34% of teachers report between 21% and 40% of ninth graders prepared. Research indicates that guidance during the middle grades can help students align their aspirations and academic skills.

Successful middle schools provide structured advisement time during which students can explore career and educational options and requirements and learn important skills for success in challenging high school classes. In one study of middle school students in Missouri, students who had fully-implemented guidance programs reported higher overall satisfaction with school, more positive relationships with teachers, felt school was relevant to them, felt safer at school and had higher grade point averages. Students' motivation to learn increases when they view teachers as personally interested in them and are held to challenging expectations. In addition, effort in the classroom, student progress and goal commitment increases when students experience recognition for their goals. It has been shown in research that guidance from counselors does not have a significant effect on behaviors in teacher encouragement and advisement. However, this may be due to limited student access to counselors on a one-to-one basis to discuss high school plans. Counselors traditionally see students for problem-based referrals. In high school, encouragement from school staff to take challenging courses and assistance from counselors in planning a high school program were significant predictors of positive student behavior, thus supporting the hypothesis that guidance and advisement are related to positive academic choices made by both middle and high school students.

It should be noted that guidance involves the communication of high expectations through goal setting and planning and encouragement from school staff to do well. Guidance from school staff positively influences choices that students make that influence their educational outcomes.

Research Brief: Guidance *and Advisement: Influences on Students' Motivation and Course-taking Choices.* SREB, Atlanta, Georgia, September 2002.

In a 2000 survey of middle school students, 40% of students indicated they did not talk to either a teacher or a guidance counselor about their high school program of study and thus impacting whether or not students are enrolled in the right courses in high school. Controlled studies show that students in classroom with teachers who set clear expectations and insist that students follow through by completing their work demonstrates an increased level of effort over students in classrooms in which teachers do not hold students to these expectations and standards. Approximately 69% of students surveyed report that their teachers often encourage them to do well in school, and 56% report they often try their best. Students who reported lesser levels of encouragement from teachers were 20% less likely to report trying their best.

Students from better socioeconomic backgrounds are significantly more likely to report completing and turning in assignments while minority students are significantly more likely to report trying to do their best in school, but not more likely to report completing and turning in assignments. Reducing the performance gap is dependent, in part, upon all students being held to the same set of high expectations.

SREB has established a goal to increase the percentage of eighth graders who perform at the proficient levels in academic subjects and developed a comprehensive framework to reach that goal.

- An academic core that is aligned to what students must know, understand and be able to do to succeed in college-preparatory English, mathematics and science. The core curriculum must accelerate their learning, challenge them and appeal to their interests.

- A belief that all students matter. Each student needs to have a personal relationship with an adult who takes an interest in his or her successful learning, goal-setting, educational planning and personal growth.

- High expectations and a system of extra help and time. Middle schoolers learn in different ways and at different rates. Middle grade students need enough time and help to meet more rigorous, consistent standards for eighth graders. The curriculum should accelerate achievement for all students.

- Classroom practices that engage students in their learning. Students need varied learning activities linked to challenging academic content and opportunities to use new skills and concepts in real-world applications.

- Teachers working together. All teachers need time to plan together, to develop and coordinate learning activities and to share work that meet proficiency standards.

- Support from parents. Parents must understand clearly and must support the higher standards for performance in middle grades.

- Qualified teachers. Middle grades teachers must know academic content and how to teach young adolescents.

- Use of data. States, districts and schools must continuously use data on student, school and teacher performance to review and revise school and classroom practices as needed.

- Use of technology for learning. Middle grade students and teachers must have opportunities to explore and use technology to improve knowledge and skills in English language arts, reading mathematics, science and social studies.

- Strong leadership. Middle grades schools need strong, effective principals who encourage teachers and participate in planning and implementing research-based improvements.

SREB: *Opening Doors to the Future: Preparing Low-achieving Middle Grades Students to Succeed in High School (Outstanding Practices).* **Atlanta, Georgia. September 2002.**

Many middle schools are beginning to identify students who may not be ready to do high school work at the end of the eighth grade and taking steps to prepare students for success in high school. These steps include

- enrolling students into accelerated academic courses and providing extra help and time for students to meet standards at the basic and proficient levels;

- getting teachers to work together to plan integrated lessons that engage students in completing challenging assignments;

- involving teachers in planning an enriched summer school curriculum aimed at closing the gap between student achievement and state standards; and

- educating students and parents about the level of work required to succeed in high school today.

One additional strategy mentioned previously is "looping," or moving the students' team up from one grade to the next as the students progress. Through this process, teachers are much more knowledgeable of students' strengths and needs for improvement, can provide more personal interaction and guidance and build a stronger relationship with each student's parent/guardian.

2.B. Review research on the effectiveness of transition programs for ninth graders such as Ninth Grade Academies on increasing the readiness of students for more rigorous high school course work.

National Middle School Association. *Transition from Middle School into High School.* **Nancy B. Mizelle and Judith L. Irvin. NMSA, Westerville, Ohio. May 2000.**

One of the fundamental functions of the initial middle level education movement was to articulate students' transition to high school. Extensive research shows that students today frequently have a difficult time making this transition. Many drop out, often shortly after they enter high school, or they fall behind and fail to graduate on time.

As middle schoolers move to high school, many students experience a larger, more impersonal, more competitive and grade-oriented environment than they experienced in middle school. They also experience a greater diversity of teachers and peers and have many more choices to make in their curricular and extra-curricular activities. Frequently, their grades drop and they do not attend school as regularly as they should. They also develop a more negative view of themselves and feel an increased need for peer friendships. A recent study of 56 Georgia and Florida high schools found that schools with extensive transition programs have significantly lower failure and dropout rates than schools that provided students with few articulation activities. The best programs included a variety of activities, particularly school counseling, school visits and special summer courses to help introduce the students to the new environment. There were three critical components of transition programs that were successful.

- Programs provided students and parents information about the new school. Parents need to understand and be actively involved in decisions eighth graders make about classes they will take in the ninth grade. They also need to understand students' options and the long-term effects of course decisions. When parents were involved in their student's transition to high school, they were more likely to remain involved. Schools need to work to keep parents involved in their child's education and school activities during middle school so they are comfortable going to the school. These students were also better adjusted and less likely to drop out. Suggestions for increasing parental involvement include scheduling a conference with the child and school counselor to discuss course work and schedules, spending the day at the high school in order to better understand what their child's life will be like, visit the high school with their child in the spring and/or fall, or to help design and facilitate some of the articulation activities for students.

- Students received social support during the transition. High school often disrupts friendship networks and interferes with students' success in high school. Successful activities to provide social support include giving students the opportunity to get to know and develop positive relationships with older students and other incoming students. These opportunities may take the form of meetings, letter writing to a "high school" buddy, and a picnic with older students. Those who participated in such activities received fewer failing grades and missed fewer days of school than student who did not have these opportunities. Females seemed to benefit more in terms of socialization, self-esteem and academic performance.

37

- Middle school and high school personnel were brought together to learn more about one another's curriculum and requirements. 1995 research showed that students who stayed together with the same teachers for grades six through eight and experienced more hands-on life-related learning activities, integrated instruction and cooperative learning groups were more successful in their transition to high school. These students also had higher language arts, science and social studies grades and were more likely to enroll in higher-level mathematics courses. At the high school, students felt that teachers expected them to learn more and faster and to do more learning on their own. Many students indicated that their transition would have been easier if they have had an even more challenging curriculum, the teachers held students more responsible for learning and taught them more about strategies for learning on their own.

SREB: *Academic Achievement in the Middle Grades: What Does Research Tell Us? A Review of the Literature.* Atlanta, Georgia, December 2002.

A review of data from several sources reveals the following information:

- Of students who have multiple risk factors in eighth grade, only 60% graduate from high school on time as compared to 90% of other students (NCES, 1996).

- As many as 6% drop out of school by the end of tenth grade (Owings and Peng, 1992).

- Among 14 to 15 year olds who struggle with basic reading and mathematics skills, 20% drop out of school within two years (Berla et al, 1989).

- Low-achieving eighth grade science students are 25% less likely to take four years of high school science, almost 70% less likely to take chemistry and 75% less likely to take physics (Haycock and Ames, 2000).

It is also interesting to note that the stability of one's peer group tends to have some effect on achievement. In the 1999 study by Schiller, high-achieving middle grades students earned better grades if they attended the same high school as many of their middle grades classmates. Conversely, low-achieving middle grade students tended to receive better grades if they attended a high school with fewer classmates from their middle grades school.

2.C. **Review trend data for the following:**
- **Enrollment in nationally recognized honors programs such as Advanced Placement and International Baccalaureate**
- **Enrollment and graduation rates in each of our state's high school diploma courses of study: career, college technical preparation and university preparation.**

    A. From <u>Answers in the Tool Box</u>, (1999), a study about what contributes most to long-term bachelor's degree completion of students who attend four-year colleges.
- High school curriculum reflects 41% of the academic resources students bring to higher education; test scores, 30%; and class rank/academic GPA, 29%. No matter how one divides the universe of students, the curriculum measure produces a higher percent earning bachelor's degrees than either of the other measures. The correlation of curriculum with bachelor's degree attainment is also higher (.54) than test scores (.48) or class rank/GPA (.44).
- The impact of a high school curriculum of high academic intensity and quality on degree completion is far more pronounced and positive for African-American and Latino students than any other pre-college indicator of academic resources. The impact for African-American and Latino students is also much greater than it is for white students.

    4. Because a disproportionate number of minority and socio-economically disadvantaged students have performed relatively poorly in school, some high school staff may expect less of them. Such views result in having lower academic expectations and being afraid to take an AP course. Consequently, they drop out of the pipeline that would lead to more rigorous courses and attendance at a post-secondary institution. From the <u>Advanced Placement Challenge: Providing Excellence and Equity for the Failure</u> (New York; The College Board, 1993).

Number/Percentage of North Carolina High School Graduates Meeting Requirements for College/University or College Tech Prep Courses of Study or Combination of Both Courses of Study

Year of Graduation					
Number of Percent Meeting Requirements	2001-02	2000-01	1999-00	1998-99	1997-98
Number	59,278	45,710	41,445	40,890	38,950
Percent	74.46%	72.96%	70.9%	68.4%	66.4%

- In North Carolina, there were 24,044 test takers taking 41,880 AP examinations. This makes approximately 1,742 examinations for every 1,000 test takers.

- In comparison to the national proportion of approximately 1,681 examinations for every 1,000 test takers, students from North Carolina took an average of 61 more examinations for every 1,000 test takers.

- In North Carolina, there were 383 schools with at least one student taking an AP examination.

- In North Carolina, there were 333 schools with at least ten students taking an AP examination.

- The AP Grade distributions for all examinations in comparison to the nation for this year are as follows:

AP Grade	North Carolina	Nation	Difference
5	11%	14%	-3
4	18%	20%	-2
3	27%	27%	0
2	27%	25%	+2
1	16%	13%	+3

Of all North Carolina 2001 AP test takers, 51% were Seniors, 43% were Juniors[2].

This year there were more female AP test takers (13,641 or 57%) than male test takers (10,403 or 43%) in North Carolina.

In 2001, the five most popular AP subject examinations in North Carolina (with the percentage of total AP examination shown in parentheses) were as follows:

#1 History: United States (31%)
#2 English Literature and Composition (25%)
#3 English Language and Composition (19%)
#4 Mathematics: Calculus AB (18%)
#5 Biology (14%)

[2] Data Notes for issue on PSAT/NMSQT and AP test takers.
2 Data Notes for issue on number of test takers by sub-group.

