Noting that only some of the approaches to helping
low achievers learn more successfully have been systematically
studied to determine their effectiveness, this paper summarizes what
research indicates will help low achievers improve performance, and
provides a resource list of books and reports with more details on
the topic. Following a brief summary of what works with low
achievers—strategies for students, parents, and community members,
as well as educators—the paper excerpts strategies and
characteristics from books and reports on effective teaching of
at-risk students, including prevention and early intervention,
 Improved environments, and practices for reclaiming minority
students. The last portion of the paper provides an annotated
bibliography of materials that address how to improve the achievement
of at-risk students, and includes the sources summarized in the
preceding section. (SW)
SUMMARY: WHAT WORKS WITH LOW ACHIEVERS?

STUDENTS

• Watch less television
• Take advanced and rigorous classes
• Have special connection to school (e.g., clubs, sports, staff)
• Believe control of outcomes are dependent on efforts
• Complete assignments
• Ask for help
• Work no more than 10-16 hours per week

PARENTS AND COMMUNITY

• Review, monitor, and provide a place and time to do homework
• Volunteer (e.g., mentor, tutor)
• Convey that education and academic success are important
• Take or provide educational trips
• Monitor child’s work hours
• Receive parental education and nutritional guidance
• Be interested and involved in child’s schooling

SCHOOL STAFF

• Have high expectations (that are realistic)
• Provide tutors or mentors (volunteers and/or older students)
• Use cooperative learning (team projects)
• Use hands-on, concrete activities, problem solving, and integrated, inter-disciplinary instruction related to real life

School Staff Continued

• Show value of subject matter
• Provide safe, organized, and orderly climate
• Provide success experiences; build motivation to learn
• Build on student’s strengths
• Maintain small classes (<20:1)
• Adjust to learning styles
• Provide immediate and constructive assessment and feedback
• Use continuous progress models—flexible groups based on student needs, assess and regroup based on student’s progress
• Use accelerated learning strategies
• Be responsive and have a positive attitude towards students
• Follow-up on unexplained student absences
• Maintain high levels of time on tasks
• Use computer assisted instruction (some models)
• Make sure students know where to get help
• Accommodate instruction to meet individual needs
• Provide intensive and comprehensive help and build resiliency (protective factors) for high-risk students
• Form school support systems (e.g., health, psychological, and career services)
• Put students in poverty in schools with a low concentration of poor students
• Implement first-grade preventative programs (e.g., Reading Recovery, Success for All)
# WHAT WORKS WITH LOW ACHIEVERS? A RESOURCE GUIDE

## TABLE OF CONTENTS

**SUMMARY: WHAT WORKS WITH LOW ACHIEVERS?** ........................................... i

**PART 1: INTRODUCTION** ..................................................................................... 1

**PART 2: REPORT AND BOOK SUMMARIES** .................................................... 2

- Children in need: Investment strategies for the educationally disadvantaged ... 3
- Effective schools: A summary of research ....................................................... 4
- Addressing the problem of the elementary-aged, at-risk child ....................... 5
- The accelerated schools resource guide .......................................................... 6
- Effective schools: Practices that work ............................................................... 7
- From rage to hope: Strategies for reclaiming Black & Hispanic students .......... 8
- Educational programs that work .................................................................. 9
- Success for All: A relentless approach to prevention and early intervention in elementary schools .......................................................... 10
- Effective programs for students at risk .......................................................... 11
- Effective educational environments ............................................................... 12
- What works: Schools that work: Educating disadvantaged children ............. 13
- Special strategies for educating disadvantaged children: First year report ....... 14
- Students at-risk in at-risk schools: Improving environments for learning ...... 15
- Rethinking policy for at-risk students ............................................................ 16

**PART 3: ANNOTATED BIBLIOGRAPHY** ........................................................... 17
What Works with Low Achievers? A Resource Guide

Part 1: Introduction

Purpose

What can we do to help low achievers learn more successfully? This is one of the biggest challenges facing educators today. Many approaches have been suggested and tried, but only some have been systematically studied to determine their effectiveness. This document is designed to:

- Summarize what research indicates helps low achievers improve their performance, and
- Provide a resource list of books and reports for schools that gives more detail on this topic.

One caution is warranted. This document does not represent an exhaustive literature review, but rather a collection of recent reports, articles, and books on this topic.

Organization

Page i, Summary: What Works With Low Achievers?, briefly summarizes practices which research suggests have a positive impact on achievement and dropout rates. This listing includes strategies for students, parents, and community members, as well as school staff, and can therefore be useful in discussions of this topic with various audiences.

The second part of this resource guide includes summaries of references which focus on what research indicates "works" with low achievers.

The third part of this resource guide is an annotated bibliography including a broader collection of books and reports that address how to improve achievement for at-risk students. Local bookstores and the public library do not carry these references, but the Wake County Public School System (WCPSS) Media Center, the University of North Carolina, and North Carolina State University do have some of them. The codes shown below and at the end of the references indicate where each can be found.

