

**2006-07**



**WCPSS STUDENTS WITH MULTIPLE ACADEMIC RISKS:  
ACHIEVEMENT PATTERNS AND SCHOOL EXPERIENCES**

**Authors**

Nancy Baenen  
Colleen Paepflow  
Sarah Ives  
Rosemary Reichstetter

**ABSTRACT**

*This study focused on effective practices for students with multiple academic risk factors (students with disabilities, students eligible for free or reduced-price lunch, and/or students with limited English proficiency). We found that achievement patterns over several years differ between students making stronger and weaker achievement growth on End-of-Grade tests. Sixteen case studies revealed that students with positive achievement patterns were more likely to show signs of resilience in their personal characteristics, school experiences, and/or home support than were students with negative achievement patterns. Teachers of both groups used some methods recommended in national research (such as small-group work, structure, and collaboration). A specific focus on language development was not mentioned. Homework was a common problem.*

Evaluation & Research Department  
E&R Report No. 06.23  
August 2007  
[www.wcpss.net/evaluation-research](http://www.wcpss.net/evaluation-research)  
(919) 850-1863

## TABLE OF CONTENTS

<b>Summary</b> .....	2
<b>Introduction</b> .....	10
Past WCPSS Research .....	10
National Research .....	12
WCPSS Context on Academic Risk Groups .....	14
<b>Study Design</b> .....	17
Evaluation Questions .....	17
• Methods	
• Interviews	
• Other Records Reviewed	
<b>Findings</b> .....	21
District Demographic and Assessment Trends .....	21
• Elementary Demographic Trends	
• Middle School Demographic Trends	
• District Assessment Trends	
• Patterns of Progress for Study Cohorts Compared to the District Overall	
Case Study Findings .....	29
• Global Case Reviews	
• Thematic Case Review	
▶ Student Performance	
▶ School and Classroom Experiences	
▶ Family Support and Involvement	
<b>Conclusions and Implications</b> .....	62
<b>References</b> .....	64
<b>Appendices</b>	
<b>A: Instruments</b>	
<b>B: WCPSS Context on LEP and SWD Subgroups</b>	
<b>C: Case Summaries</b>	

**This Page Intentionally Left Blank  
For Front and Back Printing**

# **WCPSS STUDENTS WITH MULTIPLE ACADEMIC RISKS: ACHIEVEMENT PATTERNS AND SCHOOL EXPERIENCES**

## **SUMMARY**

### **BACKGROUND**

To foster improved classroom practices and student achievement in the Wake County Public School System (WCPSS), the system's Evaluation and Research (E&R) Department has undertaken a series of studies to identify best practices. At the elementary and middle school levels, our studies thus far have focused on ways to improve the achievement progress of students who have more than one academic risk factor. Analyses of WCPSS student achievement have shown that students who qualify for free or reduced-price lunch (FRL), students with disabilities (SWD), and students with limited English proficiency (LEP) are less likely to score at grade level, and that those with more than one of these academic risk factors show lower achievement than those with just one. Our first study utilized the WCPSS effectiveness index results to identify *schools* that had positive and negative patterns of achievement for multiple-risk students over time. Differences were found between the two sets of schools, with more effective schools demonstrating more positive attitudes and expectations, different learning approaches, stronger instructional leadership and collaboration, and more effective use of resources than schools with negative achievement patterns. More effective elementary schools for multiple-risk students had fewer LEP students, while more effective middle schools had more LEP students (Baenen et al., 2006).

In this study, we focus on *students* with multiple academic risk factors. Our key questions relate to the proportion of WCPSS students who have multiple academic risk factors, the patterns evident in their achievement over several years (based on effectiveness index residuals for students), and the school experiences of students who have either positive or negative patterns of achievement progress over time.

Information on the nature of the population of WCPSS students with academic risk factors was drawn primarily from earlier reports on student outcomes at each level within WCPSS (Baenen & Holdzkom, 2007a, 2007b). We studied patterns of achievement over several years (based on effectiveness index residuals) for all students with multiple academic risk factors in grades 5 or 8 as of spring 2006. Finally, we conducted case studies of a sample of 16 students. Of the 16 students, 8 had scores on or above grade level by spring of 2006 and all positive residual scores from the effectiveness index, while 8 students had below-grade-level scores in spring of 2006 and all negative residual scores. Eight cases were FRL and LEP and eight were FRL and SWD. Interviews were a critical component of our data collection, including more than 80 interviews of the students, their teachers over three years, their principals from 2005-06, and their parents or guardians. We also analyzed data from a variety of available student records. A summary of each case is available in an appendix to the full report.

## **KEY FINDINGS**

### **Demographic Trends**

The number of students in WCPSS has been growing rapidly in recent years, with the percentage of students who are FRL and LEP growing even faster than the overall population. Slightly more than 10% have multiple academic risk factors. The most common combinations of academic risk factors are FRL with LEP and FRL with SWD.

- Of the elementary students enrolled in 2005-2006, 33% were identified as FRL, followed by 13% as SWD, and 9% as LEP. Overall, 12% of elementary students were identified as having two academic risk factors, while slightly less than 1% had all three of the academic risk factors.
- Of the middle school students enrolled in 2005-2006, 30% were identified as FRL, 16% as SWD, and 5% as LEP. FRL and LEP percentages were lower at the middle school level than at the elementary level. One tenth of the students were identified as having two academic risk factors, while less than 1% had all three of the characteristics.

### **EOG Achievement Trends**

Students with multiple academic risk factors had much lower proficiency rates on the End-of-Grade (EOG) tests and K-5 assessments in spring of 2006 compared to the system overall.

- In reading, 90% of WCPSS elementary and middle school students met grade-level standards on the EOG, compared to 56-80% of those with two academic risk factors and slightly more than half of those with all three academic risk factors.
- In mathematics, with new higher standards on the EOG, three fourths of WCPSS elementary and middle school students scored at grade level, compared to 21-56% of those with two academic risk factors and less than one third of those with all three factors.

In terms of EOG residual score patterns from the effective index, most students had a mixture of positive and negative residuals over three years. Only 7-16% of the general population and of students with multiple academic risks had all positive or all negative residuals in reading or in mathematics, and only about 2% had positive residuals in both subjects. The fact that EOG residual score patterns of all positive or all negative residual scores were unusual made this a useful criterion in selecting cases for our study.

### **Case Study Trends**

Results from the 16 multiple-risk cases revealed differences in the personal, school, and family experiences of students with multiple academic risks who were more and less successful in school. However, the pattern was not consistent across every case; the unique combination of

factors in each case made a difference in the students' success. In some cases, a lack in one area was compensated for by other strengths or supports.

All of our cases had backgrounds that posed challenges to school success. The group of cases with positive achievement patterns was more likely than the group of those with negative achievement patterns to show signs of resiliency. Resiliency is defined as the ability to overcome difficult circumstances, often with the help of school staff, families, and/or the community (McElrath & Smith, 2005). Students with positive achievement patterns were more likely to display the following:

- A positive sense of purpose, with a strong motivation to succeed, a positive future focus, and high expectations with strong support. These students had exposure to hobbies/high-interest activities as well.
- An ability to take on extra challenges with the belief that they could succeed.
- A sense of autonomy, with an understanding of themselves in relation to others, positive feelings about their capabilities, and an ability to overcome and distance themselves from negative circumstances.
- Social competence, as demonstrated by their ability to establish positive relationships with adults, make connections with peer groups, and care for others.
- Problem-solving skills, as demonstrated by connections with supportive people and places, an ability to identify and access resources, and learn "how they learn."

If cases with positive achievement patterns were weaker in any of these areas, school staff and/or family members were much more likely to help compensate for this than those involved with students who had negative achievement patterns.

The thematic review provided more details on differences and similarities between our cases with positive achievement patterns and those with negative achievement patterns, and areas in which the trend was different for LEP and SWD cases. Results are grouped in terms of students' characteristics, school experiences, and family support.

**Students' Characteristics:** Of the LEP students selected for case studies, most started in WCPSS in kindergarten or 1<sup>st</sup> grade with very limited skills in English. Two students who had somewhat stronger English skills entered WCPSS in grade 1 and in grade 3. Positive LEP cases had stronger skills in English by spring of 2006 as measured by the IPT. Of the eight SWD students in the study, most (six) were classified as learning disabled and were in the regular classroom at least 80% of the time.

Most students in the study (13 of the 16) were over-age for their grade. Although some had been retained, others had been placed in a lower grade upon arrival at school, and some may have started school later than is typical. Two students with negative achievement patterns were retained in middle school; both subsequently dropped out.

In terms of assessments, cases with positive achievement patterns showed more favorable trends in their K-5 assessments and grades as well as their EOG level scores over time. Some students improved over time, while others consistently scored at grade level over the three years studied.

Attendance was strong for most LEP students, although three middle school students were tardy quite often. For SWD students, cases with positive achievement patterns were more likely to have strong attendance than cases with negative achievement patterns. Conduct issues were mentioned more often for cases with negative achievement patterns than cases with positive achievement patterns. In terms of interests, cases with positive achievement patterns tended to enjoy reading more than cases with negative achievement patterns. In addition, positive LEP cases tended to be more involved in activities (e.g., sports, music, museums, school or community groups). In terms of expectations, most students expected to attend college, regardless of whether they were cases with positive or negative achievement patterns. Students' expectations tended to mirror those of parents in LEP cases.

**School Experiences:** Teachers of all cases, including both positive and negative achievement patterns, mentioned the importance of building relationships with students. Elementary teachers of SWD students mentioned this more often than middle school teachers. Many classroom strategies used were the same across cases with positive and negative achievement patterns. For example, small-group instruction was mentioned for all cases—a strategy supported by research. Providing structure was mentioned more often for cases with positive than cases with negative achievement patterns overall. Differences were also noted within the LEP and SWD cases.

- For LEP cases with positive achievement patterns, flexible grouping, positive reinforcement, homework, and motivation strategies were mentioned more often than for LEP cases with negative achievement patterns.
- Among SWD students, modifying assignments and breaking them down into smaller chunks was mentioned in all cases with positive achievement patterns but not in cases with negative achievement patterns.

Both groups received supplemental support. LEP cases with negative achievement patterns were more likely to receive multiple forms of support than cases with positive achievement patterns, which may have been appropriate given their achievement and needs. Of course, coordination across teachers must be strong. In cases with positive and negative achievement patterns it was reported that collaboration took place between classroom teachers and specialty teachers. Collaboration within grade-level teams and with school administration was also mentioned, although the amount of collaboration varied by school.

In both cases with positive and negative achievement patterns, teachers mentioned the use of data to inform their instruction. Summative data such as EOG results were mentioned more often by teachers for LEP cases with positive achievement patterns.

**Family Support:** One indicator of the challenge schools face in involving parents was our interview completion rate for parent interviews. Parents in both groups were difficult to reach by telephone, with a number of disconnected telephone numbers. We were able to talk to family members for four of 16 cases (25%), including three cases with positive achievement patterns and one case with a negative achievement pattern. Students and teachers also provided information about family support.

Homework completion was an issue for both groups. In LEP cases with positive achievement patterns, students were more likely to complete homework than in cases with negative achievement patterns. The lack of ability to speak English among the parents of LEP students made it difficult for most of them to provide homework support. Most LEP students did receive some support at home, with no difference evident between cases with positive and negative achievement patterns. Older siblings were an important support in two cases. Among SWD students, only half of the students completed homework regularly, with no difference across cases with positive and negative achievement patterns. In cases with positive achievement patterns students had stronger grades than cases with negative achievement patterns. In SWD cases with positive achievement patterns, students had somewhat stronger homework and family support than cases with negative achievement patterns, although it was seldom strong.

Parents and guardians were more likely to attend school conferences among the cases with positive achievement patterns than the cases with negative achievement patterns. Among LEP cases, fathers from the cases with positive achievement patterns were more likely to attend conferences.

## **IMPLICATIONS**

These results suggest that EOG residual scores over several years (especially when considerably more positive or negative than predicted), combined with level scores, can provide a useful tool in differentiating between students making stronger and weaker progress over time. Determining a way to more consistently share these longitudinal EOG scores (level, scale, and residual) with teachers could help them identify students who may be falling further behind each year or who are making particularly strong progress (and could be useful peer tutors). These longitudinal scores are already shared with principals and test coordinators, but they usually do not reach teachers at this point. Teachers often see only EOG scores for the prior year. For our study, the fact that these patterns were unusual made EOG residuals over time a useful criterion for choosing cases for further study.

Our case study results are encouraging, in that they bring to light illustrations of students who have overcome adversity to succeed in school. The results provide useful insights for school staff in viewing their role in working with students, families, and the community to build resiliency and success in school for their students. Having staff review and discuss case studies in light of what helped, or could have helped, cases with positive and negative achievement patterns is one suggestion for use of this report.

In terms of student characteristics, the level of support and the skills and experiences students brought to school varied among these cases. Getting to know the students well enough to determine their interests, what motivates them, past school successes and issues (such as English ability, grade level performance, attendance, and conduct), the challenges they face, and the resources available in the home or in their community can be critical in terms of success in school. Building on students' interests, giving them opportunities for involvement in school activities, and giving them leadership opportunities can build important ties to school. Building motivation in students can also make a positive difference, and training on ways to accomplish this could be helpful to teachers. Making students and parents aware of low-cost or free



community activities related to student interests or instructional activities can provide options for activities outside of school that are intellectually stimulating and that can build connections and learning. Helping students understand the relationship between grades in school and future college attendance and careers can motivate students who want to attend college primarily to play sports. The critical role of homework completion in bolstering grades is important for students to understand as well.

In the classroom, teachers used some methods mentioned in research with both the more-successful and less-successful students. For example, using small groups was common, as well as providing structure for the students. Although we did not measure quality of instruction, other factors could play a part in the differential impact of these efforts. Teachers could benefit from reviewing the research on resiliency and effective school and teaching strategies for new ideas. It is interesting that teachers did not specifically mention working to develop vocabulary or practice language production with LEP students; teachers may be unaware of the research about the importance of these features in a classroom for English language learners (Curtin, 2005; Linquanti, Carstens, & Soto-Hinman, 2006). This is a critical area for future training of WCPSS classroom and English as a Second Language (ESL) teachers. The district improvement plan includes efforts to provide general information on the Sheltered Instruction Observation Protocol (SIOP) to all schools (Echevarria, Vogt, & Short, 2004), with more extensive training in these techniques to targeted schools. Implementation of these techniques could be critical as LEP students are asked to master content knowledge and the English language simultaneously. This approach may also help SWD students who have weaker language skills.

Although multiple supports outside the classroom were more common among LEP students who were unsuccessful, this likely reflected their greater need for support. Research suggests that coordination of instruction, as well as pulling students out of regular instruction as little as possible is important for all students needing extra support. Going into the classroom to provide support is worth consideration. At the middle school level, teachers could benefit from further discussion of effective ways to provide students with practice besides through homework, and in how to have homework play a smaller role in the students' grades.

In terms of home support, building on what is available to students in their homes and compensating for what is not available can make a positive difference. All parents and guardians could benefit from general tips on helping their children succeed in school (e.g., providing a place for homework, checking on homework completion, limiting television and video viewing, etc.). Effective schools in WCPSS mentioned providing translations of critical school information and going to the parents as effective ways to build parent involvement. Providing translated directions for key projects could increase successful completion. Older siblings with stronger English skills might be given training in peer tutoring. Providing a list of opportunities for learning English could also be useful.

Those students with no readily accessible support in the home could become high priority for a tutor/mentor or other support programs at school or in the community. Coordination with tutoring programs could often be strengthened as well. This is particularly important for LEP students who are still learning English, given that the ESL program (especially at the elementary

level) focuses primarily on a specific language arts curriculum rather than on providing students with help for classwork or homework.

School staff should be encouraged by these results, in that some students with multiple academic risks clearly achieve academically. Results and national research suggest ways teachers can influence students' personal, social, and academic skills to make a positive difference in their success in school and beyond.

**This Page Intentionally Left Blank  
For Front and Back Printing**

# **WCPSS STUDENTS WITH MULTIPLE ACADEMIC RISKS: ACHIEVEMENT PATTERNS AND SCHOOL EXPERIENCES**

## **INTRODUCTION**

### **USING THIS REPORT**

This report can be used by school and central staff in multiple ways. The summary provides basic results of the study. While reading the full report will provide the best understanding of the trends seen, readers can also go to particular sections or appendices based on their needs.

- The Introduction section includes national research and information on the nature of the WCPSS student groups with academic risk factors and services available to them. The References section can lead the reader to the source documents, which are on file in the Evaluation and Research Department.
- The Study Design section describes how this study was conducted.
- The first part of the Findings section describes assessment trends for students with multiple academic risks, including patterns for the fifth and eighth grade cohorts studied in this report.
- The second part of the Findings describes our case study trends, both the global trends based on a holistic view of the cases and results of a thematic review.
- The Conclusions and Implications sections bring together our interpretation of the findings, links to national research, and implications for practices for WCPSS staff.
- Appendices A and B provide additional information on the interview instruments and WCPSS context for the subgroups of interest.
- Appendix C describes each case study, providing a richer flavor of the experiences and background of each student.

Useful staff discussions about instructional practices for multi-risk students could be built on information from the Summary, Conclusions and Implications, and Case Study sections of this report in particular. School or central staff might want to select some cases for discussion of why some students were more successful than others or how practices used at school or with parents compare to their own. Of course, information from the second part of the Findings might also be useful to address particular needs or topics.

### **PAST WCPSS RESEARCH**

The Wake County Public School System (WCPSS) is committed to optimizing achievement for all of its students. To foster improved classroom practices and student achievement, the Evaluation and Research (E&R) Department, in coordination with other Instructional Services Division staff, has undertaken a series of studies to identify and share best-practices information with schools and central services staff. Both quantitative and qualitative analyses have been utilized to study the most effective schools and teachers in particular subjects and for particular student subgroups.

A quantitative tool that has been essential in identifying schools and teachers who have promoted achievement growth for students over time has been the WCPSS effectiveness index. This value-added model is similar to models used in many school systems across the country to identify effective schools and teachers (Sanders, 1998). Since the early 1990s, WCPSS has used the effectiveness index to assist schools in identifying areas of strength and areas for improvement (Haynie, 2006a). However, these analyses stop short of identifying strategies that might improve outcomes for students.

The series of studies on effective practices is designed to address schools' need for practical information about effective practices to improve current practice. Across studies, we are building a common body of evidence that applies to effective teaching across subjects and subgroups, as well as unique approaches applicable to specific subjects and groups. Studies to date have focused on several high school subjects (biology, Algebra I, U.S. history) as well as on effectiveness of elementary and middle schools with groups of students with multiple academic risk factors (low income, disabilities, and/or limited English proficiency). In all of these studies, we utilized the effectiveness index model results for three or four years in a row to examine patterns of success. We then utilized quantitative and qualitative methods to examine key differences in schools and classrooms that were determined to be most and least effective in promoting student growth.

Common themes from the high school biology and algebra studies were that the most effective teachers, compared to those least effective within WCPSS:

- focused on delivery of instruction,
- resisted distractions from their classroom efforts,
- maximized student use of class time,
- studied and planned with other teachers using the North Carolina Standard Course of Study,
- focused all student time on the Standard Course of Study goals,
- carefully planned teacher-controlled student activities, and
- used data to guide their instructional practice.
- planned with others and discussed ideas for improvement.

See Haynie, 2006a, & 2006b, for more information.

### **Computing the WCPSS Effectiveness Index**

In the WCPSS effectiveness index, residual scores are computed for each student who has the necessary scores for all state tests. This student residual score is the scale score point difference between his/her actual score and the predicted model score when compared to other similar students. Thus, the residual may be thought of as the value added by a specific teacher/school. The current year's test scores are dependent variables and the state-designated pretest scores are independent variables. Indicator variables control for special-program level of service (e.g., self-contained classroom), academic gifted status, free or reduced-price lunch (FRL) eligibility, and percentage of FRL students in the school. Student residuals are aggregated to the school and teacher levels and standardized for easier interpretation (with a mean of 0 and a standard deviation of 1).

In WCPSS, students who qualify for free or reduced-price lunch (FRL), students with disabilities (SWD), and/or students with limited English proficiency (LEP) are less likely to score at grade level than are students without these characteristics. E&R found that WCPSS students with more than one of these academic risk factors were less likely to score at grade level than those with just one (see Findings section). E&R conducted special effectiveness index analyses of students with multiple risk factors and identified schools that fell in the top or bottom 25% of schools over three years (or showed a pattern on improvement or decline over three years). We identified three higher- and lower-growth schools at the elementary level and three of each at the middle school level (plus one alternative middle school) for further study based on reading and mathematics test results.

Quantitative analyses revealed similar FRL and SWD percentages across the schools, which allowed us to eliminate these demographic variables as explaining differences in achievement. We did find a difference in the number of English language learners in the more and less effective schools, with fewer LEP students at the elementary and more LEP students at the middle school level for the higher-growth schools. Differences were also found in attitudes and practices of teachers and administrators in the two sets of schools (Baenen et al., 2006). The exact nature of the differences varied somewhat by level. At the elementary school level, the following elements seemed to support achievement for students with multiple academic risks:

- high expectations,
- positive attitudes about being able to meet students' needs with the resources available,
- supportive administrative leadership that allocates resources effectively,
- professional training,
- formal and informal collaboration to help students, and
- more frequent use of teacher-led instruction.

At the middle school level, effective school staff were more likely to:

- focus more on how to address student needs and less on barriers to addressing needs,
- have more informal administrator visits in classrooms,
- have more positive attitudes and training in working with at-risk groups, and
- more frequently use resources such as assessment data, extra adults in classrooms, technology, and instructional pacing guides.

## **NATIONAL RESEARCH**

Nationally, achievement gaps between students from lower and higher income levels have been well documented (Samuels, 2007; Daeschener, Munoz, & Barnes, 2004), as have achievement gaps between English language learners and students who are proficient in English (Fry, 2007). Research on resiliency, effective schools and practices, and effective instruction for SWD and LEP students provides valuable context for interpreting results in the current study.

## Resiliency Research

Resiliency refers to the ability of individuals to overcome difficult circumstances. McElrath and Smith (2005), in summarizing research on resiliency, indicated that resilient individuals show personal strengths in the areas of social competence, problem solving, autonomy, and sense of purpose. Given similar experiences at school and at home, some students in this study appeared to be more resilient than others.

Resiliency can be fostered, with the ideal situation occurring when home, school, and community partner to develop children's potential. When one partner is absent or makes limited contributions, the others must provide increased support. Some examples of ways school staff can foster resiliency include establishing a positive relationship with the students, helping them identify and access resources, helping students feel good about their capabilities, and holding high expectations.

## Effective Schools and Practices

National research on effective schools for low-income students points out the importance of challenging learning environments, collaboration, high expectations, effective use of data, and instructional leadership in promoting student achievement. A report from the National Study Group for the Affirmative Development of Academic Ability (2004) indicated that high-quality instruction, trusting relationships in the school, and support for pro-academic behavior in the school and community are critical. Three studies provide examples of strategies successfully used with SWD and LEP students:

- Samuels (2007) recently reported on a school district in Texas whose SWD students made substantial gains in achievement when schools applied these principles. Major strategies were to reduce the percentage of SWD students who were not in regular classrooms at least half of the day, to expose SWD students to the most challenging material and assessments possible (on grade level), to provide data coaches to help schools build plans for research-based instructional strategies for all students who were performing below grade level, and to hold the expectation that all students can learn.
- Linquanti et al. (2006), working with the California Department of Education, summarized some important trends in terms of English acquisition for English language learners (ELLs). Such students must learn both social, conversational English and the more formal register of academic language to fully benefit from instruction. Interpersonal communication skills typically develop more quickly (one to two years) than the more complex language needed for academics (typically four years or more). Linquanti et al. reported that ELLs, in order to move more rapidly from social to academic language, need more explicit modeling of English use and more extended practice in using the academic register. This may be accomplished through the scaffolding of language and vocabulary into group work and teacher-guided activities. Teachers who primarily lecture and who accept one word answers from students are less likely to promote rapid language development.

- Curtin (2005) and Educational Research Service (2001) recommend using lessons that connect students to their larger social context and point to the importance of understanding the background and culture of immigrant children to promote their success. The literature promotes using a teaching style that is highly interactive, uses cooperative learning groups, and individualized assessments (Curtin, 2005; Educational Research Service, 2001). Curtin studied instructional styles used by regular classroom teachers of ESL students in a Texas urban middle school. She found more interactive teachers were more culturally responsive, and novice teachers struggled the most to meet individual ESL student learning needs. The interactive teachers were more likely to interact with students personally, and to use student-centered lesson planning and delivery, hands-on learning, differentiation, activities that tapped different intelligences, and democratic discipline techniques (with less focus on silence and behavior). She also found that most ESL students were placed with teachers who lacked specialized training in second language acquisition. Although this study did not study subsequent achievement of these students, national literature suggests that the positive practices Curtin identified can promote achievement.
- The Educational Research Service (2005) developed a document that summarized research on how the brain processes information and ways to strengthen instruction accordingly. They cite cognitive processing research by Parnell indicating that learners discover meaning by making connections. Suggested ways to build these skills include building lessons based on prior knowledge, using thematic, integrated curriculum, and connecting lessons to students' cultural background. The report also cites work by the Northwest Regional Education Laboratory that indicates that successful students monitor their own thought processes and make changes accordingly. Providing students with opportunities to discuss their thinking and to journal are suggested as ways to build these skills.

## **WCPSS CONTEXT ON ACADEMIC RISK GROUPS**

Students with academic risk factors are defined for this study as those who have limited English proficiency (LEP), students with disabilities (SWD), and/or students eligible to receive free or reduced-price lunch (FRL). Information on the nature of each subgroup and services offered to them provides useful context for understanding the study findings.

### **Limited English Proficient Students:**

#### ***Identification***

Students for whom English is not the only language spoken in the home are tested for English language proficiency in reading, listening, writing, and speaking. If a student does not show strong skills in all areas, he or she is classified as LEP. Standards for proficiency have been raised several times in the last several years due to an increased focus on academic rather than social language as required by state and federal mandates. Thus, students are more likely to be classified as LEP.



## *Languages*

Spanish is the most common home language among LEP students (76%), with Asian languages and dialects being the next most common (about 12%). The WCPSS LEP population is very diverse, with more than 90 different languages represented. In this study, all LEP students selected for study had Spanish as their home language.

## *Services*

Most (81%) LEP students in May 2006 received ESL services. Another set of LEP students (about 10%) were eligible to receive ESL services, but their parents declined service. Another 9% of students kept their LEP status, but scored too high on the IDEA Proficiency Test (IPT) to receive ESL services.

ESL services focus on the English Language Development Standard Course of Study (ELD SCS), which is state-mandated and linked to the English Language Arts standard course of study. The goal is for all instruction to be in English, although ESL teachers use some students' native language with novice students who are really struggling. ESL teachers coordinate with regular teachers as much as possible and report that time and scheduling issues are their biggest challenges.

## *IPT*

LEP students generally tend to achieve the highest levels of proficiency (Advanced or Superior) on the Listening section of the IPT assessment (70% at the elementary school level and 51% at the middle school level). Students are least likely to achieve these highest levels of proficiency on the writing section of the test (24% at the elementary school level and 11% at the middle school level).

Research has shown that it takes from four to ten years to become proficient in academic English (Cummins, 1981; Thomas & Collier, 2002). However, LEP students are exempt from End-of-Grade (EOG) reading tests in their very first year in a United States school only if they score below Intermediate High on the IPT Reading test. EOG reading scores improve once students reach at least Intermediate status on the IPT. No exemption from testing is available for mathematics.

## **Students with Disabilities**

### *Types of Disability*

A student with a disability is defined as a student needing special education services due to mental retardation, hearing impairment, speech or language impairment, visual impairment, serious emotional disturbance, orthopedic impairment, autism, traumatic brain injury, other health impairment, or specific learning disability. Most WCPSS SWD students are classified as learning disabled (LD), other health impaired (OHI), or, in grades K-5, speech/language

impaired (S/L). In May 2006, of the 17,073 K-12 students classified as SWD, the greatest percentage (50%) were White students, followed by Black/African American students (38%).

### *Services*

A student identified with a disability is served based on the least restrictive setting required to meet his/her individual needs. The settings are described as regular (80% or more of the day with non-disabled peers), resource (40% - 79% of the day with non-disabled peers), or separate (39% or less of the day with non-disabled peers).

### **Free or Reduced-Price Lunch Students**

Students whose family income is at or below 130% of the federal poverty level qualify for free breakfasts and lunches at school, and students whose family income is at or below 185% of the federal poverty level qualify for reduced-price breakfasts and lunches. FRL status is the best indicator of low-income status currently available. One limitation of this definition is that families of middle or high school students are less likely than elementary school students to apply for FRL. In May 2006, at least half of the elementary and middle school FRL students were Black/African American, followed by Hispanic/Latino (about one fourth) and then White students (14%).

## STUDY DESIGN

### METHODS

In this study, we examined three questions about students with multiple academic risk factors.

**Question 1: What proportion of the student population has academic risk factors? How many have multiple academic risk factors? How do these students perform on district and state assessments?**

**Method:** Information on the nature of the population of students with academic risk factors in WCPSS was derived from earlier reports on student outcomes at each level within WCPSS (Baenen & Holdzkom, 2007a, 2007b). Some additional descriptive analyses were also conducted to complete the picture of how these students tend to perform on student outcome measures.

**Question 2: What patterns of progress in achievement are evident for students with multiple academic risk factors based on EOG effectiveness index residuals? How do these patterns compare to the system overall?**

**Method:** The patterns of progress in achievement for students with multiple academic risk factors and WCPSS overall were based on student residual scores for 2003-04, 2004-05, and 2005-06. Our study focused on 5<sup>th</sup> and 8<sup>th</sup> grade students. We analyzed the extent to which students had all positive or all negative residual scores over time as well as various combinations of positive and negative residual scores. The residual patterns of multiple risk students were compared to the system overall.