2001 North Carolina AP Report
Overview (Public Schools)

	Number of Candidates		Number of Exams		Number of Grades 3-5	
	Number	% Change from previous year	Number	$ Change from previous year	Number	% Change from previous year
Total	10,980	9.0%	36,245	11.6%	19,578	8.8%
Gender						
Male	8,933	9.9%	15,617	10.8%	9,073	8.6%
Female	12,047	8.3%	20,628	12.2%	10,505	9.0%
Ethnic Group						
American Indian	113	20.2%	158	12.9%	66	3.1%
Asian	952	1.0%	2,048	2.6%	1,122	(1.2%)
Black	1,997	19.1%	3,078	23.8%	791	20.2%
All Hispanic	347	16.8%	582	17.3%	298	15.5%
Mexican American	82	17.1%	133	27.9%	63	26.0%
Puerto Rican	63	26.0%	99	41.4%	50	51.5%
Other Hispanic	202	14.1%	350	8.7%	185	5.7%
White	16,884	8.1%	29,126	11.0%	16,627	9.2%
Other	387	(0.8%)	725	(4.1%)	402	(10.7%)
No Response	300	32.7%	528	42.3%)	272	36.7%

AP Grades

	State		National	
5	3,636	12.3%	147,637	3.8%
4	6,344	8.1%	222,583	7.4%
3	9,598	8.1%	309,236	8.9%
2	10,273	17.7%	297,816	20.9%
1	6,394	10.9%	162,244	15.7%

2.D. Review enrollment figures for Algebra I, Algebra IA and Algebra IB.

Enrollment Trends in Algebra I *(Statistical Profile)*

	1998-99	1999-2000	2000-01	2001-02
Algebra I (middle school)	22,058	21,669	21,017	22,072
Algebra IA (high school)	46,955	50,010	47,592	50,902
Algebra IB (high school)	43,241	41,045	40,403	48,505
Algebra I (high school)	36,270	37,860	40,205	41,916

Mean Percent Correct: Algebra I EOC

	2000-01	2001-02
Algebra I (middle school)	52.4	63.7
Algebra I (high school)	52.4	50.4

Number of Schools with Students Taking AP® Examinations
From 1994 - 2001
North Carolina

| | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |

400

300

200

100

0
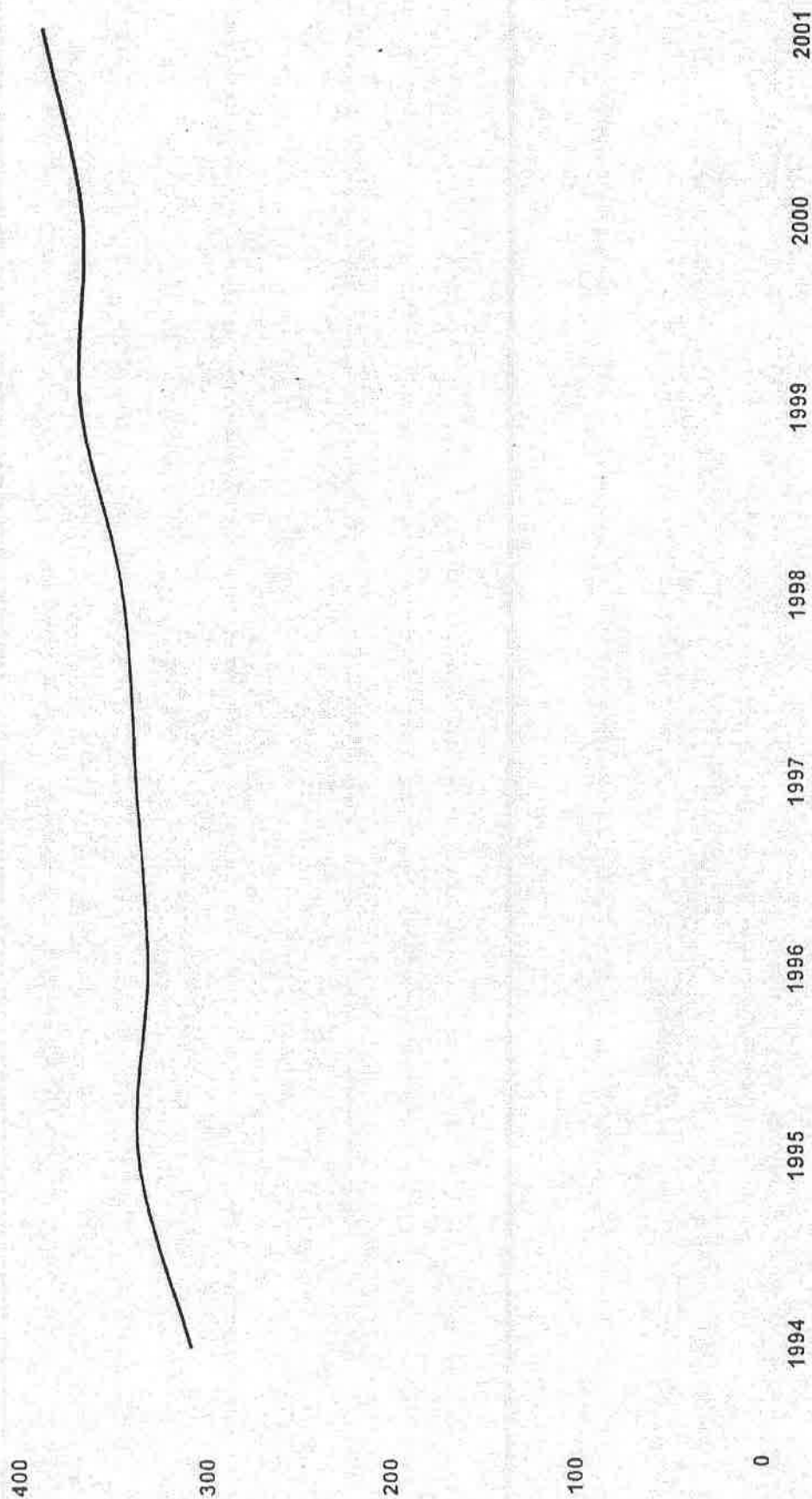
Number of AP® Examinations Taken
From 1994 - 2001
North Carolina
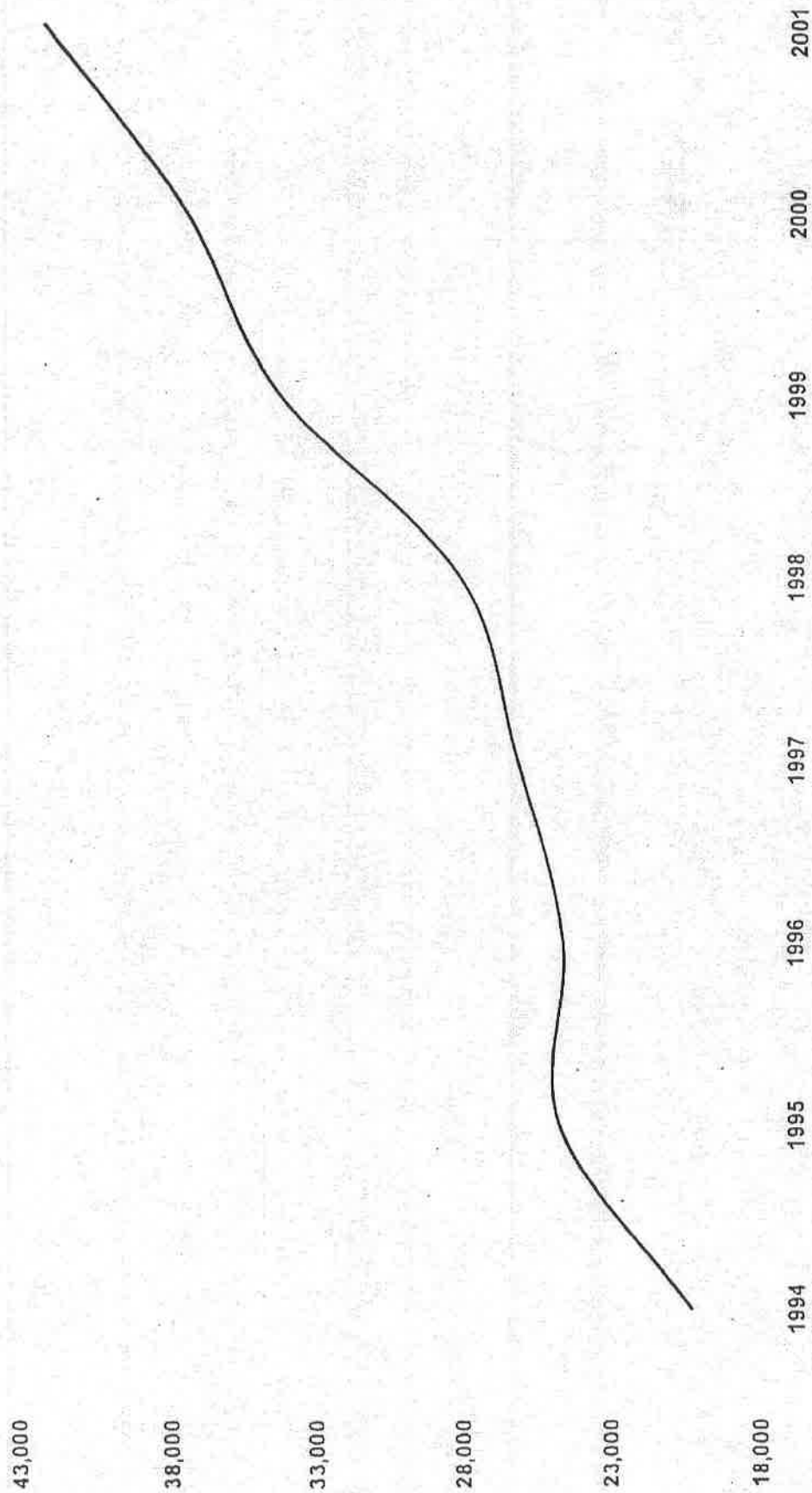
Number of Students Taking At Least One AP® Examinations
From 1994 - 2001
North Carolina