M = WCPSS Media Center
ND = North Carolina State University - D. H. Library
NL = North Carolina State University - Learning Resource Library
UNC = University of North Carolina - Davis Library

Those without a code are on order and will be placed at the WCPSS Media Center upon receipt. All of these books and reports are also available for in-house review in the Department of Evaluation and Research at the WCPSS’s central office.
Part 2:
Report and Book Summaries
Part 2: Report and Book Summaries


The following is a compilation of investment strategies from this book for helping children in need.

Prevention Through Early Intervention

- Efforts should include prenatal and postnatal care for pregnant teens and other high-risk mothers and follow-up health care and development screening for their infants.
- Parenting education for both mothers and fathers, family health care, and nutritional guidance should be provided.
- Quality child-care arrangements for poor working parents that stress social development and school readiness should be provided.
- Quality preschool programs for all disadvantaged three- and four-year-olds should be provided.

Restructuring the Foundations of Education

- Efforts should include school-based management that involves principals, teachers, parents, students, and other school personnel in shared decision-making and accountability for results. School management should encourage flexibility and innovation in the schools' curriculum, teaching methods, and organization.
- Teachers who have made a commitment to working with the disadvantaged and who have expertise in dealing with children with multiple problems should be hired. Special support for those teachers needs to be made available by school districts and schools of education.
- Smaller schools and smaller classes should be provided that are designed not only to raise achievement levels but to increase quality contact with teachers and other adults.
- Support for preschool and child-care programs by the school system should be provided for the community where appropriate.
- Up-to-date educational technology should be integrated into the curriculum to provide new learning opportunities for students and additional pedagogical support for teachers.
- Support systems within the schools should exist that include health services, nutritional guidance, and psychological, career, and family counseling.
- Emphasis on extracurricular activities that help build academic, social, or physical skills should be increased.

Drop-Out Prevention and Reentry Programs

- Work experience should be combined with education in basic skills.
- Operations should occur in an alternative setting that focuses on improving motivation, skills, and self-esteem.
- Continuity should be provided in funding and long-term evaluation of the success of the program and the progress of its participants.
The following are common characteristics that research has found in effective schools.

**Principals in Effective Schools:**
- Were goal- and task-oriented
- Had high expectations for staff, students', and principals' performance
- Often assumed assertive instructional leadership role
- Visited classrooms as staff assessment and instructional improvement tool
- Were involved in activities related to program needs
- Provided strong support to their teaching staff
- Provided in-service training targeted toward program goals
- Believed in students

**Teachers in Effective Schools:**
- Worked together as a team
- Spent more time actively teaching
- Handed out less busy work
- Generated more learning-related activity
- Demonstrated greater understanding of content area being taught
- Demonstrated greater understanding of well-established principles of learning
- Demonstrated greater understanding of special characteristics of students
- Believed in students

**Effective Schools:**
- Had strong leadership
- Had high quality instructional staff
- Had orderly climates
- Monitored students' progress continually
- Emphasized student acquisition of basic skills
- Used instructional time efficiently with instruction being appropriated to the needs of students
- Had staff who believed in students
- Set clear goals and devised plans to reach those goals
In this collection of articles, Slavin and Madden present a synthesis of research on what works in the first chapter. Other chapters deal more specifically with approaches such as Direct Instruction, early childhood programs, adaptations to student learning styles, school-community partnerships, peer tutoring, Reading Recovery, Comprehensive Instructional Management System (math), HATS, and Accelerated Schools. Additional chapters focus on general ideas for working with underachieving gifted students and middle school students. Major points from Slavin and Madden’s article about what research found works with at-risk children are presented below.

What Works: In general, effective programs are comprehensive and well planned, intensive, and assess students’ progress regularly (modifying instruction and grouping accordingly). Examples include:

- First-grade prevention programs that apply intensive resources, usually including tutors and/or small group instruction, increases students’ reading achievement (e.g., Reading Recovery, Wallach Tutorial, and Early Childhood Preventative Program).
- Continuous progress models--students proceed at own pace through a sequence of well-defined instructional objectives. Uses small groups with students at similar skill levels (sometimes different grades and homerooms) and frequently assesses and regroups based on these assessments (e.g., Pegasus-Pace--K-8, DISTAR, ECRI).
- Cooperative learning programs--students work in small learning teams to master material initially presented by the teacher. Teams are rewarded based on individual learning of all team members (e.g., Team Accelerated Instruction, Cooperative Integrated Reading and Composition).
- Remedial tutoring using older students and/or volunteers (e.g., Training for Turnabout Volunteers, School Volunteer Development Project).
- Computer Assisted Instruction--in general, CAI programs are expensive and may not be cost-effective. Quality and effectiveness vary widely. Successful CAI programs include Computer Curriculum Corporation’s drill-and-practice programs (with 10 minutes of drill and practice per day in addition to regular class time), Basic Literacy through Microcomputers, and the Los Angeles Unified School District’s own system.

