

2004-05



**WAKE COUNTY
PUBLIC SCHOOL SYSTEM**

High School Redesign 2004-05

Author

Rosemary Reichstetter, Ed.D.

Editor

Nancy Baenen, M.S

ABSTRACT

The Wake County Public School System (WCPSS) strengthened the rigor, relevance, and relationships within its high schools in 2004-05. This study provides a progress report on WCPSS high schools as they work toward high school redesign. Results showed an increase in more rigorous academic opportunities. Higher numbers of enrollees engaged in advanced courses and generally stable or higher academic success was achieved with End-of-Course exams, grade point averages, and credits earned. Greater relevance in coursework was evident with a focus on using a wider variety of instructional practices. Staff promoted stronger student-staff relationships by emphasizing personalization. The majority of students and teachers reported fewer discipline concerns in classes, and students felt connected with their schools. Dropout and suspension rates did not decline.

Evaluation and Research Department

E&R Report No. 05.05

July 2006

www.wcpss.net/evaluation-research

WAKE COUNTY PUBLIC SCHOOL SYSTEM HIGH SCHOOL REDESIGN 2004-05

Table of Contents

| | |
|---|----|
| Executive Summary | 3 |
| Background | 3 |
| Major Findings | 3 |
| Rigor | 3 |
| Relevance | 4 |
| Relationships | 5 |
| Background | 6 |
| Suggested Solutions | 6 |
| Rigor | 7 |
| Relevance | 7 |
| Relationships | 8 |
| Strategic Practices | 8 |
| Restructuring Models | 10 |
| Rigor, Relevance, and Relationships in WCPSS High Schools | 11 |
| Evaluation Plan | 12 |
| Redesign Expectations | 12 |
| Data Sources | 12 |
| Interviews | 12 |
| Surveys | 13 |
| Spring WCPSS Annual Districtwide Student Surveys (2003, 2004, 2005) | 13 |
| Spring 2005 High School Special Topics Student Survey | 14 |
| Spring WCPSS Annual Districtwide Staff Surveys (2003, 2004, 2005) | 14 |
| Spring 2005 High School Topics Teacher Survey | 15 |
| Rigor | 16 |
| Academic Opportunities | 16 |
| Advanced Courses | 16 |
| Advanced Course Enrollees | 18 |
| Restart Course Enrollees | 20 |
| Student Academic Success | 20 |
| Grade-Point Averages and Credits Earned | 21 |
| EOC Test Results | 21 |
| ABCs of Accountability | 22 |
| SAT Participation Rates and Scores | 23 |
| Advanced Placement | 24 |
| AP Exams | 24 |
| Students' Reasons for Not Taking AP Exams | 26 |
| Restart Results | 26 |
| Grade Promotions | 27 |
| Graduates | 28 |
| Mid-Year Graduation | 28 |
| Graduate Intentions | 29 |

Relevance..... 30
 Relevance of Academic Opportunities and Standards..... 30
 Instructional Practices..... 31
 Dropouts..... 33
 Dropout Rate..... 33
 Dropout Reasons..... 35
 Relationships..... 37
 School Climate..... 37
 Attendance 37
 Student Behavior..... 38
 Out-of-School Suspensions..... 38
 Discipline Issues 38
 School Satisfaction..... 40
 School Connections 40
 Ninth-Grade Transition..... 42
 Suggestions for Improvement..... 43
 Conclusions..... 46
 References..... 47

WAKE COUNTY PUBLIC SCHOOL SYSTEM HIGH SCHOOL REDESIGN 2004-05

EXECUTIVE SUMMARY

BACKGROUND

As our society and economy have evolved, calls for high school redesign have been made by a variety of factions. Wake County Public School System (WCPSS) administrators recognized a need for reform here as well, starting an investigation of the research and conducting discussions of possible improvements several years ago. They identified several approaches to increase the rigor and the relevance of coursework, and opportunities to build closer student-staff relationships. In 2003-04, eleven high schools moved to a 4x4 block schedule designed to support high school students in meeting new graduation requirements, provide more elective program and advanced class opportunities, provide more opportunities for students to re-take failed courses, and create smaller learning communities within the schools. In 2004-05, WCPSS expanded its efforts toward strengthening rigor, relevance, and relationships in high schools by providing:

- an increased number of advanced, rigorous courses;
- more in-depth training on differentiation of instructional practices, modified lesson pacing guides, and professional learning community development to more fully engage students and make the learning process more relevant; and
- a stronger emphasis on personalization, such as ninth-grade transition efforts, to develop stronger student/staff relationships.

This study provides a progress report on WCPSS high schools as they work toward high school redesign.

In this summary, comparisons have been made between *2002-03* and *2004-05*, unless noted.

MAJOR FINDINGS

Rigor

A set of new, challenging advanced courses provided students with more opportunities to meet the more rigorous graduation requirements. Academic opportunities have continued to increase since the 2002-03 school year.

- Increased challenging coursework was made available in 2004-05 for students through 142 new advanced courses (in addition to the 23 new advanced courses in 2003-04).
- Enrollment in higher-level courses increased by 57%, compared to a student membership increase of 13%.
- Most student respondents (75%) in the spring 2005 High School Special Topics Student Survey expressed satisfaction with their course opportunities.

Increased rigor was evident in the 2004-05 school year.

- Compared to 2002-03, the percent of students with a 3.0 or higher grade point average increased by 2.8% (to 49.9%) while the average number of credits earned grew from 5.66 to 6.66.
- North Carolina End-of-Course (EOC) test results remained stable with 83% of the students scoring at grade level.
- Performance in the North Carolina ABCs of Accountability Program (ABCs), the state's primary school improvement program, was stable in spring 2005, following a 2.5% increase between spring 2003 and spring 2004; high growth was reached in 11 of 18 schools in spring 2005.
- The average SAT score for WCPSS was up 8 points, to 1075. Grade 12 student participation was down from 80% to 75%, however. Both participation and scores were still above the nation and the state.
- The number of Advanced Placement (AP) course enrollees increased 24% to 10,804; the number of test takers increased by 16% to 3,212, and the number of tests taken by the students increased as well by 16% to 6,365. The most common scores were at 4 or 5, which allowed many test-takers to earn college credit.
- Of graduating seniors, 63% planned to attend a 4-year college (a gain of 2%), and 25% anticipated going to a 2-year college (a gain of 1.3%).

From surveyed students' comments, the most common request regarding rigor focused on the desire for more thorough instruction in courses taken (e.g., less rushing through the curriculum, more discussion, study sessions). Teachers most often requested greater freshman transition support and instructional make-up/coaching sessions. A common request from both groups was for year-long versus one-semester AP courses.

Relevance

In 2004-05, more meaningful coursework and use of time in school engaged students more fully and supported their need to see relevance between school, their lives, and future plans.

- The mix and frequency of use of instructional practices changed; a wider variety of activities was used on a daily, weekly, and monthly basis.
- The learning structures showed students were more fully engaged.
- Student satisfaction with schools was generally positive:
 - Course opportunities – positive responses from most students (75%);
 - Coursework – positive views from most students regarding challenge, comprehension, and homework reinforcement and amount; and
 - Daily schedule – most students (78% or more) liked their school's schedule.
- An increase occurred in dropout rates from 2.8 in 2002-03 to 3.7 in 2004-05 (note that 2002-03 was the first year for the NCWISE database implementation, and data entry issues may have resulted in artificially low rates):
 - The increase overall primarily reflected an increase within the Black/African American and Hispanic/Latino student subgroups (from 3.9 to 6.0 and from 6.5 to 8.8 respectively).

- The increase in the 11 schools new to the block schedule was slightly less (from 2.7 in 2002-03 to 3.5 in 2004-05).

Students most commonly requested more varied instructional methods and more course options, as well as a more flexible schedule (e.g., bell schedule allowing more time between classes and longer lunch periods, some courses for one semester, some courses for one year). Most teacher requests were for the use of more instructional strategies and more time for planning and professional development.

Relationships

An emphasis on personalizing the educational experience supported students through the building of staff and student relationships and helping students feel more connected with their schools.

Indications are that efforts to improve relationships have had some positive impact. In the spring 2005 High School Topics Teacher Survey, more than 80% of the teachers reported using personalization strategies to further student connections with their schools. The transition process for ninth-grade students was also addressed in the spring 2005 High School Special Topics Student Survey, relating to some new strategies attempted.

Some indicators suggest improved climate at schools, while some indicators remained stable.

- Almost all students (93%) said they were often or sometimes satisfied with their relationships with their teachers.
- In terms of student behavior, short- and long-term suspension rates stayed fairly stable between 2003-04 and 2004-05, with the percentage of students suspended declining across grades 9 through 12.
- More than half of the students and two-thirds of teachers reported fewer discipline concerns in 2004-05.
- Most students (81%) and teachers (92%) said their school is safe, down slightly (4% for students; 2% for teachers) from 2002-03.
- Close to two-thirds of students reported that they liked their school (stable).
- Attendance remained high at 96%.
- Most students (87%) said they often or sometimes felt like a part of their school.
- Most ninth-grade survey respondents (80%) indicated the change from middle to high school went smoothly for them. Some chose not to participate in ninth-grade transition activities. Of those who did participate, parent support (81%), teacher advice (74%), and advice from upperclassmen (66%) were viewed as most helpful.

In terms of areas for improvement, students most often requested more personal attention. Teachers most often requested a more positive campus climate, with students held more accountable for discipline issues, as well as more student-teacher-parent-community interactions.

WCPSS HIGH SCHOOL REDESIGN 2004-05

BACKGROUND

Society has changed greatly in the past 100 years into a participatory, information-based economy (EdSource, Inc., 2005). There is consensus that students must be better prepared for postsecondary education, workplace, and citizenship, but the complex web of factors leading to the need for high school reform is daunting (Olson, 2005b). Our high schools have not kept up with the transition due to the level of difficulty, expense, and complexity involved. Schools are not challenging and engaging all students, and are not adequately preparing students for workforce careers or to become effective citizens (EdSource, Inc., 2005). Two national studies conducted by Public Agenda (a New York City-based nonprofit opinion research group) and Achieve, Inc. (a Washington-based group formed by governors and business leaders) suggest that better academic preparation and guidance can help high school students face their post-graduation future. The Achieve study estimates that up to 40% of students do not have the study or job skills needed to succeed (Viadero, 2004). Legislators are hearing from the public that high schools are fine as they are, but businesses and federal government are pushing for reform in order to better prepare students for higher education and the workforce (Johnston, 2004).

SUGGESTED SOLUTIONS

It has been widely suggested that high schools can improve with a focus on the new 3R's:

- **Rigor:** Providing challenging coursework with strong academic content and skills and higher staff expectations.
- **Relevance:** Providing learning structures that fully engage students.
- **Relationships:** Personalizing the educational experience to prevent student anonymity (KnowledgeWorks Foundation, 2005).

*We must reinvent our high schools so that they give all students a new version of the three R's: **rigor, relationships, and relevance.***

*Melinda Gates
Bill and Melinda Gates Foundation*

WCPSS is already one of the top school systems in the nation, but recognizing areas for improvement is always a concern. "What will it take to be the best?" Bill McNeal (later superintendent) asked principals this question in 1999 while he was Associate Superintendent of Instructional Services. Richard Murphy, High School Senior Director for the WCPSS Curriculum and Instruction Department recently spoke of a need to build "social capital" - graduates who contribute to society by being prepared for college or holding a specific skill (Flenniken, 2005).

Rigor

According to a report by nonprofit group Achieve, Inc., a sizable gap exists between high school graduation requirements and college/workplace entrance requirements. Full preparation for college and work should consist of a minimum of four years of rigorous mathematics including Algebra I, Geometry, Algebra II, and data analysis and statistics as well as four years of grade-level English covering literature, writing, reasoning, logic, and communications skills (Honawar,

The public strongly believes that our high schools must be improved, and that students must take more rigorous courses and be challenged to reach a higher standard of learning and skills development to be successful in the next stages of their lives.

*Peter D. Hart and David Winston
Hart Research Associates
The Winston Group*

2004). National attention is focusing on improving high schools through greater rigor. The EdSource Forum agrees that providing challenging coursework with strong academic content and skills and higher staff expectations can do just that (EdSource, Inc., 2005). In the Access to High Standards Act from No Child Left Behind, some of the purposes adhere to this line of thought by stressing the need to increase the number of successful AP program students, the need to encourage

AP students to demonstrate their success by taking the AP exams, and the need to increase AP participation and success with larger and more diverse groups of students (Educatenj, 2005). Thirteen states with high populations of students announced in 2005 at the National Governors Association their commitment to raising standards toward more rigorous curricula requirements coupled with measuring student readiness for work and college (Olson, 2005a). The chair of the National Governors Association, Governor Mark Warner, disclosed a 10-step list for improving high schools that included defining a rigorous college-preparatory and work-readiness curriculum for high school graduation and college- and work-readiness assessments to identify high school student needs prior to graduation (Olson, 2005c). At the same summit, the Gates Foundation announced an initiative to assist schools in boosting graduation and college-readiness rates (Olson, 2005a). As part of the solution to decreasing the gap and in its advocacy for stronger academic standards, Achieve, Inc. suggests that states work with employers and postsecondary officials to define the knowledge and skills needed for graduates to succeed without remediation after high school. The organization recommends allowing students to receive college credit for college-level work in high school (e.g., AP courses or “early-college high schools”) (Honawar, 2004). Also as part of the effort to provide challenging academic programs and to improve the low-income and minority student graduation and college-going rates, the Gates Foundation provides grants to schools offering “early college” programs, and hopes to triple the number of such schools by 2009 (Hendrie, 2005).

Relevance

Beyond high expectations for students, purports the Office of Vocational and Adult Education (2005), is a strong need to prepare for America’s future through providing innovative learning structures that fully engage students. Hammond (2005) says that a focus on teacher-driven coverage of large amounts of subject matter is not conducive to true learning. More relevant to the students is an integration of hands-on construction and application of knowledge through such activities as labs,

Increased student engagement results in improved student academic performance because students work harder to achieve desired results.

*Phillip Schlechty, President and CEO
Center for Leadership in School Reform*

workshops, self-guided analysis, and science experimentation. In the same light, Schlechty (2005) talks in his book, *Creating Great Schools: Six Critical Systems at the Heart of Educational Innovation*, of the importance of creating engaging learning activities for students that move them from merely responding to voluntarily investing, persisting, and attaching meaning and significance to tasks. This engagement results in students remembering what they have learned for a longer period of time, and a transfer of their learning to applicable situations.

Relationships

A 2003 National Research Council study found that students in large, urban high schools reported a sense of alienation from their schools – an environment that was uncaring and unresponsive to their needs (Education Week, n.d.). Midgley and Maehr (as cited in Turner, 2004, p. 3) maintain that enhanced learning takes place when a caring environment exists. Saint Louis Public Schools (2005) responded through personalizing the educational experience. The school system asserts that the priority of personalization is to ensure that student anonymity is

The Learning First Alliance—an organization of 12 leading national education associations, including ASCD—describes a caring and safe school climate as one that...encourages respectful and supportive relationships among students, parents, and school staff...and fosters the involvement of family, students, school staff, and community members in the life of the school.