26,000

23,000

20,000

17,000

14,000

11,000

1994   1995   1996   1997   1998   1999   2000   2001
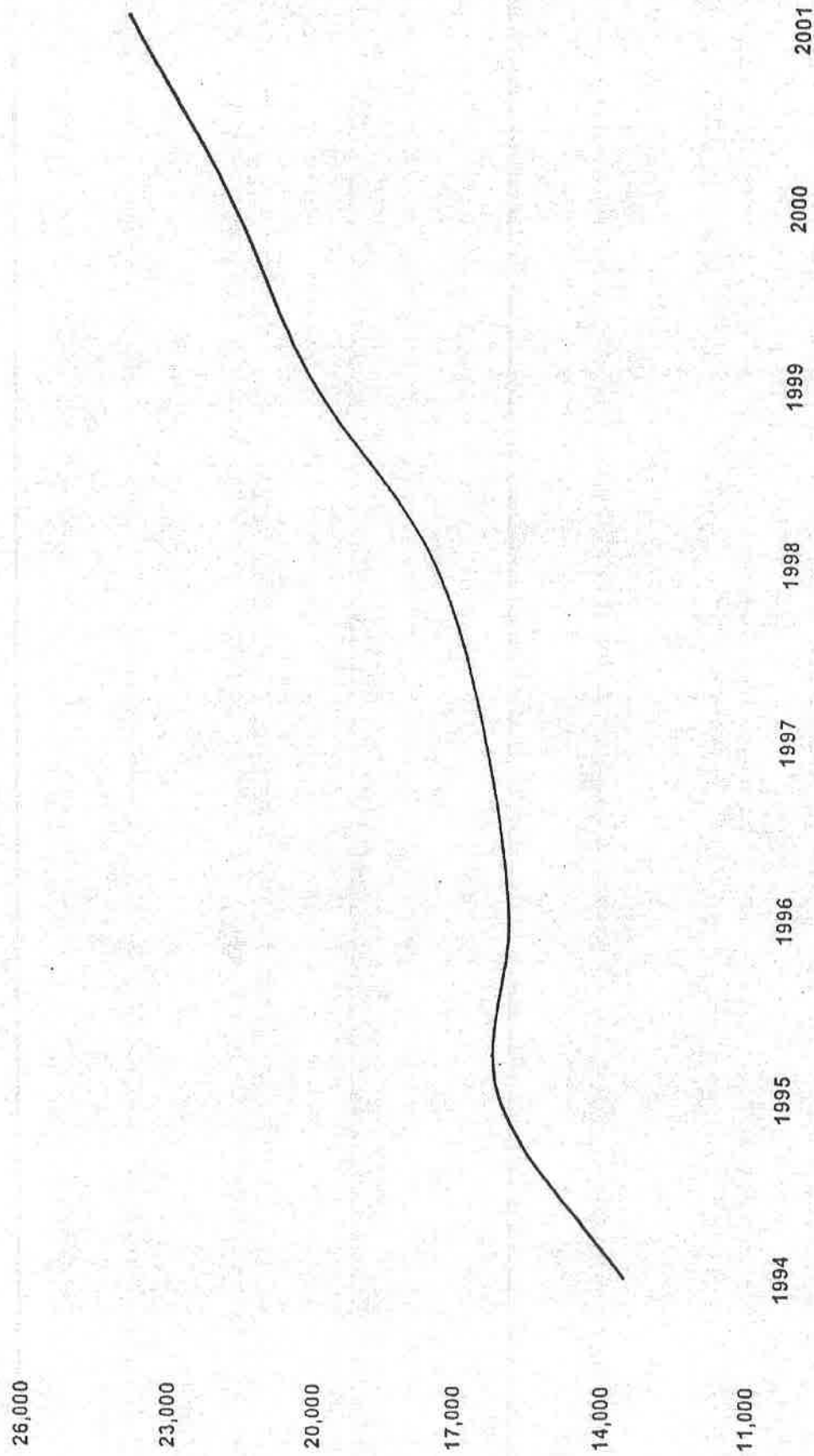
Distribution of AP® Grades for All Examinations
From 1994 - 2001
North Carolina

	1994	1995	1996	1997	1998	1999	2000	2001
	9%	8%	9%	10%	10%	10%	10%	11%
	16%	15%	17%	18%	18%	18%	18%	18%
	30%	27%	28%	29%	29%	27%	27%	27%
	30%	30%	28%	26%	28%	28%	27%	27%
	15%	21%	19%	17%	15%	18%	18%	16%

⊠ 1   ⊠ 2   ⊕ 3   ⊕ 4   ⊕ 5
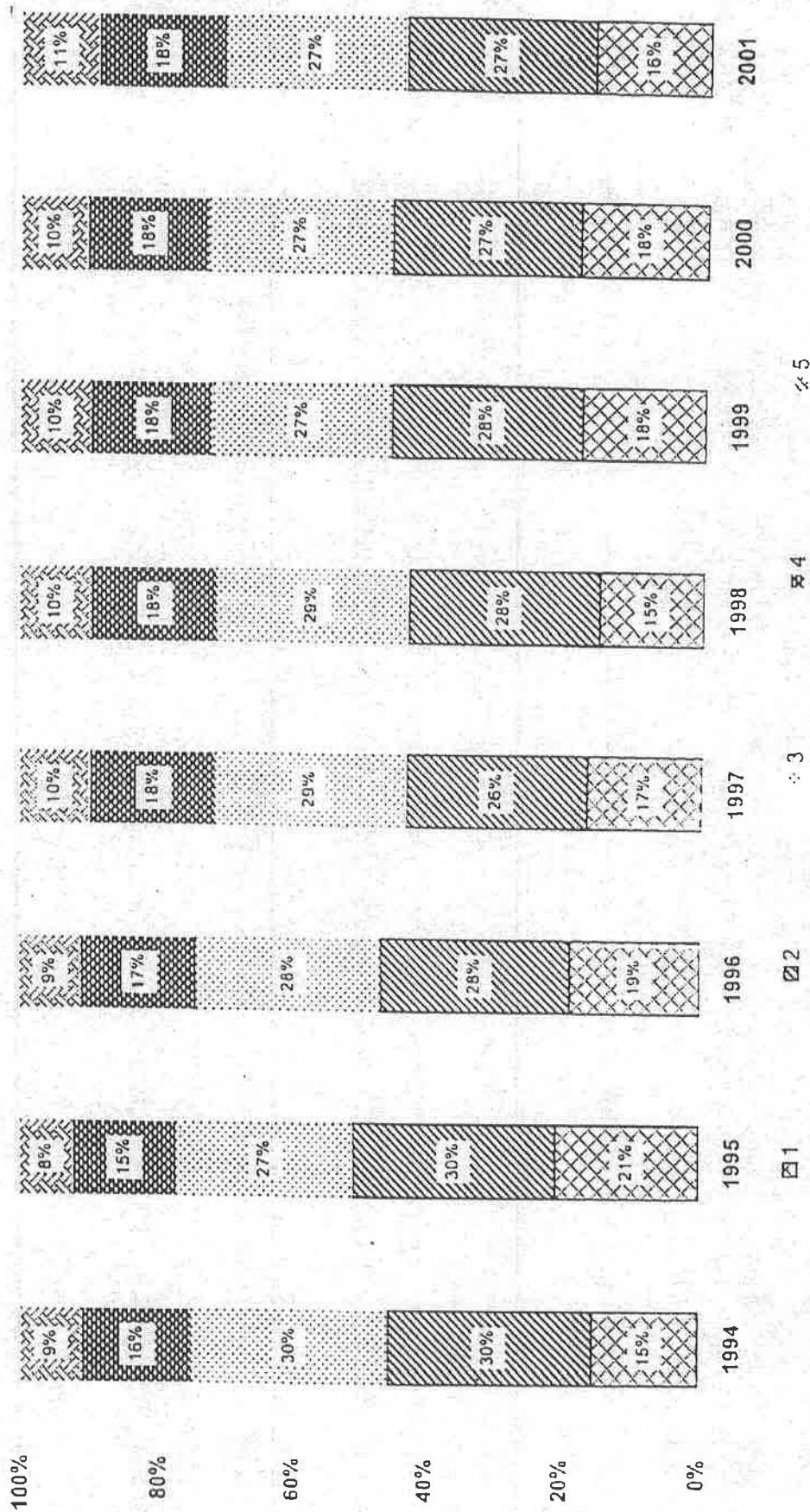
Percent of Minority Students
Taking At Least One AP® Exam
From 1992 - 2001
North Carolina

30%

24%

18%

12%

6%

0%

1992 1993 1994 1995 1996 1997 1998 1999 2000 2001

—— % Minority   - - - % Hispanic   —— % Black
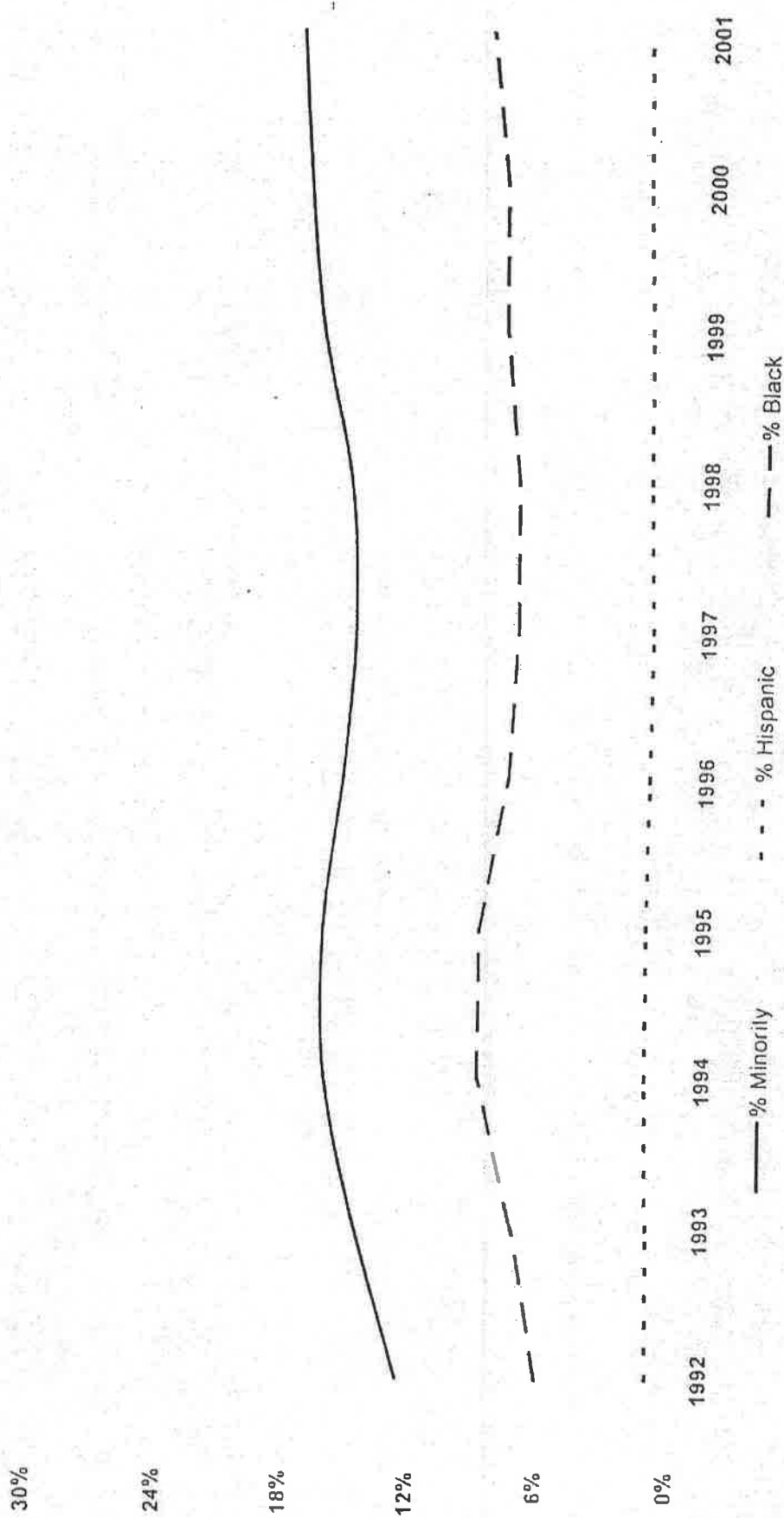
INTERNATIONAL BACCALAUREATE STATISTICS FOR NORTH CAROLINA
1998-2001