What Does Not Work

- Flunking at-risk children.
- Both pullout and in-class programs for at-risk children (e.g., many Chapter 1 programs).

Slavin and Madden advocate that schools organize schools around a well-articulated plan that involves all grades. Principles they suggest for this plan are: 1) it is the school’s responsibility to see that everyone succeeds; 2) success for everyone is not cheap; 3) prevention must be emphasized (with success for all at each step in their schooling); 4) classroom change is needed; and 5) remedial programs are used as a last resort.

This resource guide provides background and support information that can be used in conjunction with training to launch and sustain an accelerated school.

The accelerated schools project was originally established to bring "at-risk" students into the educational mainstream by the end of elementary school. The program was later expanded to middle schools. Accelerated schools give school communities an opportunity to break out of the traditional mold:

1. Instead of labeling certain children as slow learners, accelerated schools have high expectations for all children.
2. Instead of relegating students to remedial classes without setting goals for improvement, accelerated schools have a vision and clear goals for making all children academically able.
3. Instead of slowing down the pace of instruction for students in at-risk situations, accelerated schools create powerful learning experiences to accelerate the progress of all children.
4. Instead of providing instruction based on drill-and-kill worksheets, accelerated schools offer stimulating instructional programs based on problem-solving and interesting, relevant applications.
5. Instead of simply complying "downtown" decisions made without staff input, accelerated school communities systematically define their own challenge and search out unique solutions that will work for them.
6. Instead of treating parents as a problem, accelerated schools build on the strengths of their students' parents and families.

Research shows that accelerated schools across the country have had significant gains in children's achievement and self-esteem.
The following are effective programs which were created and implemented by individual schools.

**Elementary School Programs**
- **Lunch program**—lunch period starts as late as possible so students can work productively with minimal interruption during morning hours.
- **Successful Partnerships Program**—partnerships between school and every segment of the community in order to raise student achievement.
- **Come Read With Me Program**—parents and their children are encouraged to read aloud in order to improve reading readiness.
- **Celebrate Growth**—goal is to raise student morale and motivate student improvement through individual and class recognition.
- **Math program**—student's progress in math is charted with a check-off list so that subsequent teachers know how much progress the student has made.
- **Word mastery program**—students are divided into groups based on their learning style and then master a list of 200 words.

**Middle and Junior High School Programs**
- **Parallel Alternative Learning System (PALS)**—7th-grade students who are retained take 8th-grade courses in the subjects they passed, while working with teachers to develop the skills they lacked in the 7th-grade courses they failed.
- **Zeroes Aren't Permitted policy**—students are responsible for completing all assignments.
- **Student Mediation Program**—student mediators are used to settle student conflict.
- **One-to-One program**—one-to-one help is provided for all students who need it.
- **"0" Period program**—period in which students are involved in independent study or are retaught language and/or math (if necessary, retake failed tests).
- **"XL" program**—no traditional pass/fail grading system, replaced with 80% pass rule (must earn 80% or more or retake tests /redo assignments until 80% is earned).

**High School Programs**
- **School Improvement Survey**—students survey other students for ideas to improve their school.
- **Team teaching**—big classes (40 students) with two teachers, one to instruct and the other to circulate. Students with difficulties receive remediation and remaining students receive enrichment work.
- **All Students Participating in Independent Reading Experience (ASPIRE)**—students read one additional book per marking period and are assessed on reading through activities.
- **Alternative Learning Program (ALP)**—at-risk students are blocked during first 5 periods for main curriculum. They work at their own pace, independently and in groups. ALP teams consist of teachers, a guidance counselor, a social worker, and one administrator.
- **Detracking English classes**—basic and modified English courses are eliminated and students in those courses are put into regular level English classes (students who have difficulties attend mandatory tutorials).
This book combines research findings with the author's ideas on what needs to change before Black and Hispanic students are more successful in school. This thought-provoking book may serve as a good basis for discussion in schools and related groups (contact WCPSS Staff Development Department). The author believes school staff should:

**Attitudes**
- Drop all stereotypes or pre-conceived ideas about Blacks and Hispanics.
- View "bad" behaviors from a cultural point-of-view (e.g., children playing the "dozens" is considered a game, not a fight in progress).
- Appreciate children as individuals despite their socioeconomic status, gender, language, or physical attractiveness.
- Learn to accept the church, recreation centers, or boys/girls clubs as an integral part of learning for Hispanic and Black students, and integrate their use into your curriculum.
- Look at students' social self-image instead of their academic self-image.
- Watch out for cases of institutional racism--policies that exclude Blacks and Hispanics (e.g., rules about wearing braids or other hair designs).
- Be aware of, and teach to, different learning preferences. A majority of Black and Hispanic students are "field dependent" which means they tend to enjoy group activities. A majority of Caucasian students are "field independent" which means they prefer solo activities. Try to assign some of each.
- Resist the temptation to track or ability group. Many Black and Hispanic youth are over-represented in lower-ability groups and general or vocational tracks. Once they are in these groups or on these tracks it is difficult to progress to higher levels.
- Learn to appreciate the dynamics of extended families in the lives of many Black and Hispanic youth. Children may call a sister who is 10 years older, "mama", because this is the role she plays for them.