**Question 3: Do positive and negative patterns in student residual scores over several years relate to particular school or home experiences for students with multiple risks?**

**Method:** We studied patterns of achievement for students with multiple academic risk factors for two cohorts of interest enrolled in WCPSS as of spring 2006: grade 5 and grade 8 students who were FRL and SWD or FRL and LEP (or all three). From student rosters produced in E&R, we isolated students from whom we had all test scores in reading, mathematics, or both for the 2002-03, 2003-04, 2004-05, and 2005-06 school years. These test scores yielded three residual scores for reading and three for mathematics. Students who had taken alternate forms of the EOG tests were not included. Therefore, we were examining students judged as able to handle the multiple-choice standard EOG tests for several years. From these files, we selected students with positive achievement patterns (students with all positive residual scores and who had an EOG score at Level III or IV (at or above grade level) in spring 2006 and students with negative achievement patterns (students with all negative residual scores and who had a Level I or II score (below grade level) in spring 2006 (see Table 1). From these groups, we randomly selected cases for reading and mathematics for our case studies.

**Table 1**  
**EOG and Residual Scores for Students Selected as Case Studies**

Elementary Students*		2003-04		Residual	2004-05 Spring	Residual	2005-06 Spring	Residual
		Fall	Spring					
1: Pilar	R	3	3	-1.34	4	<b>8.89</b>	4	-0.15
LEP, Math +	M	4	4	0.39	4	<b>5.89</b>	4	<b>10.91</b>
2: Bernardo	R	1	3	<b>6.07</b>	2	-3.86	3	-3.33
LEP, Math -	M	3	2	<b>-8.36</b>	3	-0.10	2	-2.48
3: Francisco	R	1	2	1.12	3	2.58	3	3.42
LEP, Reading +	M	2	3	2.34	4	<b>8.03</b>	3	-4.03
4: Rosa	R	1	2	<b>-7.86</b>	1	<b>-9.90</b>	1	<b>-5.17</b>
LEP, Reading -	M	1	1	<b>-8.84</b>	2	0.47	1	1.77
5: Walter	R	3	3	-0.72	3	1.75	3	0.16
SWD, Math+	M	3	4	<b>4.15</b>	4	2.47	3	0.50
6: Sally	R	2	3	0.03	3	-3.50	2	<b>-7.82</b>
SWD, Math -	M	3	2	-3.56	3	-2.11	1	<b>-6.06</b>
7: Yasmin	R	2	2	0.55	3	<b>14.60</b>	4	<b>9.94</b>
SWD, Reading +	M	3	2	-1.13	3	<b>5.51</b>	2	1.06
8: Clive	R	1	2	-4.60	2	-2.41	2	-3.68
SWD, Reading -	M	3	3	<b>-4.14</b>	3	-1.08	2	-0.21

Middle School Students*		2002-03 Spring	2003-04 Spring	Residual	2004-05 Spring	Residual	2005-06 Spring	Residual
LEP, Math+	M	3	3	<b>4.93</b>	4	3.38	3	2.00
10: Paola	R	3	2	<b>-12.75</b>	3	3.73	2	<b>-6.52</b>
LEP, Math -	M	3	3	-1.52	3	-2.42	1	<b>-8.27</b>
11: Hector	R	3	3	<b>5.55</b>	4	<b>6.49</b>	4	0.99
LEP, Reading+	M	4	4	<b>-5.22</b>	4	<b>7.52</b>	3	1.24
12: Carmen	R	2	1	<b>-12.34</b>	1	<b>-11.49</b>	2	-2.35
LEP, Reading -	M	2	1	<b>-15.78</b>	3	3.68	2	0.68
13: Carlos	R	3	3	<b>5.54</b>	3	-3.25	4	<b>7.42</b>
SWD, Math+	M	4	4	4.47	4	3.17	4	<b>10.47</b>
14: William	R	3	3	2.03	3	-2.07	3	-3.45
SWD, Math -	M	3	2	-4.32	2	-1.65	1	<b>-8.01</b>
15: Frida	R	3	2	3.09	3	4.41	3	<b>6.26</b>
SWD, Reading +	M	2	3	<b>6.33</b>	3	1.43	2	-0.09
16: Jamar	R	2	1	<b>-5.95</b>	1	<b>-4.80</b>	1	-4.17
SWD, Reading -	M	2	2	1.14	1	<b>-4.90</b>	1	0.62

Notes: - = negative progress      + = positive progress      **bold** = more than 1 standard deviation from the mean  
 R = reading      M = mathematics      \* Pseudonyms were used to protect student privacy

Interpretation Example: 1: Pilar LEP, Math +1 means “Case #1, Pilar, was a student with limited English proficiency who had positive progress in mathematics each year based on her residual scores.

## Interviews

Interviews were a critical component of our data collection. Instructional Services Division staff members were helpful in creating the questionnaires, translating documents, completing some interviews, and answering questions about services. Most interviews were conducted by E&R Department staff with help from an evaluation intern and three graduate student contractors. To ensure the confidentiality of the participants the students who participated in this study were assigned fictitious names and the students' schools, principals, and teachers are not referred to by name. For each student, we attempted to complete six interviews during spring 2007, for a total of 96 planned interviews:

- the student,
- the student's teachers for the 2003-04, 2004-05, and 2005-06 school years,
- the student's most recent principal, and
- a parent or guardian.

At the elementary level, regular homeroom teachers were targeted. Some ESL or SWD teachers were included, especially if a homeroom teacher was no longer with the system. At the middle school level, the teacher for the subject of interest was targeted for the three years. In four of the sixteen cases, the ESL or SWD teacher became a fourth interviewee. In four cases, the ESL or SWD teacher was substituted because the third teacher was unavailable to be interviewed.

Interview protocols were based on a brainstorming session with Instructional Services Division staff about what they expected might be different about students who had more and less positive patterns of progress over time. Past WCPSS research, general knowledge of national research, and professional experience played a part in factors raised. Notes taken at the meeting were used to generate draft questions that were reviewed by all participants and finalized. As appropriate, all interview protocols addressed questions about: student characteristics, teacher characteristics, instructional strategies, data use, supplemental help, collaboration, family involvement, and strengths and challenges. Principals were asked some questions specific to the case and some more general questions about supports provided to students with multiple academic risks. (See Appendix A for copies of the instruments.) Principals were sent letters informing them about the study and our data needs. Contractors were given a letter of introduction from WCPSS to give to interviewees. Parents were notified by letter (in English or Spanish) that they would be called; the parent interview form was also translated to Spanish.

### *Completion rates*

Overall, 83 of the 96 planned interviews occurred (86.5%). Parents or guardians proved to be the most difficult to reach. Interviewers attempted to reach family members at least three times at different times of day before giving up on the contact. Interviewers also called the school and checked telephone books and other directories for alternative numbers if numbers were disconnected.

**Table 2**  
**Interviews Planned and Completed**

<b>Type of Case</b>	<b>Students</b>	<b>Teachers</b>	<b>Principals</b>	<b>Parents</b>
<b>LEP &amp; FRL</b>	7 of 8	26 of 24	8 of 8	2 of 8
<b>SWD &amp; FRL</b>	7 of 8	24 of 24	7 of 8	2 of 8
<b>Total</b>	14 of 16	50 of 48	15 of 16	4 of 16

Note 1. ALP, ESL or SWD teachers became a fourth interviewee or were substituted as the third interviewee when the classroom teacher was unavailable.  
 2. Two students, both retained in middle school, were no longer attending school regularly. Home contacts were also unsuccessful.

Interviews were taped and notes were taken at each interview. Interviewers tried to complete all interviews for a case, although this was sometimes not possible due to scheduling conflicts. Interviewers reviewed their case notes and then created summaries of them.

### **Other Records Reviewed**

Cumulative records were also checked, along with computer files, to determine students' birthdates, school attendance history, course grades, attendance, suspensions, IPT scores, K-5 assessment scores, and other relevant information important for each case. Principals were notified of the data needed and asked to designate a contact for E&R. Generally, records were reviewed and relevant copies made at the school, although some records were faxed to E&R. Record reviews, interviews, etc., were then used to compile individual case studies.

## FINDINGS

### DISTRICT DEMOGRAPHIC AND ASSESSMENT TRENDS

**Question 1: What proportion of the student population has academic risk factors? How many have multiple academic risk factors? How do these students perform on district and state assessments?**

*Answer: Overall, 43% of WCPSS elementary and 40% of middle school students had one or more academic risk factors as of 2005-06. About 13% of elementary and 11% of middle school students had multiple academic risk factors. Lower percentages of students with academic risk factors show grade level proficiency; even lower percentages of those with multiple academic risk factors score at grade level.*

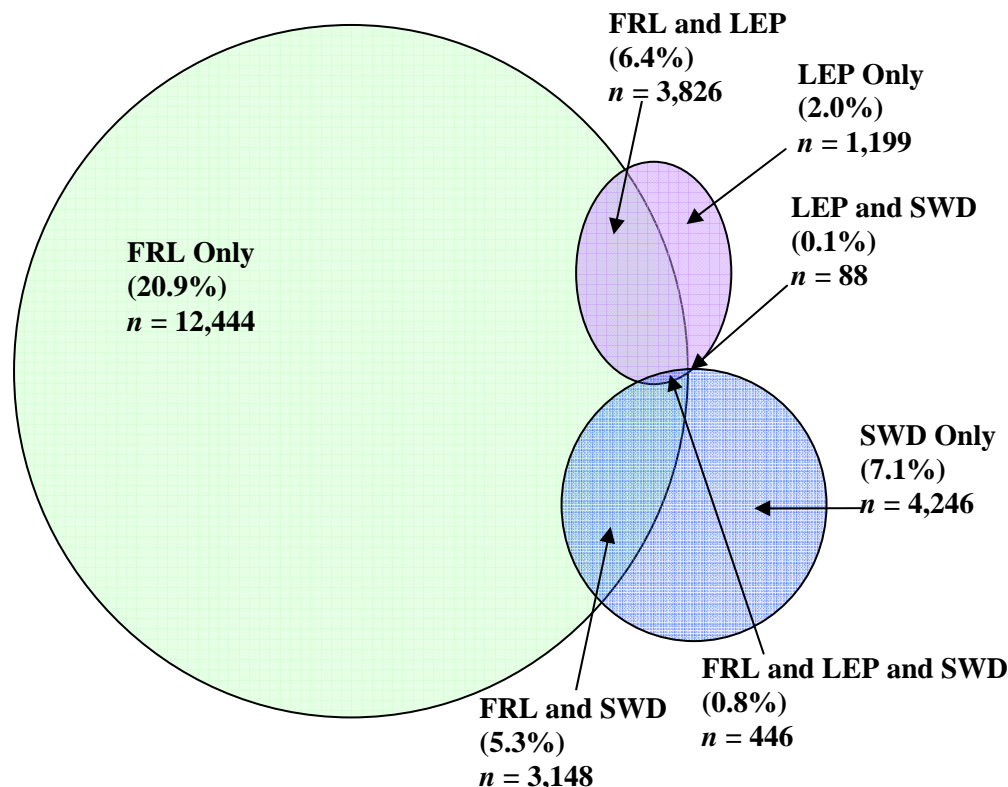
WCPSS has been growing rapidly across grades K-12 in recent years. Although the overall number of LEP students is small relative to the other groups, the percentage of WCPSS students who are LEP increased from 4.5% to 6.6% between 2000-01 and 2005-06. The percentage qualifying for FRL increased from 22.5% to 29.1% during this same period. The percentage of students with disabilities has stayed stable over time (at 14-15%), but, of course, the number has increased. For additional information, see Appendix B and the 2005-06 student outcomes reports produced by WCPSS's E&R Department (Baenen & Holdzkom, 2007a, 2007b).

#### *Elementary Demographic Trends*

During the 2005-06 school year, 43% (25,397) of all 59,442 elementary school students were identified with FRL, SWD, and/or LEP academic risk factors: 33% (19,864) were identified as FRL, followed by 13% (7,928) as SWD, and 9% (5,559) as LEP. Students with more than one of the three characteristics are included more than once in these counts.

Figure 1 illustrates that students who were FRL only were the most common (21%), followed by SWD only (7%). Overall, 12% of elementary students were identified as having two academic risk factors, while just less than 1% had all three of the academic risk factors. The most common combinations of academic risk factors were FRL with LEP and FRL with SWD. LEP students were more likely to be low income than not, while the opposite was true for SWD students. The needs of multiple academic risk students are critical to address, representing 7,508 students in spring 2006. However, it is also important to recognize that these students represented a fairly small percentage (13%) of the elementary population.

**Figure 1**  
**Students with at Least One Academic Risk Factor, Spring 2006, Grades K-5**



N=59,442 Elementary school population  
 N=25,397 Unduplicated elementary school at-academic-risk population.  
 Data Source: 2005-06 WCPSS Student Outcomes reports

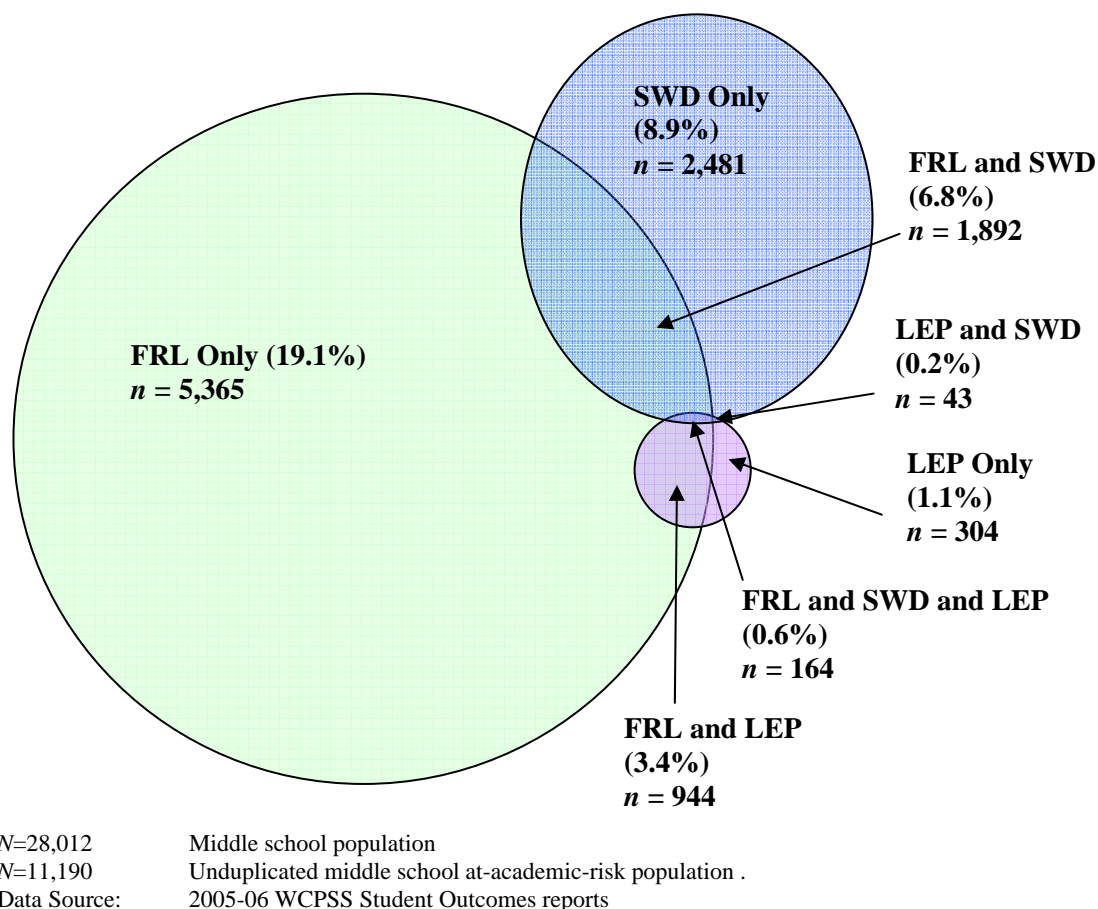
***Middle School Demographic Trends***

In the 2005-06 school year, 11,190 (40%) of all 28,012 middle school students were identified with FRL, SWD, and/or LEP academic risk factors. About one third (30%, or 8,362) were identified as FRL, 16% (4,580) were identified as SWD, and 5% (1,455) were identified as LEP (lower than at elementary). As with the elementary school level, some students were counted in more than one of the three categories.

Figure 2 illustrates that patterns of overlap between the groups at the middle school level are similar to the elementary level. Students who had FRL as their only academic risk factor were most common (19%), with SWD only as the next most common (9%). One tenth of the students were identified as having two academic risk factors, while less than 1% held all three of the characteristics. The most common combinations were FRL with SWD (7%) and FRL with LEP (3%). There were 3,043 students (11% of the middle school population) with multiple academic risks.



**Figure 2**  
**Students with at Least One Academic Risk Factor, Spring 2006, Grades 6-8**



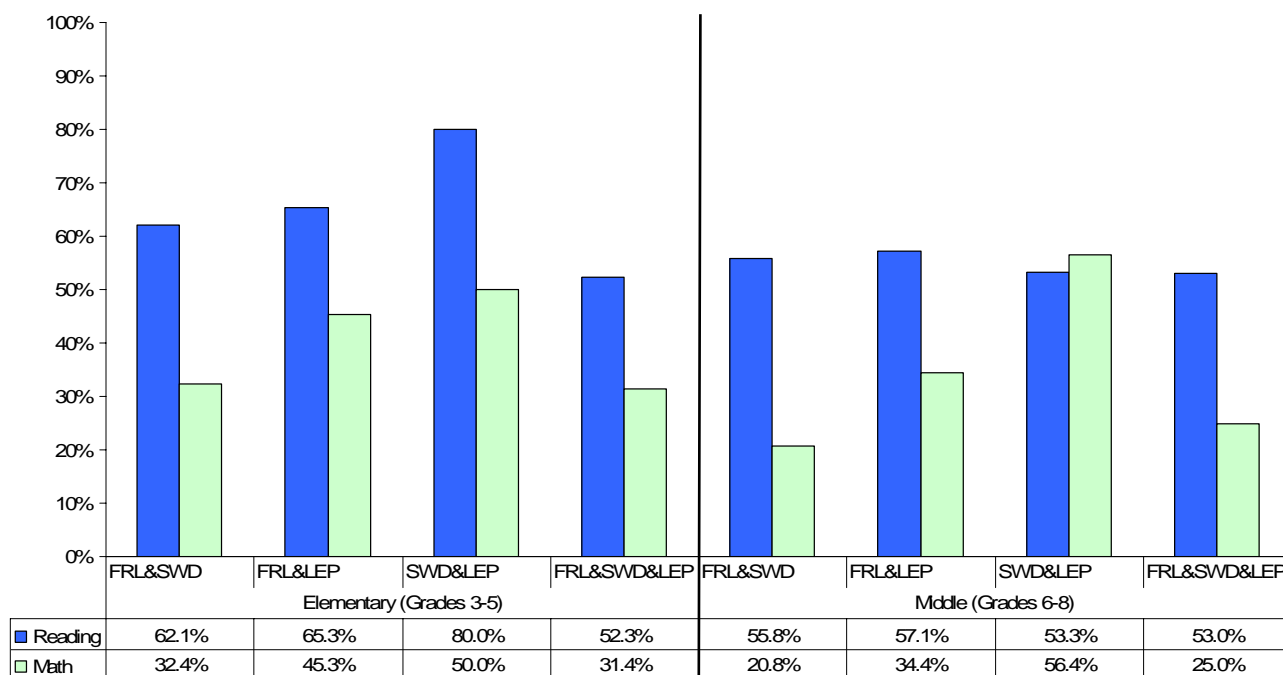
***District Assessment Trends***

Analyses of WCPSS results on K-5 Assessments and the North Carolina End-of-Grade (EOG) tests for students in grades 3-8 revealed that students with academic risk factors generally have lower academic proficiency rates. For example, on the K-2 assessments of reading in 2005-06, 85% of all K-2 students showed proficiency. LEP, SWD, and FRL students showed much lower levels of proficiency, with FRL students having the highest percentage of students at grade level (69%) and LEP the lowest (56%).

EOG results revealed similar trends. Students in subgroups associated with academic risks had lower proficiency rates than the overall population, and students with more than one of these academic risk factors had even lower proficiency rates. An analysis of the spring 2006 EOG multiple-choice tests uncovered facts of interest. (See Figure 3 and Appendix B for more detail.)

- In reading, 90% of elementary and middle school students who took the EOG reading test met or exceeded grade-level standards, compared to lower levels of proficiency for LEP, SWD, and FRL students. FRL students had the highest percentage of students at grade level (around 80%), while LEP students had the lowest (around 65%). The percentage of students who had all three risk factors (FRL/SWD/LEP) able to score at grade-level was considerably lower at just over 50%.
- In mathematics, with new higher cut scores, three fourths of WCPSS elementary and middle school students scored at grade level. The percentage of FRL, SWD, and LEP students scoring at grade level was considerably lower, ranging from a high of 53.2% for elementary FRL students to a low of 37.8% of middle school LEP students. Among those with all three academic risk factors, less than one third scored at grade level.

**Figure 3**  
**Percentages of Multiple Academic Risk Students Proficient on**  
**Reading and Mathematics EOG, Spring 2006**



N= 59,442 Elementary school population  
 n= 25,397 Elementary school at-risk population  
 N=28,012 Middle school population  
 n=11,190 Middle school at-risk population  
 Note: Unduplicated counts  
 Data Source: 2005-06 WCPSS Student Outcomes reports

### Patterns of Progress for Study Cohorts Compared to the District Overall

This study focused on 5<sup>th</sup>- and 8<sup>th</sup>-grade students enrolled in spring 2006 who had multiple academic risk factors. All students had taken the EOG multiple-choice tests in 2003 through 2006 in both reading and mathematics thereby having three effectiveness index residual scores for each subject.

At the 5<sup>th</sup>-grade level, there were 1,914 students who had at least one risk factor (LEP, SWD, or FRL) in 2006. Of these, 1,286 were students for whom we had all six residual scores (reading and mathematics for grades 3, 4, and 5). Of these, 626 had two or more risk factors and mathematics and reading scores for all three years. At grade 8, there were 1,800 students who had at least one risk factor (LEP, SWD, or FRL) in 2006. Of these, we had all six residual scores (reading and mathematics for grades 6, 7, and 8) for 1,152 students. Of these, 477 students with two or more risk factors had mathematics and reading residual scores. The greatest numbers of students were SWD and FRL, followed by LEP and FRL.

**Table 3**  
**Academic Risk Factor Combinations of Multiple-Risk Students Eligible for This Study**

Academic Risk Factors	Grade 5	Grade 8
LEP & FRL	164	71
SWD & FRL	418	382
SWD & LEP	8	5
LEP, SWD, & FRL	36	19
<b>Total</b>	<b>626</b>	<b>477</b>

Note: Students had to have EOG residuals in reading and mathematics for spring 2004 through spring 2006 to be included in the study.

**Question 2: What patterns of progress in achievement are evident for students with multiple academic risk factors based on EOG effectiveness index residuals? How do these patterns compare to the system overall?**

*Answer: Across three residual scores, less than 3% of students had all positive and less than 3% had all negative residuals either among students with multiple academic risks or the overall student population in WCPSS. Most students had a mixture of positive and negative residuals year to year. Noting whether residuals were one standard deviation above or below the mean is helpful.*

The student residual scores generated through the effectiveness index measure whether each student achieves at predicted levels relative to students with similar characteristics (FRL, SWD, and FRL percentage in the school, but not LEP status). Scores for the previous testing are also used as a predictor of student achievement, making the residuals a measure of growth. Student residuals are expressed in scale score points above or below predicted levels. Student residual scores within one standard deviation of the mean are considered to be within the predicted range. One question of interest in this study was whether positive or negative residual patterns over

several years, even within one standard deviation of the mean, might be a useful tool to teachers or the system in targeting students for extra support.

As shown in Table 4, few students (less than 3%) within the multiple-risk group or the system overall had all positive residual scores in both reading and mathematics over three years. Likewise, few students (3% or less) had all negative residual scores across subjects.

When we examined reading and mathematics separately, most students (three fourths or more) had a mixture of positive and negative residuals in reading and mathematics over three years. All positive or all negative residual scores occurred in 7-16% of the cases by subject. Patterns were generally similar for multiple-risk students and WCPSS overall, with some variations.

- For the 5<sup>th</sup>-grade cohort in reading, multiple-risk students were slightly less likely to have all positive residuals and slightly more likely to have all negative residuals than 5<sup>th</sup> graders across the system. In mathematics, multiple-risk students were more likely to have all negative residuals.
- For the 8<sup>th</sup>-grade cohort in reading, multiple-risk students were a little more likely to have all positive or all negative residuals compared to the system overall. In mathematics, multiple-risk students were less likely to have all positive or all negative residuals compared to the system; they were more likely to have a mix.

Comparing multiple-risk students across the two cohorts, reading patterns were stronger at grade 8 than at grade 5. In mathematics, multiple-risk 5<sup>th</sup> graders were more likely to have both all positive and all negative patterns than 8<sup>th</sup> graders.

**Table 4**  
**Patterns in EOG Residual Scores for 5<sup>th</sup> - and 8<sup>th</sup> -Grade Cohorts,**  
**2003 through 2006**

		Grade 5		Grade 8	
		#	%	#	%
<b>All Positive in Reading and Mathematics</b>					
Multiple-risk		15	2.40%	10	2.10%
System		172	2.55%	126	1.88%
<b>All Negative in Reading and Mathematics</b>					
Multiple-risk		19	3.04%	5	1.05%
System		141	2.09%	136	2.03%
<b>Within Reading</b>					
All positive	Multiple-risk	55	8.79%	53	11.11%
	System	686	10.16%	679	10.15%
Mixed	Multiple-risk	474	75.72%	371	77.78%
	System	5429	80.44%	5430	81.14%
All negative	Multiple-risk	97	15.50%	53	11.11%
	System	634	9.39%	583	8.71%
<b>Within Mathematics</b>					
All positive	Multiple-risk	62	9.90%	37	7.76%
	System	688	10.19%	634	9.47%
Mixed	Multiple-risk	487	77.80%	406	85.12%
	System	5367	79.52%	5278	78.87%
All negative	Multiple-risk	77	12.30%	34	7.13%
	System	694	10.28%	780	11.66%

Note: 5<sup>th</sup> - and 8<sup>th</sup>-grade students in 2005-06 with 6 residuals:

- Grade 5: 626 for multiple academic risk factors, 6,749 system
- Grade 8: 477 multiple academic risk factors, 6,692 system

Data Source: WCPSS E&R Department

Interpretation Example: Of all WCPSS 5<sup>th</sup>-grade students taking the multiple-choice EOG test in reading in spring 2003 through 2006, 10% had all positive residual scores, 80% had a mixture of positive and negative residual scores, and 9% had all negative residual scores.

Residuals that are more than one standard deviation from the mean are considered stronger (more positive) or weaker (more negative) than would be predicted statistically. Within the groups of students with multiple academic risks, we found that the majority of students with all positive or negative residuals had at least one residual that was beyond predicted levels (one standard deviation above or below the mean). At the 8<sup>th</sup>-grade level in reading, almost three fourths of the students who had all negative residuals had at least one residual that was at least one standard deviation below the mean.

**Table 5**  
**5<sup>th</sup>- and 8<sup>th</sup>-Grade Residual Patterns for Students with Multiple Academic Risks**

		Reading				Math				
		N	3 Positive	+ 1 SD	3 Negative	- 1 SD	3 Positive	+ 1 SD	3 Negative	- 1 SD
5 <sup>th</sup> Grade	# LEP & FRL	164	11	5	29	20	15	8	19	15
	# SWD & FRL	418	42	26	60	39	43	30	53	35
	# LEP, FRL, & SWD	36	1	1	6	5	4	3	4	2
	# SWD & LEP	8	1		2		0		1	
	<b>Total</b>	626	55	32	97	64	62	41	77	52
	% 1 SD			58.2%		66.0%		66.1%		67.5%
8 <sup>th</sup> Grade	# LEP & FRL	71	7	3	9	7	5	4	6	2
	# SWD & FRL	382	43	28	41	30	29	16	28	15
	# LEP, FRL, & SWD	19	3	1	3	3	3	2	0	0
	# SWD & LEP	5	0	NA	0	NA	0	NA	0	NA
	<b>Total</b>	477	53	32	53	40	37	22	34	17
	% 1 SD			60.4%		73.5%		59.5%		50.0%

Note: SD = Standard Deviation

+1 and -1 SD means students' residuals were one or more SDs above or below the mean, respectively.

% 1SD row = +1SD or -1SD ÷ 3 positive or 3 negative residuals

Interpretation Example: In the 5<sup>th</sup>-grade cohort of 626 students with multiple academic risks, 55 had all positive residuals. Of these 55, 32 (58%) had residual scores at least one standard deviation above the mean for the system, meaning they showed greater than predicted growth on one or more of the three residuals reviewed.

## CASE STUDY FINDINGS

### **Question 3: Do positive and negative patterns in student residual scores over several years relate to particular school/home experiences for students with multiple risks?**

*Answer: Students with positive and negative patterns in EOG residual scores over several years appear to have differences and similarities in school and home experiences. Students' reactions to their circumstances play a critical role in their school success.*

We reviewed case studies using two basic approaches. First, we discussed initial impressions and themes that emerged from our original school-level study. From this, we queried case study results using NVivo qualitative software to review all related comments and look for thematic trends within LEP and SWD cases. Results were compared for positive and negative case trends within the emergent themes. Consistent differences were sometimes found, but a minimum difference of two cases within SWD or LEP groups were necessary before even a slight trend was declared (e.g., two of four SWD cases with positive achievement patterns versus zero of four SWD cases with negative achievement patterns). Second, we examined case summaries more globally or holistically for cases with positive and negative achievement patterns to determine whether those considered positive or negative based on EOG achievement patterns also looked positive or negative based on interview and school record data. For this review, we used the lens of resiliency research to see whether cases with positive achievement patterns had more evidence of resiliency in their personal characteristics or supports than those cases with negative achievement patterns. To protect their privacy, we used pseudonyms for students in our study. Thus, comments included are for actual students, but the names used are not their actual names.

### **Global Case Reviews**

All of the students in our study had academic risk factors, yet some showed stronger achievement than others. The cases with positive achievement patterns in our study were more likely to show signs of resiliency and the types of support that help build resiliency. Resiliency is defined in the research literature as an individual's capacity to overcome difficult circumstances. Research indicates students' personal strengths as well as actions of schools, families, and the community can help build resiliency (McElrath & Smith, 2005). Student records and interviews reflect that students who had positive achievement records were more resilient as a group than students who had negative achievement patterns. These students either had strong motivation to succeed and took on extra challenges with the belief that they could succeed, or they had stronger social competence, problem solving, autonomy, and/or purpose.