Number of IB Schools
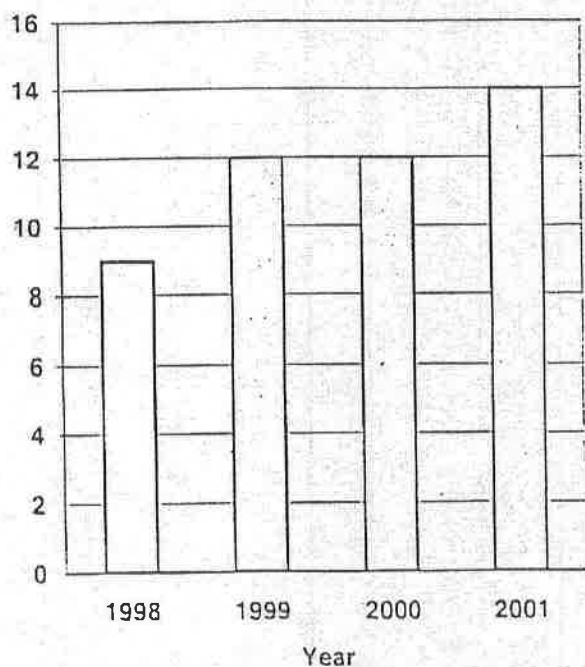
Number of Students Taking IB Exams
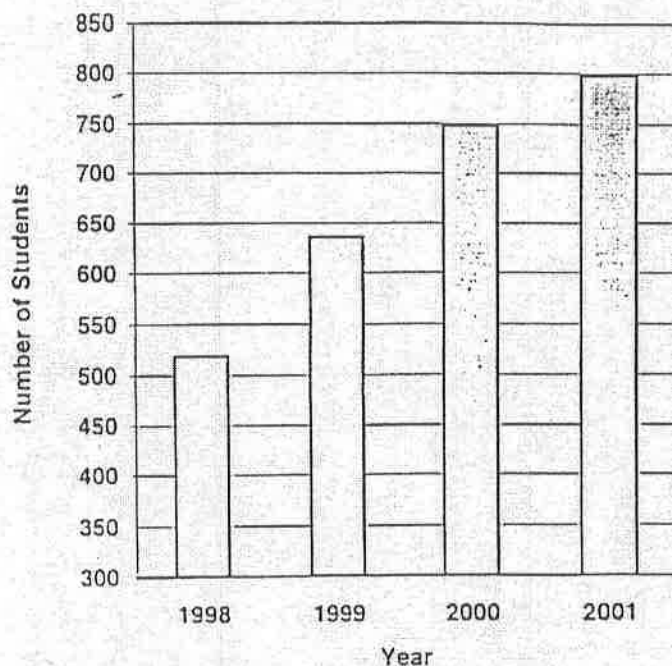

Number of IB Exams
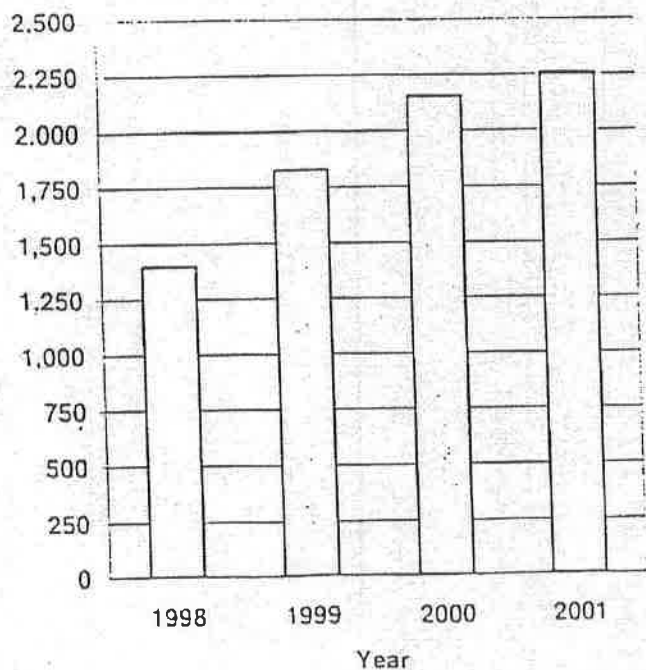
Number of IB Diploma Candidates
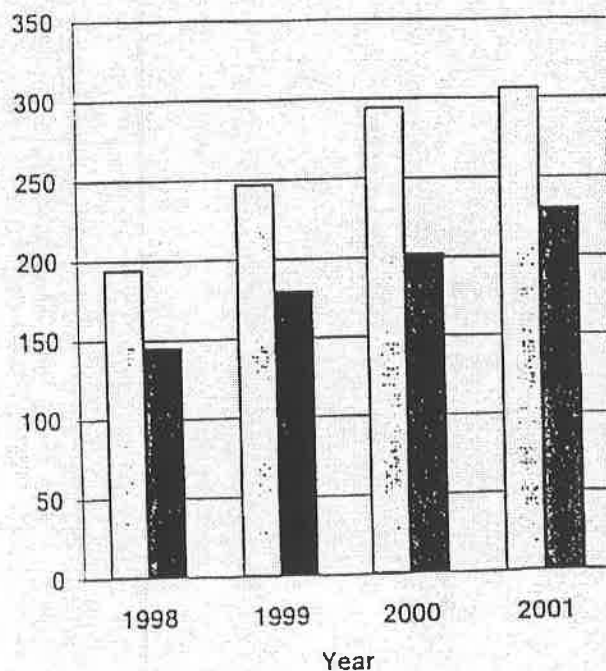
☐ Number of Diploma Candidates
■ Number of Diplomas Awarded

3. The elimination of the appropriateness of electives and exploratory courses at the middle school level.

(3) The examination of the appropriateness of electives and exploratory courses at the middle school level.

        Activities:

a.   Review data on the course taking patterns of middle school students in the following reports or projects:

- "Where do North Carolina's Middle Schools stand in the 21st Century? A Status Report on Programs and Practices"
- Southern Regional Education Board's "Education's Weak Link: Students Performance in the Middle Grades" and "Raising the Bar in the Middle Grades: Readiness for Success," Algebra
- "Schools to Watch Program"

b.   Review the number of electives and exploratory courses that schools list on such reports as the Student Activity Report.

c.   Research the impact of students working after school on dropouts.

d.   Research the changing role of the school guidance counselor, the implementation of a school-wide guidance program and the impact of the state accountability program on the responsibilities and duties of the school guidance counselor.

3.A. Review data on the course taking patterns of middle school students in the following reports or projects:
- **"Where do North Carolina's Middle Schools stand in the 21st Century? A Status Report on Programs and Practices"**
- **Southern Regional Education Board's "Education's Weak Link: Students Performance in the Middle Grades" and "Raising the Bar in the Middle Grades: Readiness for Success", Algebra**
- **"Schools to Watch Program"**

National Forum to Accelerate Middle Grades Reform: Criteria *for being a "School to Watch."*

The National Forum to Accelerate Middle-Grades Reform is an alliance of educators, researchers, national associations, and officers of professional organizations and foundations committed to promoting the academic performance and healthy development of young adolescents. The Forum developed in 1997 out of a sense of urgency that middle-grades school improvement had stalled, amid a flurry of descending test scores, increasing reports of school violence, and heated debates about the nature and purpose of middle-grades education. All agreed that nothing short of collective and concerted action could result in high-performing middle-grades schools and students.

Over the past five years, the Forum has flourished, successfully reframing the national discourse about middle-grades education. For the first time, major organizations, foundations, and others of influence have articulated and affirmed that schools do not have to choose between equity and excellence, or between a healthy school climate and a strong academic program. Rather they must focus on all of these if they want students to achieve at significantly higher levels. The Forum's vision has been endorsed by all Forum members, who now "speak with one voice" and work together to achieve their common vision.

After a year of collaboration, the National Forum identified criteria to describe high-performing schools that serve students in the middle grades. Such schools are academically excellent, responsive to the developmental challenges of young adolescents, and socially equitable, with high expectations for all students.

High-performing schools with middle grades are academically excellent. They challenge all students to use their minds well. Specific indicators of academic excellence include the following.

1. All students are expected to meet high academic standards. Teachers supply students with exemplars of high quality work that meet the performance standard. Students revise their work based on feedback until they meet or exceed the performance standard.
1. Curriculum, instruction, and assessment are aligned with high standards. They provide a coherent vision for what students should know and be able to do. The curriculum is rigorous and non-repetitive; it moves forward substantially as students progress through the middle grades.
2. The curriculum emphasizes deep understanding of important concepts, development of essential skills, and the ability to apply what one has learned to real-world problems. By making connections across the disciplines, the curriculum helps reinforce important concepts.
3. Instructional strategies include a variety of challenging and engaging activities that are clearly related to the concepts and skills being taught.

4. Teachers use a variety of methods to assess student performance (e.g., exhibitions, projects, performance tasks) and maintain a collection of student work. Students learn how to assess their own and others' work against the performance standards.
5. The school provides students time to meet rigorous academic standards. Flexible scheduling enables students to engage in extended projects, hands-on experiences, and inquiry-based learning. Most class time is devoted to learning and applying knowledge or skills rather than classroom management and discipline.
6. Students have the supports they need to meet rigorous academic standards. They have multiple opportunities to succeed and extra help as needed.
7. The adults in the school have opportunities to plan, select, and engage in professional development aligned with nationally recognized standards. They have regular opportunities to work with their colleagues to deepen their knowledge and improve their practice. They collaborate in making decisions about rigorous curriculum and effective instructional methods. They discuss student work as a means of enhancing their own practice.

High-performing schools with middle grades are sensitive to the unique needs and challenges of early adolescence.

1. The school creates a personalized environment that supports each student's intellectual, ethical, social, and physical development. The school groups adults and students in small learning communities characterized by stable, close, and mutually respectful relationships.
2. The school provides access to comprehensive services to foster healthy physical, social, emotional, and intellectual development.
3. Teachers use a wide variety of instructional strategies to foster curiosity, exploration, creativity, and the development of social skills.
4. The curriculum is both socially significant and relevant to the personal interests of young adolescents.
5. Teachers make connections across disciplines to help reinforce important concepts and address real-world problems.
6. The school provides multiple opportunities for students to explore a rich variety of topics and interests in order to develop their identity, discover and demonstrate their own competence, and plan for their future.
7. Students have opportunities for voice -- posing questions, reflecting on experiences, developing rubrics, and participating in decisions.
8. The school develops alliances with families to enhance and support the well-being of their children. It involves families as partners in their children's education, keeping them informed, involving them in their children's learning, and assuring participation in decision-making.
9. The school provides students with opportunities to develop citizenship skills, uses the community as a classroom, and engages the community in providing resources and support.
10. The school provides age-appropriate co-curricular activities.

High-performing schools with middle grades are socially equitable, democratic, and fair. They provide every student with high-quality teachers, resources, learning opportunities, and supports. They keep positive options open for all students.

1. Faculty and administrators expect high-quality work from all students and are committed to helping each student produce it. Evidence of this commitment includes tutoring, mentoring, special adaptations, and other supports.
2. Students may use many and varied approaches to achieve and demonstrate competence and mastery of standards.
3. The school continually adapts curriculum, instruction, assessment, and scheduling to meet its students' diverse and changing needs.
4. All students have equal access to valued knowledge in all school classes and activities.
5. Students have on-going opportunities to learn about and appreciate their own and others' cultures. The school values knowledge from the diverse cultures represented in the school and our nation.
6. Each child's voice is heard, acknowledged, and respected.
7. The school welcomes and encourages the active participation of all its families.
8. The school's reward system demonstrates that it values diversity, civility, service, and democratic citizenship.
9. The faculty is culturally and linguistically diverse.
10. The school's suspension rate is low and in proportion to the student population.

High-performing schools with middle grades are learning organizations that establish norms, structures, and organizational arrangements to support and sustain their trajectory toward excellence.