*Gene R. Carter, Executive Director,
Association for Supervision and
Curriculum Development*

banished through the active participation of students, parents, and teachers. With personalization, the opportunity exists for continuous relationship building between teachers and a student or group of students. In the article, “Personalization and The School Environment,” the Saint Louis schools promote an instructional program called “Smaller Learning Communities (Career Academies, Houses)”, to prevent student anonymity. Greater attention from teachers to

individual students is possible due to a limited teaching load and working in teams with groups of students. Additionally, an adult mentor is assigned to each student to help personalize the educational experience and identify lifelong goals. The intent is for teachers and schools to be perceived by students as caring and as having a stake in their individual success. Saint Louis schools encourage families to be engaged as partners in their student’s education, and enlisting community partners and agencies provides direction and support for students and the instructional program. Byrnes (2005) further claims that students’ most significant teachers were not just knowledgeable but also caring.

Strategic Practices

In *High Schools That Work (HSTW)*, the Southern Regional Education Board (2005) has outlined ten key practices purported to support rigor, relevance, and relationships:

- High expectations
- Vocational studies
- Relevant academic studies
- Challenging program of study
- Work-based learning
- Collaboration among teachers
- Students actively engaged

- Guidance toward completion of an accelerated program of study
- Extra help as needed
- Keeping score with data-based decision making

In “The Movement to Transform High School: EdSource Forum focuses on the new three R’s: rigor, relevance, and relationships,” EdSource, Inc. (2005) speaks of the teaching staff teaching students well. In *What Works in Schools: Translating Research into Action*, Marzano (2003) purports the importance of three teacher-level factors: instructional strategies, classroom management, and classroom curriculum design. Enhanced teacher-student relationships can lend strongly to improved classroom management (Marzano, Marzano, and Pickering, 2003). In *Classroom Instruction That Works: Research-Based Strategies for Increasing Student Achievement* (Marzano, Pickering, and Pollock, 2001), successful research-based strategies for instruction include:

- Identifying similarities and differences
- Summarizing and note taking
- Reinforcing effort and providing recognition
- Homework and practice
- Nonlinguistic representations
- Cooperative learning
- Setting objectives and providing feedback
- Generating and testing hypotheses
- Cues, questions, and advance organizers

Of particular concern, ninth-grade students face anxieties in transitioning from middle to high school. Successful transition programs are "carefully planned, multifaceted, and comprehensive." They involve much collaboration and focused effort from middle and high school and district-level staff (Turner, 2004). Turner notes among student apprehensions are the more rigorous assignments and grading policies, the adjustments in making new friends, embarrassment by teachers, their appearance, upper classmen teasing/bullying, and conflicts between academics and after-school activities/family pressures. Such achievement and social issues often build higher student risk factors toward student discouragement and dropping out. In response to an Educational Research Service (ERS) survey regarding the transition, high schools reported several carefully planned, multifaceted, and comprehensive strategies:

- School visits/tours of the school
- Parent orientation
- Parent visits/tours of the school
- Newsletters/announcements sent to parents regarding what students can expect
- Meetings for middle and high school educators addressing curriculum coordination
- Homework assistance programs
- Student discussion groups
- Teams of teachers assigned to students
- Faculty counselors/mentors for first-year high school students
- A “buddy” system pairing middle school and high school students

Restructuring Models

Of note regarding restructuring models are block scheduling formats and smaller learning communities. Block scheduling offers the possibility for obtaining more course credits through more course opportunities. Smaller communities within a high school offer the possibility for greater personalization.

Successful block scheduling encourages teachers to use a variety of ways during a single class period. Blocks-of-time lessons can be structured in the following manner: (a) previous learning review (checking homework, self-assessment in learning pairs, teacher questioning, etc.), (b) instructional input (delivering new concepts with active student involvement), (c) student performance (group experiences such as experiments, cooperative learning, case studies, and computer simulations), and (d) guided practice/reteaching ("reteach and reinforce the day's objectives, provide closure, and assign homework") (Hackmann, and Schmitt, 1997).

Research findings support the notion that high school students are more successful when they attend small schools (U.S. Department of Education, 2001). "Small school environments positively affect student achievement with noted improvements in grades, test scores, attendance rates, graduation rates, drug and alcohol use, and school safety" (Klonsky, as cited in U.S. Department of Education, 2001, p. 2). Too, verification exists that "large high schools that have been restructured into smaller learning communities yield similar benefits, especially when the sub-school units are separate and distinct" (Cotton, as cited in U.S. Department of Education, 2001, p. 2). The Smaller Learning Communities Program, a \$142 million competitive federal grant program, allows funds to be used for the study, research, development, and implementation of strategies for establishing smaller learning communities, and for providing professional staff development in the teaching methods that would be appropriate for the smaller learning community.

RIGOR, RELEVANCE, AND RELATIONSHIPS IN WCPSS HIGH SCHOOLS

To address the needs relating to rigor, relevance, and relationships, WCPSS high schools put into place a number of strategies, programs and practices with plans to expand these and incorporate others in subsequent years.

- Eleven high schools continued improving their 2003-04 transition process into the 4x4 block schedule format with the primary goals of (a) providing students with opportunities to earn more credits during each school year, (b) giving students more course options, and (c) allowing students to re-take failed courses more quickly, all with the purpose of meeting the more rigorous graduation requirements on time or through early graduation (Reichstetter and Baenen, 2005).
- Also continuing from its beginning in 2003-04, was the three-year Smaller Learning Communities grant, awarded to support structural and operational changes in nine high schools with an emphasis on strengthening personalization and academic rigor.
- The High Five Initiative comprises five leading corporations (SAS, Progress Energy, The News & Observer, Capitol Broadcasting Company, Inc., and BlueCross-BlueShield) and five area school systems (Wake, Durham, Johnston, Orange, and Chapel Hill-Carrboro Public Schools) with the goals of reducing dropouts and increasing graduation rates. This a regional partnership formed in 2004-05 to offer a series of workshops and presentations on key topics with a focus on high school excellence.
- Planning for and implementation of other initiatives were begun, including:
 - Advanced Placement vertical teams (developing action plans identifying students with the potential to succeed in advanced courses, as well as developing support structures addressing student motivation and achievement in challenging advanced curriculum courses) (Rigor),
 - career academies (Relevance),
 - an Arts Learning Community (a theme-based smaller learning community) (Relevance),
 - a continued focus in professional development on building instructional strategies introduced in the book, *Classroom Instruction That Works* (Marzano, Pickering, and Pollock, 2001) (Relevance).
 - freshman transition support (Relationships), and
 - advisory programs (Rigor and Relationships).
- In interviews conducted by the WCPSS Evaluation and Research (E&R) Department and EdStar, Inc., assistant principals from all high schools said their schools used the writing of their School Improvement Plans (SIP) to focus on implementation of rigor, relevance, and relationships. Strategies varied across the schools. Commonly reported were:
 - increased academic counseling, purposeful scheduling, teachers as mentors (8 schools) (Rigor, Relevance, and Relationships),
 - teacher advisors and tutorial programs (4 schools) (Rigor, Relevance, and Relationships),
 - smaller learning communities, such as freshman academies (9 schools) (Relevance), and

- *Classroom Instruction that Works* (CITW) book discussions, *Project CRISS* (CReating Independence through Student-owned Strategies), and other staff development initiatives (6 schools) (Relevance).

EVALUATION PLAN

The WCPSS Evaluation and Research Department evaluated the progress toward set goals and expectations that high schools had for redesign.

REDESIGN EXPECTATIONS

- Greater academic opportunities for advanced coursework
- Stable or increased academic success
- Positive views toward school daily schedules
- General student satisfaction with course opportunities and courses taken
- Increased variety in instructional practices
- Positive views toward lesson pacing
- Stable or increased overall student satisfaction with their schools
- Maintained or increased attendance rate
- Decreased suspensions
- Decreased discipline concerns and issues
- Positive school connections
- Positive student-teacher relationships
- Strong Grade 9 transition activities

DATA SOURCES

A wide variety of sources were used in the study. Through specific data requests, WCPSS Information Services provided data from the mainframe database system; the NCWISE database provided information including student transcripts, class periods and sections, and school courses. The WCPSS Healthy Schools Reports and the 20th Day Student Membership files from 2004-05 and 2005-06 were used, as well as the Evaluation and Research Department reports on Advanced Placement exams, dropout rates, EOC results, SAT results, ABCs results, interviews, surveys of teachers and students, and others.

Interviews

The WCPSS E&R Department and EdStar, Inc., staff interviewed assistant principals of instruction (APIs) from each of the 19 high schools in person or by telephone. In all cases, the APIs received the set of questions prior to the interview for preparation and timesaving purposes.

Surveys

Results from four surveys were analyzed for this report. Using the WCPSS Intranet Survey Application, the Evaluation and Research Department deployed and distributed annual districtwide surveys of students and teachers online for the first time in the spring of 2005. Two other surveys were also deployed online specifically for this study: the spring 2005 High School Topics Teacher Survey and the spring 2005 High School Special Topics Student Survey. In most cases, no participant was asked to respond to more than one survey through coordinated sample determination. The spring 2005 WCPSS Annual Districtwide Parent Survey was not conducted during the 2004-05 school year. Response rates may have been affected due to the timing of the surveys so close to the end of the school year, when schools were preparing for EOC exams. Too, with two student surveys online and available at the same time, some students may have accessed the wrong survey based on sample setup.

The WCPSS Intranet Survey Application was accessible online over a six-week period for the two student surveys. Randomly selected advanced and standard English classes were pooled; from this pool, classes were selected to participate in either the spring 2005 High School Special Topics Student Survey or the spring 2005 WCPSS Annual Districtwide Student Survey so that classes would not need to be involved in more than one survey. Staff members from the high schools were assigned a randomly generated number. Several surveys were administered to the staff, selection based on their random number as well as other requirements. As staff members received one survey, they were generally not selected for another survey.

Spring WCPSS Annual Districtwide Student Surveys (2003, 2004, 2005)

The spring districtwide student surveys include students from elementary, middle, and high school levels. For this report, only high school student responses were used. The spring 2005 student survey was the first of its type to be administered online through the WCPSS Intranet Survey Application. The Evaluation and Research Department's School Accountability Office conducts the administration of this survey annually. For the spring 2005 survey, randomly selected basic and advanced level English classes from each high school were established as the sample, since all students take English. Students in those classes had access to the survey for an eight-week period. All high schools responded to the spring 2005 survey with 80% of the expected number of students. Table 1 displays details of the sample set and respondent distribution.

Table 1
Districtwide Student Survey Sample and Responses

| | Sample | Responses |
|-----------------------|--------|-------------|
| High Schools | 19 | 19 |
| Class Periods | 81 | |
| Basic Course Class | 43 | |
| Advanced Course Class | 38 | |
| Number of Students | 2,008 | 1,607 (80%) |

Sources: Spring 2005 Annual WCPSS Districtwide Student Survey Sample Set
Spring 2005 Annual WCPSS Districtwide Student Survey

Spring 2005 High School Special Topics Student Survey

English class teachers from each of the 19 high schools were assigned a random number. Two classes per school were then selected based on class size (minimum of 20 students) and grade level (one from grade 9 and one from grades 10, 11, and 12). Following the selection, the academic level of the course was reviewed to see the distribution of standard, honors, and Advanced Placement levels in the survey sample of 38 English classes. The sample included 889 students. The survey was available online through the WCPSS Intranet Survey Application at the same time as the annual districtwide student survey. The selected class period teachers received instructions regarding the specific survey their students were to complete anonymously. No check was available within the tool, however, to see that the 804 responding students were indeed from the sample, had responded more than once, or were not in either of the two samples. A disparate number of responses came in from one school only; while 45 students were included in the sample from that school, 154 students responded. Table 2 displays details of the survey sample and responses.

Table 2
High School Special Topics Student Survey Sample and Responses

| | Sample | Responses |
|---------------------------------|--------|-------------|
| High Schools | 19 | 19 |
| Class Periods | 38 | |
| Standard Course Class | 21 | |
| Honors Course Class | 13 | |
| Advanced Placement Course Class | 4 | |
| Number of Students | 889 | 804 (90.4%) |

Sources: Spring 2005 High School Special Topics Student Survey Sample Set
Spring 2005 High School Special Topics Student Survey

Spring WCPSS Annual Districtwide Staff Surveys (2003, 2004, 2005)

The spring districtwide high school staff surveys include administrators, counselors, teachers, and teacher assistants. For this report, only high school classroom teacher responses were used. The spring 2005 staff survey was also the first of its type to be administered online through the WCPSS Intranet Survey Application. The Evaluation and Research Department's School Accountability Office conducts the administration of this survey annually. For the spring 2005 administration, randomly selected staff from each high school had access to the survey for a four-week period.

Although a sample of 3,981 staff members made up the sample, only 174 from four of the 19 high schools responded – a 4% response rate. Of these respondents, 133 were classroom teachers. The Evaluation and Research Department found that the demographics of these schools closely matched the combined demographics of all high schools. We, therefore, report these results *if* the items filled a unique need in the report. Even so, this information should be noted when reviewing results reported from this teacher survey (see Table 3).

Table 3
High School Demographics

| | American Indian | Asian | His./Latino | Black | White | Multi-Racial | Male | Female | Limited English Proficient | Students with Disabilities | FRL |
|--|-----------------|-------|-------------|-------|-------|--------------|-------|--------|----------------------------|----------------------------|-------|
| Student Demographics of Four High Schools Responding to District-Wide Survey | 0.3% | 5.2% | 5.6% | 28.5% | 58.4% | 2.1% | 47.9% | 52.1% | 1.9% | 14.7% | 19.3% |
| Student Demographics of All High Schools | 0.3% | 4.2% | 5.6% | 27.3% | 60.6% | 2.0% | 50.1% | 49.9% | 2.5% | 14.8% | 18.6% |

Sources: Spring 2005 WCPSS Annual Districtwide Staff Survey (Note. Return rate was low.)
WCPSS 20th Day Student Membership
WCPSS Healthy Schools 2004-05 and 2005-06 Report

Spring 2005 High School Topics Teacher Survey

The spring 2005 High School Topics Teacher Survey was administered online through the WCPSS Intranet to 414 randomly selected teachers not previously asked to participate in another spring survey. Following the selection, the list of participants was reviewed to verify that all 19 high schools were represented, and this was confirmed. A review of the participant list also confirmed that a mix across disciplines existed. Overall, 240 of the 414 teachers responded (58%). In some cases, teachers reported working in more than one subject area; therefore, some counts were duplicated in the subject areas responses. Subject areas of the 240 teacher responses were greatest for the math (21%) and English (20%) areas, with science and social studies both at 15%. The arts subject area was least represented, at just under 4%.

RIGOR

To increase student participation in more rigorous courses, the school system put much effort into adding more advanced courses and providing more opportunities for students to enroll in these courses.