In the cases with positive achievement patterns where students' work habits or skills were average to weak, the school, parent/guardian, or both compensated for the student's lack of skills. Carlos, for example, lacked motivation, had behavioral problems, and showed poor work completion—but he received strong support from his family and had a positive environment, which helped foster his growth and achievement. With the cases with negative achievement patterns, students had weaker performance based on grades and formative assessments as well as EOG test scores. The cases with negative achievement patterns were much more likely not to

have support at a school level or from family to compensate for their lack of skills. Carmen, for example, was not receiving sufficient support at the school level or at home to help facilitate academic growth based on teacher reports. Carmen dropped out in 9<sup>th</sup> grade; neither she nor her parents could be reached for an interview.

Among students with positive achievement patterns, we found more examples of **overcoming adversity and learning from it** than among students with negative achievement patterns. Although some students with positive and negative achievement patterns had dysfunctional circumstances in their home lives, students with positive achievement patterns were more likely to have help in overcoming their circumstances and to be aware of their accomplishments. Yasmin, for example, who had positive achievement patterns, was taken out of a very traumatic living situation and placed with a close relative. She was able to pull her grades up after the move and received necessary support, despite having a disability. She was able to distance herself from her traumatic circumstances and was aware of her academic accomplishments.

The students with positive achievement patterns were more likely than those with negative achievement patterns to **demonstrate social competence, establish positive relationships with adults, make connections with mixed peer groups, and care for others**. The majority of the students with negative achievement patterns demonstrated weak social competence. In addition, the students with negative achievement patterns implemented much weaker problem-solving strategies, such as having connections with turnaround people/places who are able to provide students with support, identify and access resources, and learn “how they learn.” Students with more positive achievement patterns had connections to one or more of these problem-solving strategies in their experiences. Students with positive achievement patterns were more likely than students with negative achievement patterns to demonstrate autonomy when they were given opportunities to understand themselves in relation to others, feel good about their capabilities, and distance themselves from negative circumstances. More students with positive achievement patterns had a strong sense of purpose than students with negative achievement patterns, and more students with negative achievement patterns had a weaker sense of purpose than students with positive achievement patterns. (A sense of purpose included having exposure to hobbies/high-interest activities, being able to stay focused on a bright future, and having high expectations and maximum support.)

### **Thematic Case Review**

Thematic review of the qualitative data revealed a number of similarities and differences between the two types of cases. Patterns were found in a variety of combinations, sometimes cases with positive achievement patterns across both LEP and SWD students, sometimes within LEP or SWD cases regardless of positive or negative residuals, as well as a multitude of other combinations. For example, among SWD students at the elementary level, teachers of both students with positive and negative achievement patterns mentioned the importance of developing relationships. While LEP students who said their parents expected them to attend college also expected to attend college, both LEP and SWD students with positive patterns of growth were about as likely to plan to go to college as those with negative patterns of growth. All classroom teachers reported collaborating with the ESL teacher for LEP students and the special education teachers for SWD.



Again, numerous combinations emerged, with differences between LEP and SWD cases with positive and negative achievement patterns. For example, LEP students with positive achievement patterns were more likely to complete homework than those with negative patterns, but this was not the case for SWD students. LEP students had good attendance overall, while SWD students with positive achievement patterns had better attendance than those with negative patterns of achievement. However among both LEP and SWD cases, students with more positive patterns of growth tended to be more motivated about school than students with negative patterns. To help organize data from the 83 in-depth interviews and document analysis, we grouped the themes into student characteristics, school and classroom experiences, and family support and involvement. Each of these levels was further organized around the themes that emerged within each section.

***Student Performance***

The emerging themes associated with student performance included assessment trends, grades and homework, and attendance and conduct. Table 6 displays the LEP and SWD trends for students with positive and negative residuals found within each of these sections. It should be noted that document analysis revealed all eight LEP students started school with relatively limited English ability. By spring 2006, half of the students were still in ESL, but cases with positive achievement patterns had stronger English skills. All eight SWD students in the study were in resource or regular settings and most were considered learning disabled (LD), with two students who had other health impairments (OHI).

**Table 6**  
**Performance of Students with Multiple Academic Risks**

<b>Themes</b>	<b>LEP &amp; FRL Trends</b>	<b>SWD &amp; FRL Trends</b>
<b>Assessment Trends:</b> <i>Cases with positive achievement patterns showed more favorable trends on EOG and other assessments than cases with negative achievement patterns over time.</i>	Among cases with positive achievement patterns, 3 of 4 scored at grade level on EOG consistently, with one student improving over time. One negative case stayed below grade level, with three fluctuating between at and below grade level performance. K-5 assessment patterns also favored cases with positive achievement patterns, but the pattern was less clear-cut.	Two cases with positive achievement patterns scored at grade level on EOG in both reading and mathematics consistently, with two improving over time. One negative case scored below grade level consistently, with 3 fluctuating between at and below grade level performance. K-5 assessment patterns also favored cases with positive achievement patterns, but the pattern was less clear-cut.
<b>Grades:</b> <i>LEP and SWD cases with positive achievement patterns were more likely to have course grades that were on grade level (5 of 8) than students with negative achievement patterns (1 of 8).</i>	<b>Different:</b> Cases with positive achievement patterns (3 of 4) were more likely to have course grades on grade level (3's and 4's at elementary, or A's, B's, or C's at middle) than students with negative residuals (1 of 4 had moderately positive grades).	<b>Different:</b> Half of the cases with positive achievement patterns had grades on grade level (2 of 4) and half did not (2 of 4); students with negative achievement patterns did not have grades on grade level (0 of 4).

Table 6 (Continued)

Themes	LEP & FRL Trends	SWD & FRL Trends
<b>Homework:</b> <i>Patterns of homework completion varied for LEP and SWD students. LEP students with positive achievement patterns were more likely to regularly complete homework than cases with negative achievement patterns, but SWD students with positive and negative achievement patterns were equally likely to complete homework.</i>	<b>Different:</b> In cases with positive achievement patterns (3 of 4) students were more likely to complete homework than in cases with negative achievement patterns (0 of 4).	<b>Same:</b> Homework completion was similar across groups; half of each group completed it.
<b>Attendance:</b> <i>LEP students overall had good attendance. For SWD students, cases with positive achievement patterns had stronger attendance than cases with negative achievement patterns.</i>	<b>Same:</b> Most students (4 of 4 with positive and 3 of 4 with negative achievement patterns) in both groups attended school regularly. Tardies were similar among cases (2 of 4 cases with negative achievement patterns vs. 1 of 4 cases with positive achievement patterns). All were middle school cases.	<b>Different:</b> Positive case students all (4 of 4) had good attendance; only one negative (1 of 4) had strong attendance. One negative case had excessive tardies.
<b>Conduct:</b> <i>Comments about conduct were more consistently favorable for cases with positive than cases with negative achievement patterns, especially among SWD students.</i>	<b>Same:</b> All LEP students (8 of 8) were reported to have good conduct overall.  <b>Different:</b> All (4 of 4) cases with negative achievement patterns had some difficulty with conduct (vs. 2 of 4 cases with positive achievement patterns).	<b>Different:</b> Most of the cases with positive achievement patterns (3 of 4) had good conduct and all of cases with negative achievement patterns (4 of 4) had difficulty with conduct.

## Assessment Trends

*Cases with positive achievement patterns, compared to cases with negative achievement patterns, showed more favorable trends in formative and summative assessment scores over time.*

Among cases with positive achievement patterns, most (5 of 8) showed grade-level scores on the EOGs throughout the three years of the study, while the other three improved to grade-level scores over time. The students' residuals tended to show strong progress in both reading and mathematics. Among cases with negative achievement patterns, three of the eight reached grade level at some point but scored below grade level in 2005-06; the others stayed below grade level over time. Residuals tended to fluctuate over time but remained negative, with only two students showing improving residuals (less negative) over time.

K-5 assessment results revealed that students with positive achievement patterns tended to score higher in the primary grades than students with negative achievement patterns. Most met grade-level standards by grade 2, but a few improved to grade level over time. Only one negative case

scored at grade level in reading, and none scored at grade level in mathematics the year before our study.

For LEP students, initial IPT scores were not available, but we know all had limited English skills because they qualified for LEP status and most (5 of 7) students reported knowing little English when they first started school. By spring 2005-06, the cases with positive achievement patterns showed stronger skills in English, especially in reading and speaking. Listening scores also suggested stronger skills for cases with positive achievement patterns, but both groups scored higher in this area (advanced for the negative and superior for the cases with positive achievement patterns).

### ***Grades and Homework***

*LEP and SWD students with positive residuals were more likely to have grades on grade level than students with negative residuals. Among LEP students, cases with positive achievement patterns were more likely to regularly complete homework than cases with negative achievement patterns. For SWD cases, cases with positive and cases with negative achievement patterns were equally likely to complete homework.*

**LEP:** *Students with positive residuals were more likely to have grades on grade level than students with negative residuals. In most cases with positive achievement patterns, student grades were on grade level (3's and 4's for elementary and A's and B's for middle school). In one positive case, the student's grades were inconsistent earning A's, B's, C's, D's, and F's (F's earned in science). Among cases with negative achievement patterns, most students' grades were not on grade level (1's and 2's for elementary and D's and F's for middle school). In one case with a negative achievement pattern, the student earned primarily C's, and D's in mathematics, reading, and science and A's and B's in non-core classes.*

*In cases with positive achievement patterns, students were more likely to regularly complete homework as compared to cases with negative achievement patterns. In most LEP cases with positive achievement patterns all of the teachers reported that students had their homework completed regularly. Comments from the teachers included words such as "usually," "always," or "turned in daily." In one case with a positive achievement pattern, the student even completed extra homework to stay current in class. Two of the cases with positive achievement patterns were elementary students, and one was in middle school. In one of the positive growth cases, the student was inconsistent with homework completion, with one teacher reporting he completed it and the other saying he did not.*

All of the cases with negative achievement patterns reported some difficulty completing homework. In one of the cases with a negative achievement pattern it was indicated that homework was missing or not turned in to the teacher. For the other cases with negative achievement patterns, there were inconsistencies regarding homework completion for each student. One case had two conflicting references to homework completion: "student tried to complete [homework] but wasn't on grade level" and "completed to the best of

ability.” From this we are unable to determine whether homework was completed. In one case with a negative achievement pattern, it was reported that the student attempted to do homework and was enrolled in an after-school program where he was able to do homework.

**SWD:** *In cases with positive achievement patterns, students were more likely to have grades on grade level than cases with negative achievement patterns.* In two of the four cases with positive achievement patterns students’ grades were on grade level (3’s for elementary and A’s and B’s for middle school). The other two cases with positive achievement patterns were not on grade level (2’s for elementary and C, D, F for middle school). The student who had grades of C, D, F in 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grades, respectively, had EOG level scores of Level IV each year. This disconnect could be due to his unwillingness to do homework. Several teachers commented that the student knew the material but just would not do his work. Among cases with negative achievement patterns, all four students’ grades were not on grade level (1’s and 2’s for elementary and D’s and F’s for middle school).

*With regard to homework completion, there were no differences between the cases with positive and cases with negative achievement patterns;* half of the cases with positive achievement patterns and half of the cases with negative achievement patterns were reported to have completed homework, whereas half reportedly did not. On another interesting note, all of the students who were reported to not have completed their homework were mathematics cases (with positive or negative growth), whereas all of the students who completed homework were reading cases (positive or negative). The following are main themes related to whether students completed their homework, where they did their homework, and what kind of help they received:

- Of all eight SWD cases, four were reported to rarely if ever do their homework, one had no comments about homework, and the other three always did their homework. Comments seemed to be at the extremes—either the student hardly ever did his/her homework or always did homework.
- Two of the cases with positive achievement patterns, plus one case with a negative achievement pattern, students reportedly did homework in Curriculum Assistance, (a special education class that provides support with classwork and homework). The other case (with a positive achievement pattern) that completed homework had strong support at home and completed homework right after school. Those cases with positive achievement patterns that did not complete homework reported either that they did not understand how to do the homework or that they did not want to do it.
- The two reading SWD cases with a positive achievement pattern both had support at home, one from an older sister. Of the four cases with negative achievement patterns, only one of the four mentioned home support.
- Of the four cases with negative achievement patterns, two did not do homework, one case had no specific references to homework, and the other reportedly always completed homework. As in the cases with positive achievement patterns, the one who completed homework did it in Curriculum Assistance (CA).

### *Attendance and Conduct*

*Attendance and conduct were generally stronger for cases with positive than cases with negative achievement patterns. All LEP students reportedly had good overall attendance, although records indicate two LEP cases with positive achievement patterns had high absences. Tardiness was an issue for most middle school students. Among SWD students, the cases with positive achievement patterns all had good attendance and three of the four cases with negative achievement patterns had attendance issues. All eight LEP students were reported to have good conduct. However, all four cases with negative achievement patterns and two of the cases with positive achievement patterns reported some difficulty with conduct. Among SWD students, most of the cases with positive achievement patterns had mostly positive comments about conduct and all of the cases with negative achievement patterns had negative comments.*

**LEP:** *Teachers reported attendance for LEP students as strong regardless of their achievement patterns, although tardiness was an issue for three of four middle school students. All four of the cases with positive achievement patterns and three of the four cases with negative achievement patterns had positive comments reported by teachers regarding attendance. Comments for the cases with positive achievement patterns include one teacher who recalled Francisco’s determination to come to school even though he was facing health concerns. Another teacher, one of Mariana’s, said that she had “great attendance, and would come to school even when she didn’t feel well.” These students were highly motivated to attend class.*

Three of the eight LEP cases were reported by their teachers as being tardy frequently; all were in middle school (one positive and two cases with negative achievement patterns). There were no reported occurrences of tardiness with elementary LEP students. Attendance records confirm good attendance for most LEP students; two cases with positive achievement patterns had high absences: one student was absent more than 10 days all three years, and one student was absent more than 10 days two out of the three years.

<p>Pilar, who had a positive achievement pattern, was described as personable and a joy to teach.</p>
-------------------------------------------------------------------------------------------------------

Most of the cases with negative achievement patterns also had positive attendance reported by their teachers. Of all the LEP cases, only Carmen’s attendance was referred to as “poor” by one of her teachers. Carmen’s teacher for one year claimed that she “either came late, or didn’t come at all,” and that most of her absences were unexcused. (Note: This was the same year that Carmen was held back.) Teachers for the following two years reported Carmen’s attendance as “good,” and “normal.”

Although in all of the LEP cases with positive achievement patterns, students had positive comments regarding their conduct, fighting was an issue for two of these students. One student in particular was reported to have good conduct within the classroom but to have problems with fighting outside the classroom.

While all of the students with negative achievement patterns were described as having good conduct, in each case there was also some reference to problems with conduct. Teachers reported a multitude of conduct problems, which varied widely in seriousness by case. Reported conduct problems included talking in class, being withdrawn and not participating in class, being distracted in individual and large-group work, lacking motivation, being easily distracted, and distracting others.

His ALP reading teacher explained that in 3<sup>rd</sup> grade, Bernardo, who had a negative achievement pattern, had behavior issues due to immaturity but that by 5<sup>th</sup> grade, he had no behavioral problems. His 2004-05 teacher added that Bernardo got along with everyone and was a peacemaker who was considered a motivator.

**SWD:** According to teacher reports, attendance was stronger for positive SWD cases than cases with negative achievement patterns; attendance records confirm this pattern. The cases with positive achievement patterns all had good attendance, while most of the cases with negative achievement patterns had attendance issues. All four cases with positive achievement patterns had good attendance, with one of them noted as even coming to school while sick.

Of the cases with negative achievement patterns, problems mentioned for three cases included excessive tardiness, absences if the student missed the bus, and decreasing attendance with progressive years. In the other case with a negative achievement pattern, the student had excellent attendance, even riding his bike five miles to school when he was suspended from riding the bus. The one who had excellent attendance was described by his teachers as motivated and making good academic progress but also very behind academically; in 2003-04, he was identified as LD and as having a lower-than-average IQ.

As far as conduct, most of the cases with positive achievement patterns had mostly positive comments about conduct; all of the cases with negative achievement patterns had negative comments. Three of the four cases with positive achievement patterns had very positive comments about their conduct in class, and comments regarding the other positive case tended to focus on his lack of motivation (but nothing positive or negative about his conduct). For example, Yasmin's teachers said she worked hard; was very studious, engaged in class and motivated; loved projects; and turned her work in on time. Frida's teachers indicated she was very sweet, worked very hard in class, and did not have any behavioral problems. The few negative comments about their conduct regarded incomplete homework, frustration with their ability to understand, and trouble focusing and staying on task.

Walter, who had a positive achievement pattern, was described as very bright, pleasant and respectful, motivated, engaged and participated in class.

All four cases with negative achievement patterns had multiple negative comments about student conduct, and only one case had some positive comments. In one case, Sally, teachers reported that she had "an attitude," was argumentative about scoring, would act

out for attention in class, and did little work outside of class. Negative comments in the other cases included: easily distracted, occasional behavior problems, not motivated to learn, not involved in class, and instigated negative behavior with others. Clive's conduct seemed to improve from 3<sup>rd</sup> to 5<sup>th</sup> grade. His 3<sup>rd</sup>-grade teacher reported that Clive was sometimes disruptive in class and followed the wrong crowd. His 5<sup>th</sup>-grade teacher, however, said he was "extremely charming, behavior was good in school, very strong in math and could explain math to fellow classmates and the whole class."

William, who had negative achievement patterns, was described as not involved much in class, causing trouble in class from time to time, called down a lot for misbehavior, and devious at times.

### *Student Characteristics and Aspirations*

The emerging themes associated with student characteristics and aspirations included relationships, motivation, and interests and aspirations. Table 7 displays the LEP and SWD trends for students with positive and negative residuals found within each of these sections.

**Table 7**  
**Characteristics and Aspirations of Students with Multiple Academic Risks**

<b>Themes</b>	<b>LEP &amp; FRL Trends</b>	<b>SWD &amp; FRL Trends</b>
<p><b>Relationships:</b> For LEP cases and SWD cases at the elementary level, teachers associated with both cases with positive and cases with negative achievement patterns mentioned the importance of developing relationships. Middle school teachers mentioned this less often.</p>	<p><b>Same:</b> Teachers mentioned the importance of building relationships with children equally for both groups (2 of 4 positive and 2 of 4 negative). LEP students in both groups reported that teachers cared about them as students (3 of 4 positive and 2 of 3 cases with negative achievement patterns).</p>	<p><b>Same:</b> Teachers mentioned the importance of building relationships with children equally for both groups. SWD students in both groups thought teachers cared about them (all 7 interviewed).  <b>Different:</b> Building relationships was mentioned more often at elementary (13 times) than middle school (3 times).</p>
<p><b>Motivation:</b> Among both LEP and SWD student groups, students with positive achievement patterns (6 of 8) tended to be more motivated about school than cases with negative achievement patterns (3 of 8).</p>	<p><b>Different:</b> Among cases with positive achievement patterns (3 of 4) students were more likely to be consistently motivated than in cases with negative achievement patterns (2 of 4, both had reference to struggle to remain motivated). The other two cases with negative achievement patterns were referred to as unmotivated.</p>	<p><b>Different:</b> More cases with positive achievement patterns (3 of 4) were described as motivated than the cases with negative achievement patterns (1 of 4).</p>
<p><b>Interests:</b> Among both LEP and SWD groups, students with positive and negative achievement patterns were equally likely to report that they planned to attend college. Among LEP and SWD cases students with positive achievement patterns were more likely to enjoy reading than students with negative achievement patterns. In LEP cases with positive achievement patterns, students were also more involved in sports and academic activities and more likely to be interested in music activities.</p>	<p><b>Same:</b> In most of the (6 of 8) LEP cases, the students stated that they plan to attend college.  <b>Different:</b> In LEP cases with positive achievement patterns, students reported enjoying reading and/or reading regularly, as well as participating in sports and other academic activities, more often than in cases with negative achievement patterns. They also reported participating in, or wanting to participate in, musical activities more often.</p>	<p><b>Same:</b> As far as students' future goals and college plans, in both cases with positive and cases with negative achievement patterns students reported they planned to go to college.  <b>Different:</b> In most cases with positive achievement patterns students said they enjoyed reading while most in cases with negative achievement patterns said they did not.</p>



## ***Relationships***

*For LEP cases and SWD cases at the elementary level, teachers associated with both positive- and negative-growth students mentioned the importance of developing relationships. Among SWD cases, references to relationships were more common at the elementary level than at the middle school level (13 references vs. three references, respectively). LEP students in both cases with positive and cases with negative achievement patterns reported that teachers cared about them as students.*

**LEP:** *Some teachers of students with both positive- and negative-achievement patterns mentioned the importance of developing relationships. Moreover, in both cases with positive and cases with negative achievement patterns, most students reported that teachers cared about them as students (three of four positive and two of three cases with negative achievement patterns). It is worth noting that the one case for which establishing relationships with students was mentioned as a challenge and the one case in which the student reported that the teachers did not care were both cases with negative achievement patterns. However, the two cases where students reported being in fights with other students were both cases with positive achievement patterns.*

In half of the LEP cases (two positive and two negative) some teachers mentioned the importance of building relationships with students. In Francisco's case, a student with positive residuals, the teacher reported making a home visit (he was having health concerns). One principal associated with a negative case reported that developing relationships with students was a challenge.

<p>Paola, a student with negative residuals, stated that her middle school teachers were willing to do whatever was possible so that Paola would not fail.</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------

Among the cases with positive achievement patterns, most students reported that they believed teachers cared about them as a student, while two said their teachers cared about them as a person as well. One student reported that teachers may have cared but that she would rarely turn to them. Two of the students with positive achievement patterns reported difficulty getting along with other students and getting into fights. The other two reported consistently getting along with other students.

Half of the students with negative achievement patterns also reported that they believed teachers cared about them as a person and as a student; one student reported that teachers did not care, and one student who had dropped out was not interviewed. Most of the students with negative residuals were reported as consistently getting along with other students (the fourth student dropped out of school and was not interviewed).

**SWD:** *At the elementary level, teachers of both positive- and negative-growth students mentioned the importance of developing relationships. References to relationships were more common at the elementary than at the middle school level. Relationships that were mentioned were between teacher and student, teacher and teacher, teacher and parent, and student and student.*

The most important relationship stressed was between teacher and student. When teachers were asked about their strengths in working with at-risk students, building relationships with students was mentioned. In one case with a positive achievement pattern, a teacher said that one of the most important aspects of working with students with disabilities is to develop a good relationship. One interesting note is that there are more references to relationships at the elementary school level than at the middle school level (13 times vs. 3). This could be due to the nature of the age group and middle school teachers' instilling more independence in their students. It could also relate to the fact that middle school teachers deal with more students per day for shorter periods of time than do elementary school teachers.

One student was not attending school and thus not available to be interviewed. When the other seven SWD students were asked if they felt their teachers cared about them as a person and student, all seven SWD students said they did feel teachers cared. Also, all seven said they believed they got along well with other students and their teachers. However, in two of the four cases with positive achievement patterns and two of the three cases with negative achievement patterns students admitted they got into fights. In the remaining case with a negative achievement pattern, in which the student was no longer going to school, the principal reported that Jamar had a tough-guy exterior, "there was no one for him to commiserate with." Interestingly, the teacher of one of the cases with positive achievement patterns that got in trouble for fighting said she felt the student was justified. This student also mentioned that "everybody in my elementary school was trying to start a fight with me." One other question that was asked of these students with regard to relationships was whether there was an adult at school they felt comfortable going to if they had problems. In two of the positive and two of the cases with negative achievement patterns, the student said they had an adult they felt comfortable with. One item of interest is that the students with positive achievement patterns who said they had an adult were the two who had not gotten into any fights. (For references to teacher-and-teacher relationships, see Collaboration section. For references to teacher-and-parent relationships, see the Parent Involvement at School section).

"Let them know you care about them and believe in them then they will work hard and try." – elementary school teacher of one study participant with positive achievement patterns

## ***Motivation***

*Among both LEP and SWD student groups, the students with more positive patterns of growth tended to be more motivated about school than the students with negative patterns.*

**LEP:** While in most of the cases with positive achievement patterns students were described as motivated, in cases with negative achievement patterns students were more inconsistent in terms of motivation. Most students with positive achievement patterns were described by their teachers as motivated learners. Only one student with a positive residual pattern, Hector, was described as having motivation issues. One teacher stated that he was “not a very motivated learner,” and another said that his “motivation to learn was questionable.”

A 5<sup>th</sup>-grade teacher described Pilar, who had a positive achievement pattern, “as motivated and engaged in class.”

For students with negative residuals, motivation was inconsistent. Although two students were referred to as motivated, in both cases there was some reference to a struggle to remain motivated. For example, Paola’s 6<sup>th</sup>-grade teacher said that Paola was motivated, and her 7<sup>th</sup>-grade teacher stated that “[Paola] did not initially seem motivated, but by midyear her motivation improved.” In two cases with negative achievement patterns, Bernardo and Carmen, were also referred to as unmotivated. In Bernardo’s case this was reported by two of his teachers; one noted that Bernardo “was often not engaged in class” and that his lack of motivation was a problem.” One of Carmen’s teachers said that she “had zero motivation to learn,” while another stated, “on a scale of 1-10, [Carmen’s] motivation was a 2.”

**SWD:** Teachers described most of the positive-case students as motivated. For example, one of Yasmin’s teachers said Yasmin “was engaged in class and motivated, always completed homework,” while others added that she participated in class, was very polite, on time, and prepared.” Carlos, on the other hand, “wasn’t as motivated as his siblings,” according to his 2003-04 teacher.

Of the cases with negative achievement patterns, only one student was described as being motivated. This student, Clive, was described by his 3<sup>rd</sup>-grade teacher as “not very motivated to learn, easily distracted, and more interested in sports than classwork.” But teachers for his subsequent two years described Clive as a hard-working student who wanted to do his best. They both mentioned that, while he was very motivated, Clive would become frustrated when he did not understand something. Of the other three cases with negative achievement patterns, Sally herself said that “motivation was still a bit of a problem.” However, none of her teachers specifically mentioned that it was a problem. In the remaining two cases, teachers reported the student was motivated “if the lesson was interesting to him/her.”

Frida, who had a positive achievement pattern in reading, showed improvement in her motivation. “Frida struggled with motivation and did not know how to study. After the 1<sup>st</sup> quarter Frida became motivated and wanted to learn.” – Frida’s 2005-06 Supplemental Teacher.

### *Aspirations and Interests*

*Among both LEP and SWD cases, students with positive and negative residuals were equally likely to report that they plan to attend college. LEP and SWD students with positive residuals reported enjoying reading and/or reading regularly. LEP students with positive residuals also reported, more often than did students with negative residuals, participating in sports, participating or desire to participate in musical activities, and participating in other academic activities.*

**LEP:** In most of the LEP cases (six of eight), the student stated that she/he planned to attend college. In the remaining two cases, one student said that he intended to attend vocational school or join the military; however, this student also suggested he may want to pursue engineering or architecture, which would require college or university. In the final case, the student who had a negative achievement pattern, dropped out of school and could not be reached for an interview. One notable finding was that students who stated that their parents expected them to go to college also expected to attend college. The two students who were uncertain of their parents' expectations regarding college both were also uncertain of their plans to attend college.

In all of the LEP cases with positive achievement patterns, students said they enjoyed reading; two reported reading regularly. One of the cases with a positive achievement pattern, Pilar reads several chapters for 20 minutes every night before bed, while Francisco reads non-academic material (comic books) in class. In most of the cases with positive achievement patterns (three of four), students reported that they participated in sports (e.g., soccer and softball). Although the participation in musical activities was not as pronounced, it should be noted that the only students who mentioned participating in music lessons or the desire to join the band or choir were cases with positive achievement patterns. As with mentions of musical interest, participation in other academic activities was mentioned only in cases with positive achievement patterns: two students mentioned visiting the zoo, museums, or aquariums; one student mentioned membership in the Junior Honor Society. Another student with positive residuals did not report other academic activities but did mention participating in weekly activities at his church.

Most (three of four) students with negative residuals reported that they did not enjoy reading; the fourth student had dropped out and was not interviewed. Only in one of

Hector, who had a positive achievement pattern, has been taking music lessons at school for three years, and also is involved in sports.

One student, who exhibited negative achievement patterns, also reported reading regularly in the 4<sup>th</sup> grade; he stated that he would read comics, fiction, military, and nonfiction material for a total of about 20-30 minutes per day. However, he said that he does not enjoy reading now and reads only about 30 minutes per week.

the cases with negative achievement patterns did the student report participating in sports. In none of these cases did students report an interest or participation in musical activities or other academic activities.

**SWD:** In terms of future goals, in both cases with positive and cases with negative achievement patterns students reported that they planned to go to college; cases with negative achievement patterns were more likely to see college as a way to play sports. The types of professions and majors mentioned varied across the cases. Among the cases with positive achievement patterns, two students reported that they plan to attend college and believe their parents expect them to go to college, one said he wanted some technical training, and one said she was not sure. When asked what they thought they would be doing in ten years, most of the cases with positive achievement patterns mentioned professional jobs (e.g., legal or medical professionals), while one planned to work in construction. Of the cases with negative achievement patterns, two of three students planned to attend college “to play college sports,” adding that they planned to play professional sports (either basketball or football); the other planned to be a teacher (mentioning that it would help her learn more about some subjects of interest). There were no noticeable trends among the SWD cases in terms of what they believed their parents expected of them versus their own expectation.

In most (three of four) of the cases with positive achievement patterns, but only one case with a negative achievement pattern, the student said that he/she enjoyed reading. The student with negative residuals said he likes reading, but has read less in the past three years. He also showed minimal interest in his education and wants to go to college only so that he can play college sports.

Among SWD cases, noted interests beyond reading were mostly non-academic: video games, sports, movies, dancing, cooking, and church activities. There were no mentions of involvement in any school activities or community groups, with the exception of one student with positive residuals, who participated in church activities. Video games (mentioned in two cases with positive achievement patterns and two cases with negative achievement patterns) and sports (two positive and two negative) were the most commonly listed interests. It should be noted that one student with negative residuals, Sally, did not report whether she participated in any activities at or after school; another student with negative residuals, Jamar, was not interviewed, but his principal said he was suspected of being in a gang.

## School and Classroom Experiences

The themes that emerged associated with school and classroom experiences included instructional practices, support strategies, collaboration, data use, and expectations. Table 8 displays trends for students with positive and negative residuals found within each of these sections.