1. A shared vision of what a high-performing school is and does drives every facet of school change. Shared and sustained leadership propels the school forward and preserves its institutional memory and purpose.
2. Someone in the school has the responsibility and authority to hold the school-improvement enterprise together, including day-to-day know-how, coordination, strategic planning, and communication.
3. The school is a community of practice in which learning, experimentation, and reflection are the norm. Expectations of continuous improvement permeate the school. The school devotes resources to ensure that teachers have time and opportunity to reflect on their classroom practice and learn from one another. At school everyone's job is to learn.
4. The school devotes resources to content-rich professional development, which is connected to reaching and sustaining the school vision. Professional development is intensive, of high quality, and ongoing.
5. The school is not an island unto itself. It draws upon others' experience, research, and wisdom; it enters into relationships such as networks and community partnerships that benefit students' and teachers' development and learning.
6. The school holds itself accountable for its students' success rather than blaming others for its shortcomings. The school collects, analyzes, and uses data as a basis for making decisions. The school grapples with school-generated evaluation data to identify areas for more extensive and intensive improvement. It delineates benchmarks, and insists upon evidence and results. The school intentionally and explicitly reconsiders its vision and practices when data call them into question.
7. Key people possess and cultivate the collective will to persevere and overcome barriers, believing it is their business to produce increased achievement and enhanced development for all students.

8. The school works with colleges and universities to recruit, prepare, and mentor novice and experienced teachers. It insists on having teachers who promote young adolescents' intellectual, social, emotional, physical, and ethical growth. It recruits a faculty that is culturally and linguistically diverse.
9. The school includes families and community members in setting and supporting the school's trajectory toward high performance. The school informs families and community members about its goals for students and students' responsibility for meeting them. It engages all stakeholders in ongoing and reflective conversation, consensus building, and decision making about governance to promote school improvement.

North Carolina's Middle Schools

21st Century?

A Status Report on Programs and Practices

Table 2
Percent of Schools Offering Selected Required and Elective Courses – Random Sample

Courses	Required Courses			Elective Courses		
	6th	7th	8th	6th	7th	8th
Art	20	11	8	75	84	86
Band	0	0	0	96	100	100
Career Exploration	35	23	22	41	43	47
Chorus	0	0	0	63	77	83
Computers	51	47	45	35	39	40
Creative Writing	8	9	7	9	10	10
Foreign Language	16	10	6	53	63	69
General Music	11	5	2	46	38	36
Health	87	86	84	8	7	7
Industrial Arts	3	1	0	18	24	76
Journalism	0	0	0	6	11	19
Life Skills	16	12	13	30	45	46
Orchestra	0	0	0	39	39	40
Physical Education	92	90	90	8	10	10
Reading	56	54	52	13	16	17
Technology	30	24	25	27	36	36
Sex Education	38	45	41	8	8	10
Speech	5	4	4	4	6	7
Word Processing	30	22	19	14	21	22

Percentages of Most Frequently Required Non-Core Seventh Grade Courses
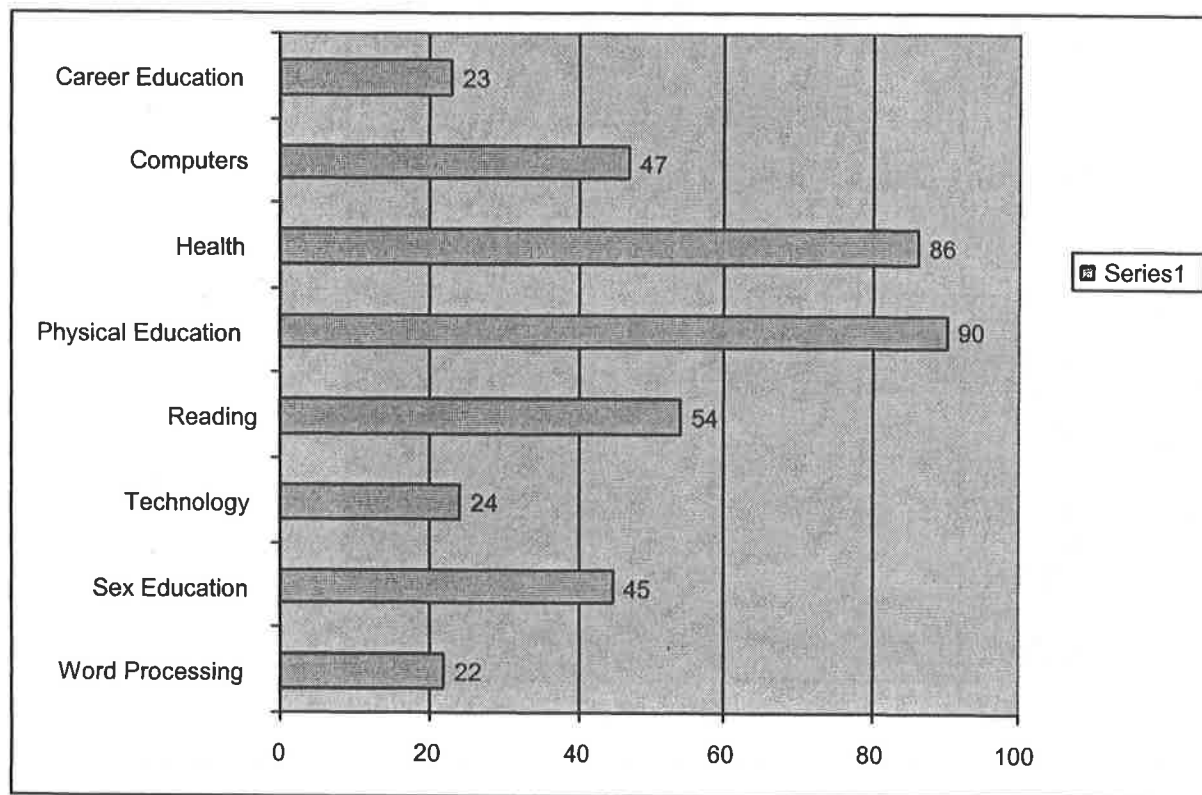
Percentages of Most Frequently Offered Seventh Grade Elective Courses

Horizontal bar chart showing:

Course	Percentage
Art	84
Band	100
Career Exploration	43
Chorus	77
Computers	39
Foreign Language	63
General Music	38
Life Skills	45
Orchestra	39
Technology	36

Legend: ■ Series1

X-axis: 0, 20, 40, 60, 80, 100, 120
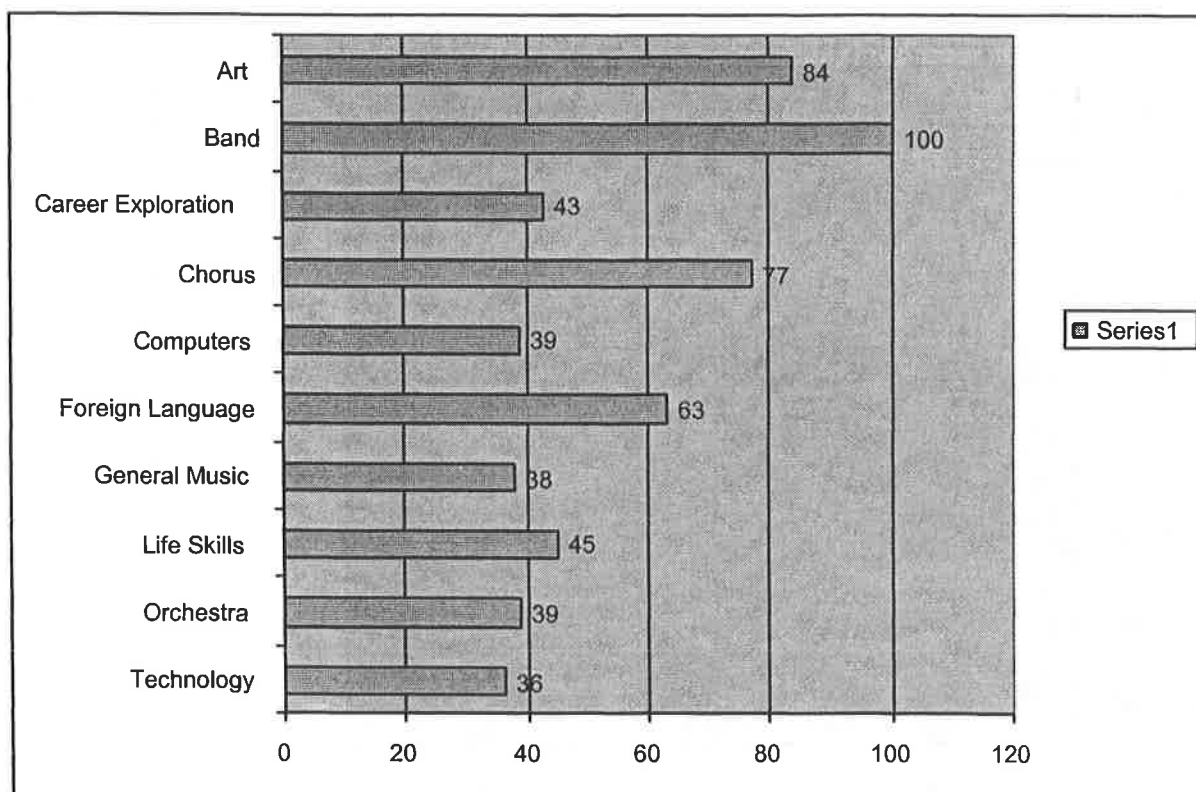
Percentages of Most Frequently Offered Seventh Grade Boys and Girls Interschool Sports Programs
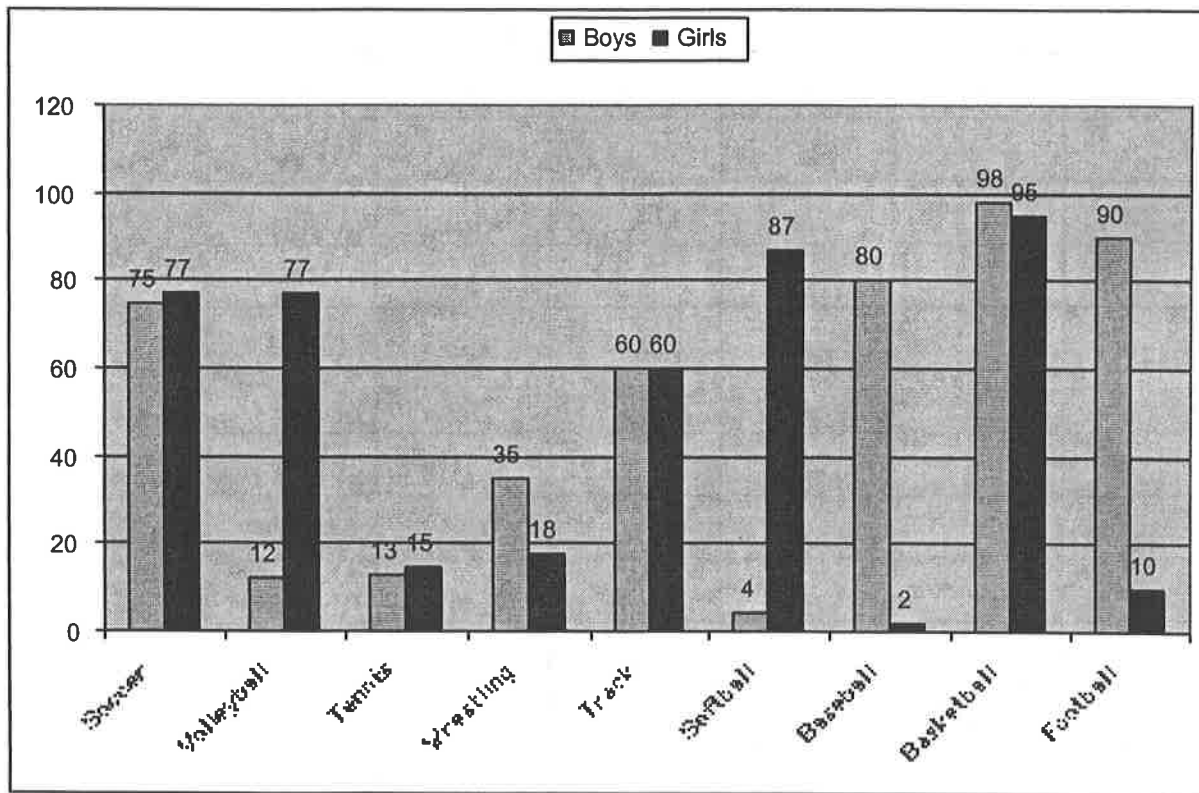
Table 12