Expectations:

- Greater academic opportunities for advanced coursework
- Stable or increased academic success

Results:

Compared to 2002-03, the following changes have occurred. In 2004-05, the number of students enrolled in high schools increased by 13%. Advanced coursework opportunities increased by 29% over 2002-03 for students across all schools, while Advanced Placement course opportunities increased by 10% over the same time period. Advanced course enrollees increased by 57%, while Advanced Placement course opportunities increased by 23% over the same time period. Most students (75%) stated their satisfaction with their course opportunities. In comparing academic success to 2002-03, improvements were seen by increases in:

- the percent of students with a weighted grade point average of 3.0 and above (up 2.8%),
- the average number of credits earned per student (up 1.01),
- the percent of students at EOC performance levels III or IV (up slightly by 0.1%),
- the percent of students promoted to the next grade level (up 0.8%),
- the percent of AP course enrollees (up 23%),
- the percent of AP test takers and AP tests taken (both up 16%),
- the total scores of SAT results (up 8 points), and
- the number of graduating seniors planning to attend a 2-year college (up 1.3%) or a 4-year college (up 2%)/

Additionally, WCPSS performance on North Carolina's ABCs of Accountability program remained stable, with 11 of 18 schools at high growth. Over half (58%) of students retaking courses (restart students) passed their restart courses. AP exam scores at 3, 4, or 5 were down by 1.5%.

ACADEMIC OPPORTUNITIES

Advanced Courses

Regular-level standard course offerings decreased from 2002-03 through 2004-05 while advanced courses increased in number. The school system offered 404 higher-level standard and advanced courses in 2004-05, which included an additional 142 new courses over the number offered in the 2003-04 school year. With 404 advanced courses available,

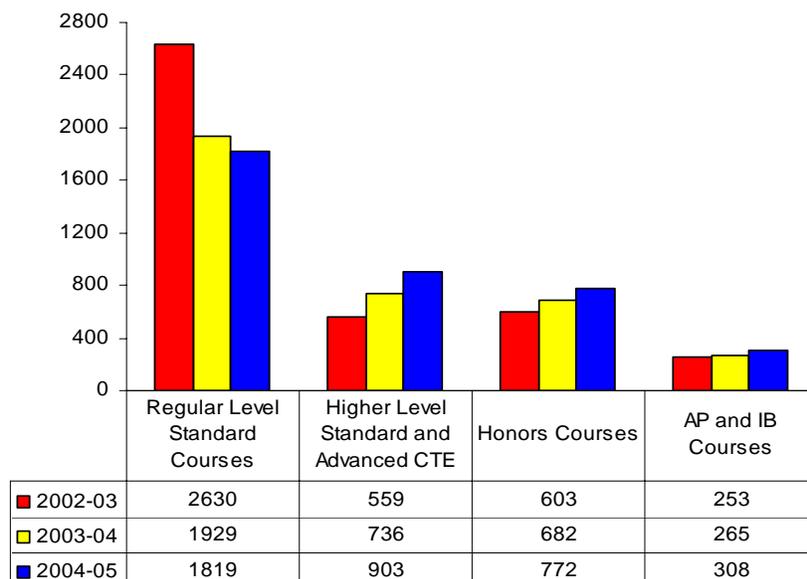
*"With the A/B schedule, I am able to ask teachers questions about the lessons on days I don't have their classes, giving me more time to think about what they said."
High school student
on A/B block schedule*

each high school selected those appropriate for its use in 2004-05, resulting in a sum of 1,983 advanced courses in use across all schools. This sum of 1,983 included:

- 1,297 courses across all schools from a selection of 207 advanced courses used by the school before,
- 621 courses across all schools from a selection of 142 new advanced courses, and
- 65 courses across all schools used for the first time by some schools from a selection of 55 advanced courses already in place within WCPSS and used by other schools in prior years.

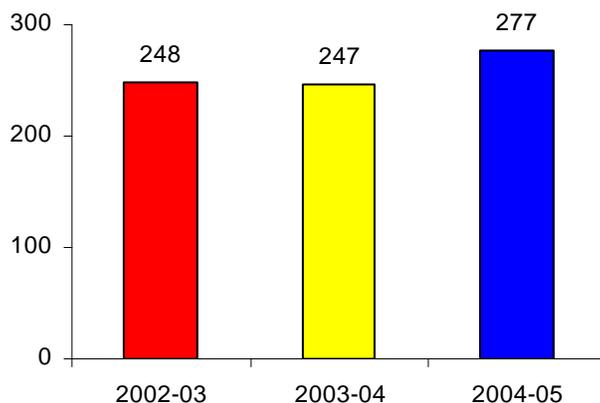
Figure 1 displays the number of courses across all schools by academic level (excluding Special Education, Abridged/Adapted, Cooperative Education, and Non-Classroom levels). Isolating Advanced Placement courses shows an increase of 28 over the number in 2002-03 (see Figure 2).

Figure 1
Total Number of Courses Offered across WCPSS High Schools by Academic Level



Source: WCPSS E&R Dept. from Information Services (ST2677)

Figure 2
Total Number of AP Courses across Schools



Source: WCPSS E&R Dept. from Information Services (ST2677)

Advanced Course Enrollees

Using three years of course enrollment data drawn from the NCWISE database, we also examined whether students were enrolled in more rigorous coursework by comparing increases in students enrolled in advanced courses with increases in enrollment overall. The number of 2003-04 AP enrollees differed by 30 students from that in the “Advanced Placement (AP) Course-taking, Exam Participation, and Exam Results, 2004-05” report (McMillen and Dulaney, 2005). High school student membership increased from 2002-03 (28,758) to 2003-04 (30,727) to 2004-05 (32,634). There were 3,876 more students in membership in 2004-05 than in 2002-03 (a gain of 13%). When looking at the change in the number of enrollees over that three-year period, the enrollees exceeded 13% in all but three subject areas. The greatest increases were in the arts and in vocational education subject areas.

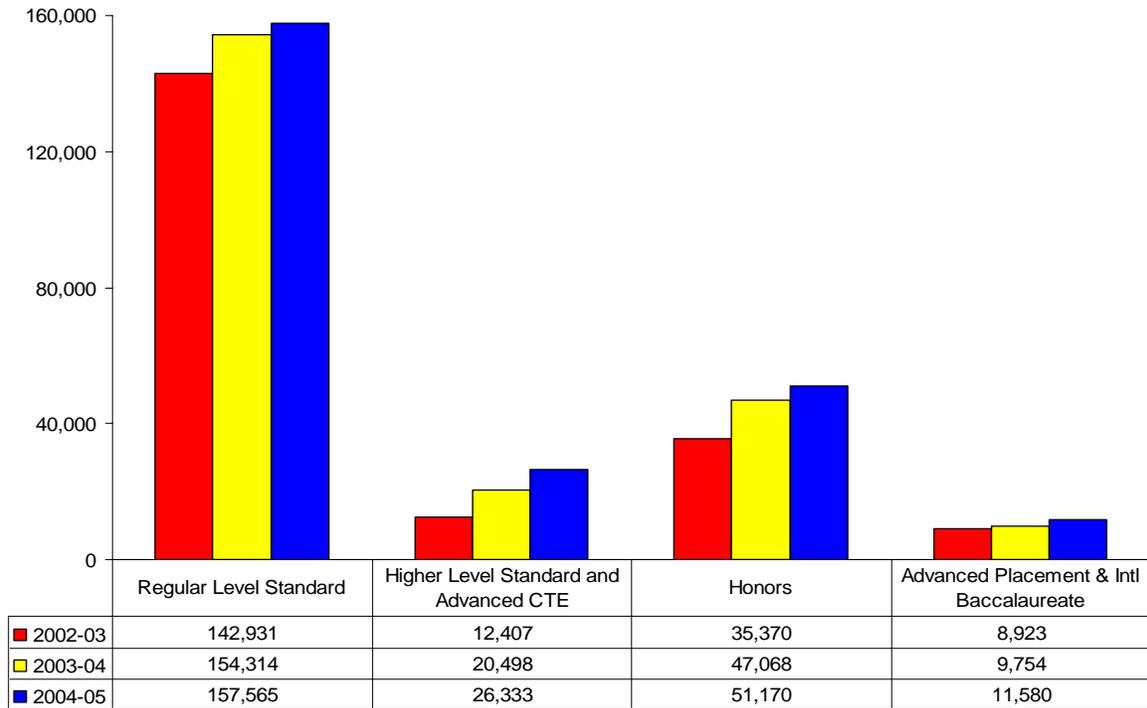
“The 7-period day is important because you are able to build upon your knowledge throughout the year.”
High school student on 7-period schedule

Over the three-year period, the enrollees in regular standard courses decreased while advanced and other higher level course enrollees increased, suggesting that more students took advantage of these opportunities. The percentage gains in advanced coursework and other higher level course were considerably greater than the 13% membership growth:

- Total course enrollees up 46,985 (gain of 24% over 2002-03)
- Regular level standard course enrollees up 14,634 (gain of 10% over 2002-03)
- Higher level standard (second year coursework and beyond) and advanced Career and Technical Education (CTE) up 13,926 (gain of 112% over 2002-03)
- Honors up 15,800 (gain of 45% over 2002-03)
- Advanced Placement (AP) and International Baccalaureate (IB) up 2,657 (gain of 30% over 2002-03)

Figure 3 displays the number of course enrollees by academic level.

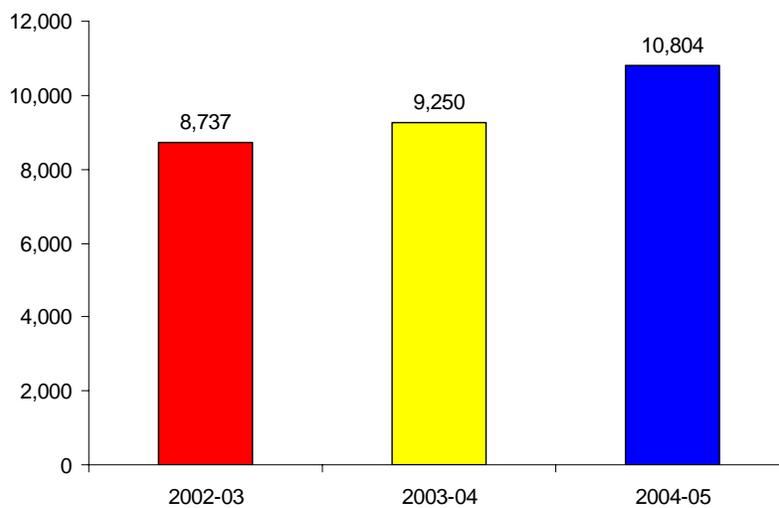
Figure 3
Number of Course Enrollees by Academic Level



Source: WCPSS E&R Dept. from Information Services (ST2677)

Isolating Advanced Placement course enrollees shows an increase of 24% over 2002-03 AP course enrollees (see Figure 4).

Figure 4
Number of AP Enrollees across Schools

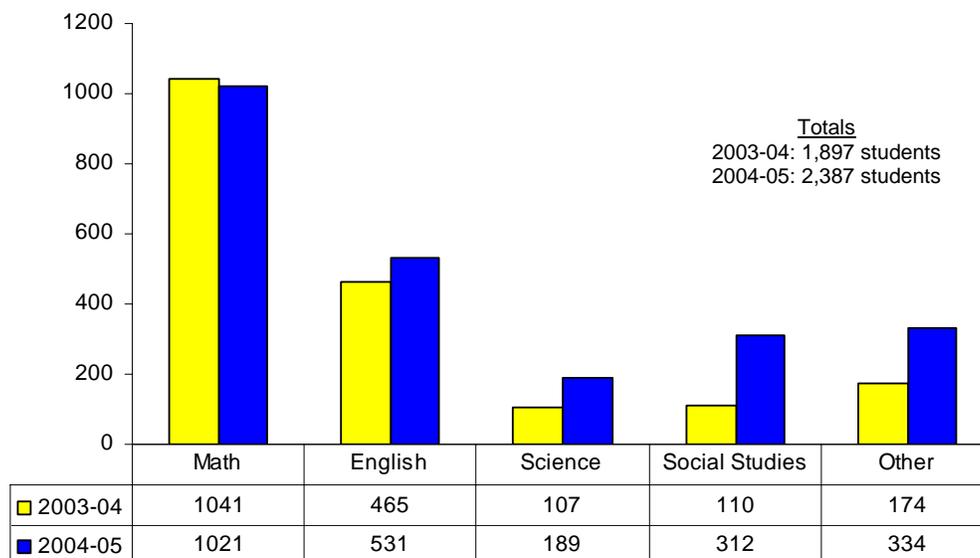


Source: WCPSS E&R Dept. from Information Services (ST2677)

Restart Course Enrollees

One advantage of the 4x4 block schedule is that students who fail a course can re-take (restart) it more easily than in a traditional schedule. Some students did re-take courses in both 2003-04 and 2004-05. Sixteen of the 19 high schools estimated that 2,387 students were eligible to restart a course after failing the course in the previous semester or school year. This number of restarts increased in 2004-05 in all subjects listed except for math. Even so, most (1,021) of these students were eligible to enroll in math-related courses. A set of 531 students was eligible for English-related courses, 312 for social studies, and 189 for science-related courses. Another 334 students were eligible to restart in other courses such as foreign language. The average number of restart students per school based on eligibility was 149, with the numbers ranging from 49 at Apex High School to 399 at Athens Drive High School. The actual count of students re-taking courses was likely lower, but could not be easily tracked; numbers changed as students withdrew or opted to take other courses, etc. Figure 5 displays the number of students who were eligible for restart in the four core courses and in other courses.

Figure 5
Number of Eligible Restart Students Per Subject



Source: WCPSS High School Curriculum and Instruction Dept. Principals Reports

STUDENT ACADEMIC SUCCESS

WCPSS believed that greater course opportunities, especially in advanced studies, would maintain or increase student academic success in several areas, including grade-point averages, credits earned, North Carolina EOC and ABCs of Accountability results, SAT participation rates and scores, AP exam results, and grade promotion rates.

Grade-Point Averages and Credits Earned

Grade-point averages (GPA) of the students in all 19 high schools were reviewed to see how weighted GPA may have changed and to see if the percent of students with a GPA of 3.0 or greater was maintained or increased. An additional comparison of GPA change was reviewed for the 11 schools new to the block schedule in 2003-04. The GPA analyses were based on students actively enrolled at any time throughout the 2002-03, 2003-04, or 2004-05 school years. Also of interest was whether students knew their GPA. Of those 804 students responding to an online survey given in spring 2004, 88% named the range within which their GPA fell. Sixty-five percent (65%) reported having a GPA of 3.0 or above.

*“We get more time to learn and practice key skills in each of my classes.”
High school student on 4x4 block schedule*

The percentage of students with a weighted GPA of 3.0 or greater in all high schools increased from 47.1% in 2002-03, to 49.3% in 2003-04, and to 49.9% in 2004-05. The eleven schools new to the block schedule in 2003-04 showed an increase of 4.3% in 2004-05, compared to 2002-03 (from 45.5% to 49.8%).