**Table 8**  
**School and Classroom Experiences of Students with Multiple Academic Risks**

Themes	LEP & FRL Trends	SWD & FRL Trends
<p><b>Instructional Practices:</b> <i>While a variety of strategies were mentioned, trends tended to vary by subgroup. Providing structure was mentioned slightly more often in cases with positive than cases with negative achievement patterns for both LEP and SWD students.</i></p>	<p><b>Same:</b> Teachers associated with cases with positive and cases with negative achievement patterns reported using small groups, manipulatives, and differentiation.</p> <p><b>Different:</b> Teachers associated with cases with positive achievement patterns more often reported the use of flexible grouping, providing structure, positive reinforcement, homework, and using motivational strategies.</p>	<p><b>Same:</b> Teachers from cases with positive and cases with negative achievement patterns mentioned collaborating about ways to motivate students.</p> <p><b>Different:</b> The word differentiation was mentioned less often in cases with positive than cases with negative achievement patterns (1 vs. 3), but cases with positive achievement patterns were more likely to mention differentiating by modifying assignments or breaking them down into smaller assignments (4 vs. 0). Structure was mentioned in half the cases with positive achievement patterns and none of the cases with negative achievement patterns.</p>
<p><b>Support Strategies:</b> <i>LEP cases with negative achievement patterns were more likely to be receiving multiple forms of support than cases with positive achievement patterns, but only Student Support Team discussions were different among SWD cases.</i></p>	<p><b>Different:</b> Students with negative residuals were more likely to be receiving multiple forms of support; 3 of 4 negative achievement pattern cases received 3 or more supports.</p> <p>NOTE: Students were also showing lower test performance, so this may be appropriate.</p>	<p><b>Same:</b> All students received Cross Categorical Resource or Curriculum Assistance support (SWD). SST was mentioned for two cases with negative achievement patterns. Additional services were similar for cases with positive and cases with negative achievement patterns (3 of 8 cases, 1 positive and 2 negative).</p>

Table 8 continued

Themes	LEP & FRL Trends	SWD & FRL Trends
<b>Collaboration:</b> <i>In both LEP and SWD cases, classroom teachers reported collaborating with specialty teachers. Other collaboration varied by school for both LEP cases with positive and negative achievement patterns.</i>	<b>Same:</b> All 8 LEP cases mentioned collaborating with the ESL teacher. In six of the eight cases teachers collaborated within grade level or team meetings (3 positive and 3 negative). Cases with positive and cases with negative achievement patterns had mixed reports about the level of collaboration in terms of principal and schoolwide involvement. The amount of collaboration varied by school.	<b>Same:</b> Both cases with positive and cases with negative achievement patterns reported that collaboration took place between classroom teachers and specialty teachers.
<b>Data Use:</b> <i>Among both LEP and SWD cases, both cases with negative and positive achievement patterns reported using data to not only assess students but also to adjust future instruction.</i>	<b>Same:</b> Cases with positive and cases with negative achievement patterns were equally likely to use formative assessments (all 4 of the middle school cases, positive and negative, reported using Blue Diamond <sup>1</sup> ).  <b>Different:</b> Teachers associated with cases with positive achievement patterns, more than cases with negative achievement patterns, were more likely to report using summative assessments (i.e. EOG data).	<b>Same:</b> All teachers talked about using data to inform instruction.  <b>Different:</b> Only one teacher from a case with a positive achievement pattern mentioned using summative data.
<b>Expectations of Student:</b> <i>For LEP cases there was no difference in the cases with positive and cases with negative achievement patterns in terms of principal or teacher expectations. However, for SWD cases there were more references to high expectations among the cases with positive achievement patterns than there were among the negative.</i>	<b>Same:</b> Teachers associated with three cases included their expectations for students among their strengths in working with at risk students. In two of these three cases (one positive and one negative) the teachers characterized this as having high expectations for all students while the third (a case with a negative achievement pattern) the teacher said that she had different expectations for different students depending on their backgrounds and experiences.	<b>Different:</b> More teachers of cases with positive achievement patterns than negative reported having high expectations.

<sup>1</sup> Blue Diamond Instructional Management Suite is a Web-based application that WCPSS uses to store assessment items related to North Carolina Standard Course of Study, generate tests, and provide reports on performance (see [www.buildatest.com](http://www.buildatest.com)).

### *Instructional Practices*

*Teachers associated with positive and negative LEP and SWD cases mentioned numerous effective instructional strategies, including use of small groups, flexible grouping, peer teaching, differentiation, working one-on-one, manipulatives, using positive praise, and homework. Providing structure was the only strategy mentioned more often for cases with positive than cases with negative achievement patterns. Otherwise, trends varied by the instructional strategy reported and group. For LEP cases, teachers associated with cases with positive achievement patterns were more likely to mention motivating students as one of their strengths, but for SWD cases, teachers from cases with positive and cases with negative achievement patterns were equally likely to mention collaboration around ways to motivate students.*

**LEP:** *Among LEP cases, there was no difference between cases with positive and cases with negative achievement patterns in term of use of small groups, manipulatives, and differentiation; however, cases with positive achievement patterns more often reported the use of flexible grouping, positive reinforcement, homework, and motivation.*

Both students and teachers reported that working in small groups was beneficial to student learning, which is supported by national research. Seven of the eight LEP students reported that small-group work helped them learn (Carmen was not interviewed, but her teacher reported she also liked group work). Although no difference was noted between cases with positive and cases with negative achievement patterns, all three cases (two positive and one negative) where manipulatives were used, were at the elementary level. The use of differentiation was equally split between cases with positive and cases with negative achievement patterns, with four of the eight LEP cases reporting use of this strategy.

Mariana, who had a positive achievement pattern, stated that working in groups helped her out and she enjoyed it. However, she did not enjoy group work if she was grouped with students who were not interested in the material.

Three of four positive and three of four cases with negative achievement patterns mentioned flexible grouping. Two of the cases with negative achievement patterns were inconsistent across years. In both of these cases, one teacher mentioned using flexible grouping while another teacher associated with the same case specifically mentioned not using flexible grouping. In two of the eight LEP cases, both teachers were associated with cases with positive achievement patterns and both mentioned that providing students with structure was one of their strengths. In two of the eight LEP cases teachers stated that teachers' positive attention and praise successfully encouraged student learning.

Although there was no difference between cases with positive and cases with negative achievement patterns in terms of student participation in a homework program, teachers associated with cases with positive achievement patterns more often reported using homework as an instructional strategy. In three of the four cases with positive achievement patterns, teachers reported

Mariana stated that she liked to do homework at school where she could ask questions, but she received no help from anyone at home with it.



successfully using homework as an instructional strategy. Only one of the cases with a negative achievement pattern mentioned homework, and that was in terms of the challenge to ensure that students did their homework. Three students (two with positive and one with negative residuals) were involved in a school program that helped them complete their homework.

Teachers associated with cases with positive achievement patterns were more likely to mention their own ability to motivate students as a strength. Two of four cases with positive achievement patterns mentioned motivation as a strength, and another gave examples of how she/he motivates students; one mentioned motivation as a challenge. Among cases with negative achievement patterns, two of four teachers mentioned motivation as a challenge (one of whom also mentioned motivation as a personal strength); one did not mention motivation; and the fourth stated that “students need motivation.”

Three teachers said that motivating their students was a strength they believed they possessed. Two of these were teachers of elementary cases with positive achievement patterns, and the other was a teacher of a middle school case with a negative achievement pattern. One of Francisco’s teachers and one of Paola’s teachers said that increasing motivation was an essential element in promoting student success. Both of these students were described as motivated; however, one showed more positive achievement growth than the other. Francisco’s (a student with positive residuals) teacher indicated that she/he had the ability to find out what specifically motivates each student and creates interesting ways to motivate students. Carmen’s (a student with negative residuals) teacher stated that she “had the ability to get students motivated when they are able to be reached.”

Three teachers stated that motivation was a challenge that they faced in working with at-risk students. One teacher (associated with a case with a negative achievement pattern) referred to motivation as the “greatest challenge in working with [students].” Another teacher (associated with a case with a positive achievement pattern) found it challenging to motivate students, especially when they are older than their classmates.

Three teachers (two associated with cases with positive achievement patterns and one with a negative achievement pattern) and one principal (associated with a case with a negative achievement pattern) listed strategies that increased the motivation of their students. Hector’s (a student with positive residuals) teacher noticed that praise was “an effective motivator” and that “positive reinforcement was extremely influential in student motivation and success.” In another case with a positive achievement pattern, one of Francisco’s teachers indicated that she used stars to improve motivation and used a program called Accelerated Reader, which utilizes leveled books and in which students are encouraged to score at or above their reading level. This teacher also used play money and class stores to motivate students. Students were provided with a checkbook and had to pay the teacher for bad behavior. The teacher stated that this was a great exercise to “adjust behavior and develop leadership abilities.” Bernardo’s (a student with negative residuals) teacher indicated that using the student’s strengths and talents to help

them see value in their abilities increased motivation. Paola's (a student with negative residuals) principal stated that her school had a guided study program in place that was designed to motivate students. Paola was described by her teachers as motivated.

**SWD:** *Effective strategies that were mentioned by teachers in both cases with positive and negative achievement patterns included use of small groups, flexible grouping, peer teaching, differentiation, working one-on-one, manipulatives, and praise. Teachers from both groups mentioned collaborating about ways to motivate students. The word "differentiation" was mentioned less often in cases with positive than cases with negative achievement patterns (one vs. three), but cases with positive achievement patterns were more likely to mention differentiating by modifying assignments or breaking them down into smaller assignments (four vs. zero). "Structure" was mentioned in half the cases with positive achievement patterns and none of the cases with negative achievement patterns.*

The most frequently mentioned strategy for working with at-risk students was the use of small groups (mentioned in six—three positive and three negative—of the eight cases). Groups were used in both reading and mathematics. Teachers reported that they use flexible grouping as well as grouping by ability. Peer learning and teaching was mentioned by teachers of two cases with positive achievement patterns and one case with a negative achievement pattern as an effective instructional practice for at-risk students. Carlos' 6<sup>th</sup>-grade teacher said Carlos learned better from peers: "Carlos was able to learn concepts from other students." Other strategies include differentiation, Student Support Team (SST), Cross Categorical Resource (CCR), Accelerated Learning Program (ALP), use of manipulatives, structure, and one-on-one teaching. According to teachers from two cases with positive achievement patterns and one case with a negative achievement pattern, giving praise whenever possible is important for these students.

Some students reported that the following teacher strategies were helpful: giving more explanation and examples, breaking down larger assignments, giving written assignments, group work, and answering student questions. One student with positive residuals said that individual attention helped her: "when they would sit and talk with me."

Differences between cases with negative and those with positive achievement patterns were minimal. For one, the word "differentiation" was mentioned only once among the cases with positive achievement patterns and in three of the four cases with negative achievement patterns. On the other hand, breaking down assignments into small, manageable "chunks" and modifying assignments (a means of differentiating instruction) were mentioned by all the cases with positive achievement patterns and none of the cases with negative achievement patterns. Structure was mentioned by two teachers associated with cases with positive achievement patterns; none of the teachers associated with cases with negative achievement patterns talked about providing structure.

As far as ineffective strategies, teachers mentioned homework, direct teaching or lecture, and whole-group instruction. Clive's (a student with negative residuals) 3<sup>rd</sup>-grade teacher

said that manipulatives were ineffective with him. This teacher also mentioned that Clive did not respond to contracts: “He did not care about consequences.”

Students said that it was harder for them to learn when teachers do not have time to answer questions during direct lecturing (whole-class teaching). “It makes it hard when they don’t have time to help you,” said Carlos. “Sometimes I would have questions and they would run out of time.” Three students said their teachers did not do anything that made it harder to learn (two cases with positive achievement patterns and one with a negative achievement pattern).

### *Support Strategies*

*Among LEP cases, students with negative residuals were more likely to be receiving multiple forms of support, but among SWD cases there were no noticeable trends between the cases with positive and cases with negative achievement patterns with regard to support strategies for at-risk students.*

**LEP:** *Students with negative residuals were more likely to receive multiple forms of support.* Three of the four cases with negative achievement patterns were reported as receiving three or more supports, while three of the four cases with positive achievement patterns received one or fewer supports. Among the cases with negative achievement patterns, one student also received ALP support and three received tutoring in other ways. One student with negative residuals, received ESL, ALP, daily before-school tutoring, daily after-school tutoring through a second program, and Title I services.

Support through ESL seemed appropriate, with six of the eight LEP students receiving ESL services between 2003-04 and 2005-06. The two students who did not receive ESL services (one with positive and one with negative residuals) scored Intermediate High to Superior on all four portions of the IPT exam in 2006. One ESL teacher associated with a case with a negative achievement pattern expressed frustration that regular teachers requested that the ESL teacher work with regular grade-level work rather than recognizing that ESL has a separate curriculum. ESL teachers teach English language development based on the proficiency levels of the students and the four domains of language. Curriculum and Instruction staff indicates that the ESL language arts curriculum is to be taught, and that ESL teachers do not utilize ESL instructional time to focus on content class work.

One principal associated with a case with positive achievement patterns said that some of the ways the school supports learning for at-risk students beyond the regular practices are to utilize Track Out Academy Teaching, ALP, common assessments, and leveling students into focus groups. “We try the best we can with all the students and that is difficult since they all have different needs. We give 100%.”

Another issue that arose related to LEP students was that three LEP students were not identified as special education because their challenge was thought to be a language issue, but time and English acquisition were not sufficient to remove the learning

difficulty issues. Wagner, Francis, and Morris (2005) discuss the growing need for identifying English language learners with learning disabilities and the fact that it can be complicated. One implication of not meeting this need is that those LEP students with learning disabilities go without the support they need. In addition, “English language learners who need special education services are further disadvantaged by the shortage of special educators who are trained to address their language- and disability-related needs simultaneously” (Ortiz, 2001, p. 1).

The principal associated with a case with a negative achievement pattern (Bernardo) said that it is most helpful to have a team of people working with a child and least helpful when one is doing pull-out and not using the information available or not using it wisely. Two of Bernardo’s five supports were provided outside of the school day, but he did receive ESL, ALP and Title I services during the school day. Coordinating three services during the school day increases the chances that students miss core instruction in class, which could be counterproductive.

In the case of Bernardo, who had a negative achievement pattern, three teachers interviewed mentioned that they received support from their principal and assistant principal in terms of providing resources and attending meetings as needed.

In the case of Francisco, who had a positive achievement pattern, his teacher reported that she received support from administration due to Francisco’s illness/injury.

**SWD:** *There were no noticeable trends between the cases with positive and cases with negative achievement patterns with regard to support strategies for at-risk students. Additional resources were not mentioned more in the cases with positive achievement patterns than in the cases with negative achievement patterns. All students received CCR or CA support.*

The majority of the principals stated the following support programs were available at their schools: ALP, CCR, and SST. Half of the principals mentioned before- and after-school tutoring by teachers, parents, community volunteers, as well as older students. Also mentioned were Advancement via Individual Determination (AVID), which encourages rigorous course taking and Communities in Schools (CIS), which brings tutors and mentors into schools to work with students.

Teachers said that CCR, CA, and ALP were effective for most of these students (six of the eight—three positive and three cases with negative achievement patterns). Some of the reasons they said these were effective included: smaller class size, more individual attention, and more time to focus on specific objectives where the student needs assistance. In one math case with a negative achievement pattern, teachers reported that CA was effective because agendas had to be signed, notebooks and lockers kept organized, and it “imposed discipline and held students accountable regarding agenda assignments.” CA seems to be beneficial for these students not only for content that they are struggling with but also for study habits and organization.

Of the six cases in which CA was used, all teachers believed it was effective for the students. The amount of CA the students received varied: one student was pulled out five

times a week for both reading and math, whereas another student just had CA once per week.

### **Collaboration**

*In all cases, there was mention of classroom teachers collaborating with special education teachers. There was no difference between cases with positive and cases with negative achievement patterns in the level of collaboration either with principals or schoolwide. The level of collaboration varied by school.*

**LEP:** *There was no difference between cases with positive and cases with negative achievement patterns in the level of collaboration either in terms of principal leadership and involvement or schoolwide involvement. In four of the cases (two with positive and two with negative achievement patterns), teachers spoke of administrative support as a positive element that helped.*

**Principal leadership & involvement:** In four of the eight (two with positive and two with negative achievement patterns) there was some reference to administrative support. Support from administration included references to availability of resources, attendance at meetings, and supporting the teacher as a professional. One teacher reported that the principal provided support by allowing teachers to teach and treating them as professionals. In two cases with positive achievement patterns, teachers reported a lack of administrative support as a challenge.

**Schoolwide involvement:** The levels of reported collaboration varied by school. In three of the eight cases (two with positive and one with negative achievement patterns) teachers mentioned that there was limited collaboration at their school. Although collaboration was reported as limited at each of these schools, teachers did mention collaborating both within their grade level or team meetings and with special education teachers. Teachers associated with all eight LEP cases mentioned collaborating with the ESL teacher. It was recognized by principals and teachers that collaboration should be strengthened with specials teachers, such as ESL and AG teachers. One principal associated with a case with a positive achievement pattern stated that collaboration will continue to grow and improve as professional learning communities are strengthened.

Both principals and teachers reported that collaboration took place within grade-level/team meetings. In six of the eight cases, teachers collaborated within grade level or team meetings. In one case with a positive achievement pattern, a principal stated that collaboration was mainly within grade levels; however, a teacher at that school stated that collaboration with the ESL teacher was very helpful, in addition to the collaboration within the grade level. This teacher also reported a lack of collaboration with administrators at the school.

In one case with a negative achievement pattern, the principal reported that collaboration did include special education teachers when appropriate, and this was confirmed by both the ALP reading teacher (who served Bernardo for three years) and the ESL teacher (who

served Bernardo in 2003-04). The ALP reading teacher stated that collaboration was pretty good at that school and that she had collaborated with Bernardo's classroom teacher and ESL teacher and had participated in team and support meetings, which the principal attended as needed. The ESL teacher reported that the collaboration extended to members of the community through before- and after-school tutoring provided by a company in the public sector, as well as a church.

In addition to the grade-level or team collaboration, teachers also reported collaboration that included the IRT, special resource teachers (ESL, Special Ed, ALP, AG, etc.), and the administration. Among specials teachers, the ESL teacher was most often mentioned in terms of collaboration. In all eight LEP cases, teachers reported collaborating with the ESL teacher. In one school associated with a case with a negative achievement pattern, the ESL teacher reported attending grade-level meetings and SST meetings.

One teacher reported that because Paola, a student with negative residuals, was "pretty much on task" collaboration was not necessary. However, in another case with a negative achievement pattern, a teacher stated that collaboration was a key factor in the success of students with risk factors, and she collaborated weekly at team and school meetings. Although one teacher of a student with a positive achievement pattern did report collaborating with former teachers to obtain background information on the student, another teacher did not feel collaboration was necessary, because her students remained in her classroom all day. In another case with a positive achievement pattern, teachers reported that overall collaboration was limited. Although one principal associated with a case with a positive achievement pattern agreed with the importance of collaboration to support students with risk factors, she stated that time was a major consideration.

**SWD:** *No discernable differences were evident between the cases with positive and cases with negative achievement patterns with respect to collaboration. In all the cases there was mention of classroom teachers collaborating with specialty teachers.*

**Principal leadership & involvement:** All of the cases reported that there were support systems in place at their school. Principals reported that they support their teachers by getting them resources, providing time for meetings during the school day, and supporting teachers at meetings. At one elementary school, teachers agreed on a planning day and substitute teachers were provided.

**Schoolwide involvement:** Teachers supported each other by sharing strategies. One supplemental teacher reported that there is no support in getting senior teachers to adjust for learning disabled students. Another supplemental teacher (associated with a case that was LEP and is now SWD) believes that students need more support developing English skills in an environment such as a transition school.

Comments about collaboration from principals and teachers were mostly positive. Most (six of eight) schools have "student support teams," "teacher teams," "grade-level teams," and collaboration among classroom teachers, special education teachers, Title I teachers,

and specialty teachers to address meeting students' needs. The frequency of collaborative meetings varied; some teachers reported meeting weekly, some biweekly, and some monthly.

One special education teacher said it was difficult to collaborate with mainstream teachers because they "seemed to see my class as separate from the rest of the school, my students [as needing to be] kept separate from their students, and my specialties and special strategies as irrelevant once the children were mainstreamed." However, she did say that the principal had stepped up to support her. Another special education teacher (associated with the same case) said there was a lack of time for open collaboration with free sharing of ideas and needs.

Two teachers mentioned that collaboration would focus on how to motivate students and that they had team meetings regarding students' needs and motivation ideas. One of these teachers was associated with a case with a positive achievement pattern and one with a case with a negative achievement pattern. One teacher associated with a negative achievement pattern mentioned that motivating students was one of his/her strengths.

### *Data Use*

*Among both LEP and SWD cases, both cases with negative and cases with positive achievement patterns reported using data both to assess students and to adjust future instruction.*

**LEP:** Although teachers associated with cases with positive and cases with negative achievement patterns were equally likely to use formative assessments (all four of the middle school cases, positive and negative, reported using Blue Diamond), teachers associated with cases with positive achievement patterns were more likely to report using summative assessments (i.e., EOG data) than teachers associated with cases with negative achievement patterns. It should be noted that only one teacher (associated with a case with a positive achievement pattern) reported using grade 3-5 assessment data.

Data were used during team collaboration and lesson planning. One principal reported that teacher teams collaborate in planning lessons using summative EOG assessment data and formative assessment data from a variety of sources (individual teachers, Blue Diamond, Study Island, and SuccessMaker).<sup>2</sup>

Four of the principals interviewed reported that collaboration took place around lesson planning and making use of summative EOG assessment data as well as formative

---

<sup>2</sup> Study Island provides web-based state assessment preparation programs and standards-based learning programs (see [www.studyisland.com](http://www.studyisland.com)). SuccessMaker offers a combination of management system, assessment, and curriculum resources to provide school staff and students with tools to improve academic performance at [www.pearsondigital.com/successmaker](http://www.pearsondigital.com/successmaker).

assessment data (such as Blue Diamond, Study Island, and Project Achieve).<sup>3</sup> Two principals mentioned teachers' use of Project Achieve data for monthly planning, particularly in the upper grades. One principal indicated that teachers for all students reviewed assessment data together and planned. The second principal said that 3<sup>rd</sup> and 5<sup>th</sup> grade staff have an additional half day of planning per month associated with Project Achieve and that the time is devoted largely to reviewing data. A third principal stated that data were used by teacher teams to collaborate and review their assessment data.

**SWD:** With respect to data use, both cases with negative and cases with positive achievement patterns reported using data not only to assess students but also to adjust future instruction. Elementary teachers, when asked what data they used to inform instruction, mentioned the following: teacher observation, small-group work, Project Achieve assessments, and profile or skill cards. Both elementary cases with positive achievement patterns were Project Achieve schools. Teachers mentioned using common Project Achieve assessments about once a week to modify instruction. Based on these assessments, teachers would re-group students by ability or objectives and then re-teach. Teacher observations of small groups and "team time" were also mentioned as assessments used to re-teach objectives. One of the positive as well as one of the cases with negative achievement patterns mentioned the use of profile cards. These cards provide a master list of skills in the curriculum that all teachers use to monitor student mastery of skills. Each is to be checked off only after appropriate use of the skill is observed three times.

At the middle school level, assessments from the Blue Diamond management system were used to assess what students had learned and to adjust instruction. Based on the assessments, which occurred several times each quarter, teachers grouped either by ability or objectives and then re-taught as necessary. Two teachers, one from a case with a positive achievement pattern and one from a case with a negative achievement pattern, mentioned that they grouped students who did understand a certain objective with students who did not and let them peer teach. Carlos' 8<sup>th</sup>-grade teacher said, "Peer learning is effective because when students can explain something they are learning it." This teacher also pointed out that she viewed Blue Diamond assessments as a way to assess herself as a teacher.

### ***Expectations***

*For LEP cases there was no difference in the cases with positive and cases with negative achievement patterns in terms of principal or teacher expectations; however, for SWD cases, there were more references to high expectations among the cases with positive achievement patterns than there were among the negative. Note: this question was not specifically addressed in the interviews; thus, any comments were volunteered by the participants.*

---

<sup>3</sup> Project Achieve (a WCPSS instructional initiative adapted from a Brazosport, Texas, model) provides grades 3-8 structure to ensure students master the curriculum, with a scheduled instructional plan, frequent assessments, and teacher collaboration.



**LEP:** *There was no difference in the cases with positive and cases with negative achievement patterns in terms of principal or teacher expectations.* Two principals (one with a positive and one with a negative achievement pattern) mentioned expectations, in particular parental expectations, in connection with the challenges regarding multiple-risk students.

Three teachers included their expectations for students among their strengths in working with at-risk students. In two cases (one with a positive and one with a negative achievement pattern) the teachers characterized this as having high expectations for all students; while the third (a case with a negative achievement pattern) said that she had different expectations for different students depending on their backgrounds and experiences. (Note: the two parents interviewed said they thought teachers had high expectations for their children when asked.)

Two teachers listed “clear expectations” among their strengths. One of these teachers also noted that the student in the study wanted very precise expectations for tasks so that he could complete them.

One principal associated with a case with a positive achievement pattern stated that one of the greatest challenges was “getting parents to have appropriate expectations of the school and of their child.”

A principal associated with a case with a negative achievement pattern stated that the greatest challenge was getting parents and various school staff to agree on expectations.

**SWD:** *There were more references to high expectations among the cases with positive achievement patterns (three of four) than there were among the negative (one of four).* Note: this question was not specifically addressed in the interviews, thus any comments were volunteered by the participants.

Of the four cases with positive achievement patterns, there were three cases in which teachers expressed that they had high expectations of their students. In the other case with a positive achievement pattern, the principal said his staff had high expectations of their students. Teachers described having high expectations for at-risk students as a personal strength. Teachers also stressed that having high expectations for students is one of the most important factors for students, especially students at-risk. One principal said that it is challenging to get parents to have high academic expectations of their children at home. One teacher identified helping students develop sufficiently high self-expectations as one of the most challenging factors in working with at-risk students. One student said that her guardian helped her learn by having high expectations of her and by helping raise her own expectations of herself.

Of the four cases with negative achievement patterns, expectations were not discussed for three students. For the fourth student, one teacher had high expectations and he made good progress that year. However, he was very far behind by the time he was diagnosed with a learning disability.

### Family Support and Involvement

The themes that emerged associated with family support and involvement included support at home and involvement at school. Table 9 displays the trends for students with positive and negative residuals found within each of these sections.

**Table 9**  
**Family Support and Involvement of Students with Multiple Academic Risks**

Themes	LEP & FRL Trends	SWD & FRL Trends
<p><b>Support at home:</b> <i>Across positive and negative LEP cases, students were equally likely to receive help with homework from family members. Among SWD cases, students with positive residuals were more likely to have more support from home.</i></p>	<p><b>Same:</b> 6 of 8 students received some help with homework, with no difference between cases with positive and cases with negative achievement patterns. Older siblings provided important support in two cases (one with positive and one with negative residuals).</p> <p><b>Same:</b> Lack of English ability on the part of parents was a limitation for 6 of 8 cases.</p>	<p><b>Different:</b> Cases with positive achievement patterns were more likely to have strong or some support and negative to have some to no support. Three of the four students with positive residuals had supportive families. Within the cases with negative achievement patterns, none of the students had help at home from parent or guardian and only one had help from a sibling. In addition, within all of the cases with negative achievement patterns there were reports of problems in the home.</p> <p><b>Same:</b> The level of support varied among cases with positive and cases with negative achievement patterns.</p>
<p><b>Involvement at school:</b> <i>While among LEP cases there was no difference in the support received by students with positive residuals versus students with negative residuals, there was a difference in the amount of support received by SWD students.</i></p>	<p><b>Same:</b> Parents of cases with positive and cases with negative achievement patterns were difficult to contact for an interview. We were able to contact 2 parents (1 positive and 1 negative) of the 8 LEP cases.</p> <p><b>Same:</b> In seven of the eight cases parents attended conferences.</p> <p><b>Different:</b> Fathers were more likely to attend conferences in cases with positive achievement patterns than in cases with negative achievement patterns.</p>	<p><b>Different:</b> One evidence of a lack of involvement at school among cases with negative achievement patterns was that we were not able to reach any of the parents after repeated calls (compared to 2 of 4 parents from cases with positive achievement patterns).</p> <p>Differences between cases with positive and cases with negative achievement patterns include: parents being supportive and attending conferences more so in the cases with positive achievement patterns than in the cases with negative achievement patterns; also the success rate for interviewing parents for this study was higher among cases with positive achievement patterns.</p>

### *Family Support at Home*

*Across LEP cases with positive and negative achievement patterns, students were equally likely to receive help with homework from family members; however, among SWD cases, students with positive residuals were more likely to have support at home. Most SWD students with positive residuals had support at home; however, among SWD students with negative residuals, none of the students had help at home from a parent or guardian and only one had help from a sibling. In addition, there were reports of problems in the home within all of the SWD cases with negative achievement patterns.*

**LEP:** *Across cases with positive and cases with negative achievement patterns, students were equally likely to receive help with homework from family members. In six of the eight LEP cases, students received some help with homework. A lack of family support was cited as a difficulty by many of the teachers and principals interviewed. In some cases it was specific to the student in the study, but in others it was a concern for at-risk students in general. Two principals and five teachers listed a lack of support from families or parents as one of the challenges in teaching multiple-risk students. Four teachers expressed this in a more positive way, saying that getting family support was one of the keys to promoting the success of at-risk students. A related idea was expressed by one teacher and one principal who spoke of the need for schools to provide support to parents so that parents will be better able to support their students.*

Three teachers said that lack of family support was a problem for a particular student in the study, and one said that the student did receive support from home. The level of family support in the final case, one with negative achievement patterns, could not be determined because neither the student (who had dropped out) nor her parents could be interviewed; however, teachers speculated that the student probably did not have help from anyone at home. In one of the three cases in which the teacher cited a lack of support, it was unclear whether the teacher was certain about the level of family support: The teacher recalled one or two conferences with Carmen's mother, but stated that "Carmen probably didn't get a lot of support at home." One teacher spoke of community support for the school as an important asset, in particular mentioning a before-school volunteer tutoring program.