Percent of Schools of Excellence and Schools of Distinction (SE/D) Offering Selected Required and Elective Courses

| Courses	Required Courses			Elective Courses		
	6th	7th	8th	6th	7th	8th
Art	16	5	9	70	88	88
Band	0	0	0	90	100	100
Career Exploration	40	28	28	28	42	46
Chorus	2	0	0	61	84	84
Computers	47	47	47	28	40	42
Creative Writing	14	16	16	9	12	14
Foreign Language	12	7	5	53	68	70
General Music	12	5	5	46	40	40
Health	84	91	91	9	7	7
Industrial Arts	4	2	2	12	25	25
Journalism	0	0	0	5	14	18
Life Skills	18	14	14	25	51	51
Orchestra	0	0	0	32	33	33
Physical Education	90	95	95	5	5	5
Reading	53	58	56	11	11	11
Technology	28	26	25	26	46	40
Sex Education	28	39	33	11	11	12
Speech	2	2	2	4	6	7
Word Processing	30	22	19	5	16	18

Table 13

Percent of Schools Not Recognized as Schools of Excellence and Schools of Distinction (NSE/D)
Offering Selected Required and Elective Courses

Courses	Required Courses			Elective Courses		
	6th	7th	8th	6th	7th	8th
Art	22	11	8	70	84	86
Band	0	0	0	91	100	100
Career Exploration	32	22	21	40	44	48
Chorus	0	0	0	60	76	84
Computers	51	49	48	32	37	37
Creative Writing	8	10	8	9	8	8
Foreign Language	21	13	8	48	60	67
General Music	11	3	0	38	37	35
Health	86	86	85	5	6	6
Industrial Arts	3	2	0	18	25	25
Journalism	0	0	0	5	10	21
Life Skills	18	15	16	30	43	46
Orchestra	0	0	0	33	37	38
Physical Education	89	87	87	8	10	11
Reading	57	57	54	10	14	16
Technology	27	22	25	22	35	33
Sex Education	37	44	451	8	10	10
Speech	5	3	3	5	6	8
Word Processing	25	16	18	19	25	25

3.B. Review the number of electives and exploratory courses that schools list on such reports as the Student Activity Report.

Enrollment Patterns in Elective and Exploratory Courses at the Middle Grades Level

	1998-1999	1999-2000	2000-2001	2001-2002
Spanish I	10,307	11,916	12,870	14,381
Exploratory Languages	16,146	14,650	15,490	15,290
Middle School Spanish	20,312	22,520	23,582	26,582
General Music	34,272	35,483	36,132	34,815
Band	60,102	61,438	62,933	63,268
Visual Arts	78,190	81,268	86,054	92,624
Creative Dramatics	20,195	19,702	20,653	19,240
Exploring Career Decisions	74,987	73,653	77,228	70,209
Business Computer Technology	20,303	24,059	27,235	34,602
Keyboarding	56,794	59,544	60,024	63,739
Exploring Business & Marketing	29,715	28,026	29,829	33,996
Exploring Biotechnology	7,968	7,907	7,674	7,373
Exploring Life Skills	37,352	38,181	39,615	41,275
Special Interest Topics	59,946	56,122	160,163	60,078

### 3.C. Research the impact of students working after school on dropouts.

Summary: The prevalence of secondary school students working part-time is linked to economic cycles: when there is an economic upturn, more students work; when economies are depressed, fewer work. Most students who work do so in low paying service clerical or sales jobs, with some evidence that proportionately more students from middle-class families work than students from either poor or wealthy families. There appears to be a general view that there is a connection between working more than 15 to 20 hours per week and reduced school success in terms of academic achievement, as well as an increased risk of dropping out of school. However, it is not clear whether increased work causes the problems, or whether academic failure leads more students who are failing to increase their work hours.

A. The effect of working part-time on students' academic achievement.
- Most research shows that there is a detrimental effect on achievement if secondary students work for over 15 hours a week (Stern, 1997). Such students have lower grades, do less homework, are more likely to drop out, and are less likely to enter post-secondary education. Those students who work fewer hours suffer fewer negative consequences. These findings are supported by a Toronto study (Cheng, 1995), and are similar to StatsCan data (*Canadian Social Trends*, 1994), which show that students who worked fewer than 20 hours a week had much lower dropout rates than those who worked for more than 20 hours a week. There were startling differences between males who worked fewer than 20 hours (16% dropout rate), and those who worked longer than 20 hours (33% dropout rate), although the highest female dropout rates (22%) occurred among females who did not work at all while at school. There is one important caveat to the link between part-time work and marks: there is mixed evidence as to whether marks decline because students work more, or whether students whose marks are declining choose to work more. However, Singh (1998) in a study, which factored in socio-economic status and previous achievement, stated that the more hours worked, the greater the negative effects on student achievement.
- The consequences for younger students working longer hours could be more severe than for older students (Barone, 1993).
- Many students who work find some problems balancing school and work demands (Worley, 1995). Many who work part-time have limited participation in extra-curricular activities (Hope, 1990).

B. The effect of working part-time on students' overall well being.
- Stern (1997) and Cheng (1995) both state that students derive benefits from working, as long as the hours are below 15 per week. Stern identifies a benefit to future earning potential and a more positive attitude to work formed while working or during work experience at school.
These findings are also supported by Canadian data. However, Lawton (1992) argues that those who support this argument also tend to support a vocational rather than a liberal view of education.
- Greenberger and Steinberg (1996), in an analysis of psycho-social aspects of working high school students, concluded that "it may make them

academically rich but psychologically poor." They also argued that instead of instilling good work habits, many students who worked part-time learned how to cheat, steal, and deal with boring work.

- Mortimer (1993) found no evidence to support the claim that working long hours fostered smoking or increased school behavior problems, but there was evidence of increased alcohol consumption. Other studies, however, have found increased drug and alcohol use, and higher rates of delinquency associated with higher number of hours worked by students.

- A 1991 Oregon Task Force found the numbers of 16- and 17-year-olds who were working to have increased in recent years. Jobs were often low-paying, unfulfilling, and offered little in the way of educational value or preparation for adult work. Canadian data suggest that trends in teenage employment are linked to economic cycles, with numbers rising and falling with buoyant or depressed economies. Most Canadian students (69%) work in service, clerical, or sales industries, with more females (85%) than males (57%) in these industries. Four times the number of males (16%) compared to females (4%) were employed in construction.

- Research also indicates that too many hours of work for teenagers increases fatigue and may cause lower academic performance. Carskadon (1999) describes changing sleep patterns during adolescence and discusses the influence of employment on sleep patterns. She found that students working 20 or more hours reported later bedtimes, shorter sleep times, more frequent episodes of falling asleep in school, and more late arrivals in school.

- An article in the American Federation of Teachers' publication *American Teacher* (February 1999), cited a report produced by the (U.S.) National Research Council (NRC) and the Institute of Medicine (IOM) which provided evidence of what it claims is an underestimate of 70 documented deaths of children and adolescents as a result of injuries at work, and 100,000 young people seeking treatment in hospital emergency wards as a result of work-related injuries. Based on these data, a committee established by the NRC/IOM is calling for Congress to authorize limits to the number of hours worked per day by and to regulate teenagers' work start- and finish-times on school nights.

Figure 1
Achievement by Students Not Working, Students Just in Jobs and
Students in Work-Based Learning
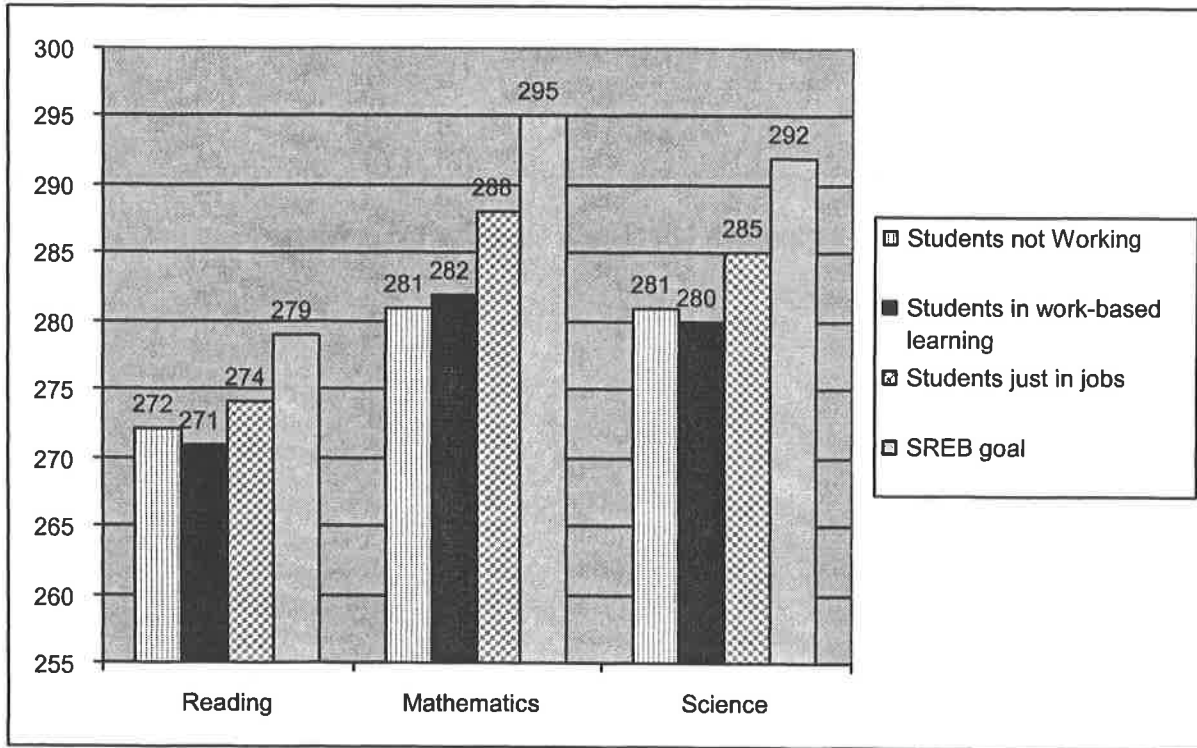
Findings are from the 1996 *High Schools That Work* Assessment
Note: Scores in each area range from 0 to 500.

3.D. Research the changing role of the school guidance counselor, the implementation of a school-wide guidance program and the impact of the state accountability program on the responsibilities and duties of the school guidance counselor.

HOW NORTH CAROLINA COUNSELORS
SPEND THEIR TIME

The following is a report on how North Carolina Counselors spend their time.