**Strategies**
- Build on non-academic gifts and talents. Recognize and respect the idea that academic intelligence is just one of seven intelligences. Many Black and Hispanic youth are "gifted" in non-academic ways.
- Interact on a personal basis with Black and Hispanic youth (e.g., hug these students, walk around their desks, speak to them). Let them know you care.
- Make the physical learning environment attractive. Students learn more easily when they are not embarrassed by the quality of their facility.
- Practice self-image enhancement through the use of bulletin boards and murals that depict Black and Hispanic historical figures throughout the year, not just during Black History month.
- Set a positive class climate through colorful decorations and positive slogans about values.
- Establish and foster a climate of mutual trust and respect between students, helpfulness between students, acceptance of student differences, and freedom of student expression.
- Strengthen the home-school bond through positive contact with parents (e.g., calling parents to tell them what you like about their child).
The following is a categorical list of exemplary programs that include at-risk students (economically and educationally disadvantaged). The list below contains active programs and those with limited activity (limited activity programs are marked by an asterisk).

**Preservice/In-service Training**
- Learning to Teach in Inner-City Schools and With Diverse Populations (LTICS)
- Responding to Individual Differences in Education (Project RIDE)
- Learnycle: Responsive Teaching*

**Dropout Prevention/Alternative Programs**
- City-As-School (CAS)
- The Coca-Cola Valued Youth Program
- DeLaSalle Model
- Graduation, Reality, and Dual-Role Skills (GRADS)
- CoOperative Federation for Educational Experiences (COFFEE)*
- Project Intercept*

**Reading/Writing**
- Reading Recovery
- Rural Schools Reading Project (RSRP)
- Flint Follow Through: The School Effectiveness Model*
- Help One Student To Succeed (HOSTS) Reading*
- Individualized Prescriptive Management System for Underachievers in Reading (IPIMS) Reading Center*
- Programmed Tutorial Reading (PTR)*
- Reading Improvement by Teaching Effectively (R.I.T.E.)*

**Mathematics**
- Help One Student To Succeed (HOSTS) Math*
- Mathematics Achievement Program (MAP)*

**Health/Physical Education**
- Stanford Adolescent Heart Health Curriculum

**Multidisciplinary/Cognitive Skills**
- Enriching the Curriculum*

**Early Childhood/Parent Involvement**
- High/Scope K-3 Curriculum
- On the Way to SUCCESS in Reading and Writing with Early Prevention of School Failure (EPSF)
- Early Prevention of School Failure (EPSF)*
- Mother/Child Home Program (MCHP) of the Verbal Interaction Project*

**Special Populations: Adult/Higher/Migrant Education**
- Supplemental Instruction (SI): Improving Student Performance and Reducing Attrition
- Early Prevention of School Failure Migrant Program (for Spanish- and English-Speaking Children)*

This book describes the components of Success for All (SFA) and discusses its research and policy implications. This program, developed by staff at The Johns Hopkins University in Baltimore in 1986, attempted to translate research into practice.

**Main Components:**
- Reading tutors—one-to-one tutoring for students having difficulty keeping up with their reading group.
- Reading assessments—assessments are given every 8 weeks to monitor students’ progress. Assessments are used to: 1) determine who will receive tutoring, 2) to change student reading groups, 3) to suggest other adaptations in student programs, and 4) to identify students who need other types of assistance (e.g., family intervention, screening for vision or hearing problems).
- Reading program—students across grades (first through third) and across classes with similar reading performance are grouped for 90 minutes of direct reading instruction (Joplin Plan).
- Preschool and kindergarten—most SFA schools have half-day preschool and/or full-day kindergarten which offer programs focusing on providing a balanced and developmentally appropriate learning experience for young children. The curriculum emphasizes the development and use of language.
- Family support team—a team that works in each school to make families feel comfortable in the school and helps them to become active supporters of their child’s education.
- Program facilitator—the facilitator helps plan SFA program, helps the principal with scheduling, visits classes and tutoring sessions frequently to help teachers and tutors with individual problems, works directly with teachers on implementation of the curriculum, classroom management and other issues, and coordinates the activities of the family support team with those of the instructional staff.
- Teachers and teacher training—teachers and tutors are regular certified teachers. They receive detailed teacher’s manuals and three days of in-service at the start of the school year. Additional in-service presentations are made throughout the year and informal sessions are organized to allow teachers to share problems and problem solutions.
- Advisory committee—a committee composed of the principal, program facilitator, teacher representatives, and family support staff meets regularly to review the progress of the program and solve any problems that arise.
- Special education—one major goal of SFA is to keep students with learning problems out of special education and to serve any students who do qualify for special education in a way that does not disrupt their regular classroom experience.