Most students in the study received help with homework from parents, siblings, and other family members. Pilar mentioned that her mother helped her study for tests by quizzing her. In seven of the eight LEP cases, there was some reference to help with homework. Mothers were the family member most often mentioned as providing assistance with homework. In six of the eight cases, mothers attempted to help; however, in three of the six cases (one with positive and two

One student with positive achievement patterns received a lot of help from home, and would do his homework either in the living room or in his room. In another positive-achievement case, the student stated that his parents "bugged" him about his homework being done, but that he did not do his work in any particular place. Of the cases with negative achievement patterns, two had desks that they used to do their homework, and their parents would ask about it and provide limited help if needed.

with negative achievement patterns), the mothers' inability to help was also mentioned. Francisco's mother stated she helped with and checked the completion of homework. However, Francisco mentioned that although his mother reminded him to do his homework, his older sister helped him with mathematics and his father with reading assignments. Siblings were also often referred to as family members who helped with homework. Mariana relied on her old sister's (six years older than Mariana) help when she had questions with her homework. Rosa's 2003-04 teacher explained that although Rosa's mother was able to help Rosa with mathematics and science, an older brother helped with English homework.

Among LEP students, both cases with positive and cases with negative achievement patterns, Spanish was often the language spoken at home. Parents of many of the LEP students had limited English skills, which limited their ability to help their student with homework. Parents were engaged in informal and formal methods of improving their English skills. In Pilar's case, her mother had taken an English class and spoke and understood basic English, but read little in English. Her father studied English on his own using a video and the dictionary as aids. In spite of Pilar's parents' efforts to learn English, her teacher reported that Pilar acted as a translator for her mother. In Rosa's case, her aunt acted as a translator at parent conferences, and her ESL teacher reported that Rosa's mother was frustrated with her inability to help Rosa. Francisco stated that his mother aided his initial acquisition of English by requiring that he watch English-language videos during his elementary school years.

Another factor impacting the parents' ability to help with homework may be the level of schooling completed by the parent. Francisco's mother mentioned that she had completed the 9<sup>th</sup> grade in Mexico (she is currently pursuing her GED), while Rosa's mother (as reported by her 2005-06 teacher) had completed the 7<sup>th</sup> grade.

Some of our students had responsibilities at home, including cooking, cleaning, and care of younger siblings. One student, Pilar (who had positive achievement patterns), helped her mother with the care of her baby brother when he was born; she often found it hard to do her homework in 3<sup>rd</sup> grade, unless the baby was asleep. Although Pilar stated that in her 4<sup>th</sup>-grade year, her family refocused on her education, she continued to help her mother take care of her young brother. Pilar's teacher confirmed that Pilar often was responsible for cooking, cleaning, and taking care of her little brother because her mother needed the help due to work and household responsibilities.

Carlos, who had a positive achievement pattern, had help at home from his siblings as well as his dad. His special education teacher found it effective to simply say, "I'm going to call your dad if ..." and that would be enough to motivate Carlos to do his work.

**SWD:** *Three of the four students with positive residuals had supportive families. Within the cases with negative achievement patterns, none of the students had help at home from a parent or guardian, and only one had help from a sibling. In addition, within all of the cases with negative achievement patterns there were reports of problems in the home.*

Principals and teachers alike stressed the need and importance for more parental support at home. In six of the eight SWD cases, teachers and/or principals mentioned that one of the greatest challenges for working with at-risk students was the lack of parental support. An additional challenge can be parental attitudes toward education. Two respondents, one with a positive and one with a negative achievement pattern, mentioned that students need support from all—parents, administration, teachers, mentors, and the community.

With the exception of one case, all of the cases with positive achievement patterns had supportive home environments. Yasmin's guardian was pursuing a master's degree and had high expectations for Yasmin. This guardian provided structure, limited television time, and encouraged reading for pleasure. Another case with a positive achievement pattern, Carlos, had help from his siblings as well as his dad; his supplemental teacher said that Carlos' father encouraged him to do his school work. Frida had a very supportive guardian who, although unable to help with her homework, encouraged Frida in her studies (her guardian only had a 10<sup>th</sup>-grade education). Frida also reported that she received help from her twin sister and did a lot of her homework during CA.

In the cases with negative achievement patterns, all four students had unstable and unsupportive home environments. Sally's mother was unable to help her with homework because of her own emotional problems; Sally often came to school dirty and tired from being up all night. However, Sally did report that her 8<sup>th</sup>-grade older sister would help her with her homework. Another student with negative residuals, Clive, lived in a large low-income housing project, where he often witnessed fights; Clive's father was absent and his mother was not involved, according to Clive's teachers. Clive said he did his homework during CA, and one of his teachers said he would ask questions during first period if he had been unable to complete the homework at home. Teachers of the other two cases with negative achievement patterns reported that the mothers were very protective of their children but there was not much follow-through at home. Jamar's 7<sup>th</sup>-grade teacher said that he had no direct knowledge as to whether Jamar received any help at home with his homework.

As far as household responsibilities, there were more cases with positive achievement patterns (three) than cases with negative achievement patterns (one) in which students had excessive responsibilities at home. The nature of the responsibilities varied: among the cases with positive achievement patterns, responsibilities included taking care of a grandmother, making sure to take medications, and cooking. Clive, the single case with a negative achievement pattern in which household responsibilities were mentioned, "had to take on a lot of responsibilities at home because his youngest brother had health problems," according to his 4<sup>th</sup>-grade teacher.

### ***Family Involvement in the School***

*Although among LEP cases there was no difference in the support received by students with positive residuals versus students with negative residuals, there was a difference in the amount of support received by SWD students. In SWD cases, the differences between cases with positive and cases with negative achievement patterns included: parents being more supportive and more likely to attend conferences in the cases with positive achievement patterns than in the cases with*

*negative achievement patterns. Also, the success rate for interviewing parents for this study was higher among cases with positive achievement patterns.*

**LEP:** *Although among cases with positive and cases with negative achievement patterns, mothers were equally likely to attend parent/teacher conferences, fathers associated with cases with positive achievement patterns were more likely to attend conferences than were fathers associated with cases with negative achievement patterns.*

Family involvement in student learning took the form of attendance at conferences and occasionally as a classroom volunteer or chaperone. In seven of the eight cases, it was mentioned that parents attended conferences. Mothers were most often referred to as attending parent/teacher conferences. In three of the four cases with positive achievement patterns, fathers also attended conferences.

In the three cases in which frequency of conferences was referred to, conferences occurred two or three times a year. Francisco's mother reported that she often spoke with teachers informally if she had a concern; however, she believed that Francisco no longer wanted her to visit the school. Francisco's 2003-04 teacher reported that his mother was very involved in conferences. Bernardo, who had negative achievement patterns, was served for three years in ALP, and his ALP teacher reported that Bernardo's mother regularly attended ALP and Title I meetings. However, both Bernardo's 2005-06 teacher and his ESL teacher stated that, although his mother attended conferences there was little follow-up at home. This may have been because of her limited English skills; the teacher used an interpreter during conferences.

In two cases (both cases with positive achievement patterns), mothers volunteered at school or for field trips. In one case with a positive achievement pattern, the 2003-04 teacher reported that Francisco's mother was very involved, attending conferences and helping with the class holiday celebration despite her not being fluent in English. Pilar, who had positive achievement patterns, mentioned that her mother had chaperoned a field trip when Pilar was in 1<sup>st</sup> grade.

**SWD:** *Differences between cases with positive and cases with negative achievement patterns include: parents being supportive and attending conferences more so in the cases with positive achievement patterns than in the cases with negative achievement patterns. Also, the success rate for interviewing parents for this study was higher among cases with positive achievement patterns.*

Within the cases with positive achievement patterns there were reports of parents and guardians coming to conferences, as well as being involved with the school's parent-teacher association. In three of the cases, the teachers said the family was "very supportive." In one case with a positive achievement pattern, the guardian had transportation issues that prevented her from coming to conferences.

In all four cases with negative achievement patterns there were reports of difficulty contacting parents. One mother was involved with the school; however, teachers reported that she may have been more of a hindrance than a help and also she was hard to

contact. In two of the cases with negative achievement patterns, teachers said that the parents did not attend conferences but would sign and return papers sent home with the students. In two of the cases, the parents were involved when there were behavioral problems. In three of the four cases, the father was reported as not being involved at all; in the fourth case, there was no mention of a father.

Researchers attempted to contact parents for each of the cases, but most case files contained phone numbers that were disconnected or incorrect. When there was a current phone number, researchers made at least three attempts to call, at different hours of the day. Researchers were able to conduct two parent interviews; both of those were cases with positive achievement patterns.

### ***Family Expectations***

**LEP:** *There was no difference between cases with positive and cases with negative achievement patterns in terms of parents' expectations.* Students who stated that their parents expected them to go to college also themselves expected to attend college. The two students who were uncertain of their parents' expectations regarding college were both also uncertain of their plans to attend college. For two of the eight LEP cases, the parents were interviewed; in both cases, the parents stated that they expected their child to attend college. Seven of the eight students were interviewed, and five of those seven reported that their parents expected them to attend college, while two of the students stated that they did not know what their parents expected: Bernardo was not sure what level of education his parents/guardians expected him to complete, while Hector stated that his parents want him to decide for himself. According to Hector, "Whatever I want to do is OK with my parents." With the exception of the student who dropped out and did have negative residuals, there was no difference among students with positive and negative residuals in terms of their expectations for attending college.

**SWD:** *In both cases with positive and cases with negative achievement patterns, most students thought their parents expected them to go to college. There were also a few students, one with a positive and two cases with negative achievement patterns, who mentioned they were not sure or did not know what their parents expected of them.* There were only two parent/guardian interviews, both cases with positive achievement patterns. One guardian who was working on her master's degree, expected her niece to finish high school, and hoped she would go further: "Mainly I just want Yasmin to do something that she can be happy doing." In the other parent interview, Frida's mother mentioned that she thought Frida would probably reach community college: "She likes cooking and helps her grandmother with medications, so maybe Frida will do something in medicine or healthcare." Frida herself said she would like to be a doctor; however, when asked what level of education she thinks she will reach, Frida said high school.

## CONCLUSIONS AND IMPLICATIONS

The results are encouraging, in that some students with multiple academic risks clearly achieve academically. In addition, results provide a greater understanding of factors and strategies which can make a positive difference for these students. Results suggest that effectiveness index results for students, when used in combination with level scores, can be helpful in exploring students that show desirable patterns of growth and conditions that support learning. However, the relationship between test performance and growth and a student's school experience is not clear-cut. This study helped us realize once again how complex and different each student's experience of school can be. All of the students we studied were low income, but other circumstances and conditions varied by case. Some students had characteristics that supported academic achievement more than others, such as personal traits, strength in both reading and mathematics, or the ability to learn new material fairly easily. In addition, some students were able to learn from adversity, while others were unable to move beyond it. The unique combination of student characteristics and conditions led to the outcomes. At the same time, patterns emerged that can help us foster growth for students with academic risk factors.

National research suggests resiliency can be developed in students and that learning can be enhanced through teacher actions. Teachers can play a critical role, not only through teacher instructional practices, but by building relationships, using the strengths students bring to school, and tapping the resources available to them outside of school. Teachers can incorporate activities into their instruction that can help students develop resiliency, including traits such as caring, planning, resourcefulness, confidence, initiative, internal locus of control, self-awareness, goal direction, achievement motivation, educational aspirations, special interests, and optimism (McElrath & Smith, 2005). Examples of ways school staff can foster resiliency include establishing a positive relationship with the students, helping them identify and access resources, helping students feel good about their capabilities, and holding high expectations.

Our results were consistent with resiliency research. We saw evidence that our more successful students were more resilient in terms of personal strengths related to social competence, problem solving, autonomy, and sense of purpose. They were able to tap strengths and compensate for their weaknesses, often with the help of supportive individuals at school, in their homes, or in their community. Getting to know the students well enough to determine the challenges they face, as well as the resources that might be available in the home or in their community, can be critical in terms of support for homework and school in general.

Teachers may also be able to strengthen instructional practice by purposefully using practices emphasized as helpful in language acquisition research as well (ERS, 2005; Linqanti, Carstens, & Soto-Hinman, 2005):

- Lessons that link their learning to prior knowledge (e.g., using thematic, integrated curriculum),
- A variety of instructional and assessment methods to tap students' learning styles,
- Opportunities for emotionally secure, comfortable interaction and collaboration (e.g., small group work, cooperative learning experiences, peer tutoring, positive teacher-student relationships),



- Lessons which imbed language acquisition objectives and opportunities (e.g., by introducing new vocabulary and giving students more opportunity to practice language),
- Active learning opportunities, through discussions, hands-on learning, energizers, actions, and exercise, can promote cognitive growth,
- Opportunities for students to discuss what they are thinking and doing (which can also build language competence),
- Journaling opportunities, to help them reflect on their learning,
- Material on-grade level, even if modified,
- Holding high expectations for students, and working to motivate them to learn, and
- Discipline techniques that focus less on silence and behavior and spell out expectations clearly.

The teachers we interviewed also used some, but not all, of these practices. Small groups and structure were commonly used with both the more successful and less successful cases. These conditions may be necessary but not sufficient for most of these students to show strong academic progress. The difference may be in the quality of the services, the coordination of resources provided, or in the match of the students' learning strengths with the way in which services were provided. Teachers also seemed to be unaware of the importance of scaffolding language acquisition and practice into their instruction, especially for LEP students.

WCPSS is investing in training for school staff on strategies to use with LEP students as well as the alignment of interventions for students, and this training has the potential to make a difference. In addition, the WCPSS literacy team created an excellent reading resource guide for special education staff which can be quite useful; it summarizes both the balanced literacy model used in WCPSS as well as resources to support it (WCPSS, 2005).

The role of homework in learning and in students' sense of school success may bear further discussion at the middle school level (as well as at high school). While homework should help students practice skills introduced in school, many of these students did not have the ability to successfully complete it outside of school. Therefore the homework did not serve the desired purpose. Opportunities for stronger homework support in school or after school could be helpful, especially for LEP students with limited English ability. In elementary schools, the grading system grades knowledge of grade level material separately from work habits, but this is not the case in middle schools. In middle school, students may suddenly face lower or failing grades because of incomplete homework, regardless of curriculum understanding. Grades *may* influence a students' view of his/her competence and lead to dropping out. Failing core courses can lead to retention in grade, which research links to increased chances of dropping out. Two of our case studies were retained in middle school; one had dropped out in grade 9 and the other was no longer attending school regularly. Many of the other students with multiple risks were over-age for their grade as well, but research is less clear about the impact of this.

These results can help WCPSS fine tune efforts towards improved achievement and improved success for all students. Central and school staff are encouraged to use the study trends and case studies as discussion starters on the road to school improvement.

## REFERENCES

- Baenen, N., & Holdzkom, D. (Eds.). (2007a). *WCPSS elementary school student outcomes 2005-06*. Raleigh, NC: Wake County Public School System, Evaluation and Research Department.
- Baenen, N., & Holdzkom, D. (Eds.). (2007b). *WCPSS middle school student outcomes 2005-06*. Raleigh, NC: Wake County Public School System, Evaluation and Research Department.
- Baenen, N., Ives, S., Lynn, A., Warren, T., Gilewicz, E., & Yaman, K. (2006). *Effective practices for at-risk elementary and middle school students*. Raleigh, NC: Wake County Public School System, Evaluation and Research Department.
- Cummins, J. (1981). *Schooling and language minority students: A theoretical framework*. Los Angeles, Ca.: Evaluation, Dissemination, and Assessment Center, California State University.
- Curtin, E. (2005). Instructional styles used by regular classroom teachers while teaching recently mainstreamed ESL students: Six urban middle school teachers in Texas share their experiences and perceptions. *Multicultural Education*, 12(4), Summer 2005.
- Daeschner, S., Munoz, M., & Barnes, J. (2004). Meeting the challenge of closing the achievement gap: What can we learn from urban, high-poverty/racially mixed schools? Educational Research Service, *Spectrum*, Summer 2004.
- Educational Research Service (2005). Strengthening instruction through research on how students learn. *Focus On*, Alexandria, Va.: Author.
- Educational Research Service (2001). The achievement gap: Successful teachers for diverse classrooms. *Theme issue*, Alexandria, Va.: Author.
- Echevarria, J, Vogt, M., & Short, D. (2004). *Making content comprehensible for English learners*. Boston (2<sup>nd</sup> edition): Pearson Education Inc.
- Fry, R. (2007). *How far behind in math and reading are English language learners?* Washington, D.C.: Pew Hispanic Center.
- Haynie, G. (2006a). *Effective biology teaching: A value-added instructional improvement analysis model*. Raleigh, NC: Wake County Public School System, Evaluation and Research Department.
- Haynie, G. (2006b). *High school Algebra I study: 2002-2006*. Raleigh, NC: Wake County Public School System, Evaluation and Research Department.

- Linquanti, R., Carstens, L., & Soto-Hinman, I. (2006). *NCLB title III institutes ensuring academic success for English learners*. California Department of Education and California Comprehensive Center at WestEd.
- McElrath, M., & Smith, T. (2005). Fostering resiliency in the middle-level school. *Middle Matters*, (13)4, May 2005. National Association of Elementary School Principals.
- National Study Group for the Affirmative Development of Academic Ability (2004). *All students reaching the top: Strategies for closing academic achievement gaps*. Naperville, IL: Learning Point Associates.
- Ortiz, A. (2001). English language learners with special needs: Effective instructional strategies. *Eric Digest*. Retrieved April 18, 2007, from [https://www.cal.org/resources/digest/digest\\_pdfs/0108-ortiz.pdf](https://www.cal.org/resources/digest/digest_pdfs/0108-ortiz.pdf)
- Samuels, C. (2007). Texas district makes gains with spec. ed. *Education Week*, June 20, 2007.
- Sanders, W.L. (1998). Value-added assessment. *School Administrator*, 55(11), 24-27.
- Thomas, W.P., & Collier, V.P. (2002). *A national study of school effectiveness for language minority students' long-term academic achievement*. Santa Cruz and Washington, D.C.: Center on Research, Diversity, and Excellence.
- Wagner, R. K., Francis, D. J., & Morris, R. D. (2005). Identifying English language learners with learning disabilities: Key challenges and possible approaches. *Learning Disabilities Research & Practice*, 20(1), 6-15.
- Wake County Public School System (2005). *Special Education Services: Reading resources*. Raleigh, NC: Wake County Public School System Literacy Department.

## APPENDIX A

### INSTRUMENTS

#### Effectiveness Study--Student Questions

School \_\_\_\_\_ Date \_\_\_\_\_ Case \_\_\_\_\_

Hi, my name is \_\_\_\_\_, I work with the **Wake County Public School System**. Thank you for taking the time to talk with me. We are doing a study about what practices best help students learn. I would like to ask you a few questions today about you and your experiences in middle/elementary school. When you are answering these questions, try not to think about this year, but about the last 3 years. There are no right or wrong answers. We will be looking for common things students say about what helps them learn; we won't share your name in our report. Please take your time answering the questions and be as honest as possible. Are you ready to begin?

1. Tell me a little bit about yourself. What do you enjoy doing? Are you involved with any activities at school or after school?
2. What do you like to read? About how many hours do you read per week? How about during the last 3 years (less, same, more)?
3. How do you think you're doing this year academically? How do you think you did in middle/elementary school?
4. Thinking back to middle/elementary school, how would you describe yourself as a student? What has been your greatest strength as a student [your overall skills as a student]? What have you struggled with the most as a student? What makes that difficult?
5. What activities were you involved in during middle/elementary school? How about activities outside of school?
6. When and where did you usually do your homework?
  - a. Did you have access to a computer at home?
  - b. Did teachers post assignments on line?
  - c. Did your parents ask about your homework and how did they help you with it?
  - d. Did you have classmates you could call or work with if you had questions or problems doing the work?
7. How did you get along with other students? How did you get along with your teachers? Were you ever sent to the office? If so, why? Do you feel it was handled fairly?
8. How old will you be in 10 years? What do you think you'll be doing in 10 years?

9. Which classes in middle/elementary school were your favorites? Why? Were your classes were your least favorite?
10. What did your teachers do that helped you learn? What or who else helped you learn?
11. What did your teachers do that made it harder to learn?
12. Describe a typical day at school. How often did teachers lecture? Have you work with one other student? Have you work in a team? Which did you prefer?
13. Do you think your teachers cared about you as a person and as a student? Did you have one or more teachers that you felt comfortable going to with a problem or question?
14. When you didn't understand something, what typically happened?
15. Did students generally pay attention in class? Why or why not?
16. What was the best thing about middle/elementary school? What was the worst thing about middle/elementary school?
17. If you could change one thing about each year, what would you change?
18. LEP only—How well were you able to understand English when you first came to Wake County Public Schools?
19. What do your parents or guardians think you'll be doing in 10 years?
20. What level of education do you think they want you to complete? What level of education do you think you will complete?
21. How were your family members involved with the school?
22. LEP only—Are your parents or guardians fluent in English? Do your parents have conversations in English? Do they speak English at home? At work?



**PLC: Vision**

5. In what ways has your staff worked together on developing and committing to a shared vision and mission?

**PLC: Data Use**

6. What systems are in place in the school that monitor student attainment of essential learning outcomes?  
\*Are there any additional ways your school monitors learning for your students at risk?

**PLC: Collaboration**

7. Do your teacher teams collaborate in planning lessons and reviewing assessment data for your students at risk?  
\*For all of their students?  
\*If so, how is this time worked into the school schedule (how often and for what length of time)?

**PLC: Leadership Support**

8. How do you, as the school's leader, support your teachers regarding their work?

**Family Involvement**

9. How has your school encouraged **involvement of parents** of students at risk in supporting student learning? Does this differ from that of involving your other students' parents?

**Strengths and Challenges**

10. Biggest challenge regarding multi-risk students? Highest priority in promoting multi-risk student success?

### Effectiveness Study—Teacher Questions

School \_\_\_\_\_ Date \_\_\_\_\_ Case \_\_\_\_\_

**Introduction:** We are conducting a study about strategies used to promote the learning and achievement of students who are limited in English proficiency (LEP), low income (eligible for free or reduced-price lunches), and/or have disabilities (SWD). We realize that some of these students score at grade level, while others have more difficulty in school. Given that all of these students have special challenges, we are focused on determining what practices best support student learning.

We would like to ask you a few questions about working with at risk students and specifically about your work with \_\_\_\_\_, who you had in class in [school year]. We will be combining results of our interviews, with an analysis of trends for students that made strong progress over time compared to those who did not. We will send you an email when the report is ready this coming summer. Is your district email all right to use?

1. **Student Background:** What was \_\_\_\_\_ like as a student?
2. **Family Involvement:** How would you describe his/her family in regards to their involvement with his/her learning? How often did you have contact with them? Did you view them as a support to your classroom efforts?
3. **Instructional Strategies:** What kinds of instructional strategies do you remember as being effective with \_\_\_\_\_? Were these strategies used with other students in your class? Were there some strategies you used for a bit that you found to be ineffective?
4. **Data Use:** How do you use formative/summative assessments and other data for instruction? How do you adjust your instruction based on data? (How often?)
5. **Supplemental Help:** Did \_\_\_\_\_ receive supplemental help? If so, through whom? Did you consider it effective? Why?
6. **Collaboration:** How did you collaborate with other teachers and school staff in ways that supported his/her learning? How did the principal and other staff at your school support you (resources etc.)?
7. **Strengths and Challenges:**  
In working with at risk students:  
What do you consider your strengths?  
What do you find to be the greatest challenges?
8. **Summing Up:** What do you think is most important in promoting the success of at risk students?
9. **Miscellaneous:** Is there anything you think we should have talked about that we haven't covered? Is there anything you'd like to add?

Thank you very much for your time.



Parent/Guardian \_\_\_\_\_ Date \_\_\_\_\_ Case \_\_\_\_\_

## Effectiveness Study— Parent Questions

Introduction: Hi, my name is \_\_\_\_\_. I work with the Wake County Public School System. I am helping to conduct a study of what practices are best for learning and achievement of students in our schools. Did you receive our letter about the study? *[If no, Well the letter briefly explained that we are studying what school and home practices help students learn to their fullest potential and that we plan to talk to teachers, students, and parents of 16 students who completed elementary or middle school last year.]*

XX has been selected as part of this study. We appreciate your taking about 15 minutes to talk with us about what helps your child learn and achieve his/her best in school. We'll be sharing our results in a report this summer to help schools improve teaching for children. Our focus is on your child's elementary / middle school experience, so when you are answering these questions try to think about the their elementary / middle school experiences in grades 3, 4, and 5, / 6, 7, and 8. Take your time answering the questions and let us know if your response only applies to one grade level. We will be looking for common things parents say; we won't be sharing your or your child's name with anyone.

### Student Characteristics

1. Tell me about xx? What are his/her interests? What does he/she like to do outside of school?
2. About how much time does your child spend reading each week? What is his/her favorite reading material? [books, magazines, comics, internet articles, newspapers]

Think about educational activities that might occur outside of school (such as visits to the library, going to museums, watching educational videos or TV shows, discussing newspaper or magazine articles about current events, receiving tutoring, participating in a club where s/he learns). Which, if any, of these activities does your child do? How often? *[Could ask in pairs]*

3. What is xx like as a student? What qualities does xx possess that helped them as a student in middle / elementary school? What qualities make school difficult for him/her?
4. When your child doesn't want to do something, what works best to motivate him/her?
5. Where does your child typically go at the end of the school day? Is your child involved in any after-school activities? If so, what type? How many hours per week?
6. How do you feel about your child's progress in elementary/middle school? How is s/he doing this year?

### Teacher and School Staff Strategies:

7. How did your child's middle/elementary teacher(s) share how s/he was doing in their class? How often? Was this satisfactory?

- a. Did your child receive extra help in middle/elementary school? [such as IEP, tutoring]
  - b. If yes, did you meet with your child's teacher(s) and/or other school staff to plan your child's program and services?
8. Do you think the teacher(s) had high expectations of your child?
  9. Were there any practices that were particularly helpful to your child's learning either with the regular classroom instruction or with additional support?
  10. Did your child's teacher provide activities for practice at home?
  11. At your child's school, would you say that student discipline was handled fairly?

**Family Characteristics/Involvement:**

12. What is your highest level of education?
  - a. What is the highest level of education you think your child will reach (i.e. High school, professional or trade school, college)?
  - b. What type of job would you like to see your child do?
13. I know it can sometimes be hard to help your child with homework. Are you able to help your child with their homework? If so, how do you tend to help your child with homework? If no, are you available in the evenings to help with homework?
  - o Place to do it
  - o Check if it is done
  - o Help them do it
  - o Check it over and give ideas or point out errors
  - o Check assignments on line or in agenda
14. Have you had an opportunity to volunteer at your child's school?
  - o Classroom aid
  - o Office aid
  - o Field trip
  - o School improvement team
  - o PTA
  - o Tutor
  - o Special events

**Wrap up:**

Our report will be on the WCPSS Web site this summer. Would you like us to send you a summary of the finished report? [If yes, get address or e-mail.]

**This Page Intentionally Left Blank  
For Front and Back Printing**

## **APPENDIX B**

### **WCPSS CONTEXT ON LEP AND SWD SUBGROUPS**

Students with academic risk factors are those who have limited English proficiency (LEP), students with disabilities (SWD), and/or students eligible to receive free or reduced-price lunch (FRL). As context for this study, readers can benefit from knowing more about the nature of each of the LEP and SWD subgroups and the services provided to them, as well as related demographic and assessment trends for all three groups. Much of the data shared in this section is from the student outcomes reports prepared for each school level in 2007 by E&R staff (Baenen & Holdzkom, 2007a; Baenen & Holdzkom, 2007b); readers are encouraged to look at these reports for more information. Some additional analyses were also completed for this report.

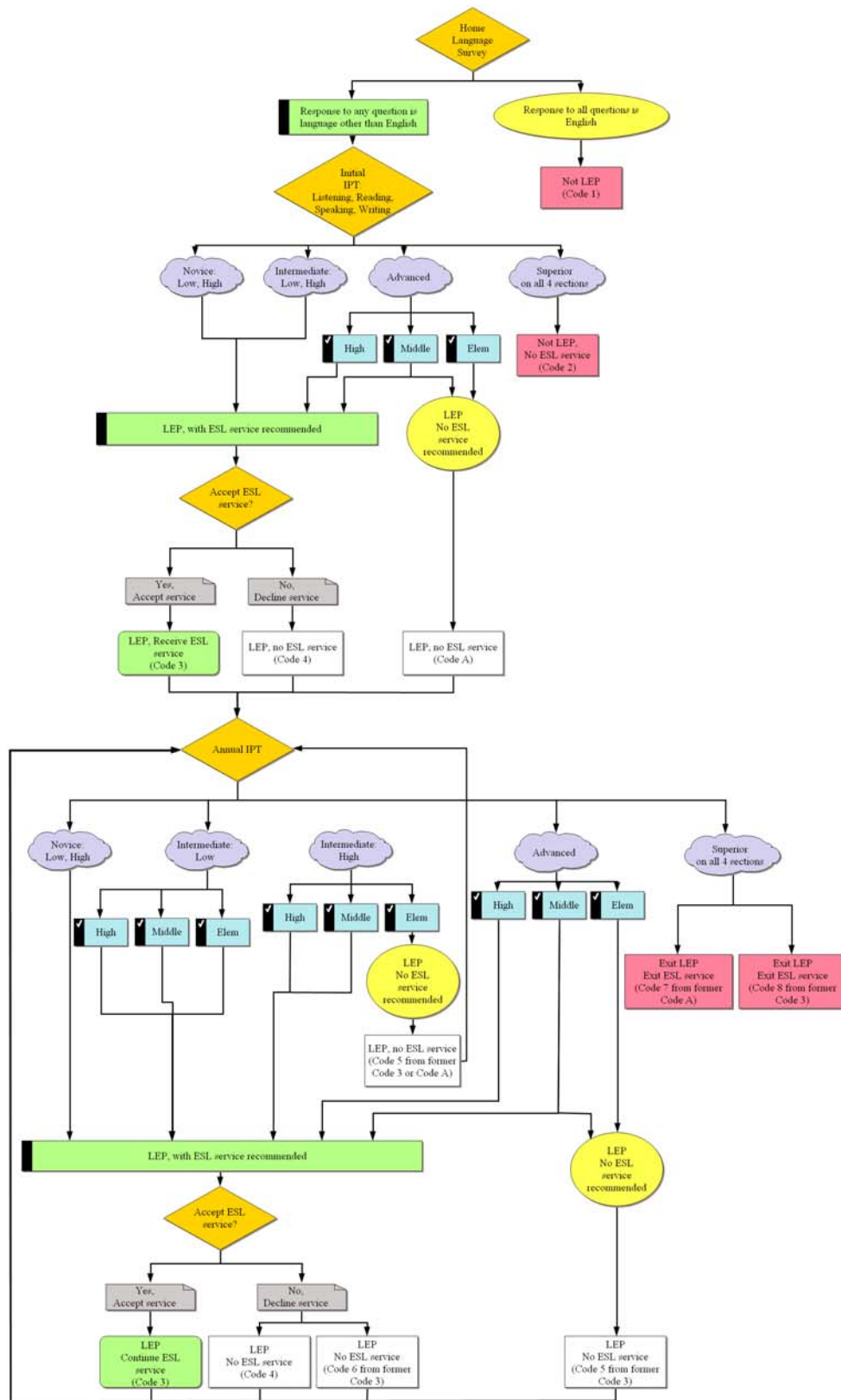
### **NATURE OF LEP AND SWD SUBGROUPS**

#### **Limited English Proficient (LEP) Students**

##### *Identification*

When a student enters WCPSS, a home language survey given to them or their parent/guardian indicates whether or not the English language is the only language spoken in his or her home. If another language is spoken in the home, the student is given the Idea Proficiency Test (IPT), the state-adopted assessment of English language proficiency. The IPT assesses English language proficiency through the use of four sections: Reading, Listening, Writing, and Speaking. Students can receive a score from the test of Novice (Low or High), Intermediate (Low or High), Advanced or Superior on each of the four sections. Generally, if a student does not receive a Superior score on all four tests, he or she is classified as LEP. The LEP ESL Decision Tree Flow Chart, which maps the process, is included in Figure B1. Standards for proficiency have been raised several times in the last several years due to an increased focus on academic rather than social language as required by state and federal mandates. Thus, students are more likely to be classified as LEP.