HOW NORTH CAROLINA SCHOOL COUNSELORS
SPEND THEIR TIME

Introduction

Educational reform and accountability, such as that found in the North Carolina ABCs process, affect all program areas including school counseling. Yesterday's guidance program was defined by service and responding to crisis. Today, the movement is toward a planned, comprehensive, competency-based program that is accountable in terms of program implementation and student success.

According to research conducted by the National Consortium for State Guidance Leadership (Author, 2000), 70%-80% of a school counselor's time should be devoted to direct service to students. Guidelines for school counseling programs, established by the American School Counselors Association (Author, 1997), indicated that direct student service should be provided in three broad categories:
- Academic development
- Career development
- Personal/social development

Studies completed by the National Consortium of State Guidance Leadership, (Author, 2000), resulted in recommended percentages of time that counselors should spend in each of four major function areas:
- Guidance curriculum
- Individual planning
- Responsive services
- System support

These data were used to make comparisons to the results of the August, 2000, survey of North Carolina school counselors. Approximately 3,100 surveys were sent to student services personnel, including:
- Elementary school counselors
- Middle school counselors
- High school counselors
- Career Development Coordinators
- Other student services personnel

Fifty-seven (57) per cent of the surveys were returned and included in this report.

Definition of Terms

For the purposes of this report, selected terms and titles were defined to clarify their meaning and use.

Elementary school: Those schools which contained grades K-5. Also included were schools that have a K-8 grade arrangement.

Middle school: Those schools which contained grades 6-8. Also included were those schools with a 7-9 grade arrangement.

High school: Those schools which contained grades 9-12.

Student Services Personnel: This group included school social workers, dropout prevention coordinators, substance abuse prevention coordinators, alternative school counselors, and some counselors who are assigned to work only with exceptional children.

Guidance curriculum: Contains statements as to the goals for guidance instruction and the competencies to be developed by students at each grade level. It is designed to serve all students and is implemented through a team approach. The curriculum is primarily delivered by teachers with counselors providing resources and assistance as needed.

Individual planning: Activities provided for all students and are intended to guide students in the development and implementation of their personal, educational, and career plans.

Responsive services: Provide special help to students who are facing problems that interfere with their healthy personal, social, career, or educational development.

67

System support: Includes management activities necessary to support the comprehensive school counseling program and the total educational program.

Major Findings

The following findings are noted:
- Over 50% of the school counselors who responded to this survey have five or fewer years of counseling experience.
- Fewer than half of the North Carolina school counselors spend the nationally recommended amount of time in the major function areas of a comprehensive school counseling program.
- Testing coordination responsibilities have taken more and more of the elementary, middle, and high school counselors' time.
- One-third of the elementary counselors spend between 10%-30% of their time on test coordination activities.
- More than one-third of middle school counselors spend between 10%-40% of their time on test coordination activities.
- More than one-third of high school counselors spend between 10%-40% of their time on test coordination activities.
- Registering students, maintaining cumulative records, and transferring student records took away from counseling activities for middle school counselors.
- Student schedule changes also took up high school counselors' time.

Demographic Information

The survey answered two types of questions. The first type was demographic information, and the second type was specific to how school counselors spend their time. Table 1 reported the distribution of counselors who completed the survey. A total of 1772 (57%) completed surveys were returned.

Table 1
Number of Student Services Personnel by Category

COUNSELORS	NUMBER
All	1772
Elementary	483
Middle School	301
High School	676
Career Development Coordinators	198
Other Student Services Personnel	114

Beginning with Table 2, results were reported as percentages. The total did not always equal 100, because every respondent did not answer every question. Table 2 showed the distribution of years of experience in education for responding counselors, including their years as a counselor. It might be noted that approximately 50% of the school counselors have had at least ten years of experience in education

Table 2
Years of Education Experience of Counselors

YEARS	ELEMENTARY	MIDDLE SCHOOL	HIGH SCHOOL
0-5 years	22.6%	26.6%	19.5%
6-10 years	21.1%	15.3%	14.5%
11-15 years	16.1%	15.9%	14.3%
16-20 years	13.5%	15.3%	13.3%
> 20 years	26.3%	26.9%	38.2%

It should be noted in Table 3, that over 50% of the school counselors have had five or fewer years of counseling experience.

Table 3
Years of Experience as a Counselor

YEARS	ELEMENTARY	MIDDLE SCHOOL	HIGH SCHOOL
0-5 years	57.6%	59.5%	52.2%
6-10 years	23.0%	19.3%	21.2%
11-15 years	14.9%	10.0%	13.4%
16-20 years	2.1%	6.0%	6.0%
> 20 years	2.2%	5.0%	7.2%

The counselors who responded to the survey provided information about the size and configuration of their schools. More than 90% of the school counselors in this survey serve only one school. However, 70% of the Career Development Coordinators and 60% of the other student services personnel serve only one school. As reported in Table 4, over 50% of the schools in this study had at least two counselors.

Table 4
Number of Counselors Per School

NUMBER	ELEMENTARY	MIDDLE SCHOOL	HIGH SCHOOL
0	20.7%	7.3%	2.2%
1	55.3%	28.2%	9.5%
2	19.3%	40.2%	22.8%
3	1.9%	18.6%	25.0%
4 or more	2.5%	5.6%	39.2%

Table 5
Type of School Schedule

TYPE	ELEMENTARY	MIDDLE SCHOOL	HIGH SCHOOL
Block	15.7%	42.5%	74.3%
Traditional	82.6%	57.5%	25.7%

Table 6
Size of the Student Body

STUDENTS	ELEMENTARY	MIDDLE SCHOOL	HIGH SCHOOL
0-300	10.9%	9.6%	3.6%
301-600	46.6%	15.6%	9.3%
601-900	31.5%	44.9%	18.6%
901-1200	8.5%	23.3%	25.9%
> 1200	2.0%	6.3%	41.4%

To facilitate future communication with student services personnel in the local school systems, data were collected about access to technology. Table 7 provided information that may assist with future communication efforts. At least 85% of the counselors who responded to this survey reported that they had a computer in their office and over 75% of them have Internet and e-mail access. It should be noted, however, that the survey did not collect information about the quality of the equipment or the reliability on online services.

Table 7
Counselors' Access to Technology

ACCESS TO TECHNOLOGY	ELEMENTARY	MIDDLE	HIGH
Have a computer in their office	85.5%	88.7%	98.2%
Have Internet access.	76.8%	77.4%	90.4%
Have access to e-mail	76.8%	77.4%	88.0%

Results

The data on how school counselors spend their time were analyzed and the following results were obtained. The key responsibilities for school counselors vary by grade level, therefore, the results were reported in Table 8 for all student services personnel who responded to this survey. In addition, the results for each major group are reported separately. There are national standards for the amount of time that school counselors spend in major job function areas. Where this information was available and applicable, it has been included in the shaded area.

A copy of the survey is included in the Appendix. Information about the tasks included in each activity can be found there.

Table 8
Time Spent on Specific Activities by All Student Services Personnel

ACTIVITY	NATIONAL PERCENTAGE	<10%	10-20%	20-30%	30-40%	>40%
Curriculum	N/A	37.8%	29.0%	13.5%	8.2%	6.8%
Individual planning	N/A	33.9%	24%	14.7%	10.6%	12.4%
Responsive services	N/A	21.2%	23.4%	20.8%	15.2%	14.3%
System support	N/A	32.2%	29.0%	13.5%	8.2%	6.8%

According to the data displayed in Table 9, only 17.6% of the elementary school counselors in North Carolina are spending an appropriate amount of time on curriculum activities. At the time of the survey, the state-wide guidance curriculum was being revised. Additionally less than 20% of the counselors spend the suggested amount of time in responsive services and less than 30% of the counselors spend the suggested amount of time on system support. They did, however, spend an appropriate amount of time in the area of individual planning.

Table 9
Time Spent on Specific Activities by Elementary School Counselors

ACTIVITY	NATIONAL PERCENTAGE	<10%	10-20%	20-30%	30-40%	>40%
Curriculum	30-40%	13.7%	29.2%	21.7%	17.6%	16.4%
Individual planning	5-10%	61.9%	22.4%	8.7%	2.9%	1.2%
Responsive services	30-40%	10.8%	22.6%	28.2%	19.7%	17%
System support	15-20%	13.6%	29.0%	22.0%	18.0%	16.0%

According to Table 10, fewer than half of the middle school counselors spend an appropriate amount of time in curriculum, individual planning, and responsive services activities. Just over 50% spend the suggested amount of time of system support.

Table 10
Time Spent of Specific Activities by Middle School Counselors

ACTIVITY	NATIONAL PERCENTAGE	<10%	10-20%	20-30%	30-40%	>40%
Curriculum	20-30%	44.5%	31.9%	10.3%	3.6%	3.6%
Individual planning	15-25%	49.5%	26.9%	11%	4.7%	2.3%
Responsive services	30-40%	7.3%	17.6%	26.6%	18.3%	24.6%
System support	15-20%	24.2%	31.6%	19.9%	11.6%	3%

Data reported in Table 11 showed that fewer than 50% of high school counselors spend the suggested amount of time on each of the major counseling functions.

Table 11
Time Spent on Specific Activities by High School Counselors

ACTIVITY	NATIONAL PERCENTAGE	<10%	10-20%	20-30%	30-40%	>40%
Curriculum	15-25%	53.6%	26.2%	9.2%	3.8%	2%
Individual planning	25-35%	14.3%	28.8%	20.7%	15.8%	15.7%
Responsive services	25-35%	22.8%	30%	18.6%	14.5%	8.9%
System support	15-20%	40.6%	33.4%	11.8%	6%	2%

Data was also analyzed for Career Development Coordinators (Table 12) and all other student services personnel (Table 13). The group of student services personnel included school social workers, dropout prevention counselors, substance abuse prevention counselors, alternative school counselors, and some counselors who are assigned to work only with exceptional children.

Table 12
Time Spent on Specific Activities by Career Development Coordinators

ACTIVITY	NATIONAL PERCENTAGE	<10%	10-20%	20-30%	30-40%	>40%
Curriculum	N/A	24.7%	11.2%	18.2%	10.6%	3.5%
Individual planning	N/A	4.0%	10.6%	17.7%	21.7%	42.9%
Responsive services	N/A	67.7%	15%	6.6%	2.0%	1.5%
System support	N/A	25%	32%	21%	9.5%	6.5%

Table 13
Time Spent on Specific Activities by Other Student Services Personnel

ACTIVITY	NATIONAL PERCENTAGE	<10%	10-20%	20-30%	30-40%	>40%
Curriculum	N/A	50.8%	21.1%	6.1%	2.6%	8.8%
Individual planning	N/A	42.1%	17.5%	8.8%	8.8%	13.2%
Responsive services	N/A	12.3%	18.4%	11.4%	14.9%	29.8%
System support	N/A	28%	16.6%	21%	11.4%	10.5%

Tables 8-13 showed the analysis of how counselors spend their time in the four specific functions of a school counseling program. The results showed that fewer than half of the

North Carolina school counselors spend the nationally recommended amount of time in these areas. The following tables displayed the non-counseling activities that counselors have been asked to perform. The national standards indicate that none of these tasks should be included in a school counselor's job function.

For elementary, middle, and high school counselors, responsibility for test coordination has taken more and more of their time. Narratives that were sent along with the surveys by many of the counselors supported the data. Registering students, maintaining cumulative records, and transferring student records took time away from counseling activities for middle school counselors. High school counselors' time was also taken up with student schedule changes.