The average number of credits earned per student in all high schools increased from 5.65 in 2002-03 to 6.66 in 2004-05. The opportunity for gain by students new to the block schedule was more likely (moving from 6 to 8 courses per year) and was more pronounced, with an increase of 1.46 credits earned. Table 4 shows the percentage of students with GPAs at 3.0 and above and the average number of credits earned by those in the 11 schools new to the block schedule in 2003-04 and by the total number of high school students.

**Table 4
Percentage of Students with Grade Point Averages at 3.0 and Higher and Average Credits Earned**

| | School Type | 2002-03 | 2003-04 | 2004-05 |
|--|--|---------|---------|---------|
| Weighted Grade Point Averages at 3.0 or Higher | Eleven Schools New to the Block in 2003-04 | 45.5% | 48.2% | 49.8% |
| | All High Schools | 47.1% | 49.3% | 49.9% |
| Average Number of Credits Earned | Eleven Schools New to the Block in 2003-04 | 5.22 | 6.69 | 6.68 |
| | All High Schools | 5.65 | 6.66 | 6.66 |

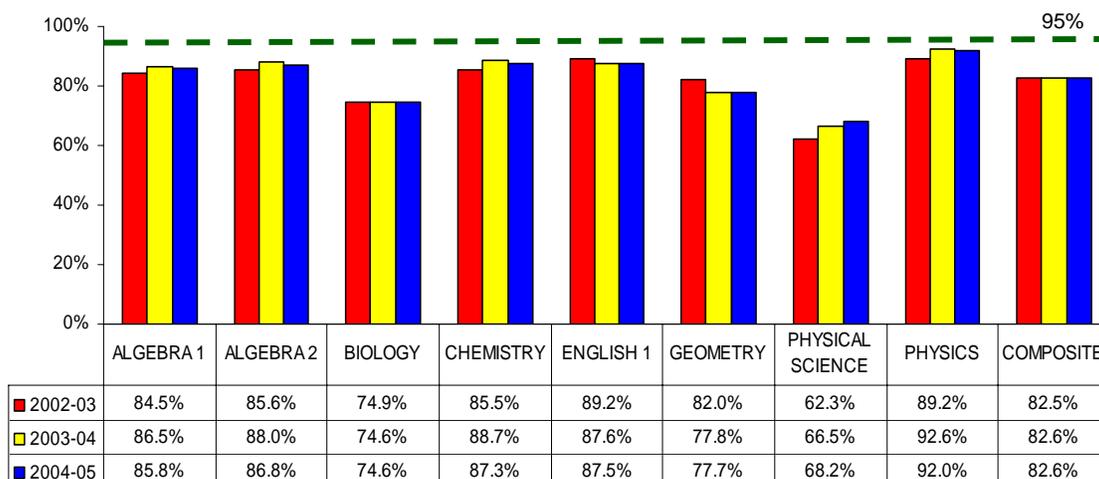
Source: WCPSS Information Services

EOC Test Results

North Carolina EOC exams are administered to students at the close of key courses to establish student understanding of the courses taken. Success rates vary from course to course. The student composite reveals that the percentage of students scoring at Levels III and IV has remained stable, at 83% overall for the three year period from 2002-03 through 2004-05 (McMillen, Haynie, and Dulaney, 2005).

The WCPSS Board of Education goal, “By 2008, 95 percent of students in grades 3 through 12 will be at or above grade level as measured by the State of North Carolina End-of-Grade or Course tests, and all student groups will demonstrate high growth,” is yet to be attained in any EOC course, with Physics the closest. The percentage of students at Levels III or IV showed increases from 2002-03 in Algebra I, Algebra II, Chemistry, Physical Science, and Physics. However, decreases were found in Biology, English I, and Geometry (see Figure 6). Two required courses for graduation were not tested in 2004-05 as the tests were being revised – U.S. History and Civics and Economics. Beginning in 2006-07, new graduation requirements related to EOC will be implemented. Freshman students in 2006-07 (graduating class of 2020) will be required to earn Level III or IV scores on five EOC exams (Algebra I, Biology, English I, U.S. History, and Civics and Economics). Given the stability of the test scores, this will likely be difficult for at least 25% of WCPSS students. Additional resources to support struggling learners would be helpful, as well as re-thinking how some courses are taught.

Figure 6
Percentage of Students at EOC Levels III or IV in All Regular
WCPSS High Schools over Three-Year Period



Note. Excludes alternative option high schools and middle school students taking EOC exams
 Source: WCPSS E&R Dept.

ABCs of Accountability

The high school ABCs formulas are based on many measures, including EOC results, College or Tech Prep (technical preparation) diploma completers, competency passing rates, and dropout rates. The ABCs percentages are not exactly the same as EOC percentages because the ABCs rules mean that students enrolled less than 140 days are excluded and grade 8 EOC results are included. Growth results have been stable, with most high schools (61% in 2004-05) showing high growth (see Table 5).

Table 5
ABCs Growth and Performance Composite

| | Growth Composite | | | ABCs Performance Composite (% of students @ Levels III and IV) | | |
|-------|------------------|--------------|-------------|---|-------|-------|
| | 2003 | 2004 | 2005 | 2003 | 2004 | 2005 |
| WCPSS | 8 + 10 ++ | 4 + 13 ++ | 7 + 11++ | 80.5% | 82.8% | 82.8% |

Note. + = Expected Growth; ++ = High Growth
Source: WCPSS E&R Dept.

(Includes middle school EOC scores of grade 9 students)

SAT Participation Rates and Scores

The SAT is a national College Board test that is given to students who wish to participate and who are thinking about entering college. While the absolute number of WCPSS SAT I test-takers increased between 2002-03 and 2004-05 (from 4,531 to 4,958), the percentage of graduating seniors participating decreased from 80% to 75%. On the other hand, average scores increased in both the verbal and math areas, with a total increase of 8 points overall. SAT scores reflect 12th grade students' "most recent" scores, which are frequently earned prior to spring 2005 (about 20% without re-takes) (McMillen and Dulaney, 2005).

Table 6 displays the details of the SAT participation rates and average scores over a period of four years.

Table 6
SAT Participation Rates and Scores

| | | 2001-02 | 2002-03 | 2003-04 | 2004-05 |
|--------------------|-------|---------|---------|---------|---------|
| Participation Rate | US | 46% | 48% | 48% | 49% |
| | NC | 67% | 68% | 70% | 74% |
| | WCPSS | 79% | 80% | 77% | 75% |
| Total Score | US | 1020 | 1026 | 1026 | 1028 |
| | NC | 998 | 1001 | 1006 | 1010 |
| | WCPSS | 1067 | 1067 | 1063 | 1075 |
| Verbal Score | US | 504 | 507 | 508 | 508 |
| | NC | 493 | 495 | 499 | 499 |
| | WCPSS | 524 | 524 | 524 | 527 |
| Math Score | US | 516 | 519 | 518 | 520 |
| | NC | 505 | 506 | 507 | 511 |
| | WCPSS | 543 | 543 | 539 | 548 |

Sources: WCPSS E&R Report 05.13 SAT Report 2004-05
WCPSS E&R Dept. Graduate Lists

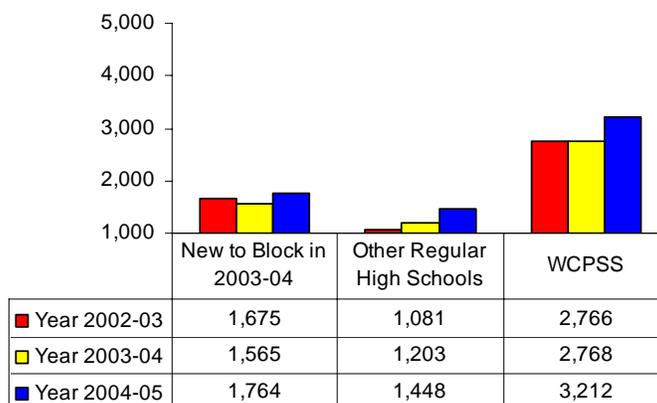
Advanced Placement

Advanced Placement (AP) courses provide rigorous college-level studies and offer students more challenging academic pursuits. The number of AP courses across schools increased by 12% between 2002-03 and 2004-05. AP course enrollees increased by 23% between 2002-03 and 2004-05, considerably more than the 13% gain in 20th-day student membership for this time period.

AP Exams

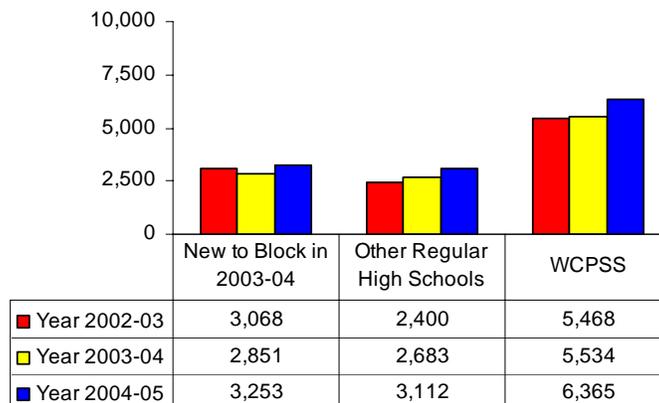
Students enrolled in AP courses sometimes earn college-level course credit if they earn an AP exam score of 3, 4, or 5 (score requirements vary). The AP exams are developed and administered by the Educational Testing Service for the College Board, a nonprofit organization with a focus on preparing and inspiring students for college and opportunity. In 2004-05, the sum of all AP course enrollees was 10,804 (a duplicated count of students as some students took more than one AP course). Although not all AP course enrollees chose to take AP exams in spring 2005, those electing not to take the exams still received the benefit of taking the rigorous coursework. A count showed that 3,212 students (an increase of 446, or 16%, over spring 2003) took 6,365 exams (an increase of 897, or 16%, over spring 2003). On average, each student took two tests. Displayed in Figure 7 are details that show the number of students that took the exams; Figure 8 displays the number of exams taken by these students.

Figure 7
Number of Students Taking AP Exams



Source: The College Board Advanced Placement Program (Summer 2005)

**Figure 8
Total AP Exams Taken**

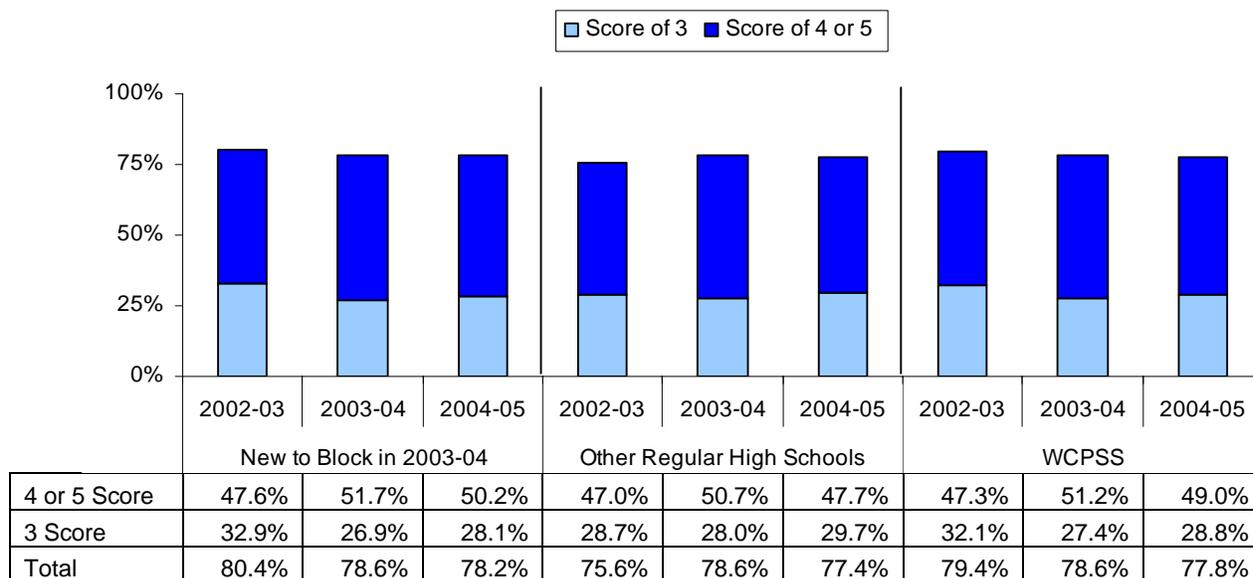


Source: The College Board Advanced Placement Program (Summer 2005)

The increase in exams taken could lead to a decrease in the percentage of students earning a score of 3 or higher. In fact, the overall percentage of exams with scores of 3 or higher did decrease from 79.4% to 77.8% from 2002-03 to 2004-05 (-1.6%).

The percent of exams with scores of 4 or 5 went up (1.7% to 49%) over 2002-03, while exams with scores of 3 went down slightly (see Figure 9).

**Figure 9
Percentage of AP Exams with Score of 3 or Score of 4 or 5**



Source: The College Board Advanced Placement Program (Summer 2005)

As noted earlier, not all students taking AP courses elected to take the AP exams. Of the 266 students responding to the WCPSS spring 2005 High School Special Topics Student Survey, the highest percentage (47%) stated they were taking one course, and 43% said they were not planning on taking any AP exams. The number of AP courses reportedly taken by survey respondents ranged from 0 to 8. On average, survey respondents reported taking two AP courses and two AP exams. In total, respondents reported taking 624 AP courses; 258 students said they planned to take a collective total of 467 AP exams in spring 2005.

Students' Reasons for Not Taking AP Exams

Of 251 AP students responding to the question, *“If you do not plan to take the College Board AP exam for any or all of the AP course(s) that you have taken, which of the following reasons apply to you”*, 32% stated that they did not think they would score well enough on the exam. Another reason given by 23% of the students was that the expense is too great. A group of 15% stated that they had already received their university acceptance, 12% thought the time was too long between the end of the course and the May AP exam, and 10% said there was not enough time to learn the material before the May exam. A few others (9%) said they had taken the AP coursework for high school credit alone. Table 7 displays student responses to the question.