**Figure B1**  
**LEP and ESL Services Decision Tree**



Data Source: Produced by E&R in collaboration with WCPSS ESL Services Office

**WCPSS Entry**

Of the LEP students enrolled as of spring 2006, the highest percentage of students (35% at elementary and 21% at middle school) enrolled during the 2005-06 school year (see Table B1). In our study, we focused on students enrolled in WCPSS at least three years (about 40% of the elementary and two thirds of the middle school LEP students enrolled).

**Table B1**  
**Entry of LEP Students, Spring 2006**

WCPSS Entry	Earlier	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
Elementary ( <i>n</i> =4,005)	2.4%	5.6%	8.2%	10.4%	14.0%	24.0%	35.4%
Middle ( <i>n</i> =1,372)	23.6%	7.5%	9.0%	11.4%	12.0%	15.5%	21.0%

Data Source: May 2006 (5/1/06) Student Locator merged into July 2006 End-of-Year Summary

**LEP Services**

Most (81%) LEP students in May 2006 received English as a Second Language (ESL) services. Another set of LEP students (about 10%) were eligible to receive ESL services, but their parents declined service, either because their base school did not offer the program and they did not want to switch schools or for another reason. Another 9% of students kept their LEP status, but scored too high on the IDEA Proficiency Test (IPT) to receive ESL services.

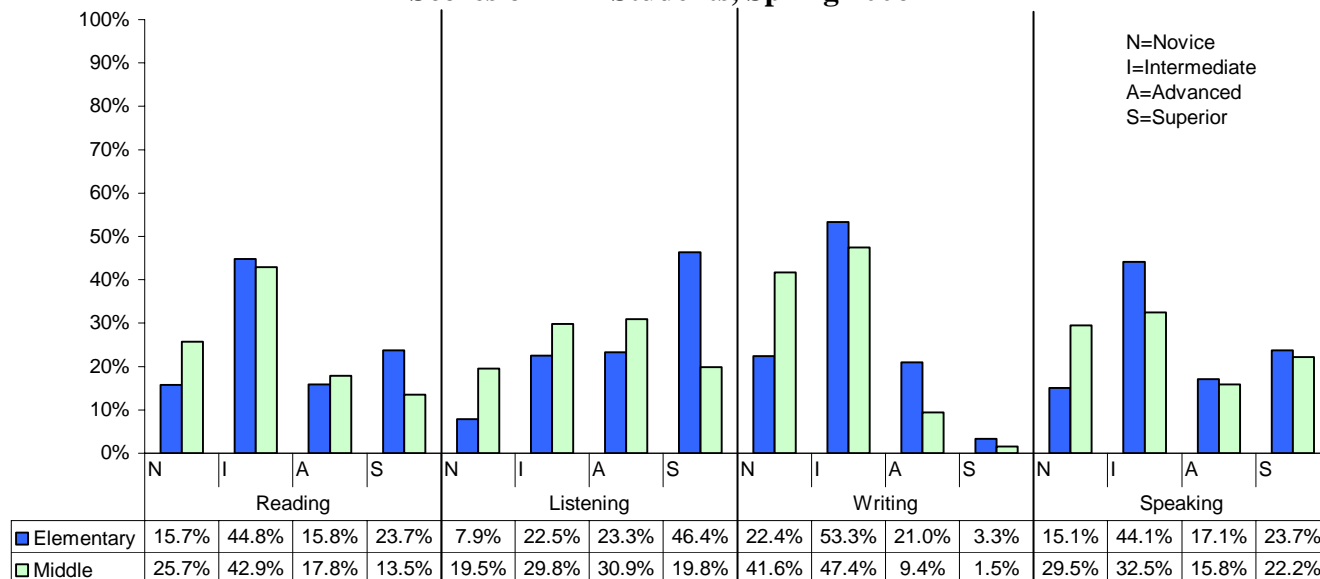
ESL services focus on the English Language Development Standard Course of Study (ELD SCS), adopted December 2003 by the State Board of Education. This is the state-mandated standard course of study for all teachers who instruct LEP students, including regular classroom teachers who teach LEP students. ESL teachers use the grade level and content area standard courses of study in conjunction with the ELD SCS. The ELD SCS is linked to the English Language Arts (ELA) standard course of study. The Superior level in all four domains (Listening, Speaking, Reading, and Writing) includes the at-grade-level competencies from the ELA. In the ESL classroom, the goal is for all instruction to be in English. However, ESL teachers use the student's native language with novice students who are really struggling (perhaps a phrase or two to make them feel more comfortable and make sure they are on track). This is likely only when teaching a homogenous group, however, in order to be fair to students in a class where many languages are spoken.

ESL teachers coordinate with regular teachers as much as possible. K-5 ESL teachers participate in grade-level meetings and 6-12 ESL teachers meet with teachers in department meetings and on an as-needed basis, with time and scheduling issues as the biggest challenges. In Grades K-8, ESL teachers help LEP students as needed with their regular classroom work.

**IPT Assessment Trends**

LEP students are retested for English proficiency each spring. As shown in Figure B2, students generally tend to achieve the highest levels of proficiency (Advanced or Superior) on the Listening section of the test (elementary: 70%; 51%: middle). Students tend to achieve these highest levels of proficiency least often on the Writing section of the test (elementary: 24%; middle: 11%).

**Figure B2**  
**IPT Scores of LEP Students, Spring 2006**

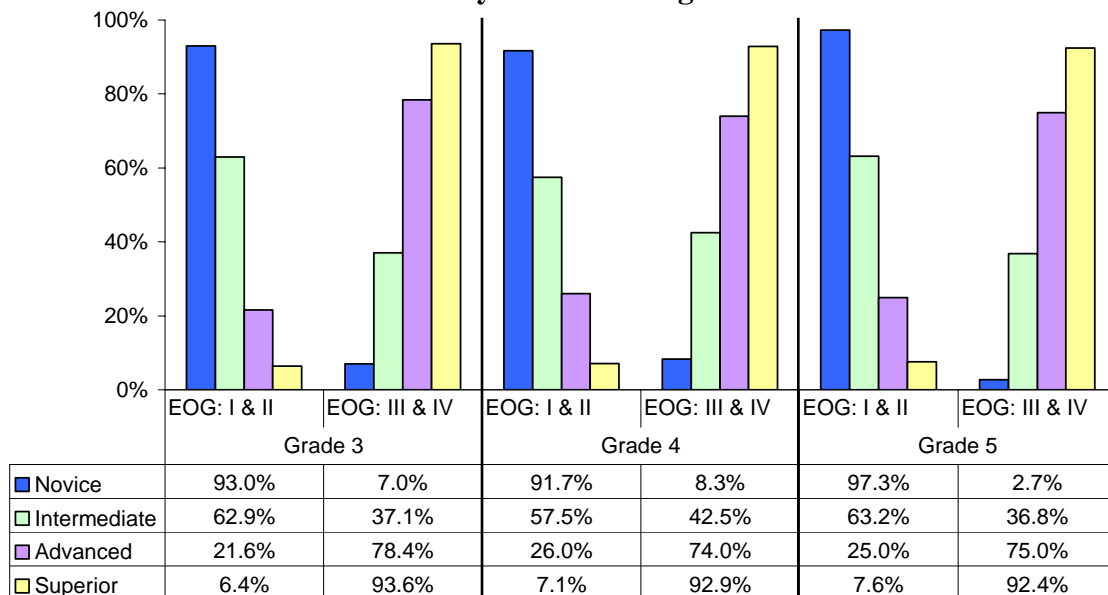


Note: *n*~3,500 elementary; *n*~1,262 middle. Number of students tested varies by 0 to 1 per section.  
 Data Source: 2005-06 WCPSS Student Outcomes reports, Elementary and Middle

Research has shown that it takes from four to ten years to become proficient in academic English (Cummins, 1981; Thomas and Collier, 2002). As of May 2006, 23% of elementary LEP students and slightly less than half of middle school LEP students had not as yet achieved English proficiency, although they had entered the school system four or more years earlier. LEP students are only exempted from EOG reading tests in their very first year in a United States school if they score below Intermediate High on the IPT Reading test. Some LEP students may be deemed eligible to take the North Carolina Checklist of Academic Standards (NCCLAS) in place of the standard EOG tests.

Figures B3 and B4 illustrate that students with stronger English skills based on the spring 2006 IPT Reading section are much more likely to score at or above grade level on the EOG than are those with weaker English proficiency. Few students who scored Novice on the IPT Reading section (16% or fewer by grade) scored in Level III or IV (at grade level or above) on the EOG reading test, compared to 92% or more by grade among those who scored Superior. The percentage of students able to score at grade level on the EOG tests increased by 27 to 41 percentage points once students reached at least Intermediate status on the IPT Reading section. Students in grades 3 and 6 scoring at the Intermediate level on the IPT Reading section showed the least difference between the percentages scoring at Levels I or II (below grade level performance) and Levels III or IV on the EOG reading tests.

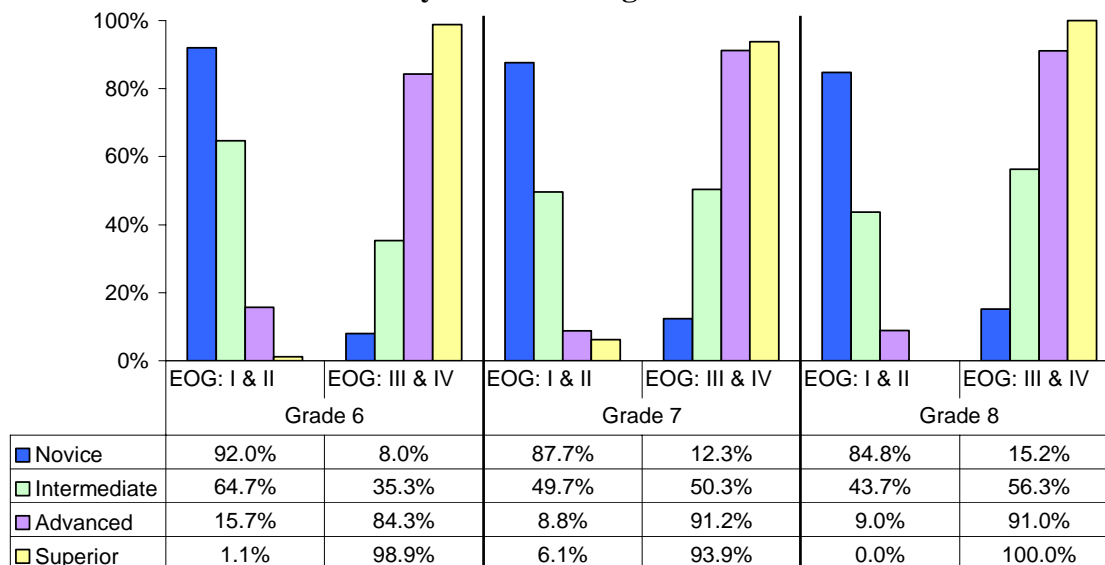
**Figure B3**  
**Percentage of Spring 2006 Elementary Grades 3, 4, and 5 IPT Reading Scores**  
**by EOG Reading Level**



Note: *n*=Grade 3: Novice-43, Intermediate-224, Advanced-153, Superior-249  
*n*=Grade 4: Novice-36, Intermediate-134, Advanced-123, Superior-224  
*n*=Grade 5: Novice-37, Intermediate-125, Advanced-124, Superior-197  
 Interpretation Example: “93% of (or 40 of 43) Grade 3 students scoring as Novice on the Spring 2006 IPT Reading section scored below grade level (either Level I or Level II) on the Spring 2006 EOG Reading test.”  
 Data Source: May 2006 (5/1/06) Student Locator merged into July 2006 End-of-Year Summary.



**Figure B4**  
**Percentage of Spring 2006 Middle Grades 6, 7, and 8 IPT Reading Scores**  
**by EOG Reading Level**



Note: n=Grade 6: Novice-25, Intermediate-184, Advanced-89, Superior-90  
 n=Grade 7: Novice-81, Intermediate-147, Advanced-68, Superior-49  
 n=Grade 8: Novice-99, Intermediate-158, Advanced-67, Superior-31  
 Interpretation Example: “92% of (or 23 of 25) Grade 6 students scoring as Novice on the Spring 2006 IPT Reading section scored below grade level (either Level I or Level II) on the Spring 2006 EOG Reading test.”

Data Source: May 2006 (5/1/06) Student Locator merged into July 2006 End-of-Year Summary.

**Students with Disabilities (SWD)**

*Disabilities*

A student with a disability is defined as a student needing special education due to mental retardation, hearing impairment (including deafness), speech or language impairment, visual impairment (including blindness), serious emotional disturbance, orthopedic impairment, autism, traumatic brain injury, other health impairment, or specific learning disability. As of May 2006, most WCPSS SWD students were classified as learning disabled (LD), other health impaired (OHI), or, in grades K-5, speech/language impaired (S/L). Overall, WCPSS SWD students fell within 13 disability categories (see Table B2). The percentage of elementary students who were SWD (13%) was slightly lower than the percentage of middle school students who were SWD (16%).

**Table B2**  
**Students by Disability, Spring 2006, Grades K-5**

Code	Name	Number of Grade K-5 SWD Students (n=7,959)	Percentage of Grades K-5 SWD Population	Number of Grade 6-8 SWD Students (n=4,623)	Percentage of Grades 6-8 SWD Population
AU	Autistic	552	6.9%	216	4.7%
BED	Behaviorally/Emotionally Disabled	224	2.8%	256	5.5%
EMD	Educable Mentally Disabled	340	4.3%	248	5.4%
HI	Hearing Impaired	89	1.1%	28	0.6%
LD	Learning Disabled	2,703	34.0%	2,302	49.8%
Multi D	Multi-Disabled	27	0.3%	22	0.5%
OHI	Other Health Impaired	1,573	19.8%	1,278	27.6%
OI	Orthopedically Impaired	32	0.4%	16	0.3%
S/L	Speech/Language Impaired	1,298	16.3%	56	1.2%
S/P	Severely/Profoundly Mentally Disabled	21	0.3%	16	0.3%
TBI	Traumatic Brain Injured	12	0.2%	14	0.3%
TMD	Trainable Mentally Disabled	77	1.0%	66	1.4%
VI	Visually Impaired	28	0.4%	26	0.6%
Not known	---	983	12.4%	79	1.7%

N=59,442 Elementary Grades K-5

N=28,012 Middle Grades 6-8

Data Source: May 2006 (5/1/06) Student Locator merged into July 2006 End-of-Year Summary.

## DEMOGRAPHIC TRENDS

WCPSS has been growing rapidly overall across K-12 (see Table B3). As with the system, the number of students who are FRL, SWD, or LEP has increased over time. While the overall number of LEP students is small relative to the other groups, it is noteworthy that their numbers have come close to doubling since 2001.

**Table B3**  
**Students by Academic Risk Factor, Spring 2001-06, Grades K-12**

	2001	2002	2003	2004	2005	2006
<b>All FRL</b>	21,959	24,172	25,782	28,428	30,881	35,195
<b>All SWD</b>	14,179	14,483	14,948	16,025	16,630	17,264
<b>All LEP</b>	4,398	5,451	6,610	5,659	6,371	7,989
<b>FRL and LEP</b>	2,686	3,455	4,157	3,801	3,982	5,429
<b>FRL and SWD</b>	4,806	5,134	5,320	5,851	6,050	6,752
<b>LEP and SWD</b>	72	96	128	109	115	128
<b>FRL and LEP and SWD</b>	204	289	387	408	441	553
<b>All WCPSS</b>	<b>97,522</b>	<b>100,912</b>	<b>104,464</b>	<b>108,712</b>	<b>113,934</b>	<b>121,114</b>

Note: Students can be counted more than once in the top section of this table (duplicated count). Students are counted only once on the bottom part of the table (unduplicated count).

Data Source: Analysis of WCPSS Student Locator annual May data

## Ethnicities

Most K-12 multi-academic risk students in Spring 2006 were Hispanic/Latino (5,615, or 44%) or Black/African American (5,107, or 40%).

- At the elementary level, Hispanic/Latino students were more common among multi-academic risk students (3,955 or 53% of the multi-academic risk students) of Hispanic/Latino ethnicity compared to Black/African American students (2,331 or 31%).
- At the middle school level, Black/African American students were more common than Hispanic/Latino students among the multi-academic risk population (49% Black/African American vs. 34% Hispanic/Latino students).

## ASSESSMENT TRENDS

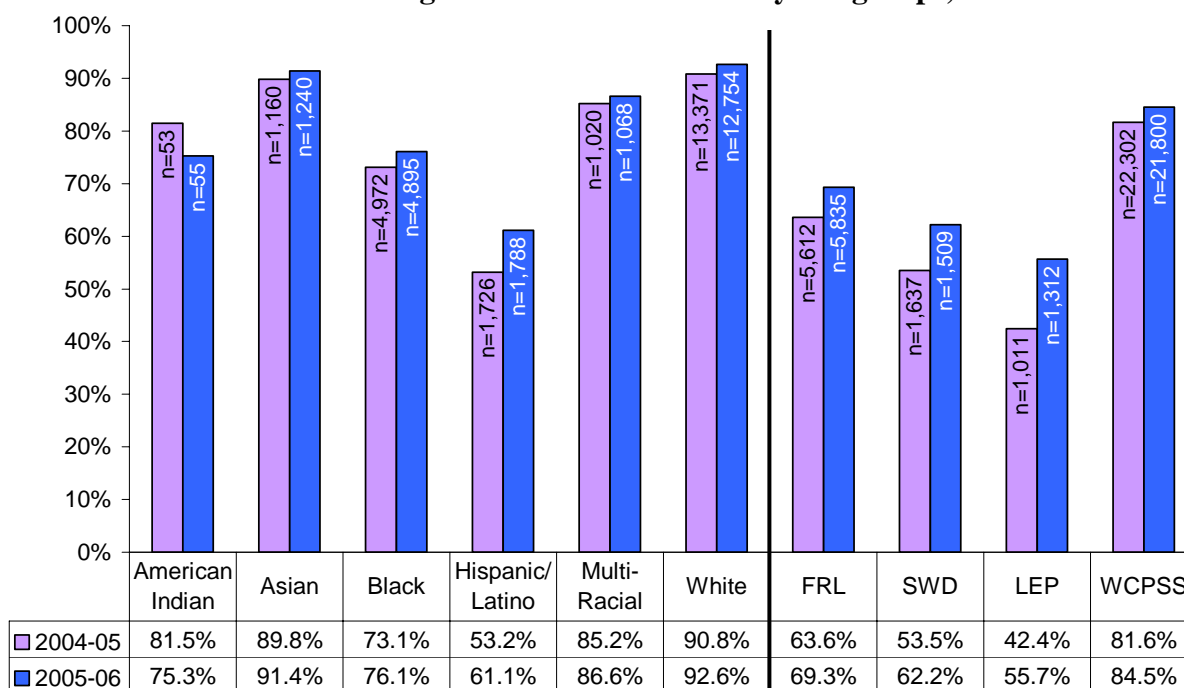
### K-5 Assessment

In 2005-06, 85% of all K-2 students reached reading proficiency in the K-2 assessment (three percentage points more than the previous year), see Figure B5. LEP, SWD, Hispanic/Latino, and FRL students showed much lower levels of proficiency, with FRL students having the highest percentage of students at grade level and LEP the lowest. LEP students showed the largest increase in reading proficiency percentages between 2004-05 and 2005-06. In mathematics, 70%

of all K-5 students were proficient in all mathematics strands on the K-5 assessment.

- K-2 FRL students moved from 64% to 69% (a 5 percentage point increase) showing reading proficiency between 2004-05 and 2005-06. In mathematics, 47% of K-5 FRL students were proficient, a 1% decrease over 2004-05 results.
- K-2 SWD students improved from 54% to 62% (an 8 percentage point increase) showing reading proficiency between 2004-05 and 2005-06. In mathematics, 41% of K-5 SWD students were proficient, a 1% decrease over 2004-05 results.
- K-2 LEP students moved from 42% to 56% (a 14 percentage point increase) in reading proficiency between 2004-05 and 2005-06. In mathematics, 41% of K-5 LEP students were proficient, a 1% increase over 2004-05 results.

**Figure B5**  
**K-2 Students Meeting Book-Level Standards by Subgroups, 2005-06**



Note: *n* counts are total number of students meeting book-level standards in that subgroup. Ethnic data are unduplicated counts; academic risk-group data are duplicated counts.

Data Source: 2005-06 WCPSS Student Outcomes reports

### End-of-Grade (EOG) Test Results

In this study, we included only students able to take the multiple-choice standard version of the EOG for four years. Thus, we did not include students exempted from testing overall or who took alternate assessments during that time. Students with disabilities and students identified as limited English proficient who do not take the EOG tests take a state-designated alternate

assessment in response to the federal Individuals with Disabilities Education Act (IDEA) and the No Child Left Behind Act of 2001 (NCLB) to measure grade-level competencies.

- NCCLAS (North Carolina Checklist of Academic Standards): measures competencies of LEP students and some SWD students
- NCEXTEND2: measures competencies of SWD students using modified achievement standards in a simplified multiple-choice format
- NCEXTEND1: measures performance of students with significant cognitive disabilities using alternate achievement standards

The EOG test results are divided into four levels (I through IV) defined by the North Carolina (NC) Department of Public Instruction (DPI) per subject area. A level categorizes student performance on the test at insufficient mastery of knowledge and skills in the subject area (Level I), inconsistent mastery (Level II), consistent mastery at grade level proficiency (Level III), or superior mastery clearly beyond proficiency requirements (Level IV).

### ***Reading***

More than 90% of elementary students and 91% of middle school students who took the multiple-choice versions of the EOG reading test met or exceeded grade-level standards in spring 2006. At least two thirds of the students with academic risk factors were able to meet grade level standards, but these percentages were lower than for WCPSS overall. LEP students showed the lowest proficiency percentages.

- At the elementary level (grades 3-5), 80% of FRL students, 77% of SWD, and 69% of LEP students were able to score at or above grade level.
- At the middle school level, the pattern was similar, with 78% of FRL, 73% of SWD, and 60% of LEP students able to demonstrate grade-level proficiency.

Most students with multiple academic risk factors showed slightly lower performance in reading than the overall academic risk subgroups.

- Elementary level: 52% (FRL/SWD/LEP students) to 80% (SWD/LEP students) at or above proficient level
- Middle school level: 53% (SWD/LEP students and FRL/SWD/LEP students) to 57% (FRL/LEP students) at or above proficient level

### ***Mathematics***

Mathematics EOG tests in 2005-06 held to a new curriculum, and new cut scores for proficiency were established based on the “reasoned judgment” method (one of four methods considered). This resulted in a more rigorous mathematics standard than in past years. Reading also plays a part in mathematics test performance.

EOG test results showed that 76% of elementary school students and 75% of middle school students scored at or above proficiency in mathematics. The percentage was lower for students with academic risk factors at each level.

- Elementary level students demonstrating grade-level proficiency: 53% of all FRL, 53% of all SWD, and 50% of all LEP students
- Middle school level students demonstrating grade-level proficiency: 46% of all FRL, 43% of all SWD, and 38% of all LEP students

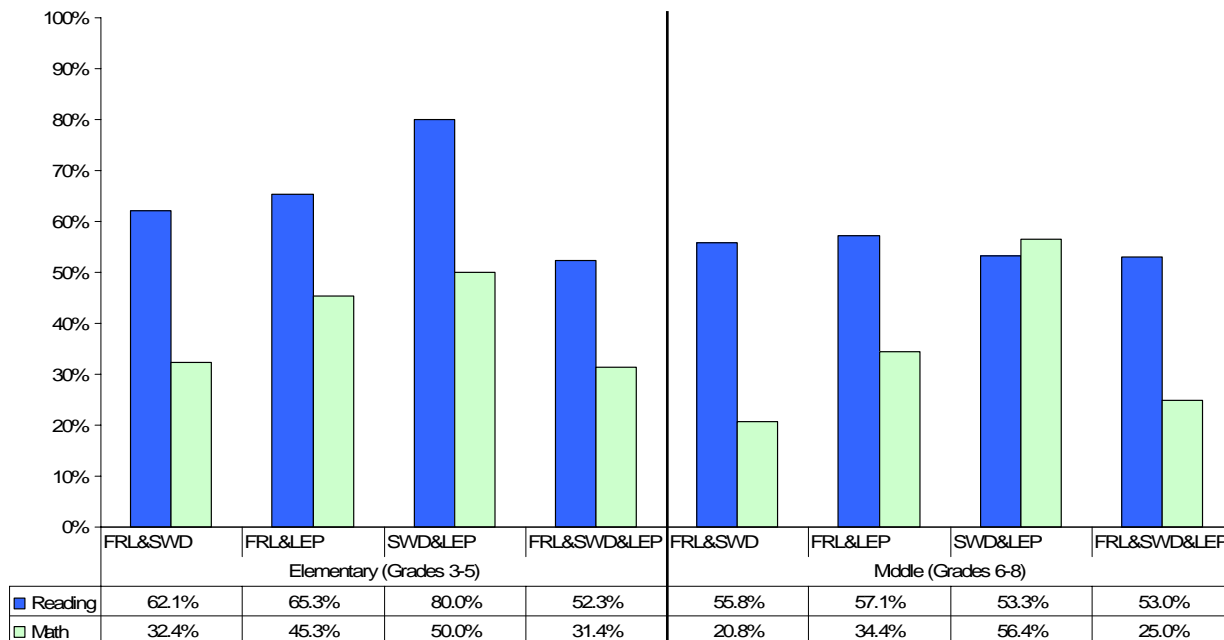
In mathematics, with the exception of SWD/LEP students, those with multiple academic risk factors showed lower performance than the overall academic risk subgroups.

- Elementary level: 31% (FRL/SWD/LEP students) to 50% (SWD/LEP students) at or above the proficient level.
- Middle school level: 21% (FRL/SWD students) to 56% (SWD/LEP students) at or above proficient level.
- The lowest performing subgroup at both grade levels in mathematics were those students identified with both SWD and FRL and those with all three academic risk factors. The highest performing subgroup at both grade levels were those students identified with both SWD and LEP academic risk factors.

Spring 2006 EOG test results showed the percentage of students performing at or above the proficient level across WCPSS in reading was 16 percentage points above mathematics. The gap for students with academic risk factors overall was 28 percentage points, while the difference for students with multiple academic risk factors was 26 percentage points (80% proficient in reading and 54% proficient in mathematics). Figure B6 displays the percentages of students with multiple academic risk factors at or above proficiency in EOG reading and mathematics tests. It is of interest to note that:

- the variation in proficiency across these subgroups in reading is greater at the elementary than the middle school level,
- the largest gaps in proficiency between reading and mathematics were for FRL/SWD and SWD/LEP students at the elementary level, and
- the difference in proficiency percentages among middle school multi-risk students was much smaller for SWD/LEP students than for other groups. (Keep in mind that this is a smaller group.)

**Figure B6**  
**Percentages of Multiple Academic Risk Students Proficient on**  
**Reading and Mathematics EOGs, Spring 2006**



N=59,442      Elementary school population  
 n=25,397      Elementary school at-risk population  
 N=28,012      Middle school population  
 n=11,190      Middle school at-risk population  
 Note:            Unduplicated counts  
 Data Source:    2005-06 WCPSS Student Outcomes reports

## **APPENDIX C**

### **CASE SUMMARIES**

These case studies represent students in WCPSS who have shown either positive or negative achievement patterns over time. Pseudonyms are used for each case to protect student confidentiality. These case studies can be useful in discussing why some students were more or less successful over time.

In selecting cases, we included students judged as able to handle the multiple-choice standard EOG tests over four years. To be considered a successful case, students had to have EOG scores at Level III or IV (at or above grade level) in spring 2006 and all positive residual scores based on the last four years of testing. Cases with negative achievement patterns had to have Level I or II (below grade level) scores in spring 2006 and all negative residual scores over the last four years of testing.

Residual scores are generated from a value-added regression model (called the effectiveness index) that the Wake County Public School System (WCPSS) has used since the early 1990s to assist schools in identifying their strengths and areas for improvement relative to other schools in the school district. Residual scores, computed for all students who have the necessary pretests, are the difference between students' actual scores and their predicted model score when compared to other similar students. Thus, the residual may be thought of as the value added by a specific teacher/school. The current year's test scores are the dependent variables and the state-designated pretest scores are the independent variables. Indicator variables control for students' special education status, academically gifted status, Free or Reduced-Price Lunch (FRL) status, and percentage of FRL students in the school.



