

E&R RESEARCH ALERT

EFFECTIVE PRACTICES FOR MIDDLE SCHOOL STUDENTS WITH MULTIPLE NEEDS

School-level practices can make a difference in promoting the achievement growth of multiple-risk students. At the middle school level, effective school staffs 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.*

Effective Practices

Analysis of Wake County Public School System (WCPSS) End-of-Grade (EOG) performance results indicates that WCPSS students with the most difficulty reaching accountability standards are those with more than one of the following characteristics: are eligible for free or reduced-price lunch (FRL), have disabilities (students with disabilities, or SWD), and/or have limited English proficiency (LEP).

The Curriculum and Instruction Department (C&I) requested a study from the Evaluation and Research Department (E&R) to identify effective school practices that:

- promote the achievement of students with multiple-risk factors (FRL, SWD, and LEP) and
- provide schools with hope that they can meet the challenge of helping students with multiple needs grow academically.

Our study compared characteristics and practices of schools with greater and lesser success in promoting academic growth of students with multiple risk factors (Baenen et al, 2006). E&R staff conducted effectiveness index analyses that included only students with two or more of these characteristics (FRL, SWD, and LEP).

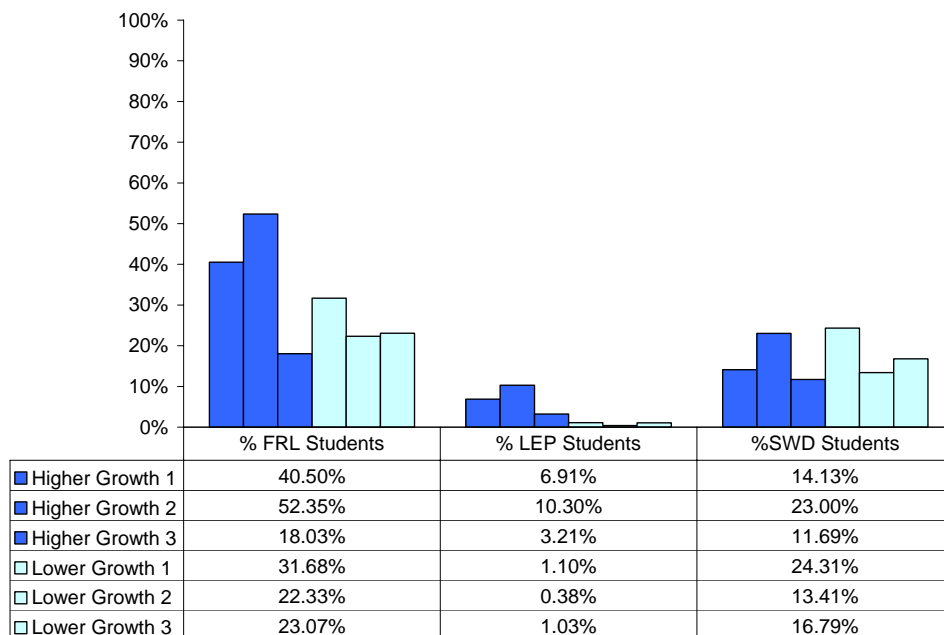
We identified schools that had shown the most positive and least positive patterns of progress in achievement for multi-risk students. We then selected three higher-growth and three lower-growth schools, plus one alternative school, for further study.

We first analyzed student demographics, teacher characteristics, resource allocations, and the overall percentage of students performing at grade level. These analyses helped determine whether we could eliminate these demographic variables as an explanation for differences in achievement. We then explored school climate, which we believed could be a key factor in improving achievement.

We collected data through school and teacher observations, staff interviews, and staff checklists. We also analyzed school improvement plans, discussed recommended practices with C&I staff, and conducted brief reviews of the literature. We grouped findings by factors that promote effective instruction for students based on research.