Table 7
AP Students' Reasons for Not Taking AP Exams

“If you do not plan to take the College Board AP exam for any or all of the AP course(s) that you have taken, which of the following reasons apply to you?” (159 respondents with 251 responses)

| Percent | Reason |
|---------|---|
| 32% | I don't think I will score well enough on the exam. |
| 23% | The expense is too great. |
| 15% | I have already received my university acceptance. |
| 12% | The time is too long between the end of the course and the May AP exam. |
| 10% | There is not enough time to learn the material before the May exam. |
| 9% | The AP course is for high school credit only. |

Source: WCPSS Spring 2005 High School Special Topics Student Survey

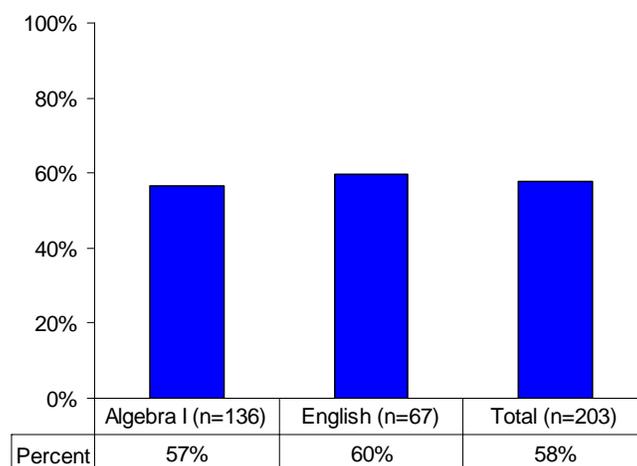
Restart Results

WCPSS Evaluation and Research Department staff conducted a review of restart students' earned grades to discover the outcomes of restarting (re-taking) courses. In selecting student grades for review, the staff selected 10 Algebra I courses and 10 English courses across the 15 schools that reported having eligible restart students. Student names and identification numbers were requested from one Algebra I course each from ten schools and one English course each from ten schools, each containing no more than ten students per school course. A total of 107 names were requested. Schools responded by sending names of 349 students from Algebra I and English courses that were (a) fewer than requested, (b) more than requested, or (c) from other courses than from those requested. Of the names received, 278 were reviewed. The review of the student transcripts showed:

- 42 of the students had no previous grade entered for the restart course
- 33 of the students had previously passed the restart course with at least a D
- 58% of the remaining 203 restart students passed their Algebra or English restart course after having previously failed the course:
 - Algebra – 77 of 136 students (57%) passed the course; and
 - English – 40 of 67 students (60%) passed the course.

Restarting a course did seem to help just over half of those attempting a failed course for the second time. Figure 10 displays the findings.

Figure 10
Set of Algebra and English Restart Students Passing Courses



Sources: WCPSS High School Curriculum and Instruction Dept.
WCPSS NCWISE Student Transcripts

Grade Promotions

Grade retention and promotion rates of the students were studied. The *WCPSS High School Program Planning Guide* informs students that grade level promotions are awarded at the high school level based on units of credits that are earned through the successful completion of specific required courses. Thus, no promotion may occur when a single required course for a grade level has not been successfully completed. Alternatives such as summer school and retaking a course during the regular school year are options that assist students in gaining the necessary required credits to move into the next grade level or to graduate. Table 8 displays grade level promotions over a three-year period.

Table 8
Promotions by Grade Level (All High Schools)*

| Grade-level | 2002-03 Number of Students | Percent of 2002-03 Students Promoted in 2003-04 | 2003-04 Number of Students | Percent of 2003-04 Students Promoted in 2004-05 | 2004-05 Number of Students | Percent of 2004-05 Students Promoted in 2005-06 |
|-------------|----------------------------------|---|----------------------------------|---|----------------------------------|---|
| 09 | 7,784 | 88.5% | 8,551 | 87.7% | 9,126 | 88.0% |
| 10 | 6,651 | 92.4% | 7,291 | 94.2% | 7,571 | 94.2% |
| 11 | 6,052 | 94.5% | 6,540 | 96.3% | 6,799 | 97.0% |
| 12 | 5,723 | 96.9% | 5,946 | 95.1% | 6,639 | 96.6% |
| Total | 26,212 | 92.7% | 28,328 | 92.9% | 30,135 | 93.5% |

*Note. Includes returning dropouts excluded in official state reports

Sources: WCPSS E&R Dept. October 2002, October 2003, October 2004, and October 2005 Student Locators

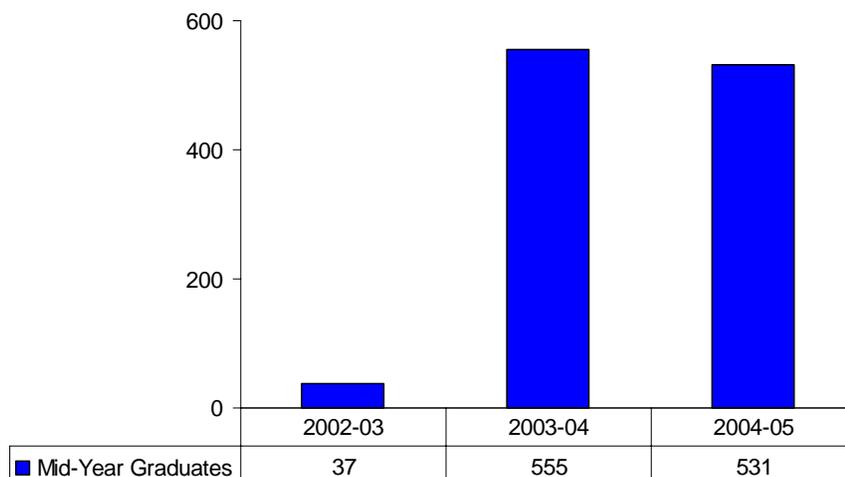
Graduates

A number of students move into and out of the school system throughout each school year. Although a true graduation rate is determined by *following* a cohort of grade 9 students through high school years, this is a complex issue, with definitions not yet set by the North Carolina Department of Public Instruction. Therefore, we have not attempted to do a graduation rate in this report. The reader is encouraged to review the December 2005 WCPSS Evaluation and Research Department Report No. 04.08, "Graduation Rates of the 1998-99 9th-Grade Cohort: Wake County Public School System" (Haynie, 2005) available online at <http://www.wcpss.net/evaluation-research>.

Mid-Year Graduation

Mid-year graduation prior to 2003-04 was an option for students in only two high schools (Fuquay-Varina and Southeast Raleigh) and in special cases such as evening classes. With 4x4 block scheduling, students at all high schools, except two, may now attempt to qualify for mid-year graduation. According to graduation roster files from the 19 schools, the number of mid-year graduations has increased markedly from 2002-03. The number in 2002-03 was 37; in 2003-04, the number increased to 555; in 2004-05, the number was 531 (see Figure 11).

Figure 11
Mid-Year High School Graduates



Source: WCPSS E&R Dept. High School Graduation Roster and Intentions files (2003, 2004, and 2005)

Graduate Intentions

In each of the school years from 2002-03 through 2004-05, most (more than 60%) graduating seniors stated that they planned to attend a 4-year college. Almost a quarter of the remaining students said they planned to attend a 2-year college. Table 9 displays in percentages the intentions of graduates over the three-year period.

Table 9
Graduate Intentions

| | 2002-03 (n=6,091) | 2003-04 (n=5,680) | 2004-05 (n=6,570) |
|-----------------------|----------------------|----------------------|----------------------|
| Attend 4-year college | 61.1% | 62.4% | 63.1% |
| Attend 2-year college | 23.7% | 24.6% | 25.0% |
| Trade/business school | 1.5% | 1.0% | 1.3% |
| Go into the military | 2.6% | 2.4% | 1.9% |
| Get a full-time job | 4.7% | 5.9% | 5.3% |
| Other | 6.4% | 3.8% | 3.3% |

Source: WCPSS E&R Dept. High School Graduation Roster and Intentions files (2003, 2004, and 2005)

RELEVANCE

In the high school reform literature, increasing relevance for students generally refers to providing learning structures that more fully engage students and making high school coursework more relevant to students' future work or college experiences. WCPSS emphasized changing school schedules to enhance course opportunities, increasing relevance in courses taken, strengthening instructional practices from faculty through training, and utilizing more thoughtful lesson pacing.

Expectations:

- General student satisfaction with course opportunities and courses taken
- Increased variety of instructional practices
- Positive views toward lesson pacing
- Decreased dropout rates

Results:

Results indicate relevance is present in WCPSS. At least three-fourths of the students liked their schedules (regardless of type), and most also were satisfied with course opportunities. Teachers and students reported teachers were using a greater variety of teaching methods. Dropout rates, however, did not decline as hoped.

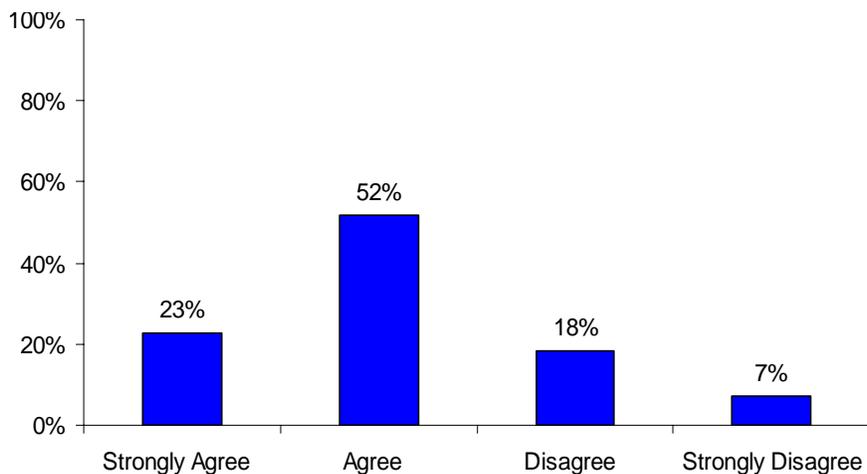
RELEVANCE OF ACADEMIC OPPORTUNITIES AND STANDARDS

When students from each of the three school schedule types (4x4 block with its 4 subjects per day per semester, A/B block with its alternating days for 8 subjects per year, and a 7-period day with 7 subjects per day per year) were asked about their satisfaction levels with course opportunities, three-fourths of the 804 respondents agreed or strongly agreed that the opportunities for taking courses they needed or desired were adequate (see Figure 12). In the spring 2005 Annual Districtwide Student Survey, 25% of the 1,607 respondents said their teachers often help them develop personal learning goals, while 47% said their teachers sometimes helped them.

"We are able to take more courses and it gives you a chance to retake a course if you fail it the first time. Having a block schedule gives students a chance to graduate early with more credits than they would on a regular schedule."

High school student on 4x4 block schedule

Figure 12
Student Satisfaction with Course Opportunities
 “This year, course offerings at my school met my needs and interests.” (n=804)



Source: Spring 2005 High School Special Topics Student Survey

INSTRUCTIONAL PRACTICES

WCPSS provided additional staff training opportunities to build upon the daily school schedule implementation. The WCPSS Curriculum and Instruction Department developed pacing guides for the 2003-04 school year that showed how to cover all North Carolina Standard Course of Study objectives within the school calendar year for each subject area. Teachers and students provided suggested modifications for the guides, and adjustments were made for 2004-05 to address the various school schedules throughout the school system. Teachers were asked whether the modified guides were helpful. Close to 70% of the 240 teacher respondents agreed or strongly agreed that the guides were helpful. Additionally, 88% of 640 student respondents agreed or strongly agreed that the pacing of their advanced course lessons met their learning styles and needs.

Teachers received training in the use of the nine instructional strategies promoted by Marzano and espoused in his book, *Classroom Instruction That Works* (Marzano, Pickering, and Pollock, 2001). Regarding the strategies used and their applications into instruction, interviewed assistant principals from all WCPSS high schools reported that they had observed at least some teacher use of most of the Marzano tools and techniques. Most training was conducted across the entire school, with reinforcement during the year through faculty meetings. Several assistant principals noted that:

“I am able to keep interest levels having exciting classes of personal interest as well as my required classes.”

*High school student
on 7-period schedule*

- the strategies used most often were those presented earlier in the training, and
- changes in the order in which the strategies are introduced might be helpful.

Teachers and students fairly closely agreed on the frequency of instructional methods used during class time. Use of instructional activities varied in frequency. Teachers reported the most

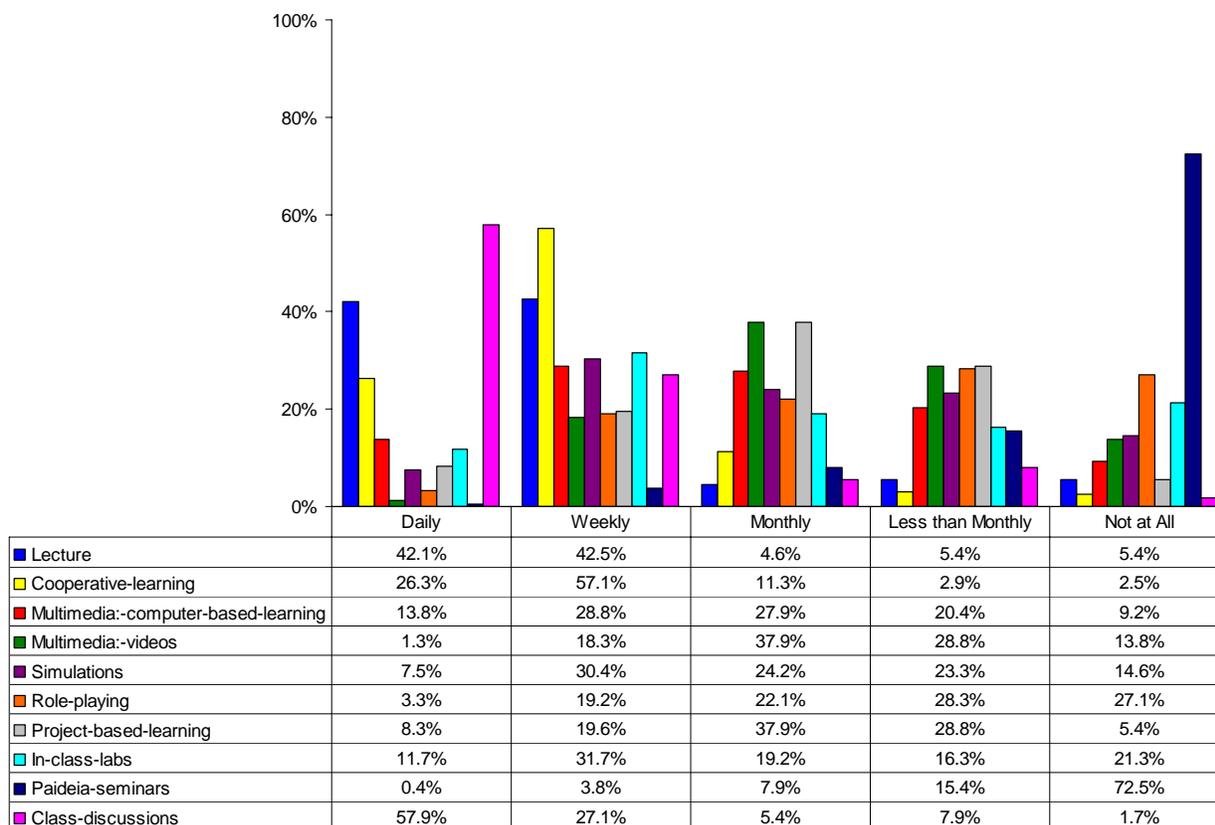
frequently used activities were class discussions, lectures, and cooperative learning (used daily or weekly by 83% or more of the teachers). The least used activity was the Paideia seminar (used less than monthly or not at all by 88% of the teachers). Students were in fairly close alignment with teacher reports.