Research on SFA was based on differences in students’ language and reading progress from first through third grade in schools with the SFA program and similar schools without the SFA program. SFA was found to increase reading achievement (especially for students who are most at risk), reduce retentions and special education placements, and increase attendance. SFA was also shown to impact the reading performance and language proficiency of students with limited English proficiency.

The authors suggest the following practices for at-risk students based on their review of research.

**Setting**
- Setting of service (in-class vs. pullout, etc.) makes little difference. Quality of program is important.

**Timing**
- Prevention and early intervention are much more promising than waiting for learning deficits to accumulate before providing remedial or special education services.

**Teaching Methods**
- Accommodate instruction to individual needs while maximizing direct instruction.
- Assess student progress through a structured hierarchy of skills and adapt instructional strategies to result of assessments.
- If a class is pullout, the method should be intensive (1-to-1 tutoring or computer-aided instruction) and brief.
- If the setting is in-class, two methods work best:
  - **Continuous Progress Model**
    1. Students proceed through a well-specified hierarchy of skills and are tested at each level. Special procedures are used to assist students who fail (tutoring, small-group instruction, assignment to different groups, or special materials or activities).
    2. Careful records are kept of students' progress.
    3. Teachers group and instruct students who are at the same instructional level. Students are constantly grouped and regrouped across grade lines.
  - **Cooperative Learning Model**
    1. Four 5-member mixed ability groups help prepare for teachers' assessments. Teams receive recognition for best team score.
    2. Teachers instruct students from different teams at the same level of hierarchy of skills.
    3. Students are assessed frequently by peers and teachers.

**School Level**
- Preschool emphasizes exploration, language development, and play, rather than academics.
- Kindergarten builds language and pre-reading skills using structured, well-organized comprehensive approaches.

**Integration**
- Collaboration and consistency between regular, remedial, and special education are essential.

Finally, effective practices for students at risk are not qualitatively different from the best practices of general education.
The following is a compilation of major points from this book on research-based ways to enhance achievement.

**Student Groupings**
- Heterogeneous groups generally tend to enhance student learning. The major exception involves gender segregation, where girls and minority boys do better in single-sex schools.
- Minority students in desegregated schools and lower socioeconomic status children in schools with higher socioeconomic status children tend to have higher achievement.
- Lower-ability elementary students learn more when they are not in lower tracks or in low-ability groups.
- At the secondary level, where tracking is pervasive, students in low tracks tend to have lower achievement, educational aspirations, self-esteem, attitudes toward school, and college grades, along with higher incidence of misbehavior and drop-out rates compared to those in top tracks. However, research has basically found only correlational relationships, not causal links. Researchers advocate involving lower achievers in more challenging courses using the pacing and instructional strategies used in higher level courses.
- Desegregation across race and ethnicity, social class, and ability levels should occur across schools within a district, within schools, and within classrooms for the majority of instructional time.

**Facilities, School, and Classroom Size**
- Resources can directly affect children's learning, especially in the way that resources are allocated and directed toward individual children.
- When resources are broadly conceived of as time, materials, and pace of instruction, it becomes clear that students who receive more of these resources also have higher achievement.
- Carefully designed studies confirm the intuitive notion that student achievement is enhanced in smaller classrooms and smaller schools. Class size generally must be below 15 students to see an increase in achievement.

**Effective Climates and Community Relations**
- High achievement tends to be associated with teachers' warmth and responsiveness to students, their use of positive reinforcement strategies, their emphasis on cognitive development, and their good, but unobtrusive, control of their classrooms.
- Student learning is enhanced in settings with high academic expectations, effective leadership, an orderly atmosphere, and respect for others.
- Student learning is enhanced when parents are involved in children's schooling and when the relationships between parents, community members, and school officials are respectful, collaborative, and mutually supportive.
The following is a compilation of recommendations supported by research and experience to help improve the education of disadvantaged children.

**Schools**
- Mobilize students, staff, and parents around a vision of a school in which all students can achieve.
- Create an orderly and safe school environment by setting high standards for discipline and attendance.
- Help students acquire the habits and attitudes necessary for progress in school and in later life.
- Provide a challenging academic curriculum.
- Tailor instructional strategies to the needs of disadvantaged children.
- Help students with limited English proficiency become proficient and comfortable in the English language—speaking, reading, and writing—as soon as possible.
- Focus early childhood programs on disadvantaged children to increase their chances for success.
- Reach out to help parents take part in educating their children.