Table 14
Non-counseling Activities by Elementary School Counselors

NON-COUNSELING ACTIVITY	NATIONAL PERCENTAGE	<10%	10-20%	20-30%	30-40%	>40%
Duty (bus, lunch, etc.)	0	81%	9.7%	2%	1%	.4%
Registrar Responsibilities	0	72.7%	10%	3%	2%	2%
Schedule Changes	0	84.1%	1.9%	.1%	0	0
Test Coordination	0	41.8%	22.6%	11.4%	8.7%	6.2%
Substitute Teaching (covering class)	0	84.9%	1.2%	1.0%	0	0
Other Non-Counseling	0	56.7%	7.5%	1.4%	1.4%	1.0%

Table 15
Non-counseling Activities by Middle School Counselors

NON-COUNSELING ACTIVITY	NATIONAL PERCENTAGE	<10%	10-20%	20-30%	30-40%	>40%
Duty (bus, lunch, etc.)	0	75%	11.9%	3%	1%	1%
Registrar Responsibilities	0	42%	23.9%	10%	9%	5%
Schedule Changes	0	31.9%	13.3%	6.0%	3.3%	2.0%
Test Coordination	0	36.7%	18.3%	10.6%	11.6%	11.3%
Substitute Teaching (covering class)	0	84.7%	1.7%	.1%	0	0
Other Non-Counseling	0	51.2%	7.3%	3.3%	1%	.1%

Table 16

Non-counseling Activities by High School Counselors

NON-COUNSELING ACTIVITY	NATIONAL PERCENTAGE	<10%	10-20%	20-30%	30-40%	>40%
Duty (bus, lunch, etc.)	0	81%	5.9%	.8%	.8%	1%
Registrar Responsibilities	0	33%	28.6%	12%	8%	5.9%
Schedule Changes	0	37.1%	29.0%	11.1%	7.4%	6.1%
Test Coordination	0	39.1%	19.1%	10.5%	7.7%	12.7%
Substitute Teaching (covering class)	0	81.7%	1.6%	1%	0	0
Other Non-Counseling	0	30.0%	6.3%	2.5%	0.6%	1.4%

Table 17

Non-counseling Activities by Career Development Coordinators

NON-COUNSELING ACTIVITY	NATIONAL PERCENTAGE	<10%	10-20%	20-30%	30-40%	>40%
Duty (bus, lunch, etc.)	0	75%	12%	1%	0.5%	0.5%
Registrar Responsibilities	0	20%	10%	2.5%	0.5%	0.5%
Schedule Changes	0	74%	6.6%	1.5%	1%	1%
Test Coordination	0	64.1%	14.6%	3.0%	2.5%	1.0%
Substitute Teaching (covering class)	0	79.3%	2%	0	0.5%	0
Other Non-Counseling	0	41.4%	4.0%	3.0%	2.0%	3.5%

Table 18

Non-counseling Activities by Other Student Services Personnel

NON-COUNSELING ACTIVITY	NATIONAL PERCENTAGE	<10%	10-20%	20-30%	30-40%	>40%
Duty (bus, lunch, etc.)	0	71%	8.7%	0	3.5%	2.6%
Registrar Responsibilities	0	63%	8.7%	5.0%	0.8%	1.7%
Schedule Changes	0	70.0%	5.2%	0.8%	3.5%	0.8%
Test Coordination	0	58.8%	11.4%	3.5%	3.5%	2.6%
Substitute Teaching (covering class)	0	71.1%	1.7%	1.0%	1.0%	1.0%
Other Non-Counseling	0	42.1%	7.0%	2.6%	4.4%	4.4%

Summary

The purpose of this report was to determine how North Carolina School Counselors spend their time in
- Guidance curriculum
- Individual planning
- Responsive services
- System support
- Non-guidance activities

The results revealed that school counselors in North Carolina are not dividing their time according to the suggested national standards and that a significant amount of time is spent on non-counseling activities, such as testing, covering classes, and registrar activities.

Demographic information revealed that
- More than half of the counselors in this study have five or fewer years of counseling experience.
- 85% have a computer in their office.
- 75% have Internet access and e-mail.
- 57% of the counselors completed the survey and returned it.

Conclusions

Some conclusions were drawn from the results of this study. The first is acknowledging the key role that counselors should have in directing students in successful school experiences. Other conclusions include:
- Counselors want their voice to be heard as evidenced by the 57% return rate for the survey and by the number who wrote supporting documents and made phone calls to thank the researcher for doing the study.
- Staff development activities to help principals and counselors schedule their time appropriately and to increase understanding of the major function areas.
- A study on how support personnel can be used to eliminate non-counseling duties.
- Resources to eliminate non-counseling functions is needed.
- A revised guidance curriculum for the school counseling program is needed.

Recommendations

The following recommendations are made:

●Results of this study might be made available to local education agencies, counselors, professional organizations, as basis for individual program improvement efforts.

●Results of this survey should be made available to the Joint Legislative Education Oversight Committee (The Studies Act of 2000) as they study issues related to school counselors and social workers.

●Encourage LEAs to provide appropriate staff development for school counselors. ●Guidelines for local school systems be developed for the review, implementation, and evaluation of North Carolina's Comprehensive School Counseling Program.

●Review and revision of the School Counselor Performance Appraisal Instrument.

References

●American School Counselor Association (1997). National Standards for School Counseling Programs. Alexandria, VA: Author.

●National Consortium for State Guidance Leadership (2000). Status and Impact of Guidance and Counseling Programs on Student Academic Achievement. Columbus, OH: Author.

**HOW SCHOOL COUNSELORS SPEND THEIR TIME
2000-2001**

As a part of the revision of the school counseling curriculum, please indicate how you, a school counselor, spend your time.
    •Please answer the ten questions and complete the table below.
    •Mail your response (envelope provided) to:
        Betty Jo Wimmer
        NC Department of Public Instruction
        301 North Wilmington Street
        Raleigh, NC, 27601
    •If you have questions, please call 919-715-9658.

1. I am a(n) (a)*elementary,(b)middle,(c)high school* counselor. I am *(d) a high school* or

    (e) a middle school Career Development Coordinator.

2. I have *(a) 0-5, (b) 6-10, (c) 11-15, (d) 16-20, (e) more than 20* years of experience.

3. I have been a counselor (or CDC) in my present school for *(a) 0-5, (b) 6-10, (c) 11-*

    15, (d) 16-20, (e) more than 20 year(s).

4. There are *(a) 0, (b) 1, (c) 2, (d) 3, (e) 4 or more* counselors in my school.

5. Our school is on a *(a) block, (b) traditional* schedule.

6. We operate *(a) traditional, (b) year-round* classes.

7. I *(a) have, (b) do not have* a computer in my office.

8. I *(a) have, (b) do not have* Internet access.

9. I *(a) have, (b) do not have* e-mail access.

10. This school has approximately *(a) 0-300, (b) 301-600,*

    (c) 601-900, (d) 901-1200, (e) more than 1200 students

Appendix A (page 2)
WORKSHEET
Please read each of the following tasks and determine what percentage of your time you would typically spend on that task. Use the following scale and transfer this information to the corresponding number at the left: *(a)less than 10%, (b) 11%-20%, (c) 21-30%, (d) 31%-40%, (e) more than 40%.*

TASK	% TIME
11. Curriculum	
•Classroom activities:	
Character education, School counseling curriculum activities, Awareness of opportunities (college, summer programs, financial aid, etc.).	
•Group activities:	
Technology activities (such as NCMentor, Career Explorer, NC Careers, or other computer information system), decision making, goal setting, planning, and problem-solving activities	
12. Individual Planning	
•Individual advisement:	
College information, career information, course selection, graduation requirements (transcript audit), sports eligibility.	
•Individual assessment:	
Administering inventories (interest, personality, values, etc.), interpreting results to students, parents, teachers.	
•Placement:	
Job shadowing, internship, apprenticeship, full-and part-time employment.	
•Career Development:	
Career awareness activities, career exploration activities, career inventories, career development plans (writing and revising).	
13. Responsive Services:	
Academic concerns, school-related concerns (tardiness, absence & truancy, misbehavior, school avoidance, dorp-out prevention), relationship concerns, physical/sexual/emotional abuse, substance abuse, grief/loss/death, family issues, sexuality issues, stress.	
14. System Support:	
Research, program development, staff development (sessions provided to staff and community), professional development (attending workshops, conferences), committee, partnership, advisory boards, school-based committee, school improvement team, program management and operation (Parent contact, business contact, public relations.	
Non-counseling activities:	X
15. Duty: Bus (arrival/departure), lunchroom, hall monitoring	
16. Registrar responsibilities (enrolling, transferring, cumulative folder monitoring, transcript preparation, etc.).	
17. Extracurricular activity sponsor.	
18. Schedule changes.	
19. Test coordination.	
20. Substitute teaching.	

We will be able to count responses received by September 22, 2000.

Appendix B
The School Counseling Expert Committee

Joan Bishop	Guilford County Schools
Shirley Cohen	Johnston County Schools
Andrea Farrow	Cabarrus County Schools
Alan Hardy	Rowan-Salisbury Schools
Ken Hayes	Rowan-Cabarrus Community College (and CACRAO)
Donna Henderson	Wake Forest University
Eleanor Herndon	Real Enterprises
Janet Huber	Charlotte-Mecklenburg Schools
Sharon Nettles	Chatham County Schools
Joseph Petty	Brunswick County Schools
Phyllis Post	UNC-Charlotte (and NC Counseling Association)
Debra Preston	UNC- Pembroke
Laura Russell	NC JobReady
Kenneth Simington	Winston-Salem/Forsyth County Schools
Patricia Slagel	Hayesville High School
Carolyn Smith	Forestview High School
Eric Sparks	Wake County Schools (and NCSCA)
Glenda Till	Cumberland County Schools
Carol Walters	Wilson County Schools
Mary H. Williams	Edgecombe County Schools
Willa Wyatt	Madison County Schools

North Carolina Public Schools Consultant Staff

David Bryant

Sandra Peyser

Betty Jo Wimmer

Appendix C
SAMPLE COUNSELOR COMMENTS THAT ACCOMPANIED THE SURVEY

•"We need testing coordinators. These vast responsibilities are taking up nearly ALL of our time! We are no longer counselors!"

•"I am sending back the survey form. We have no counselor. We need one, but have no funds."

•"I am filling out this survey based on my responsibilities last year. I was the testing coordinator (counselor). Testing is a full time job. I would work most week-ends, Sunday mornings included, to keep my head above water. It was awful. This year my high school hired a test coordinator. I love counseling. This year I have seniors and I 'm working like a dog and it is great. Counselors should not be doing testing."

•"Counselors spend 60% of their time organizing and administering assessments. With the new Exit Exam, that will increase to 70%."

•"Thanks for doing this survey. However, NOTHING will change until principals stop giving counselors non-counseling duties. The principal needs other personnel to do these non-counseling duties. Unfortunately, the guidance curriculum has little or no effect on what counselors are being told to do."

•"I'm so glad that you are collecting this data. I think we have a problem state-wide with counselors not being able to do the counseling job they were supposed to be hired to do. So many children's individual needs are going unmet because school counselors are being forced to spend most of their time in classrooms, cumulative records, testing, committee meetings, etc. rather than focusing on the children's needs. I hope that you will use this data to remind school systems and school principals what the appropriate ;major functions of school counselors are. Thank you"

•"I don't know where the state of school counseling is going? I used to have 1500 students in 2 schools, and back then in 1979 I had more student contact, knew all my students/parents, had numerous classes/groups each day. Not now—all I do now is push paper/testing! Sad!!"