*“[I like] taking different classes each day and having more time in class.”
High school student
on A/B block schedule*

Of the 1,607 students surveyed districtwide, 79% agreed that their school gave them many ways to learn. Most of 804 other students surveyed said they experienced daily or weekly lectures (83%), class discussions (78%), or cooperative learning (70%) activities. Almost half of the students (49%) said project-based learning was a monthly activity, and 70% reported that Paideia seminars were used less than monthly or not at all. Simulations and role-playing activities were not used at all, according to about one-third of the students. Figures 13 and 14 display details of teacher and student survey responses.

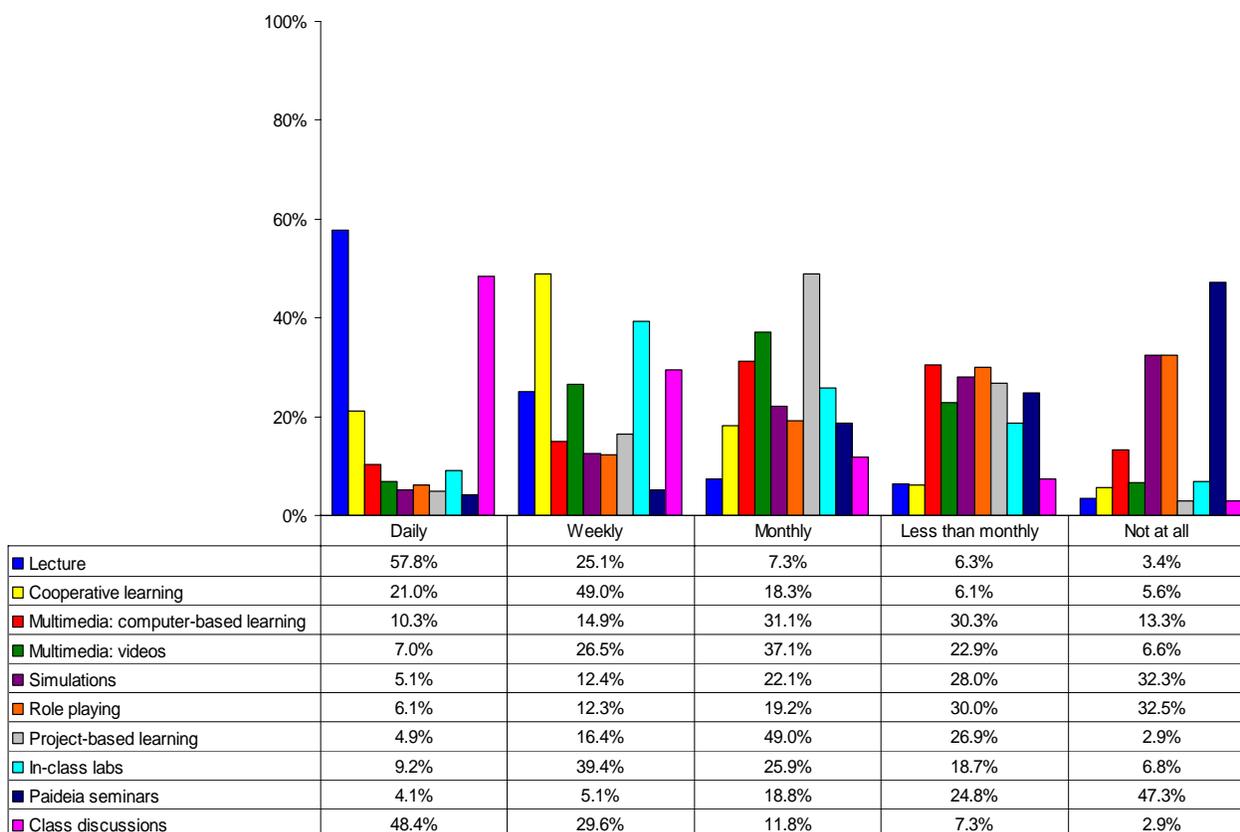
Figure 13
Teacher Perceptions: Frequency of Instructional Activity Use

*“I use these instructional activities to deliver curriculum in my classroom with about the following frequency:”
(n=240)*



Source: Spring 2005 High School Topics Teacher Survey

Figure 14
Student Perceptions: Frequency of Instructional Activity Use
“About how often do your teachers use the following:” (n=804)



Source: Spring 2005 High School Special Topics Student Survey

In comparing 2003-04 and 2004-05 responses of student and teacher perceptions regarding frequency of instructional activities, both groups conveyed that a lesser degree of daily lecturing occurred than in the previous year (students: a 7% decrease to 58%; teachers: a 13% decrease to 42%).

DROPOUTS

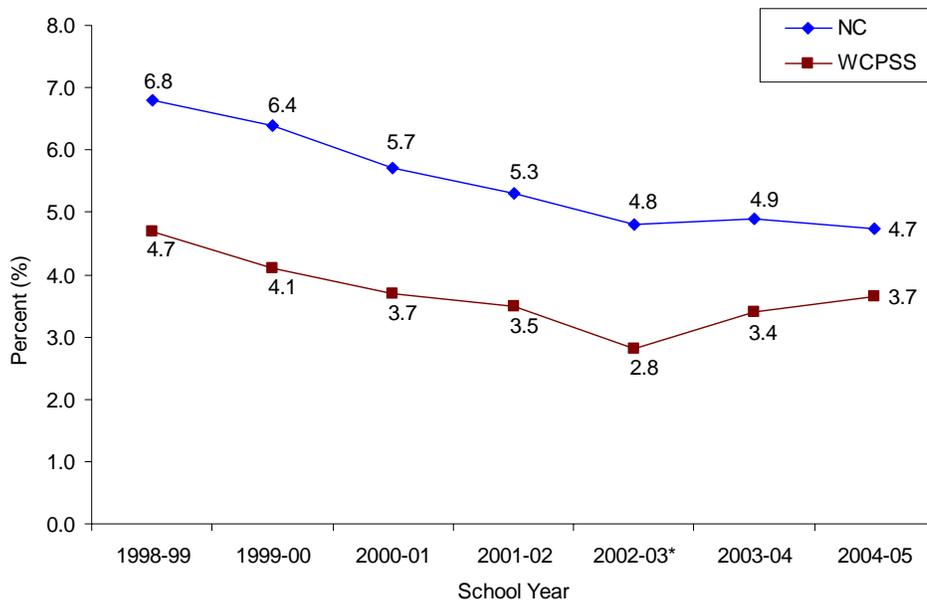
It is anticipated that greater coursework relevance encourages students at risk of dropping out of school to remain in school through graduation. For this reason, WCPSS is looking at high school dropout rates to see whether downward trends occur over time as more relevance is emphasized.

Dropout Rate

The latest report on dropouts reflects the 2004-05 school year. Unfortunately, high school dropout rates did not decline, but rather showed a slight increase, from 3.4% in 2003-04 to 3.7% in 2004-05, although the rate was less than the 4.7% rate of North Carolina (Gilleland and

McMillen, 2006). We suspect the 2002-03 rate was artificially low, so dropout rates probably have hovered around 3.5% for several years (see Figure 15 and notes attached).

Figure 15
NC and WCPSS 1999-2005 Dropout Rates Grades 9-12



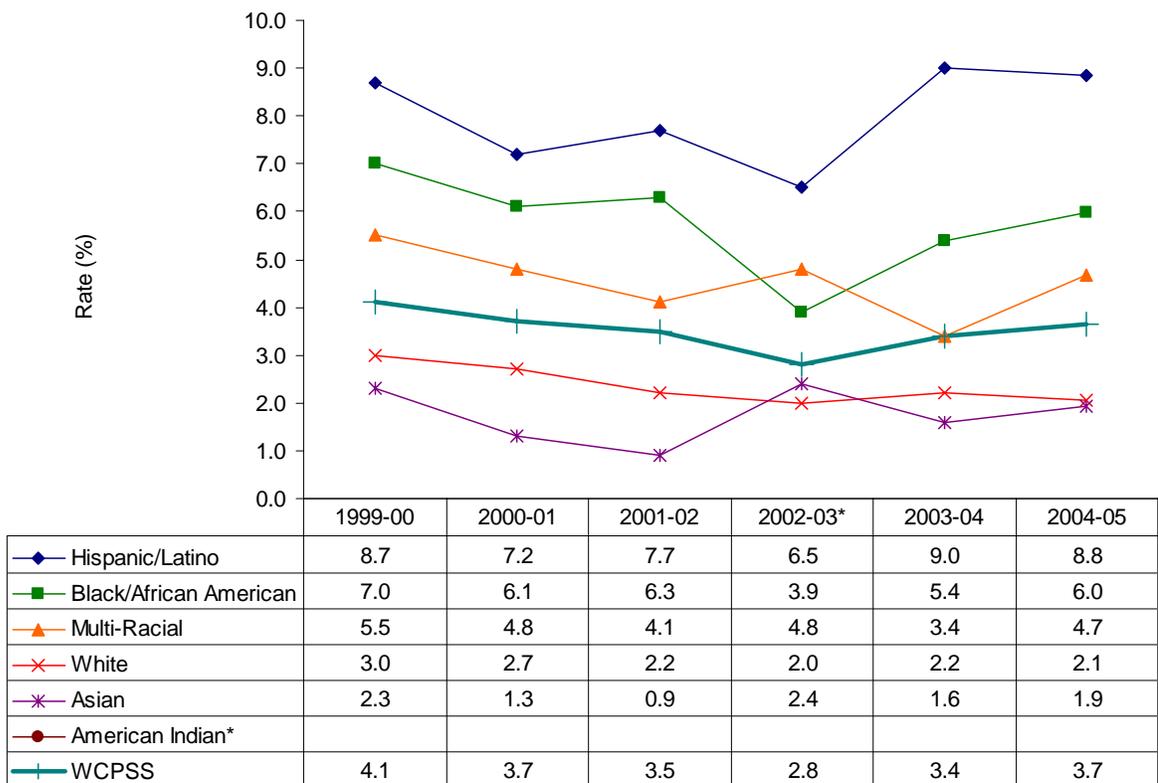
*Note. Revisions for accuracy were made subsequent to the 2002-03 report sent to NCDPI, resulting in the more accurate rate displayed above. Additionally, 2002-03 was the first year for NCWISE implementation, and data entry issues may have resulted in artificially low rates.

Source: WCPSS Evaluation and Research Report 05.27 “2004-05 WCPSS Dropout Rate”

Compared to other large school districts in North Carolina (Durham, Forsyth, Guilford, and Charlotte/Mecklenburg), only WCPSS has had a rate below 5% in each of the past seven years (Gilleland and McMillen, 2006).

Figure 16 displays the WCPSS dropout rates disaggregated by ethnicity over a period of six years. The greatest increase since 2002-03 is reflected within the Black/African American and Hispanic/Latino student subgroups.

Figure 16
WCPSS Dropout Rates for Grades 9-12 by Ethnicity from 1999-2000 to 2004-05



*Note. Revisions for accuracy were made subsequent to the 2002-03 report sent to NCDPI, resulting in the more accurate rate displayed above. Additionally, 2002-03 was the first year for NCWISE implementation, and data entry issues may have resulted in artificially low rates. The American Indian values are blank due to insufficient data.

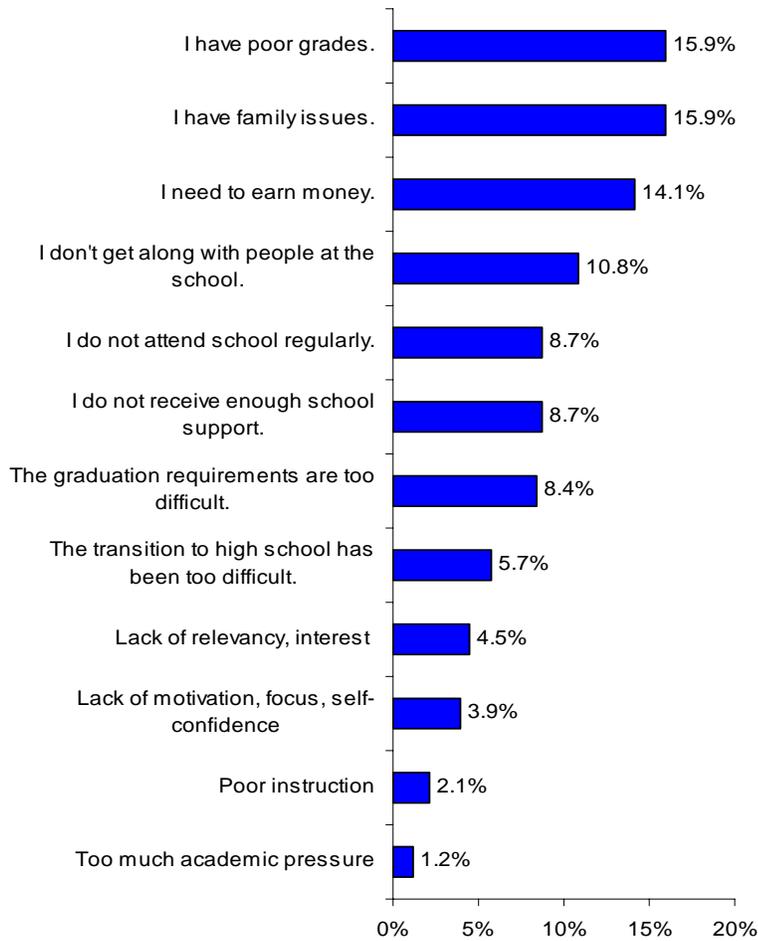
Source: WCPSS E&R Report No. 05.27 “2004-05 Wake County Public Schools Dropout Rate”

Dropout Reasons

Although the hope is that students will complete their high school education, 23% of 804 respondents to the spring 2005 High School Special Topics Student Survey gave reasons they might consider dropping out. The most prevalent possibilities were poor grades or family issues (both at 16%), followed closely by the need to earn money (14%). Instructional relevance was mentioned infrequently. Figure 17 displays possible reasons some students would consider dropping out.

Figure 17
Possible Reasons for Dropping Out of School

*“If you have thought about dropping out of school, which of the following reasons apply to you? (Check all that apply.)”
 (185 of 804 students with 333 responses)*



Source: Spring 2005 High School Special Topics Student Survey

RELATIONSHIPS

High school redesign in WCPSS also focused on personalizing the educational experience for students and helping students feel more connected to their schools. Factors that may indicate positive relationships became WCPSS expectations.