**Parents, Guardians, and Communities**
- Instill in children the values they need to progress in school and throughout life.
- Demand the best from children and show this expectation by supervising children’s progress.
- Get involved with the schools and with children’s education outside of school.
- Invest in the education and future success of disadvantaged children.
The following are first-year observations of special strategies by the Urban and Suburban/Rural Special Strategies Studies for Educating Disadvantaged Students. The strategies examined include Reading Recovery, computer-assisted instruction, METRA and other peer tutoring, extended-day and extended-year projects, schoolwide projects, Success for All projects, Comer School Development projects, Paideia projects, and RE: Learning/Coalition of Essential School projects.

- Virtually all of the programs being studied appear to possess some clear and often unique advantages which might recommend them to some schools and school districts.
- A specific strategy is often chosen by administrators and/or teaching staff with little consideration of alternative educational options.
- There appears to be some urban/rural differences in the process by which new strategies are chosen for schools. In large urban areas, movement to implement philosophical approaches come from within the school and, in smaller cities and towns, the movement comes from external sources. This trend is reversed for schoolwide projects.
- Strategies designed to affect students' whole day typically resulted in higher levels of interactive instruction throughout the students' reading, language art, and mathematics classes than programs which are adjunct to the regular day.
- Implementation of strategies varied within and across sites and programs in relation to each school's skill at implementing new programs, teacher expertise, and magnitude and intensity of the intervention.
- Most strategies have benefited from additional funding for individual schools.
- Externally developed programs requiring fidelity to a pre-specified model (e.g., Reading Recovery, Success for All) require support from either model developers or other high-quality technical assistance.
- Schools with the greatest difficulties initiating special strategies usually display other serious problems such as severe fiscal constraints, racial tensions, or inadequate school and district leadership.
- Active leadership is crucial to program implementation—especially at the principal's level of commitment, organization, and ability to motivate the staff.
- There appears to be powerful contextual variables (e.g., local variables, budget, availability of technical assistance) which facilitate or impede implementation of the various strategies.
- District and state commitment to ongoing staff development can be the key to facilitating special strategy implementation and institutionalization.
- Specific implementation issues vary with the intended magnitude and scope of the special strategy on the structure of the school and the content of instruction (i.e., Paideia schools require significant changes in patterns of all teachers, but these can be phased in over several years).
The following is a synthesis of institutional, student, and community-based strategies and activities for dealing with the classroom challenges posed by at-risk students. This synthesis, with attendant suggestions, could be useful to teachers and administrators in enhancing the probability of success of programs targeted for at-risk (further referenced as vulnerable) students.

**Institutional Suggestions**
- Identify what constitutes at-risk students for the milieu of your school. All schools have some vulnerable students but the type and degree of vulnerability will vary by the makeup of the student body.
- Using the school developed model, identify the degree to which your student body meets your criteria.
- Identify the educational climate of your classroom or your school.
- Determine the degree to which your school’s educational climate is conducive to the cognitive/educational growth of your at-risk cohort and make changes accordingly.
- Remember that not all poor students of color are vulnerable.

**Student Suggestions**
- Assess level of identified student vulnerability by use of appropriate instrumentation or assessment modality.
- Document and develop remediation strategies with as many of the major players in the student’s academic life as possible. Home involvement and support are important but institutional parameters can be substituted to some degree.
- Test early to document level of vulnerability and often to measure growth and to provide positive feedback. Develop and be prepared to pay for a level of student assessment in excess of the normal level of testing.
- Use small groups geared to incremental progress and focused on limited objectives.
- Pay close attention to early indicators of progress lag such as reduced academic performance, acting out behaviors, or any action not conducive to planned growth. If any are manifested, act decisively to remediate or ameliorate causes. Delay is corrosive of progress.
- Set, maintain, and increase high expectations for student educational attainment.
- Demand high energy engagement from the student in the educational process.

**Community Suggestions**
- Engage with the community that the student comes from, if possible.
- Identify the gestalt of the community. "Parent Days" as a substitute for meaningful educational involvement are counter indicated. The school’s expectations for a student should be congruent with the expectations of the community.

The following is a compilation of major points from this book on what research has found impacts achievement positively.

**Socio-Economic Effects**
- Students in poverty who attended schools with a low concentration of poor students had higher test scores on a standardized test than their counterparts in schools with a high concentration of poor students.
- Students who did not partake in programs offering free or reduced-price lunches had higher achievement scores than students who did participate in these programs.
- The percentage of students in the lowest achievement quartile increased as schools had more students participating in free or reduced-price lunch programs.