Risk Group Demographics at Middle Schools in Study



MAJOR FINDINGS

The populations served by the schools that were more successful with multiple-risk students actually had more challenging populations, but also had more resources to address their needs. Demographically, as shown above, the higher-growth middle schools served higher percentages of students in the FRL, LEP, and SWD categories than in the lower-growth middle schools studied. LEP students at the higher-growth middle schools also had more limited skills in English. All higher-growth middle schools studied were English as a Second Language (ESL) sites, while no lower-growth middle schools were ESL sites.

We found differences in attitudes and practices between the sets of higher- and lower-growth schools. A focus on addressing student needs, instructional leadership, professional learning communities, use of assessment data, and curricular coherence all revealed differences between the groups.

Focus on Student Needs: Both the higher- and lower-growth middle schools mentioned school-based barriers to learning such as the need for extra adults, the fast pace of the curriculum, class size, and insufficient technology resources. Actual resources provided by the system were similar, with the exception of extra resources for LEP students at the higher-growth schools. Both groups also mentioned student-based barriers, such as lack of parental involvement, student behavior, and student motivation.

Higher-growth school staff *focused more on how they were addressing these challenges*, while lower-growth schools tended to use them as reasons for their limited success with these students. Lower-growth schools also mentioned scheduling and teacher quality issues more often than higher-growth schools.

Schoolwide observations suggest higher-growth schools *let students take the lead* on their instruction more often than the lower-growth schools (working individually or in groups).

These initial results merit further study and discussion, especially given the small sample size (four of the six middle schools) and the fact that elementary results showed that more teacher-led instruction was helpful with multi-risk students (Baenen *et al*, 2006). WCPSS high schools studies of algebra and biology also showed that more effective teachers tended to control the instruction for all students more than those with less positive achievement growth patterns (Haynie, 2006).

Instructional Leadership: We found evidence of *strong administrative leadership* more often in the schools with higher growth for multiple-risk learners. Principals were more likely to pop into classrooms for *informal observations* and provide useful feedback on instruction.

Professional Learning Opportunities: Differences in staff attitudes, training, and collaboration were evident. Higher-growth middle schools more frequently reported *positive staff attitudes* towards learners with multiple-risk factors and towards other staff; completion of *professional training* related to FRL, SWD, or LEP students; and both *formal and informal collaboration* among staff. Only staff at the alternative school explicitly mentioned having a professional learning community at their school. The primary difference noted was that higher-growth middle schools reported *strong administrative support of staff development*, with some in-house training. Some teachers at lower-growth middle schools reported that training and teacher education programs were inadequate at preparing them for teaching SWD and LEP students.

Resources: Higher-growth middle schools were more likely to *use assessments* frequently and effectively to inform instruction compared to lower-growth middle schools. Lower-growth schools seemed to have more technology available, but higher-growth schools tended to make better use of available technology in terms of frequency and effectiveness of use.

Curricular Coherence: All schools mentioned use of the North Carolina Standard Course of Study (NC SCoS) to guide their work, and most mentioned modifying the curriculum to meet student needs. Stronger schools *used the C&I Web site resources* more often and expressed more opinions that are positive about their ability to adapt the curriculum to their students.

IMPLICATIONS

Some middle schools do show more positive achievement patterns for students with multiple needs. These initial findings suggest that it is possible to improve achievement with multiple-risk students. We encourage school staffs to consider the implications of these initial findings for their own school practices.

E&R welcomes feedback and ideas on effective practices for multiple-risk students. In 2007, our focus has shifted to exploring strategies used with individual multi-risk students.

QUESTIONS FOR CONSIDERATION

E&R plans to explore strategies used with individual multi-risk students in 2007.

Questions for discussion:

- What does your school do when students have not learned?
- Are your practices in line with those found in this study?
- What has worked successfully?
- How can you build success with multiple-risk learners?
- What kind of student work might be optimal for these students while still meeting the needs of other students?

FOR MORE INFORMATION

See the full report: www.wcpss.net/evaluation-research/reports/2006/0603effectiveness03_06elem_middle.pdf

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.

Haynie, G. (2006). *Effective biology teaching: A value-added instructional improvement analysis model*. Raleigh, NC: Wake County Public School System.