Expectations:

- Maintained or increased attendance rate
- Improved behavior as evidenced by:
 - Decreased suspensions
 - Decreased discipline concerns and issues
- Positive perceptions of student-school connections
- Positive perceptions of student-teacher relationships
- Strong grade 9 transition activities

Results:

Indications are that efforts to improve relationships have had some positive impact. More than 80% of the teachers reported using personalization strategies to further student connections with their schools. The transition process for grade 9 students was also reviewed, with some strategies attempted. Almost all students (93%) often or sometimes said they were satisfied with their relationships with their teachers. In terms of student behavior, short- and long-term suspension rates stayed fairly stable between 2003-04 and 2004-05, with the percentage of students suspended declining across grades 9 and 12. More than half of the students and two thirds of teachers reported fewer discipline concerns in 2004-05. Attendance rates remained stable at 96%.

SCHOOL CLIMATE

Attendance

WCPSS ranks high compared to other school systems in North Carolina for overall K-12 attendance. High school student attendance rates from 2002-03 through 2004-05 were reviewed and, regardless of school type, a high 96% attendance rate has been maintained. Other large North Carolina school systems reported lower high school attendance rates than WCPSS over three years:

- Charlotte-Mecklenburg: stable at 93%;
- Durham: up 1% to 94%;
- Forsyth: down 1% from 2002-03, and maintained from 2003-04 at 93%; and
- Guilford: stable at 94%.

Source: ADA:ADM DATA Spreadsheet (Excel), NCDPI Web site (<http://www.ncpublicschools.org/fbs/ada-adm.html>)

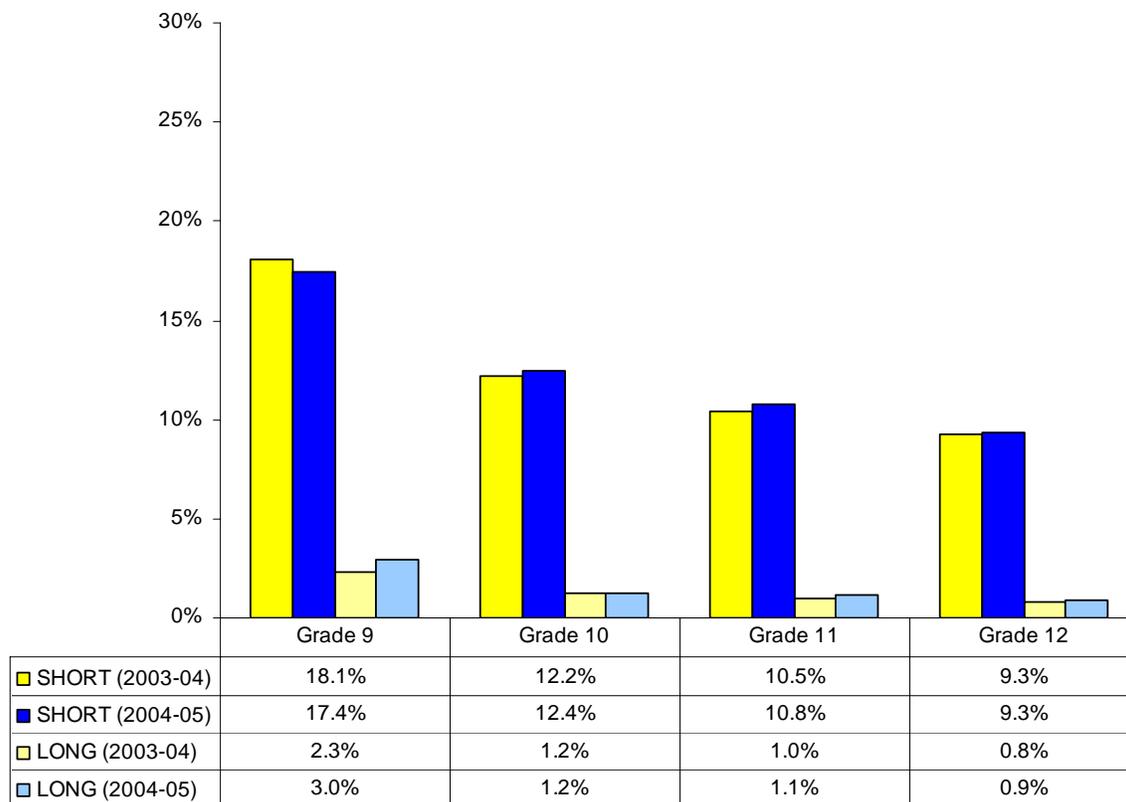
Student Behavior

Out-of-School Suspensions

Figure 18 illustrates that both short- and long-term out-of-school suspensions stayed fairly stable between 2003-04 and 2004-05. Suspensions showed a steady decline across grades, which likely reflects increasing student maturity, understanding of the rules, and dropouts who are no longer enrolled. Generally, 1 out of 5 grade 9 students is short-term suspended, 1 out of 7 grade 10 students, 1 out of 9 grade 11 students, and 1 out of 10 grade 12 students.

“I like that I get more time in classes, which lets me interact more with my teacher and classmates.”
High school student on 4x4 block schedule

Figure 18
Percent of 2003-04 and 2004-05 Students Suspended by Grade Level



Source: WCPSS Information Services

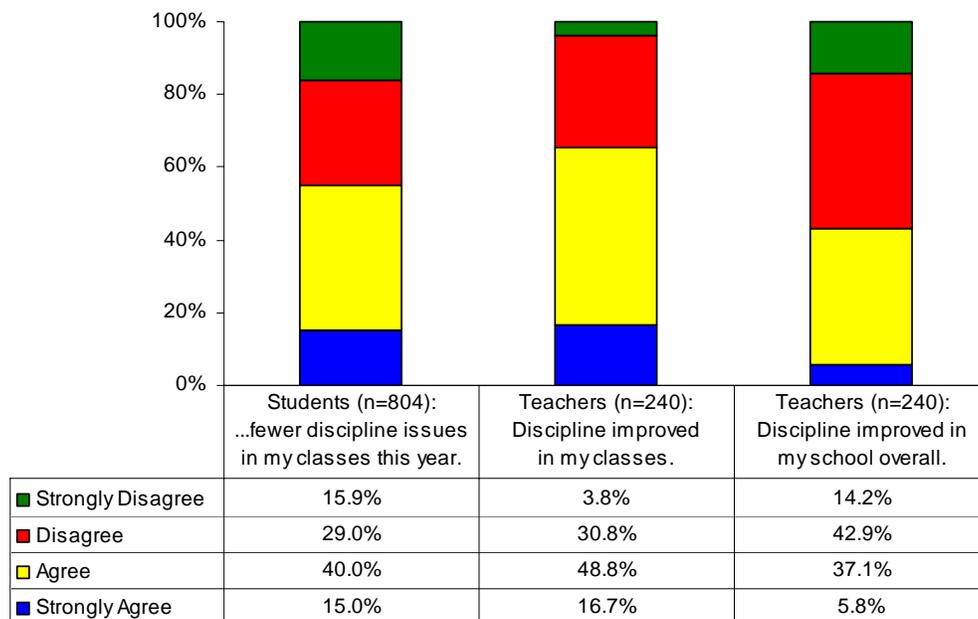
Discipline Issues

Several factors were reviewed in considering discipline in the schools. Fewer than half (44%) of 1,607 student respondents agreed that the rules were fair in their school. On the other hand, 84% of the 133 teachers agreed or strongly agreed that a climate of order and discipline was maintained in their school during the year (up from 79% in spring 2003).

School is Safe: Overall, from WCPSS annual districtwide spring 2005 student and staff survey results, 81% of the 1,607 high school students responding agreed that their school was a safe place to learn during the 2004-05 school year. Additionally, results showed that 92% of the 133 responding high school teachers agreed or strongly agreed that their school was a safe place to work, similar to spring 2003 results (94%). (Note that, although a number of teachers from all 19 high schools were asked to respond to the online spring 2005 survey, the return rate was low, with teachers from only four high schools responding.)

Discipline Concerns: Slightly more than half (55%) of the 804 student respondents agreed or strongly agreed that there were fewer discipline issues in their classes during the 2004-05 school year. Of the teacher survey respondents, 65% agreed or strongly agreed that discipline improved in their own classes, while fewer (43%) agreed or strongly agreed that discipline improved in their school overall (see Figure 19). There is room for improvement on classroom discipline issues, although improvement was recognized by more than half of the teachers and students.

Figure 19
Student and Teacher Responses to Discipline Concern Items
(Students: 804; Teachers: 240)



Sources: Spring 2005 High School Special Topics Student Survey
 Spring 2005 High School Topics Teacher Survey

School Satisfaction

Nearly all (97%) of the 133 high school teachers responding to the Annual Districtwide Staff Survey said they enjoyed their work (similar to spring 2003 at 96%), and 82% said they would still want to be a professional educator if they had the choice. Most (86%) of the teachers agreed that school climate promotes student learning (close to the 90% of spring 2003 results).

Most (93%) of the 804 student respondents perceived that their principal and teachers expected that students treat each other with respect. Slightly fewer (73%) felt that they were treated with as much respect as other students in their school. On a positive note, 74% of the students agreed that they felt comfortable sharing their thoughts in their classes.

“[I like] getting to see a variety of people and teachers throughout the day.”
High school student
on 7-period schedule

Source: Spring 2005 High School Special Topics Student Survey

School Connections

Feeling connected to one’s school may be an important factor in strengthening students’ perceptions toward school. More than 80% of the 240 teacher respondents to the High School Topics Teacher Survey stated they were using personalization strategies to meet students’ needs through offering guidance in academic matters (98%), communicating frequently with parents (80%), or by connecting students with outside resources (93%).

Student respondents to the Annual Districtwide Student Survey did seem to have feelings of connection to their teachers, at least in general. However, since no responses are available from before the new practices were implemented, it is impossible to assess the degree of improvement that has occurred.

- Eighty percent (80%) of student respondents felt they could often or sometimes talk to their teachers when they had a problem.
- More than 60% of student respondents indicated their teachers often (45%) or sometimes (16%) asked them for suggestions about how to make their classes better.
- Sixty-three percent (63%) of the 1,607 student respondents agreed that they liked their school.
- Fewer than half (46%) agreed that students get along with each other. Of these 1,607 students, likewise, 83% of 804 High School Special Topics Student Survey respondents said they felt there was often or sometimes at least one adult in their school with whom they could talk when they had a problem.

Of the 804 respondents on the High School Special Topics Student Survey:

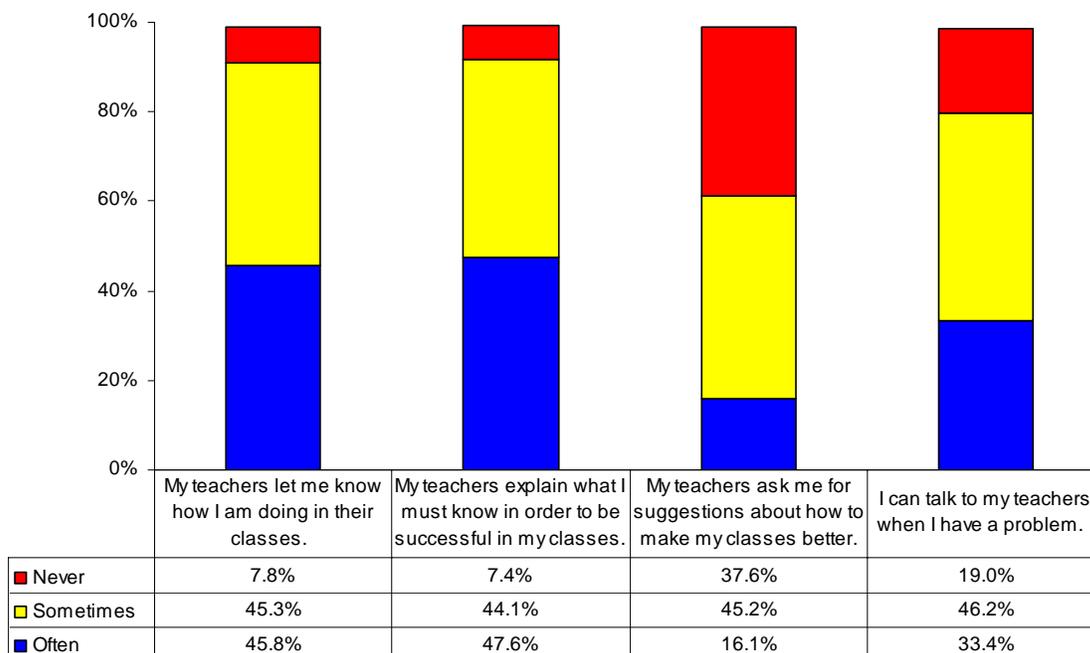
- Most (93%) students stated they often or sometimes felt satisfied with their relationships with their teachers.
- When needing academic support, 93% said they were often or at least sometimes comfortable asking for that support.
- Many (87%) said they often or sometimes felt like a part of their high school.

- More than three-fourths (79%) stated they participated in school-sponsored extra-curricular activities (such as sports, drama, music, or clubs).

If you examine the higher standard of expecting positive relationships, “often” responses were still fairly positive from students about teachers letting them know how they are doing and what they must know to be successful (close to half said “often”). Fewer students (one-third) said they often felt comfortable approaching their teachers when they had a problem, and only 16% said teachers asked for their suggestions on making classes better (see Figure 20).

“With the A/B schedule I am able to ask teachers questions about the lessons on days I don't have their classes, giving me more time to think about what they said.”
High school student on A/B block schedule

Figure 20
Student Views of Student/Teacher Relationships (4 survey items)
(n=1,607)



Source: Spring 2005 Annual WCPSS Districtwide Student Survey

NINTH-GRADE TRANSITION

Transitioning from middle school to high school as a ninth-grade freshman can be daunting for many young people. Statistics such as dropout rates and suspension rates are indicative of adjustment difficulties. Strategies to make the transition smoother included freshman orientation sessions, recognition programs, freshman centers, and teacher advisory programs.

Of the 322 grade 9 survey respondents,

- 80% agreed or strongly agreed that the change from middle school to high school went smoothly for them (16% did not agree),
- 64% agreed or strongly agreed that staff at the middle school they attended helped them prepare for the change to high school, and
- 68% agreed or strongly agreed that staff at their high school helped them adjust to the change to high school.

Although the majority of surveyed grade 9 students saw school staff members as helpful, this could likely be improved with purposeful strategies addressing student concerns. In an open-ended question to freshmen (“*If the change to high school did not go smoothly for you, what do you think made it most difficult?*”), respondents noted aspects of their ninth-grade transition that were difficult.

- Some comments (18%) indicated students were not prepared well enough to make the transition due to lack of orientation, priming by their middle school, or difficulty adjusting to the longer class periods and school schedule.
- Another 14% stated discomfort due to their difficulty in making new friends on a larger campus with a larger student body.
- Twelve percent (12%) reported difficulties in adjusting to the heavier workload (classwork, homework, fast pace, grading system).
- Another 12% centered on adjustment difficulties based on a feeling of disrespect, bullying, and unfriendliness from others, especially upperclassmen. This same group expressed difficulties based on perceptions of less friendly, disinterested, or nonsupportive staff or students.
- A small percentage (2%) did not like the separation of ninth-grade students from the rest of the school.