**Effects of Categorical Programs**
- Research concludes that, for moderate learning improvements among children with special needs, special placements should be avoided. Nearly all children with special needs should be integrated with "ordinary" children in regular classrooms.
- Children in special programs (e.g., Chapter 1) show steadily decreasing rates of progress through the curriculum in reading and mathematics when compared to other pupils.
- Lack of effects for categorical programs have been contributed to being too focused on basic skills and neglectful of the more complex elements in modern school curriculum.
- There is no conclusive evidence which confirms that special education services appreciably enhance the academic and/or social accomplishments of handicapped children beyond what can be expected without special education.

**Effective Climates and Characteristics**
- Student learning is enhanced by teachers who are enthusiastic and clear in their instruction, provide frequent feedback to students about their performance, and maintain an organized and controlled classroom.
- Students who are non-disruptive, motivated to learn, self-confident, and have a positive attitude have greater learning enhancement.
- Student learning is enhanced by parental involvement, interest in schooling, and parental expectation for academic success.
Part 3:
Annotated Bibliography
Part 3: Annotated Bibliography


This report presents guidelines that can be used to develop a coalition dedicated to improving the education of minority students who are considered at risk. The planning guide posits that the entire community must be actively involved if positive changes are to be introduced into the schools. This guide offers step-by-step assistance for the development and implementation of strategies that can be used to mobilize community members.


This report urges business leaders, educators, and policy-makers to look beyond the traditional classroom boundaries and provide early and sustained intervention in the lives of disadvantaged children. The business community should take the lead in forming coalitions which include businesses, educational and parent organizations, civic groups, and pertinent government agencies. Business leaders are urged to speak out at the federal, state, and local levels for improved programs and necessary resources. This report gives many concrete examples of effective corporate involvement in education that can be emulated by different types of businesses in all parts of the country.


This information file contains an annotated bibliography and a collection of selected articles which focus on how to prepare students for the transition to the next school level. Articles discuss topic areas such as: the importance of family involvement, eighth-grade summer school programs, and preparations and programs schools have used to ease the transition to the next school level.


This information file contains an annotated bibliography and a collection of selected articles which focus on how to help at-risk high school students. Articles discuss the following topics: the importance of student involvement in school activities, school within a school programs, effective at-risk program essentials, alternative school programs, art as a motivator,
computer-based career information programs, reading workshops and identifying and understanding at-risk students.


This information file contains an annotated bibliography and a collection of selected articles which focus on how to help at-risk middle school students. Articles discuss the following topics: multi-agency intervention programs, literacy, an ecological framework for conceptualizing educational risk, faculty and staff mentors, expectations for success, after school programs, Project PRIME, and effective school environments.


This folio investigates the problem of the elementary-aged child who may be at risk for school failure. This folio is not intended to provide specific guidelines or recommendations on the exact nature of the most effective elementary-level program. Rather, this series of assembled articles, papers, and book excerpts provide a meaningful, objective, and balanced look at the issues.


This research briefly summarizes and analyzes the extensive body of current research on the characteristics of effective schools. The results of input-output studies, including research investigating the relationship between individual school resources and pupil performance, are discussed. In addition, research is presented showing what occurs in the school significantly affects the level of student achievement. The findings from the effective schools research is also presented, along with a detailed description of the characteristics of effective schools.


This book provides information on different types of educational innovations. Strong support has been found for mastery learning programs, cooperative learning programs and effective schools research. Research is not sufficient at this time to draw conclusions about whole language programs, learning-styles approach, outcome-based education, thinking skills programs, and interdisciplinary curriculum.

This book describes Phi Delta Kappa's efforts to validate a scale that might be used to predict risk among young people, and it displays the data collected on 21,706 students and the analyses in tabular and graphic form. A narrative is included to help interpret the graphs and tables included, but for complete understanding, volume 1 (*Growing Up Is Risky Business, and Schools Are Not to Blame*) should be read.


This book is the final report of a study about at-risk children who have educational, personal, or social problems. It is also a study of what caused those problems, why the problems developed, where the problems arose, and who or what may have been responsible. This volume describes, in narrative form, the details of the study and a brief overview of the methodology and general results of the study.


In this new revised edition of the original 1956 publication, a major reassessment is presented of the initial argument in favor of a radically different reorganization of elementary schooling. A comprehensive bibliography and an up-to-date overview of research findings related to the practice and effectiveness of "nongradedness" is also provided. An informed discussion of the parallels between the school reform movements of the 1950s and the 1980s demonstrates the need for a serious reexamination of the "nongraded" option.


This book presents ideas about how to design, staff, program, and build a school around learning. It includes separate sections on the ideas for restructuring a school and the practical application and implementation of these ideas.


This resource guide provides background and supportive information that can be used in conjunction with training to launch and sustain an accelerated school at the elementary or
middle school level. This guide is a product of both research and practice and serves as an informative picture of the background, philosophy, and process of the accelerated schools.


This book documents a number of successful programs which schools implemented to increase student achievement. A description of each practice provides a snapshot of the identified problem and an account of the new practice which addresses the problem. Data-based results are then described, along with additional pertinent comments.