**CASE SUMMARY 1: PILAR**  
*LEP, Positive Progress in Mathematics, Grade 5*

**Student Characteristics:** Pilar repeated grade 1 the year she came to WCPSS from Mexico in April 2001. She has not been retained since. However, she is one year older than is typical for her grade. Pilar has received good grades and K-5 assessment results in school. She did not quite reach the grade level standard for grade 1 in reading. Her EOG levels in both reading and mathematics have all been above grade level except grade 3 reading, which was at grade level. Pilar's mathematics residuals increased each year, with 3<sup>rd</sup>-grade at predicted levels, 4<sup>th</sup> grade above predicted levels, and 5<sup>th</sup> grade well above predicted levels. Reading residuals for Pilar in the 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> grades were at predicted levels in 3<sup>rd</sup> and 5<sup>th</sup> grades, and well above predicted levels in 4<sup>th</sup> grade. With her excellent conduct, work habits and attendance, Pilar's teachers felt she was a joy to teach.

Pilar enjoys school, music, games, cartoons and educational type programs. Pilar reads several chapters of whatever book she is into every night before bed for about 20 minutes. Pilar's family engages in family activities including playing games and visiting the zoo and water parks. Pilar is very interested in Egypt, and after graduating college she'd like to become an archaeologist. Pilar helps her mother with her baby brother and enjoys taking care of others. Her teacher in 2005-06 even commented that Pilar enjoys helping other students with their work and is like a "mother hen."

Pilar had limited English skills when she first came to WCPSS, but felt that her English skills were on par with her peers after she completed three years of ESL support. Pilar said that she is fluent speaking, reading, and writing in Spanish, and that her family speaks Spanish at home.

**Classroom Experiences:** Pilar has attended the same elementary school for grades 1-5. She gets along well with others and does not cause trouble. Pilar identifies her greatest academic difficulty to be writing, particularly writing fiction, but will ask questions when she doesn't understand something. She disliked and sometimes refused to accept compensating shortened assignments that she was given by her teachers. Pilar usually completed her homework, and would take on extra assignments to stay on top of new material. Pilar likes working in pairs and small groups, but has trouble when teachers get pushed for time and abbreviate or rush their explanations. Pilar also found using a song to help learn and remember things to be a very useful strategy. Pilar does not like having an unpredictable schedule, as she did in 4<sup>th</sup> grade.

Effective strategies and interventions that teachers mentioned using with Pilar included guided reading; alternative reading strategies; leveled reading groups; small group, one-on-one, and peer-on-peer work. Pilar's teachers described her as motivated, engaged in class and hard working even though at times she would work at a slower pace than others. Pilar's teachers mentioned breaking lessons into smaller chunks; using manipulatives for math; and using writing workshops and checklists. Pilar also received resources like Honor Academy, WEB reading program, Developmental Spelling, Math Superstars, and the ESL program. Her teacher in 2003-04 collaborated with the ESL teacher and with other same grade-level teachers. Less collaboration was evident past this point, after Pilar left ESL. Her teacher in 2005-06 reported that she considered the classroom to be self-sufficient and therefore did not collaborate much with other teachers.

**Family Support and Involvement:** Home support for academic achievement has improved over time for Pilar. From December 2003 until December 2004, Pilar lived in a small dwelling with her parents and newborn brother. Between the noisy baby, close quarters, and helping her mom, Pilar was not properly focused on school and fell behind. On a few occasions, she even fell asleep in class due to lack of sleep the night before. Halfway through grade 4, the family addressed these issues, and moved into a larger residence which provided Pilar with her own room and desk. In her new environment, Pilar was not only

able to have a quieter setting for studies, but her parents also made sure that she had time to focus on her school work. Not long after the move, her grades began to improve, due to a positive change in her habits.

Pilar's parents attended conferences with teachers about once a year. Pilar's teachers said that her parents did not appear to be helping her with homework, but her teacher in 2005-06 said that she thought that someone else was helping Pilar with homework. Pilar said that her mother helped her prepare for tests by quizzing her. Pilar believes that her parents want her to graduate from high school at least and want her to develop a career, not just have a job.

### CASE SUMMARY 2: BERNARDO

*LEP, Negative Progress in Mathematics, Grade 5*

**Student Characteristics:** Bernardo entered WCPSS in second grade in August 2001 and was retained. Bernardo's grade 3 EOG scores in mathematics indicated that he was below grade level and well below predicted levels. In grade 4, he was at grade level and at predicted levels according to his EOG exam residuals in mathematics. Bernardo fell below grade level in grade 5 on his mathematics EOGs, but was at predicted levels based on his residual scores. On his grade 3 reading EOGs, Bernardo scored at grade level and above predicted levels. In grade 4 he slipped below grade level on his reading EOGs but was within predicted levels according to his residuals. He was able to score at grade level in reading on his grade 5 EOGs, with residuals that were at predicted levels. Bernardo's reading teacher in 2003-04 noted that Bernardo had poor work habits, and Bernardo said that his teacher that year did not command respect. On his report cards, Bernardo typically received grades that indicated that he was below grade level in both reading and mathematics. He typically had good attendance, except in grade 3 when he missed more days than is considered standard. Bernardo has been suspended once for fighting and is one year older than typical students in his grade.

Bernardo enjoys video games, taking walks, and nature. In 10 years he expects to be working in the restaurant business, and he may eventually attend college. Bernardo isn't sure what his parents expect for his future. For years, fellow students have picked on Bernardo and this seems to have affected his behavior. In elementary school, teachers helped reduce the bullying, but in middle school they don't. Aside from this, Bernardo gets along pretty well with others. Bernardo misses recess, which they had in elementary school, because it provided a mental and physical break. Bernardo describes his class in 2003-04 as rather disruptive, containing many unmotivated students and having a teacher who did not command respect. He feels as though he has had multiple teachers since then that he said he was comfortable going to with questions and problems.

Bernardo has been in ESL since entering WCPSS in 2001. Spring 2006 IPT scores showed Bernardo as superior in listening, advanced in reading and speaking, but intermediate-low for writing. He didn't understand English very well in 1<sup>st</sup> grade but was comfortable with it by 3<sup>rd</sup> grade. Watching TV and interacting with people helped him most in learning the language. His parents speak mostly Spanish at home although they understand some spoken English and his sisters are bilingual. Bernardo's teacher's records and comments suggest that he may have language issues beyond not being a native speaker, because he struggles in vocabulary, decoding, phonics, and spelling.

**Classroom Experiences:** Throughout grades 2-5, Bernardo was in an after-school community program run through his church, which he enjoyed. In the program he got one-on-one tutoring and help with his homework, but it is limited to elementary school students. One technique Bernardo has employed to help himself focus and attack his work is to pretend his homework is a video game. Bernardo's favorite

subjects were mathematics, although he struggles with it, and science. He finds both subjects to be interesting and he likes solving problems. As a 6<sup>th</sup> grader, Bernardo worked on 5<sup>th</sup>-grade mathematics at home some in his free time and says that he understands it better; now he focuses on trying to figure out why it works, not just how to do it. Language arts was Bernardo's least favorite subject because he doesn't like to read that much, although he realizes the benefits of reading. Bernardo describes himself in elementary school as motivated, fairly responsible, and being engaged in non-academic reading 20 to 30 minutes per day.

Bernardo's teachers described him as distracted in large groups, a "people person," visual, tactile, having a kinetic learning style, and hard-working when motivated and not distracted, but often unmotivated. Bernardo was enrolled in ESL, ALP instruction for reading, and before school tutoring. His teacher in 2005-06 describes Bernardo as being disengaged due to his belief that the work was too immature for him despite the fact that he was still struggling with the material.

**Family Support and Involvement:** Bernardo's parents generally seemed supportive and he has a quiet environment to complete homework. His mother used privilege earning as a motivator to get him to do his work. Bernardo said his mother would check his homework and help him with his reading; however, his teacher in 2005-06 said that the mother's English skills were such that an interpreter was needed for conferences. Bernardo's teachers described his mother as lacking follow through, and even seemed to take directions from Bernardo instead of the other way around. Bernardo's teacher in 2004-05 described the parents as being involved, speaking up about social issues at school, and being active in church. Bernardo's mother attended ALP meetings, conferences, and Title I meetings. Bernardo's father was unable to attend most meetings due to work. His father did, however, attend conferences with his bilingual teacher 2004-05. His teachers reported Bernardo is often tired at school because of staying up late watching television with his family.

**CASE SUMMARY 3: FRANCISCO**  
*LEP, Positive Progress in Reading, Grade 5*

**Student Characteristics:** Francisco entered WCPSS in 2001 as a first grader. His EOG achievement levels during grades 3-5 were typically at grade level in mathematics and reading, with the exception of his grade 3 reading score, which was below grade level, and his grade 4 mathematics score, which was above grade level. Francisco's residuals for reading were at predicted levels, but increased each year. His residuals for mathematics were mixed, being at predicted levels in grades 3 and 5 but above predicted levels in grade 4. Francisco was seldom absent or tardy, although he did have a high amount of absences in grade 4 because of a serious illness and an injury. Francisco's teachers described him as a motivated and interested student who completed homework and had no behavior or attendance issues. Francisco has never been retained, and is the same age as his classmates. His K-5 assessment scores were generally at grade level, although he did not reach book level in grade 2.

Francisco stated that he enjoys playing soccer and video games. He likes museums but prefers aquariums and enjoys traveling with his parents. He reads during class time and likes comic books. Francisco's favorite school subject is mathematics. He would like to be an auto mechanic and sometimes helps his stepfather, who is a mechanic. Francisco's teacher in 2004-05 described him as a respectful student who followed directions, tried hard, and was interested in all subjects.

When Francisco entered WCPSS he knew little English, and was enrolled in ESL. His 2006 IPT scores indicated that he had superior abilities in listening, reading, and speaking. At home, Francisco's family primarily speaks Spanish, although both his mother and stepfather speak English and use it at work. Francisco reported that his mother bought videos for him to watch to help improve his English when he was not in school.

**Classroom Experiences:** Two teachers reported that Francisco was a hands-on, kinesthetic learner and multi-sensory presentation was identified as a modification on his grade 5 LEP plan. Francisco felt that explanations, examples, and notes to refer back to when doing homework were all helpful, while it was difficult when a teacher moved on too quickly once the basics had been mastered. He found that other students in class sometimes distracted him and this was echoed in one teacher's comment that he was social, though not disruptive.

Writing was identified as an area in which Francisco needed improvement, and mathematics as an area in which he excelled. Both Francisco and his teachers reported that placing him in small groups was effective because other students could help him if he didn't understand. In addition to ESL services, Francisco's teacher in 2003-04 reported that he was in ALP, which helped him. More recent teachers were not sure whether Francisco was in ALP or not. His teacher in 2004-05 stated that Francisco was pulled out of her class for ESL at the same time that she gave her writing instruction, and this hindered his progress in writing.

**Family Support and Involvement:** Francisco received strong support from his family. His teachers reported that Francisco's mother attended conferences and supported him academically. His mother, stepfather, and older sister all provided assistance on his homework; his parents provided structure and a routine for getting it done. He did not have a set place to do homework but did have a set time and a computer with Internet access at home. Francisco's mother volunteered at holiday celebrations in elementary school and continues to volunteer on field trips with his older sister. Francisco's mother reported that she used to visit him at school frequently and knew his elementary school teachers well, but that more recently he has asked her not to visit him at school, apparently due to teasing from other students.

**CASE SUMMARY 4: ROSA**  
*LEP, Negative Progress in Reading, Grade 5*

**Student Characteristics:** Rosa entered WCPSS in August 2002 when she was in grade 2. Her EOG scores were below grade level for grades 3 through 5 in both reading and math. Rosa's reading residuals were all below predicted levels, with grade 4 well below predicted levels. In mathematics, her residuals were well below predicted levels in grade 3, but then at predicted levels in both grades 4 and 5, indicating that she was making progress. Rosa's report card grades indicated that she was below grade level in core subjects, but earned satisfactory grades in elective courses. Her K-5 assessments also indicated that she was below grade level in reading and mathematics. Neither behavior nor attendance was a problem for Rosa, and her teachers described her grade 3 and grade 4 attendance as excellent. Her attendance in grade 5, however, was a bit excessive. She has never been retained, and is the appropriate age for a student in her grade. Rosa is a quiet, studious, and shy girl who has trouble asking for help or making much progress. She exhibited the behaviors of a good student, completing work to the best of her ability and paying attention in class, but did not learn well and had difficulty remembering what she had learned.

Rosa's English skills, including her conversational skills, are still limited despite five years in WCPSS and on-going ESL services. One teacher reported that Rosa's mother had expressed concern because Rosa did not begin to use sentences even in Spanish until age five. No adults speak English at home, although her older brother is able to speak English. In Spring 2006 Rosa's IPT scores were Novice-High for reading and speaking, Intermediate-Low for writing, and Advanced for listening.

Rosa's ESL teacher of at least three years, plus her teachers in 2004-05 and 2005-06 believed that her difficulties in learning could not completely be caused by her limited proficiency in English and that she would have struggled in Spanish, too. Rosa was evaluated in her 2005-06 year for special education services, and the assessors determined that her English language skills, not a learning disability, were the cause of her low academic achievement.

Rosa stated that she likes playing sports and listening to music. She could not identify a type of reading she enjoys and does not read very much. Although her mother reported that she likes to draw, neither Rosa herself nor any of her teachers mentioned drawing as one of her interests. Rosa said she would like to be a model and wants to go to college.

**Classroom Experiences:** Rosa's principal, her teacher in 2005-06, ESL teacher, and mother all reported that Rosa had received tutoring at school. Tutoring assessments show mixed results for Rosa, although there seemed to be general agreement that it was more successful than classroom instruction. All of Rosa's teachers reported using small groups as part of their instruction, but two found that it was difficult to place Rosa in an appropriate group because she needed to work at a much slower pace than all the other students in the class. Rosa was in ESL, attended ALP, received extra tutoring, used English Language Learning and Instruction System (ELLIS), and was reviewed at Student Support Team (SST). She was in Reading Mastery, but it was not successful; the ESL teacher's assessment was that Rosa's vocabulary was not large enough for her to benefit from Reading Mastery. The ESL teacher had independently mentioned that difficulties sometimes arise when regular classroom teachers do not feel a sense of ownership for the LEP students in their classes. This seemed to be the case for Rosa's teacher in 2005-06, who had her in class less than an hour per day.

In terms of learning style, one teacher found that Rosa responded better to auditory stimuli, while another found that she needed visual as well as auditory stimuli. All of Rosa's teachers found that she did better when working one-on-one with either a teacher, a tutor, or a friend, and that large-group situations were

difficult for her. Rosa herself expressed a preference for working in small groups and stated that it was hard to follow when teachers lecture.

**Family Support and Involvement:** The principal at Rosa's elementary school said that getting parents involved is not an issue for the school in general because parents are involved, even those at a satellite location who live more than 10 miles from the school. Rosa's family is supportive; her mother attends conferences and tries to help Rosa with her homework, although she cannot help with anything in English. Her mother reported that Rosa's older brother can and does help her with English homework. Her teacher in 2004-05 met with Rosa's mother and aunt for conferences, while her teacher in 2005-06 reported that family contact was mostly with the ESL teacher. Rosa's ESL teacher reported that her mother was very responsive and involved. In addition, Rosa's mother had been helpful in reaching out to other Spanish-speaking families in the community, particularly in cases where a student was recommended for psychological evaluation for a suspected learning disability. When interviewed, Rosa's mother seemed concerned but resigned to the fact that Rosa learns slowly and "that's just how she is."

**CASE SUMMARY 5: WALTER**  
*SWD, Positive Progress in Mathematics, Grade 5*

**Student Characteristics:** Walter started in WCPSS in fall of 1999 as a kindergartner and attended the same elementary school through grade 5. He is one year older than is typical for his grade because he was retained in grade 1. Walter's reading EOG scores show that he reached grade level in grades 3, 4 and 5 and his residuals indicated that he was at predicted levels. In mathematics, Walters EOG scores were above grade level in grades 3 and 4, but then at grade level in grade 5 with the higher standards. His residuals were above predicted levels in grade 3, and at predicted levels and positive in grades 4 and 5. Report card grades and K-5 assessments were typically at grade level, with an occasional below grade level score in mathematics and on the expository and narrative rubric. Walter is a bright and apparently happy boy who can sometimes be disorganized. His teachers reported that he has Attention Deficit/Hyperactivity Disorder (ADHD), would get distracted easily, and that he had trouble staying focused.

All three of Walters teachers said that he participates in class, is very respectful, and has no behavior problems other than staying focused. His teacher in 2004-05 said that he was a motivated student, although his teacher in 2005-06 said that he did not challenge himself. Walter struggled with completing his work throughout elementary school. His attendance was either noted as good or average.

Walter said he enjoys playing action video games on his Nintendo DS, and he doesn't enjoy reading very much. In terms of expectations, Walter said he plans to be in college in 10 years and possibly be a "lawyer or something." Walter thinks his mother expects him to finish college and be a doctor or scientist.

**Classroom Experiences:** Walter's teacher in 2003-04 reported that he got along well with other students but could get angry, though she indicated that he was justified. Walter mentioned, "Everybody in elementary school was trying to start a fight with me." The principal reported that Walter would come to the office "from time to time."

Walter has an Individualized Education Plan (IEP) and was pulled out of class for Cross-Categorical Resource (CCR) in both reading and writing. Walter was in ALP in 2004-05. The principal and all three teachers mentioned that Walter was average academically. Walter felt he did "good" in elementary school, but in 6<sup>th</sup> grade in middle school he received D's in social studies and science and an F in reading. His teacher in 2003-04 said he didn't complete his homework at first, but when consequences were applied, he did it. Walter's teachers in 2004-05 and 2005-06 said that his homework completion was inconsistent. One teacher thought this was due to Walter's ADHD; she said she could tell when Walter was taking his medication and when he wasn't. Walter said when he didn't understand something he just wouldn't do the work. All three teachers said that Walter did well with structure, procedures, orders, and written instructions. All three mentioned that Walter did better in small-group settings, and one teacher noted that this was a "biggie." One said that he benefited from guided reading.

**Family Support and Involvement:** Walter has limited support at home with his schoolwork. He said his mother checks on his homework but doesn't help him much with it, mostly because he doesn't think he needs help. Walter's teachers and the principal mentioned that his mother has her hands full with Walter's siblings, who hate school. His teacher in 2003-04 said she would see his mother outside of school and got the impression that she was proud of Walter. All three teachers said that Walter does not have a stable home environment and believe that with more support he would be successful. All four children in Walter's family have IEPs, and two teachers mentioned it was difficult to get his mother in for conferences.

**CASE SUMMARY 6: SALLY**  
*SWD, Negative Progress in Mathematics, Grade 5*

**Student Characteristics:** Sally has attended four different schools in WCPSS since she entered the system in August 1999 as a kindergartner. She is a year older than is typical for her grade as she was retained in kindergarten. On her reading EOGs, she scored at grade level in grades 3 and 4, but dropped below grade level in grade 5. Her reading residuals were at predicted levels in grades 3 and 4, but below predicted levels in grade 5. In mathematics, her EOG scores were below grade level in grade 3, at grade level in grade 4, but then dropped below grade level in grade 5. Her mathematics residuals were at predicted levels in both grades 3 and 4, but below predicted levels in grade 5. Thus, 5<sup>th</sup> grade performance was lower in both subjects. Sally typically received ‘needed improvement’ for grades in class and below grade level on K-5 assessments, with a few ‘satisfactory’ grades in mathematics on assessments in grade 1. Records show Sally consistently had very poor attendance: she was absent 38 days in grade 5; her teacher said she could not evaluate her for the 3<sup>rd</sup> quarter because she had missed so much school.

Sally was evaluated in May 2006 for intelligence and other concerns, and results noted intelligence in the low average range, with average nonverbal skills but significant weakness on verbal tasks. She has been described as having a chip on her shoulder, having a lot of attitude, and acting out. Sally’s mother states that Sally is taking medication for hyperactivity. One study conducted by Wake County Health Department indicated that on a good day, Sally acts inappropriately 60% of the time. School records show that in the 2004-05 school year, when she was in grade 4, her conduct was acceptable and that she worked very hard. Sally was pleasant and polite in the interview, but in need of constant clarification of basic questions. She shook hands and said ‘pleasure to meet you.’

Sally reported that she likes dancing but did not mention being involved in any activities at or after school. Sally does not like to read, and only reads maybe ½ an hour a day at school. As far as expectations, Sally doesn’t know what she’ll be doing in 10 years but would like to be a teacher. When asked what subject she would like to teach, Sally said social studies and science because she would like to understand these subjects better herself. She believes she will finish college. As far as her mom’s expectations, Sally said her mother wants her children to grow up and be somebody, go to school, get a job.

**Classroom Experiences:** When asked how she would describe herself in elementary school Sally said she was mean. Her teacher in 2003-04 said Sally tried to start fights when she got to school. When asked if she got along with students and teachers, Sally said she had a lot of friends in elementary school but did not like her teachers; she admitted to having an attitude with teachers and being sent to time-out a lot. She believes these situations were handled fairly.

Sally enjoys physical education because she gets to go outside. Her teacher in 2003-04 said that Sally did best one-on-one and needed close teacher proximity. Peer teaching was effective when Sally was paired with someone who worked well with her and had a lot of patience. She also said that small-group work and guided reading were effective strategies for Sally. In grade 3, Sally had CCR class and was pulled out five times a week, twice each day. Her teacher in 2003-04 found CCR effective because it was a smaller setting, more one-on-one, and more focused. All of Sally’s teachers reported that they collaborated with other teachers and worked as a team to support her. Records indicate that she responded well to tutoring in 2004-05 and her conduct improved that year as well. Sally continued to struggle in all areas and would often give up when material frustrated her. Her teacher in 2005-06 said that Sally had limited academic skills and was reading on a 2<sup>nd</sup>- or 3<sup>rd</sup>-grade level, which greatly impacted her success in all areas. Sally said that study and practice would help her do better, but all of her teachers



reported that she didn't do homework and would rarely do any work outside of school. Sally said her own behavior, homework completion, and insufficient interest/motivation make it difficult for her as a student.

**Family Support and Involvement:** Sally indicated that her family has been involved in supporting her education, although both her teachers in 2003-04 and 2005-06 noted limited support and involvement by her family. Sally reported that her mom would ask about her homework, but she would get help from her sister, who is in grade 8. Sally also said that her mom would attend conferences and help her with homework. Sally said that until a few months ago she had a computer at home where she would do her homework, and that her mother and sister checked it for completion. Sally also said that she has a friend who is very helpful with schoolwork. It is reported that Sally's mother went over mathematics problems with her at home on a weekly basis and makes her write for extra practice. In order to get Sally's IEP ready for middle school, the school made visits to her home.

**CASE SUMMARY 7: YASMIN**  
*SWD, Positive Progress in Reading, Grade 5*

**Student Characteristics:** Yasmin entered WCPSS in October 2002. She had experienced a traumatic environment and had limited time in school prior to that, thus she was considerably behind her peers academically. She is one year older than is typical for her grade. On the EOGs, Yasmin's level scores improved in reading from Level II in 3<sup>rd</sup> grade to Level III in 4<sup>th</sup> grade to Level IV in 5<sup>th</sup> grade. In mathematics, EOG scores were Level II in grades 3 and 5 and Level III in grade 4. Her residuals in reading were in the predicted range in grade 3 but well above predicted levels in grades 4 and 5. In mathematics, residuals were at predicted levels in grades 3 and 5 and above predicted levels in grade 4.

She had excellent work habits and conduct. Yasmin does not like to acknowledge her learning disability, according to her aunt. In the 3<sup>rd</sup> grade, Yasmin did not read much outside of class or homework, but as she got better at reading, she found that it was fun. By the 5<sup>th</sup> grade, Yasmin was reading a lot; and now, she reads, at least, an hour a day. She reads mainly adventure and mystery books. By all accounts, she is very popular with teachers and peers despite struggling with shyness. Yasmin enjoys reading and exploring nature, mathematics, science and P.E.; she wants to be a doctor, police officer, crime scene investigator, painter, or someone who deals with animals.

Yasmin's teacher in 2005-06 noted on Yasmin's report card that she was a delight to have in class and was elected by her peers to student council her first year there. Yasmin's teachers have described her as motivated, studious, hard working, engaged in class, a bit introverted, well-behaved, and very polite. At times, Yasmin has a hard time asking for help, but she always completed homework and had good attendance.

**Classroom Experiences:** In-class strategies that her teachers found effective for Yasmin included direct instruction reading, ability-level instruction, small-group and one-on-one instruction, and use of manipulatives. Interventions used with Yasmin included modified assignments, Larson's mathematics, spiraling mathematics program, one-on-one writing conference, writing graphics, specials in reading and speech, and CCR. Yasmin stated that she understood some things in 3<sup>rd</sup> grade; 4<sup>th</sup> and 5<sup>th</sup> grade were harder, as she was introduced to new things, but by the time she graduated 5<sup>th</sup> grade, it was starting to sink in and she felt that she understood what they were trying to teach her. In 6<sup>th</sup> grade, Yasmin was doing very well in school and was on the A/B honor roll. Yasmin says that being shy makes it harder to ask questions and to work in large groups; she prefers individual work. Yasmin's aunt said that Yasmin likes school, loves to excel, is motivated by progress, did not like the grading scale in 4<sup>th</sup> and 5<sup>th</sup> grades but does like the scale for 6<sup>th</sup> grade. Yasmin's teacher in 2005-06 noted that she would try to do all of the work assigned to the class (even if she had been given a shortened assignment) and would even do extra work.

**Family Support and Involvement:** Yasmin's early childhood was stressful and traumatic. Since moving to Wake County in October 2002, Yasmin has lived with her aunt in a nurturing, academically supportive, and very structured environment. Yasmin's aunt is currently working on a master's degree. She expects Yasmin to graduate high school and hopes that she continues with education after high school. She stresses that mainly she wants Yasmin to be happy doing whatever she chooses as her career/livelihood. After school, Yasmin has a snack, works on homework, and studies for 1½ hours in a quiet setting, either at her desk or at the living room table. If she has no homework, then she studies whatever she most needs to work on for an hour. Her aunt is available to help Yasmin but encourages self-help, especially if there is a book in which Yasmin can look up the information. Her aunt checks Yasmin's agenda and homework every night. The aunt's expectations for Yasmin are sometimes higher

than that of her teachers, i.e., she has Yasmin redo all work that received a 'C' or lower; at least one teacher commented that the aunt is perhaps harder on Yasmin than she needs to be. The aunt also attends conferences, including Individualized Educational Program team meetings, writes notes to the teacher or phones when she has questions, and was always open to the teacher calling her. From 3<sup>rd</sup> grade on, Yasmin has been going to the public library three times a week. She also visits museums, engages in crafts and painting, is involved in church, and has a mentor. She is allowed to watch TV three school nights per week and on weekends only for an hour to an hour-and-a-half a day.

**CASE SUMMARY 8: CLIVE**  
*SWD, Negative Progress in Reading, Grade 5*

**Student Characteristics:** Clive entered WCPSS in 2003 at the 3<sup>rd</sup> grade. In his previous school district he was retained in 1<sup>st</sup> and 3<sup>rd</sup> grades. He was identified as SWD in the fall of 2004 as Learning Disabled. Clive's EOG achievement levels for reading were below grade level all three grades. Mathematics level scores were Level III in grades 3 and 4 but dropped to Level II in grade 5 (when the state standard was raised). Clive's reading residuals were below predicted levels in grade 3 but within the predicted range for grades 4 and 5 while still negative). The same pattern was true in mathematics. On K-5 assessments and report cards, Clive was considered stronger in mathematics (earning 3s) while reading and writing tended to be below grade level (2s).

Clive's teachers in 2004-05 and 2005-06 described Clive as hard working, very motivated, and engaged in class. Clive completed homework and even did extra, unassigned problems, and he was well liked and friendly. Clive had good behavior in class but occasionally had behavioral problems during recess and on the bus. He was once expelled from the bus and rode his bike five miles to and from school.

Clive indicated that he now regrets not taking an interest in school until 2003-04. Clive enjoys video games and loves sports; he is involved in football and basketball outside of school. Clive is not very interested in reading; he only reads outside of school maybe once a week and generally only about sports. In elementary school, Clive rode his bike every day and played football at school in 5<sup>th</sup> grade. Clive got along well with his teachers and especially male authority figures. He reported that he wants to attend college so that he can play college ball and expects to make a career as a professional athlete playing either basketball or football.

**Classroom Experiences:** Clive enjoys working individually and in small groups and sometimes in whole group instruction. Clive would sometimes get frustrated when he didn't comprehend something and emphasized that working in small groups helped him learn. He asked questions frequently. Clive considered his strongest subject to be mathematics and his greatest weakness to be reading. Clive said that he inadvertently substitutes words while reading, which changes the content and makes reading difficult. Clive's favorite classes were science (because they got to do experiments), and gym (because they got to play sports). His least favorite classes were Spanish (because he just didn't get it), and music (because he can't read notes and doesn't like playing instruments). Clive says that his afternoon classes (i.e., specials) helped him to learn because they were in a separate classroom from his main class, were smaller and utilized small group work.

In WCPSS, Clive had intervention plans for grades 4 and 5. Strategies and interventions used included modified work, differentiation, relating things to sports, one-on-one attention in reading and social studies, CCR for reading and writing, remediation, small group work, SWD resource teacher, Student Support Team, and ALP. In 2005-06, Clive did not need modifications in mathematics, and he sometimes even explained mathematics concepts to the class; he worked well with AG students. Clive

struggled with spelling, didn't like writing, and did well if dictating to someone else. Everyone at the school knew Clive, and the staff took every opportunity to give him positive reinforcement.

**Family Support and Involvement:** Clive's family environment has not been the most supportive. Clive's teacher in 2005-06 believes that Clive's home life/situation works against him. During the 2003-04 school year, Clive's youngest brother was in the hospital with a life threatening condition; this put a strain on the family. In addition, Clive has lived in a rough environment, been exposed to criminal activity, and been awakened in the middle of the night by police raids. The environment was so bad that on multiple occasions, in an effort to stay away from home, Clive came to school when he was tracked out and asked if he could join in with another class. Clive's father has been absent for the past three years.