In another survey question, 332 freshmen students responded to the question, “*How helpful has each of the following been to you in your first year of high school?*” Students chose not to participate in several supportive activities/programs meant to ease their ninth-grade transition. Of those who did participate, the greatest support activities that were very or somewhat helpful were parents (81%), teacher advice (74%), and the advice from upperclassmen (66%). About half of the respondents also mentioned that exam preparation outside class (58%), support from an adult mentor (such as a teacher or a community member) (57%), or freshman orientation (54%) were very or somewhat helpful.

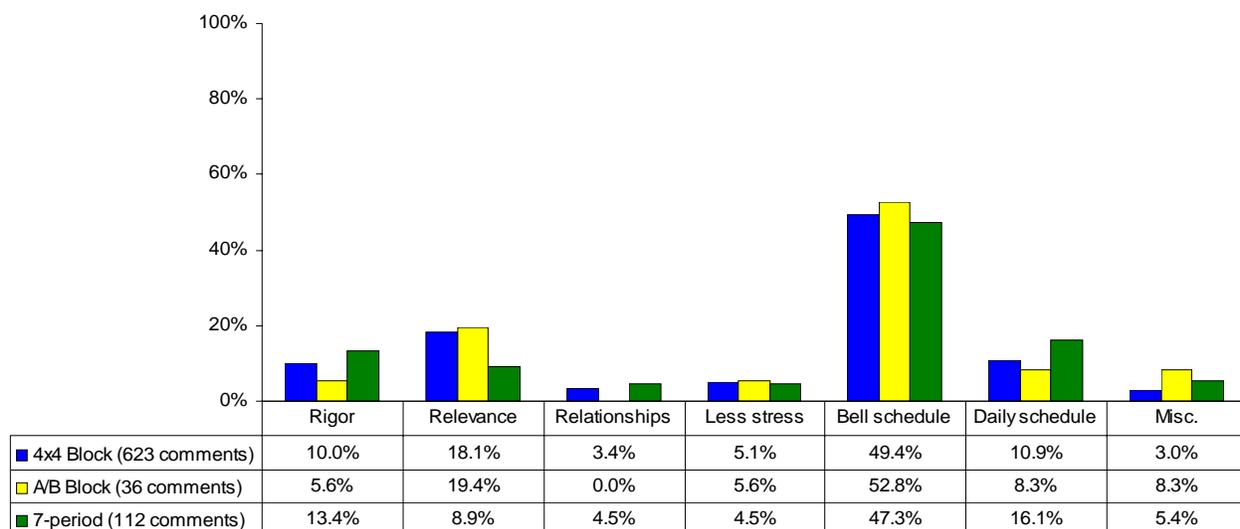
SUGGESTIONS FOR IMPROVEMENT

Both students and teachers were asked to make suggestions regarding improvements they would like to see for their schools.

The greatest improvement by all student respondents, regardless of school type, was a change in the bell schedule (allowing more time between classes and longer lunch periods). Figure 21 displays the results and Table 10 provides further details.

Figure 21
Student Suggestions for School Improvements by School Type

"My school's daily schedule (the 4x4 block, the A/B block, or the 7-period day) could best be improved by:"
(550 respondents with 771 suggestions)



Sources: Spring 2005 High School Special Topics Student Survey

Table 10
Details of Student Suggestions for School Improvements

"My school's daily schedule (the 4x4 block, the A/B block, or the 7-period day) could best be improved by:"
(550 respondents with 771 suggestions)

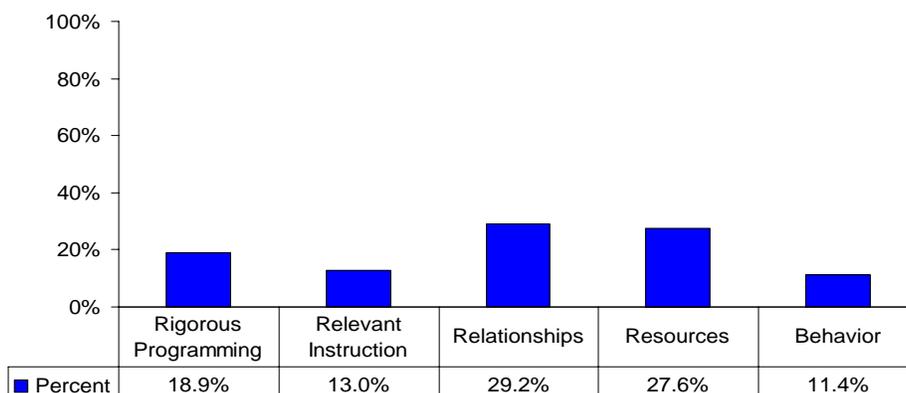
| Category | Details |
|----------------|--|
| Rigor | More thorough instruction Study hall; tutorial time; more frequent homeroom\leadership periods Fewer exams Year-long AP courses Reduce requirements |
| Relevance | Use of more varied, interesting instructional activities More course options |
| Relationships | More personal attention Discipline/school issues Registration/guidance issues |
| Less stress | Absentee make-ups Less homework/class work |
| Bell schedule | Longer, more lenient lunch time; free time Shorter school day, especially later start time Shorter classes or breaks within classes Lengthened time between classes |
| Daily schedule | Return to traditional schedule/get rid of/alter block schedule Move to year-round schedule Move to 4x4 block schedule 4-day week/alter schedule/more workdays Go to A/B block schedule |
| Miscellaneous | Other |

Source: Spring 2005 High School Special Topics Student Survey

Teachers preferred improved relationships above other choices (29%), closely followed by more resources (28%). Figure 22 displays the results and Table 11 provides further details.

Figure 22
Teacher Suggestions for School Improvements

"Strategies for improving my school's success in meeting student needs include:"
(135 responses with 185 suggestions)



Source: Spring 2005 High School Topics Teacher Survey

Table 11
Details of Teacher Suggestions for School Improvements
"Strategies for improving my school's success in meeting student needs include:"
(135 responses with 185 suggestions)

| Category | Details |
|---|---|
| Rigorous Programming (including transitioning and at-risk student support) | <ul style="list-style-type: none"> • length AP course time • more organized registration/scheduling process • academic coaching, after-school tutoring or make-up sessions • students accountable for academic behavior • assist with transitioning skills, knowledge • uninterrupted instruction |
| Relevant Instruction | <ul style="list-style-type: none"> • motivate and/or offer more assistance to low-achieving students • more instructional strategies • vocational programs for certification • intro classes in foreign languages • interdisciplinary teaching |
| Relationships | <ul style="list-style-type: none"> • campus climate • smaller learning communities • interaction with parents and community • teacher mentor program • tutoring after school and during lunch time • student evaluations of teachers |
| Resources | <ul style="list-style-type: none"> • make technology more available • specific needs in professional development • planning time • improved staff communication • supportive administrative staff • smaller class sizes • classrooms for all teachers • same school schedule districtwide |
| Behavior | <ul style="list-style-type: none"> • discipline issues; holding students accountable for personal behavior • safer learning environment • consistency with rules throughout school |

Source: Spring 2005 High School Topics Teacher Survey

CONCLUSIONS

Rigor, relevance, and relationships were at the core for WCPSS high schools in 2004-05. Each facet conveyed evidence of improvement within the schools:

- Rigor
 - More rigorous academic opportunities were available for students.
 - Higher numbers of enrollees were engaged in advanced courses.
 - Academic success remained stable or reached higher levels through EOC exams, grade point averages, and credits earned.
- Relevance in coursework
 - Students expressed satisfaction with the course opportunities available to them.
 - Teachers used a wider variety of instructional practices.
- Relationships
 - High school staff members emphasized personalization.
 - The majority of students and teachers reported fewer discipline concerns in classes.
 - Most students felt connected with their schools.

The school system remains committed to the overall success of its students through maintaining a focus on rigor, relevance, and relationships. An emphasis continues to be placed on the reduction of dropout and suspension rates, which have not decreased as desired.

Successful initiatives to be continued include the following programs and strategies.

- 4x4 block scheduling (except one A/B schedule school and one 7-period magnet school)
- High Five Series participation
- Advanced Placement vertical teams
- Career academies
- Professional development on building instructional strategies
- Freshman transition support
- Advisory programs
- Increased academic counseling
- Tutorial programs
- Smaller learning communities

REFERENCES

- Byrnes, R. S. (2005, February 23). To improve high schools, listen to the insights of students [Electronic version]. *Education Week*, 24(24), 39-40.
- EdSource, Inc. (2005, May). *The movement to transform high school: EdSource forum focuses on the new three R's: rigor, relevance, and relationships*. Retrieved November 1, 2005, from <http://www.edsource.org/pdf/forum05pub.pdf>
- Educatenj. (2005, October 10). *The high school*. Retrieved November 1, 2005, from <http://www.educatenj.com/HighSchool.htm>
- Education Week. (n.d.). *High school reform*. Retrieved December 15, 2005, from <http://edweek.org/rc/issues/high-school-reform/index.html>
- Flenniken, K. W. (2005, April). Redesigning Wake high schools. *Education Matters*, 1-2.
- Gates, M. (2003, July). *Educating all children well: Do we want to do it badly enough?* Speech presented at the National Conference of State Legislatures, San Francisco, CA. Retrieved May 12, 2006 from <http://gatesfoundation.org/MediaCenter/Speeches/MelindaSpeeches/MFGSpeechNCSL-030725.htm>
- Gilleland, K. & McMillen, B. (2006). *2004-05 Wake County Public Schools dropout rate* (E&R Report No. 05.27). Raleigh, NC: Wake County Public School System, Evaluation and Research Department.
- Hackmann, D.G., & Schmitt, D.M. (1997, April). *Strategies for teaching in a block-of-time schedule*. National Association of Secondary School Principals, 1-9.
- Hammond, B.G. (2005, January 19). On dropping AP courses [Electronic version]. *Education Week*, 24(19), 32.
- Hart, P.D. and Winston, D. *Ready for the real world? Americans speak on high school reform*. Retrieved on May 9, 2006, from <http://www.cccoe.k12.ca.us/edsvcs/PDFs/ETS2005execsumhsreform.pdf>
- Haynie, G. (2005). *Graduation rates of the 1998-99 9th grade cohort Wake County Public School System* (E&R Report No. 04.08). Raleigh, NC: Wake County Public School System, Evaluation and Research Department.
- Hendrie, C. (2005, January 5). Gates Foundation awards grants to expand “early college” high schools [Electronic version]. *Education Week*, 24(16), 9.

- Honawar, V. (2004). Report cites “expectations gap” in high school preparation. *Education Week*. Retrieved December 15, 2005, from http://www.edweek.org/ew/articles/2004/12/21/16achieve_web.h24.html
- Johnston, R.C. (2004, December 1). State chiefs discuss global competition, high school reform [Electronic version]. *Education Week*, 24(14), 22.
- KnowledgeWorks Foundation. (2005). *High school initiatives: Ohio high school transformation initiative*. Retrieved November 1, 2005, from http://www.kwfdn.org/high_schools/ohsti
- Marzano, R.J. (2003). *What works in schools: Translating research into action*. Alexandria, VA: Association for Supervision and Curriculum Development (ASCD).
- Marzano, R.J., Marzano, J.S., & Pickering, D.J. (2003). *Classroom management that works: Research-based strategies for every teacher*. Alexandria, VA: Association for Supervision and Curriculum Development (ASCD).
- Marzano, R., Pickering, D., and Pollock, J. (2001). *Classroom instruction that works*. Alexandria, VA: Association for Supervision and Curriculum Development.
- McMillen, B. & Dulaney, C. (2005). *Advanced placement (AP) course-taking, exam participation, and exam results, 2004-05* (E&R Report No. 05.12). Raleigh, NC: Wake County Public School System, Evaluation and Research Department.
- McMillen, B. & Dulaney, C. (2005). *SAT report 2004-05* (E&R Report No. 05.13). Raleigh, NC: Wake County Public School System, Evaluation and Research Department.
- McMillen, B., Haynie, G., & Dulaney, C. (2005). *End-of-course multiple-choice test results, 2004-05* (E&R Report No. 05.14). Raleigh, NC: Wake County Public School System, Evaluation and Research Department.
- Office of Vocational and Adult Education. (n.d.). *Preparing America's future: The secretary's high school initiative*. Retrieved November 18, 2005, from <http://www.ed.gov/about/offices/list/ovae/pi/hsinit/index.htm>
- Olson, L. (2005a). State leaders pledge to reform nation's high schools. *Education Week*. Retrieved December 15, 2005, from http://www.edweek.org/ew/articles/2005/02/28/25summit_web.h24.html
- Olson, L. (2005b). District initiative key to improving high schools, study says [Electronic version]. *Education Week*, 24(22), 10.
- Olson, L. (2005c). Governors' association offers steps to help states improve high schools [Electronic version]. *Education Week*, 24(22), 18.

- Reichstetter, R. & Baenen, N. (2005). *Block scheduling evaluation*. (E&R Report No. 04.17). Raleigh, NC: Wake County Public School System, Evaluation and Research Department.
- Saint Louis Public Schools. (2005, March 7). *Personalization and the school environment*. Retrieved November 18, 2005, from http://www.slps.org/high_school_renewal/PersonalizationAndSchoolEnvironment.htm
- Schlechty, P.C. (2005). *Creating great schools: Six critical systems at the heart of educational innovation*. San Francisco, CA: Jossey-Bass.
- Southern Regional Education Board. (n.d.). *High schools that work: alignment with the eleven CSR components*. Retrieved November 17, 2005, from <http://www.sreb.org/programs/hstw/specialnetworks/csr/AlignmentWithCSRComponents.asp>
- Turner, J.R. (2004). Why is a focus on student transition to high school important? *ERS Focus On*, 1-14.
- U.S. Department of Education, Office of Elementary and Secondary Education and Office of Vocational and Adult Education. (2001). *An overview of smaller learning communities in high schools*, Washington, D.C. Retrieved March 28, 2006, from http://www.ed.gov/programs/slcp/slchighschools_research_09_01.doc
- Viadero, D. (2004, December 8). Panel urges new system for high school data [Electronic version]. *Education Week*, 24(15), 1, 16.

WCPSS High School Redesign 2004-05

Author

Rosemary Reichstetter, Ed.D.

Editor

Nancy Baenen, M.S.

Contributors

WCPSS Evaluation and Research Department:

David Holdzkom, Assistant Superintendent

Glenda Haynie, Senior Administrator

Wanda Whisnant, Secretary

Kimberly Yaman, Evaluation Assistant

Juliana Muli, Dissemination Specialist
and Others

WCPSS Curriculum and Instruction Department:

Richard Murphy, Senior Director, High Schools

Teresa Pierrie, Director, Smaller Learning Communities Grant

WCPSS Technology Services:

Student Information Staff

E&R Report No. 05.05

July 2006

Evaluation and Research Department
WAKE COUNTY PUBLIC SCHOOL SYSTEM
Raleigh, North Carolina

www.wcpss.net/evaluation-research/
(919) 850-1840