In elementary school, Clive usually did his homework in class after finishing his class work, but sometimes did work in quiet at home at the kitchen table. Clive's mother didn't usually check his homework, but sometimes she would help him with it. In 5<sup>th</sup> grade, Clive's mother signed him up for a mentor through a local center, and this has helped him progress. During the interview, Clive's teacher in 2005-06 indicated that Clive was the caretaker for his brothers. Clive's mother did not come to conferences and the only time his 2005-06 teacher saw his mother was when she gave him a ride home.

**CASE SUMMARY 9: MARIANA**  
*LEP, Positive Progress in Mathematics, Grade 8*

**Student Characteristics:** Mariana was a hardworking A/B mathematics student who scored at grade level on her 8<sup>th</sup> grade mathematics EOGs and had positive mathematics residuals throughout middle school. Mariana reported that she could speak English “OK” when she first came to WCPSS in 4<sup>th</sup> grade. She stated that reading helped with her English most. Mariana’s parents had low levels of English. She reported that although she was assessed with an IPT, she was not placed in an ESL class. In middle school she continued to be assessed via IPT, but because she scored advanced, intermediate high, or superior, she did not receive ESL services.

Mariana was tutored in mathematics in 6<sup>th</sup> and 8<sup>th</sup> grades and stated that she liked to complete homework at school because she could ask questions. Mariana’s teacher in 2003-04 stated that she had a happy disposition and no real behavioral issues; talkative and normal behavior. While Mariana reported that she did not have problems getting along with other students, she stated she was involved in two fights, one in the 7<sup>th</sup> grade and one in the 8<sup>th</sup> grade. Mariana was suspended out of school for three days because of the second fight; she recognized that she should have apologized. Mariana’s teacher in 2004-05 stated that she did not have any behavior problems in the classrooms, but Mariana had some problems outside the classroom due to jealousy from other girls. Mariana’s report cards reflected average or above average conduct for all three grade levels (with one exception of below-average conduct in 7<sup>th</sup>-grade science). Her teachers reported that she was an outspoken student with regular attendance. Mariana’s attendance records indicate that she was absent 16 days in 8<sup>th</sup> grade, 13 days in 7<sup>th</sup> grade, and 1 day in 6<sup>th</sup> grade.

Mariana reported that she enjoys going to the mall, movies, drawing, listening to music, playing at the park, and reading novels (e.g., *To Kill a Mockingbird*, mysteries). Mariana stated that she was involved in softball and Junior Honor Society (in 8<sup>th</sup> grade) during middle school. In 10 years Mariana thinks she will be graduating from college and would like to be a pediatrician. Mariana’s teacher in 2003-04 stated that she had high expectations for herself and was upset when she didn’t do well on tests. The principal reported that the mathematics department has high expectations for the students.

**Classroom Experiences:** Mariana stated that she was on the honor roll in the 6<sup>th</sup> grade. She indicated that while she did have trouble understanding mathematics, it was her favorite subject since she enjoyed working with numbers. She said she was tutored in mathematics in 6<sup>th</sup> and 8<sup>th</sup> grade. Her teacher in 2003-04 stated that, while mathematics did not come easily to her, she was a hard working mathematics student. Her report cards showed she earned A’s and B’s in mathematics during middle school. Mariana stated that she did not have classmates she could call or work with if she had questions or problems doing the work. She reported that she learned from examples and she had trouble with written instructions. She said it helped her learn when teachers provided examples, rather than just lecturing, but she had no trouble asking questions. Her teacher in 2005-06 reported that she was a visual learner. Both her 7<sup>th</sup> and 8<sup>th</sup> grade teachers reported using visual instructional strategies in their classrooms. Mariana added that she enjoys class discussions on subjects, but dislikes independent book work. Mariana’s teacher in 2005-06 stated her strengths were working in groups and asking questions.

**Family Support and Involvement:** Mariana said that she did not have access to a computer at home; thus, she would complete her homework at school when possible at the end of a lesson. She also stated that she liked to complete homework at school because she could ask questions and had a place to work. She reported that her parents/guardians did not ask about homework. If Mariana had questions she would ask her sister, who is six years older. She had a stepfather who was also very supportive, her teacher in 2003-04 stated that Mariana always wanted to please her parent/guardian. While Mariana’s 6<sup>th</sup> grade teacher reported that both parents attended conferences together and separately, Mariana’s 7<sup>th</sup> and 8<sup>th</sup> grade teachers reported no contact with her family. Her teacher in 2004-05 reported that Mariana would

ask for teacher escort between classes because she knew there were girls waiting for her; on one occasion she was so badly beaten by other students that she had to be taken away in an ambulance, and the teacher still did not see Mariana's parents.

**CASE SUMMARY 10: PAOLA**  
*LEP, Negative Progress In Mathematics, Grade 8*

**Student Characteristics:** Paola entered WCPSS in kindergarten. Paola's middle school grades were mostly C's in her core classes and B's in non-core classes. In 6<sup>th</sup> grade, Paola was above grade level in mathematics and demonstrated predicted progress, while in reading she was below grade level and well below predicted progress. She improved in 7<sup>th</sup> grade, scoring above grade level in both reading and mathematics, with residuals that were at predicated levels. In 8<sup>th</sup> grade Paola scored below grade level on both the reading and mathematics EOGs, and was below predicted levels. Paola had average attendance, although in 8<sup>th</sup> grade she missed twice the amount of classes she did during the year before, and also had tardiness issues. Paola mentioned that she struggled with the early schedule in 8<sup>th</sup> grade, and her teacher for that year mentioned that she was missing homework also. Paola had positive conduct, and was referred to as a "peacemaker" among her peers. Teachers mentioned that Paola had no difficulty asking questions in class and did well when she was focused.

Paola enjoys listening to music and spending time with friends. Her teachers and principal recalled that Paola has an outgoing and popular personality. Paola stated that she enjoys science fiction, but does not read very much for pleasure. She said that she would like to be a lawyer when she completes school. She thinks that she's had good relationships with her teachers throughout middle school, especially since she's so quiet.

Paola stated that she entered kindergarten speaking Spanish with little to no English skills and learned to speak English in about a year and half after entering the school system; she exited ESL in 2001. She believes her ESL classes were helpful. Her parent/guardian does not speak English very well, and wants Paola to speak in Spanish when conversing with her friends so she will know what she is saying. At the school level, parental involvement was encouraged through correspondence to parents in English and Spanish.

**Classroom Experiences:** The principal stated that this student was quiet and did not stand out. According to Paola's teachers, she was quiet in the 6<sup>th</sup> grade but more outgoing in 7<sup>th</sup> and 8<sup>th</sup> grades, yet remained a focused student. Teachers disagreed with whether or not Paola had a visual or auditory learning style. Both Paola's teacher in 2003-04 and the principal recalled that Paola attended before- and after-school tutoring. Paola believes she is doing "ok" academically. Paola said that she struggled in shorter class periods in elementary school and felt more time in class (similar to middle school) would have been beneficial and allow more time for questions. Paola reported that she found it helpful when teachers gave notes and provided study guides and found it difficult when the teacher went too quickly. According to Paola and her teachers, Paola preferred working in teams and would ask the teacher questions when the material was not clear. Paola's teacher in 2005-06 stated that she benefited from working in small groups and seeing a lot of examples. Paola's mathematics teacher in 2003-04 grouped students with mixed abilities and used step by step examples to illustrate the material. The school catered to students who were struggling by having team meetings to discuss strategies for each student. Collaboration among core teachers was not needed for Paola since she was on task and had passing grades. Paola felt that teachers should provide more examples to help clarify the material.

**Family Support and Involvement:** At home Paola had a place to work and a computer but little assistance from anyone with her homework. Paola stated that she typically did her homework in her room. According to Paola, her parent/guardian was able to remind her to do her homework but was not able to help with the actual assignments because of the language barrier. Paola stated that her mother is now taking classes to learn English and Paola thinks she will be able to help her mother learn. Paola said that her parents want her to complete college and “not throw her life away” as they feel “so many others have.” Paola teachers reported that her family didn’t get involved with her school life. Her teachers speculated that Paola’s family didn’t get involved because they didn’t speak English. The principal stated that more could be done at the team and teacher levels to involve parents.

**CASE SUMMARY 11: HECTOR**  
*LEP, Positive Progress in Reading, Grade 8*

**Student Characteristics:** Hector entered WCPSS in 2<sup>nd</sup> grade. Hector has made progress since elementary school, when he scored below book level in 3<sup>rd</sup> grade and was retained. His EOG scores were above grade level throughout middle school in both reading and mathematics, specifically Level IV's in 7<sup>th</sup> and 8<sup>th</sup> grade reading, and 6<sup>th</sup> and 7<sup>th</sup> grade mathematics. Hector's reading residuals were above predicted levels in both 6<sup>th</sup> and 7<sup>th</sup> grade reading, and at predicted levels in 8<sup>th</sup> grade. His mathematics residuals were below predicted levels in 6<sup>th</sup> grade, above predicted levels in 7<sup>th</sup>, and at predicted levels in 8<sup>th</sup>. Although his middle school achievement levels were high, Hector's grades in his core classes were mostly D's, while he earned A's and B's in his electives, which allowed him to be placed into 9<sup>th</sup> grade. Hector's teachers stated that his poor grades were due to his lack of homework completion, and Hector admits that he didn't finish his homework in middle school. He stated that middle school had less importance to him, but he is asserting more effort now that he is in high school, because he realizes that "it will affect [him] later." Hector attended one elementary school and two middle schools. His teachers rated his conduct as being above average to excellent, and he didn't have any behavioral problems. His attendance was below average, having more than 10 unexcused absences each year in middle school, and excessive tardiness in 8<sup>th</sup> grade.

Hector enjoys both music and sports, and is involved in church related activities during the weekends. Hector has been taking music lessons at school for three years, and also is involved in sports. He stated that he enjoys reading, and probably reads one novel each week, and his favorite classes are music and carpentry/woodworking. Hector struggles with his homework because "[he] loses attention," and often doesn't complete it because he "likes to keep [his] school life and [his] home life separate." After high school, Hector imagines that he will probably either join the military or attend a technical school, and hadn't given much thought to attending college. He would like to be a carpenter, engineer, or architect when he finishes school.

From 2<sup>nd</sup> grade until present, Hector's IPT scores have determined that he is eligible for ESL, but he or his family has declined them. Hector stated that when he first entered the school system, he was speaking English. His 2006 IPT scores indicated that his writing level was low, although his listening, reading, and speaking were intermediate to high. His teachers speculated that his parents more than likely spoke both English and Spanish, with Spanish being their primary language.

**Classroom Experiences:** Hector's teachers described him as an unmotivated learner. Hector's teacher in 2004-05 recalls him not completing his homework, while Hector's teacher in 2005-06 recalls him mostly turning in assignments. Both of his teachers recall that he was not studious. Hector was mostly a visual learner, requiring step-by-step instructions, and responding positively to praise from his teachers. According to Hector's teacher in 2004-05, he was missing a lot of vocabulary, and was having trouble acclimating to life in the United States. Hector's teacher in 2004-05 also recalled that he became engaged in class and even dominated group discussions when the topics were related to science or Hispanic culture. Hector's teacher in 2004-05 collaborated with his other teachers because he was struggling in other subjects, too. Hector's teacher in 2005-06 recalls his language arts skills being poor, and both of his teachers recalled him being below grade level in reading, even though he scored above grade level (Level IV's) in 2004-05 and 2005-06.

**Family Support and Involvement:** Hector stated that he typically did his homework in the library because he was not always able to use his parent/guardian's laptop. According to Hector, his parents 'bug him' to see if his homework is completed and are willing and able to help him if he asks for help. According to Hector's teacher in 2004-05, education is strongly valued in Hector's home, and he has a



wonderful environment in which he can do his homework. Hector's parents never voluntarily showed up at his school, and there was no need for conferences with them. Overall, Hector's parents were not viewed as a support to his classroom. We were unable to reach them for an interview.

**CASE SUMMARY 12: CARMEN**  
*LEP, Negative Progress in Reading, Grade 8*

**Student Characteristics:** Carmen entered WCPSS in 1999 as a 3<sup>rd</sup> grade student. Carmen was retained in 2003-04 while she was in 7<sup>th</sup> grade. She scored below grade level on her reading EOG exams in 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grades. Her EOG scores indicated that although she was below grade level, she was showing improvement. Her residuals were well below predicted levels in 6<sup>th</sup> and 7<sup>th</sup> grades and at predicted levels in 8<sup>th</sup> grade. In mathematics, Carmen's EOG test results fluctuated. She was below grade level in both 6<sup>th</sup> grade and her first 7<sup>th</sup> grade year, above grade level in her second 7<sup>th</sup> grade year, and below grade level again in 8<sup>th</sup> grade. Her residuals showed that she was well below predicted levels in 6<sup>th</sup> grade and at predicted levels in both her second 7<sup>th</sup> grade year and her 8<sup>th</sup> grade year. When Carmen started middle school, she failed most of her classes, but her grades improved significantly by 8<sup>th</sup> grade, with her earning A's in mathematics and non-core classes. Carmen's attendance was good in middle school, except for 2003-04, when she was absent more than other students. There were no reported conduct issues for Carmen, although her teachers reported that she lacked motivation and had problems with participation and work completion. During 8<sup>th</sup> grade, Carmen's grades continued to improve, and she received excellent grades in mathematics and science courses. She withdrew from 9<sup>th</sup> grade in 2006-07.

Carmen's ESL teacher remembers that she enjoyed mathematics, and would even help other ESL students with mathematics problems. Carmen's principal recalled her as a very friendly student who would initiate conversation with teachers and administrative staff and enjoyed socializing with her friends. Other interests could not be determined because the student and her parent/guardian could not be reached for interviews.

Carmen was enrolled in ESL classes when she started school due to her IPT scores. For an undetermined reason, she did not get ESL help during her second time through 7<sup>th</sup> grade. Carmen's ESL teacher indicated that her 8<sup>th</sup> grade reading level was that of a 1<sup>st</sup> grade student and that she would refer to herself as "dumb in reading." By the end of middle school, Carmen's IPT scores had significantly decreased compared to when she entered. The principal indicated that the ESL department was undergoing a transition, which may have disrupted services. Carmen had good social English, but would mostly socialize with her fellow Spanish-speaking friends, speaking Spanish primarily unless required to in class. Carmen's teachers speculated that her parent/guardian only spoke Spanish, and the language barrier made contact difficult.

**Classroom Experiences:** Carmen was enrolled in an enrichment program, SST, and ICR in 2003-04. Pairing Carmen with other Spanish-speaking students or placing her in similar ability groups typically worked best to engage her. Carmen's teacher in 2005-06 thought that ESL may have been a hindrance for her, because it allowed her to remain isolated among fellow Spanish speakers and kept her from having to learn more English. Carmen demonstrated signs of anxiety and distraction when approaching tasks. Her teacher in 2005-06 recalled that she was very embarrassed by her inabilities and would cry if she had to give oral presentations. Carmen was never tested for a learning disability; however her ESL teacher thought that she might have had one. Her teachers would tell her that she needed to try harder, but she did not really recognize the progress that she was making year to year. There were after school programs for students who needed extra help, but Carmen did not participate in them either because she didn't want to be at school for the additional time, or had responsibilities at home that had a higher priority. Her

teacher in 2004-05 recalled collaborating with her other teachers to discuss overlap in problems with her academic performance in other classes. There were some administrative changes going on at Carmen's school, which may have contributed to Carmen's lack of assistance.

**Family Support and Involvement:** Carmen's teacher in 2003-04 recalled a conference with her mother and only because it was mandatory due to her grades. Carmen's other teachers were unable to recall her parents/guardians having any participation in her education. All of the teachers interviewed stated that Carmen probably didn't get much support from anyone at home with her homework.

**CASE SUMMARY 13: CARLOS**  
*SWD, Positive Progress in Mathematics, Grade 8*

**Student Characteristics:** During middle school, Carlos was consistently above grade level in both reading and mathematics. His reading residuals indicate that he was above predicted levels in 6<sup>th</sup> grade, at predicted levels in 7<sup>th</sup>, and above predicted levels again in 8<sup>th</sup> grade. His mathematics residuals show that he was at predicted levels in both 6<sup>th</sup> and 7<sup>th</sup> grades, and well above predicted levels in 8<sup>th</sup> grade. Although Carlos' EOG test results and residuals indicate that he made significant progress during middle school, his grades indicate that he declined. Carlos earned mostly passing grades in 6<sup>th</sup> grade, mostly D's in 7<sup>th</sup> grade, and F's in 8<sup>th</sup> grade. He consistently had excellent attendance, but his conduct and behavior declined along with his grades. Carlos had instances of detention and in-school suspension in 7<sup>th</sup> grade, and several more instances of detention, in-school suspension, and out-of-school suspension in 8<sup>th</sup> grade. Carlos was older than other students in his grade, which may have been because he was retained prior to middle school.

Carlos said he enjoys school, talking with his friends, riding his bike and playing basketball. Carlos said he likes to read if it is interesting, mostly finds it boring, especially in his language arts classes. He stated that he gets along well with other students and his teachers, despite his behavior problems. He felt that his teachers cared about him as a person, and recalled having a male teacher whom he could go to with problems if needed. As far as expectations, Carlos believes his parents/guardians want him to continue his education after high school, but in 10 years Carlos thinks he will most likely be working in construction.

Carlos was initially in ESL, but later exited both ESL and LEP because of his IPT scores. Carlos' teacher in 2003-04 recalls that as Carlos got older, he became more proficient in English.

**Classroom Experience:** Carlos' supplemental teacher described him as a strong student when he would apply himself, which wasn't often because he wasn't driven. Carlos' teacher in 2003-04 said that although he was not as motivated as his siblings, who had been prior students of his, Carlos possessed a lot of potential. Carlos' teacher in 2003-04 also said that he lacked communication skills, was very laidback, and never in a rush. Carlos' teacher in 2003-04 reported that it was important to build a relationship with both students and parents/guardians to encourage a team-like commitment. Carlos' teacher in 2004-05 recalled him differently, as an above average student who was conscientious about his work. Carlos' supplemental teacher said that he knew the material but didn't do the homework, which led to his poor grades. Carlos' teacher in 2005-06 couldn't recall Carlos, but stated that "zeroes were not permitted" in her classroom. Carlos found it helpful when teachers would go into more detail if he didn't understand. Not having enough time to answer questions during class, and difficult homework made things harder for him. His teacher in 2003-04 said that whole class and small-group strategies were used. Peer learning, where the teacher matches stronger students with weaker students, was used by all three of Carlos' teachers; they found this strategy to be effective for Carlos in particular as well as at-risk students in general. Carlos' teacher in 2005-06 found structure to be important for at-risk students because they need to know what is expected of them. Carlos' supplemental teacher noted the importance in students knowing the 'hidden rules' and being able to apply them. Carlos' teacher in 2003-04 reported that he collaborated with a team of other teachers to discuss how they could motivate Carlos to excel beyond midrange. Carlos' teacher in 2004-05 also mentioned that she would collaborate with other teachers about best ways to teach individual students. His supplemental teacher said that giving Carlos extended time and separating him from other students helped him to focus. Carlos was surprised when told that he was well above level.

**Family Support and Involvement:** Carlos said his parents would tell him to do his homework but he mostly got help from his siblings, mostly an older sister. His teacher in 2003-04 said that his parents were

very supportive and had kind words to say when the teacher called them. They showed up for conferences and were supportive of Carlos' education. His teacher in 2004-05 didn't think she ever met Carlos' family, and Carlos' teacher in 2005-06 couldn't remember Carlos as a student and thus didn't remember whether the family was involved or not. Carlos' supplemental teacher, however, said that he would call Carlos' father to let him know when Carlos was falling behind on assignments, and that would get him back on track.

**CASE SUMMARY 14: WILLIAM**  
*SWD, Negative Progress in Mathematics, Grade 8*

**Student Characteristics:** William's mathematics EOG test scores declined over time, with him being above grade level in 6<sup>th</sup> grade, and then slipping below grade level by the time he completed 8<sup>th</sup> grade. His residuals showed that he was at predicted levels in both 6<sup>th</sup> and 7<sup>th</sup> grade, but below predicted levels by 8<sup>th</sup>. His reading EOG test scores show that he improved from being below grade level in 6<sup>th</sup> grade, to above grade level by the end of 8<sup>th</sup> grade. William's residuals show that he was at predicted levels in reading all three years of middle school. Along with his reading EOG test results, grades in both Language Arts and Mathematics improved while he was in middle school. Attendance became an issue for William, however, missing hardly any days in 6<sup>th</sup> grade, but more than other students on average in both 7<sup>th</sup> and 8<sup>th</sup> grade. Conduct was also a problem for William, especially when he would cause minor disturbances in class and instigate negative behavior with other students. Issues concerning William fighting with other students escalated in 8<sup>th</sup> grade.

William says that he likes to read, but has read less during the last three years. He enjoys playing video games, basketball and football in his neighborhood, and sometimes watching movies. He has cut grass to make extra money since middle school, also helping his uncle with painting jobs. William said he got along with everyone, basically, in middle school, and said he got along with some of his teachers, but not all. He said he liked 6<sup>th</sup> grade a lot and said the best thing about middle school was football and English; he especially liked his English teacher because she seemed to care about him. William said that the worst thing about middle school was getting kicked out of school for fighting, and he did not believe the incident was handled fairly. The principal said William had behavior issues including gang issues. William had a single parent at home; the school tried to help provide William positive male role models. William has expressed a minimal interest in his education, but hopes to attend college to later become an NFL football player or lawyer.

**Classroom Experiences:** Although William was usually a courteous, happy, and popular child during elementary school, exhibiting a good fund of general knowledge and divergent thinking, he began having fights in school as early as first grade. The fighting, class/activity disturbances, and noncompliance became a stronger problem resulting in several short-term suspensions during grade 8, with his last few days of grade 8 ending in a long-term suspension. William's grade 6 mathematics teacher said that he was a good, sweet kid, yet was a handful at times during the 6<sup>th</sup> grade. William began showing learning problems in kindergarten and began receiving special education services as a learning disabled student in 1<sup>st</sup> grade in reading and math. He continued to receive special education services throughout middle school and now in 9<sup>th</sup> grade, through his curriculum assistance elective. He was mostly respectful toward classmates and thinks he did okay academically, although he thinks he didn't try as hard as a student in middle school as he does now. He said he studies for tests and does his homework now, but in middle school, he felt lost and didn't always do his homework. William said that when he didn't understand something, he would typically ask someone, the teacher first, next a classroom peer, then his mother or cousins who were a year ahead of him in school. His middle school mathematics teachers, on the other hand, said he was sometimes too minimally focused, participating at times, enjoying occasions when he was successful and the attention of the moment. William responded best to one-on-one instruction, small

group, or peer tutoring, and his motivation in learning mathematics depended on his interest in the topic. His 2005-06 teacher said that William was sulky, would sit in the back of the class, was not studious, did not complete his homework, and appeared to be motivated to learn in the narrow sense of getting attention for it, devious at times, being quick to identify with troublemaking activity around him. William's 2005-06 teacher said that teams met weekly where they discussed William's behavior problems.

To address meeting William's needs, he received support in his curriculum assistance elective in a small class of 10 or less students. Here, an emphasis on learning how to be more organized was effective in that agendas had to be signed to show that parents were aware of assignments, and notebooks and lockers had to be kept organized. Other effective strategies included (a) intervening at the moment of any academic struggle because William could not tolerate any feelings of loss or frustration, (b) calling on him and getting him involved immediately, and (c) providing him with one-on-one instruction when possible. William also received tutoring through the Communities in Schools (CIS) program. Although these strategies were used, and his 2005-06 teacher thought male teachers were more influential than female teachers, he felt as though there were no truly effective instructional strategies that touched William's "hot button" because what seemed to be most important to the William was his street reputation.

**Family Support and Involvement:** William feels as though he gets a lot of support from home. His 2004-05 teacher recalls his parent/guardian as being protective of her son when contacted about his behavior. William's agendas would be signed, and he stated that he had a place at home where he could do his homework. William said he had access to a computer at home last year where he could retrieve assignments and most agenda items posted online by his teachers. William said he could call or work with his best friends in the neighborhood if he had questions or problems doing his homework and his mother usually checked his homework for completion. William's grandmother had more contact with the special education teacher who then passed along needed information to the rest of the team. William's 2004-05 teacher said it was believed at school that William's mother was protective of him, and that she came to school for his behavioral issues. William says his family members were involved in school conferences. William said his family has always stuck by him and has always been there for him.

**CASE SUMMARY 15: FRIDA**  
*SWD, Positive Progress in Reading, Grade 8*

**Student Characteristics:** Upon entering middle school, Frida was above grade level in reading, and below grade level in mathematics. She dropped below grade level on her reading EOG test scores in 6<sup>th</sup> grade, but then scored above grade level in reading in both 7<sup>th</sup> and 8<sup>th</sup> grade. Her reading residuals indicate that she was at predicted levels in reading during both 6<sup>th</sup> and 7<sup>th</sup> grades, and above predicted levels in reading for 8<sup>th</sup> grade. Frida stayed above grade level in mathematics in both 6<sup>th</sup> and 7<sup>th</sup> grade, according to her EOG exam scores, but then fell below grade level in 8<sup>th</sup> grade. Her mathematics residuals indicate that she was above predicted levels in mathematics in 6<sup>th</sup> grade and at predicted levels in both 7<sup>th</sup> and 8<sup>th</sup> grade. Although she was suspended once for fighting, Frida had mostly positive reports of behavior from her teachers. She had excellent attendance throughout middle school, however, she did have a few tardies in 2005-06. Frida's grades fluctuated, but she mostly made A's and B's in 6<sup>th</sup> and 7<sup>th</sup> grades, and C's in 8<sup>th</sup> grade. Her reading grades declined over the three year period. Frida was slightly older than other students in her grade and attended one school throughout middle school.

Frida has a twin sister, and they are both quiet and began speaking at a later age than most other kids. Frida's teachers recall her being a very quiet student, but also that she is improving and becoming more outgoing. Frida enjoys going to the movies and the mall. She likes to read everything and devotes around 20 minutes each day to reading. Frida's parent/guardian (grandmother) stated that Frida likes to cook, participate in activities going on at her church and play video games, but is not that interested in reading. Frida enjoys watching medical shows, and expects that she will become a doctor when she is older.

**Classroom Experiences:** As a student with disabilities, Frida had a Special Education teacher for Language Arts and Math, along with daily Curriculum Assistance. According to Frida's teachers, she seemed to do best in a highly structured, one on one environment, with specific instructions given. Praise and high expectations increased Frida's motivation, but working with other students in groups caused her to shut down. According to her 2003-04 teacher, Frida required a lot of prompting and guidance and was not in ALP that year, even though it was offered. The school had a mentor program, but Frida was not involved in it. Frida's 2005-06 teacher said there was a lot of collaboration and team meetings that year and that graphic organizers seemed to help her.

**Family Support and Involvement:** Frida stated that she had access to a computer at her family member's house next door to them. Her parent/guardian was not able to get to Frida's school as frequently as she would like, due to poor health and transportation issues, but would have phone conferences with teachers two or three times a year. Frida stated that she would get help from her sister with her work when she had questions, or couldn't figure things out. Since her grandfather died four years ago, Frida has been a big help to her grandmother with getting her medications and helping out around the house. Frida's parent/guardian said that she was a very good girl, and getting her to do what she was told was not a problem.

**CASE SUMMARY 16: JAMAR**  
*SWD, Negative Progress in Reading, Grade 8*

**Student Characteristics:** Jamar was below grade level according to his EOG test scores in both reading and mathematics throughout middle school. His reading residuals indicated that he was below predicted levels in both 6<sup>th</sup> and 7<sup>th</sup> grades, and at predicted levels in 8<sup>th</sup> grade. His mathematics residuals showed that he started out at predicted levels in 6<sup>th</sup> grade, slipped below predicted levels in 7<sup>th</sup> grade, and rose back up to predicted levels in 8<sup>th</sup> grade. Jamar was retained in 6<sup>th</sup> grade, although his grades were mostly

B's and he only failed one class. The second time through 6<sup>th</sup> grade, his grades further declined, and he got mostly D's. Jamar's grades in 7<sup>th</sup> and 8<sup>th</sup> grade were mixed, but in both years he mostly passed his electives and failed core classes. His absences were excessive, and his report cards indicated that he was missing work and was excessively tardy. Jamar attended two middle schools; by the time of this study he had dropped out of school and couldn't be contacted for an interview.

Jamar's supplemental teacher reported that he was defiant, tried to intimidate people, and would present a 'tough guy' shell to hide his limited reading ability. He was a leader amongst his other classmates and his attitude would set the tone for the rest of the class. Jamar's behavior led to him being suspended from school, the school bus, and kicked out of some classrooms. The principal reported that staff suspected Jamar was involved in gang activity.

**Classroom Experiences:** Jamar's principal reported that he responded well to direct instruction and thrived on praise and attention. His supplemental teacher reported that Jamar responded well to her once she had made a personal connection with him. She had to specifically contact his mother to find out what his interests were in order to make that connection. Jamar received extra help from a resource mathematics teacher, the Assistant Principal in charge of In School Suspension, and his regular Language Arts teacher. He often stayed late after school, getting picked up at 5:00 or later, however, there is no indication that the time was used for any academic support. For unspecified reasons, Jamar was in a higher-level language arts class and responded well in that class.

**Family Support and Involvement:** Jamar's supplemental teacher reported that his mother did not help much with his schooling but that she was in touch with the school several times during the year and was very protective of him. Jamar would come to the teacher for help on school assignments, not his mother. The teacher also reported that Jamar lacked support from his father, who lived out of state, and had issues with the law.

**WCPSS STUDENTS WITH MULTIPLE ACADEMIC RISKS:  
ACHIEVEMENT PATTERNS AND SCHOOL EXPERIENCES**

**Authors**

Nancy Baenen  
Colleen Paepflow  
Sarah Ives  
Rosemary Reichstetter

**Contributors**

**WCPSS Staff**

David Holdzkom  
Joanne Medlin  
Sherri Miller  
Val Pinkney  
Kimberly Yaman

**Contractors**

Candace Blackwood  
Evelyn Gordon  
Aimee Lougee  
Lisa Tracy

**E&R Report No. 06.23**

August 2007

Department of Evaluation & Research  
WAKE COUNTY PUBLIC SCHOOL SYSTEM  
Raleigh, North Carolina  
[www.wcpss.net/evaluation-research](http://www.wcpss.net/evaluation-research)  
(919) 850-1863