This article provides cost comparisons of three comprehensive models aimed at bringing at-risk students to grade level during their elementary school years: Robert Slavin's Success for All, Henry Levin's Accelerated Schools, and James Comer's School Development Program.


The information presented in this book aims to help educators develop a greater appreciation of cultural diversity and differences among students, and to develop an understanding of how teacher expectations are formed and how they can contribute to student failure. Strategies are presented to help strengthen the social and academic self-image of Black and Hispanic youth and to help these students overcome some school-related obstacles to long-term student success.


This activities kit gives elementary and secondary reading teachers ready-to-use techniques and activity sheets for teaching and reinforcing reading comprehension. This resource was written mainly for remedial reading teachers to aid them in understanding the different levels and components of reading comprehension and ways to improve their students' ability in this skill.
Longmont, CO: Sopris West Inc. NL

This catalogue provides schools nationwide with a list of exemplary programs and practices. Current descriptions of most programs described in previous editions are included together with new programs approved for national dissemination since publication of the thirteenth edition in 1987.

Longmont, CO: Sopris West Inc.

This catalogue provides schools nationwide with a list of exemplary programs and practices. Current descriptions of most programs described in previous editions are included together with new programs approved for national dissemination since publication of the fifteenth edition in 1989.

Longmont, CO: Sopris West Inc. NL

This catalogue provides schools nationwide with a list of exemplary programs and practices. Current descriptions of most programs described in previous editions are included together with new programs approved for national dissemination since publication of the sixteenth edition in 1990.

Longmont, CO: Sopris West Inc. NL

This catalogue provides schools nationwide with a list of exemplary programs and practices. Current descriptions of most programs described in previous editions are included together with new programs approved for national dissemination since publication of the seventeenth edition in 1991.

Longmont, CO: Sopris West Inc. NL

This catalogue provides schools nationwide with a list of exemplary programs and practices. Current descriptions of most programs described in previous editions are included together with new programs approved for national dissemination since publication of the eighteenth edition in 1992.

The research contained in this volume addresses which courses differentiate students who will go on to college from those who will not, regardless of their racial, ethnic, or income characteristics. The work expands on a 1988 study that investigated the factors affecting minority students' participation in higher education.


This volume presents the first-year evaluation results of Maryland's tomorrow, a program for at-risk high school students. The program aims to reduce the number of youths who drop out of high school and increase the number who successfully graduate and go on to postsecondary education or employment. The program is distinguished by its emphasis on collaboration among the educational system, the employment training system, and the business community.


This book is about research on the topic of flunking. At a time when strict grade-to-grade promotion standards are being imposed as part of educational reform, it challenges the efficacy of grade retention and reveals some of the damaging effects on those retained.


This book describes Success for All, an elementary school and community program based on prevention, with intensive early intervention and continuing support in an integrated school program to ensure success for every child. Research and policy implications of the program are also discussed.


This book provides the best available information on what is known now about effective programs for students at risk of school failure, particularly those who are currently served in compensatory and special education programs. The message of this book is that we know much more than we are currently using in programs for students at risk, and that while much
more remains to be learned, we know how to proceed to discover how best to prevent and remediate learning deficits.


The *Portland Blueprint* includes suggestions for action by students, parents, teachers, administrators and support personnel, policy makers, and business and community members for opening doors of educational opportunity to disadvantaged students. These recommended actions are organized in the following goal statements: to increase family involvement with at-risk students; to help at-risk students set high personal goals and empower students to achieve them; to increase capacities of teachers and other school staff to identify and respond to special needs of students at risk; and to provide recognition and incentives for improvement in responding to the needs of at-risk students.


This book focuses on environments in which students learn. The empirical literature is reviewed and describes positive and negative environmental influences on academic achievement in terms of four major areas: groupings of students, learning climates, school facilities and size, and community environments.


This book is about individual children who are at risk in America today. Each chapter is a case study of one student who was identified by a teacher or teachers as being seriously at risk. Each child is then described by a researcher trying to understand risk and how risk manifests itself in the life and mind of that particular child.


The purpose of this book is to afford the reader an active role in examining and evaluating instructional techniques. It is recommended that this book be read selectively for the specific units and strategies the reader wishes to review and evaluate. The 14 units of this text describe 82 strategies and practices.
This volume presents methods and first-year findings from the urban and suburban/rural studies of Special Strategies for Educating Disadvantaged Children. Special Strategies is a three-year project that is collecting case study data on 10 different strategies that were identified as holding promise for educating disadvantaged children. The sample includes over 1,000 students in the first, third, and ninth grades in the 1990-91 school year.

This book is designed to help parents, teachers, principals, community leaders, and state and local education authorities replicate in their own communities the success of outstanding schools serving disadvantaged children. Twenty-three profiles of schools, programs, and/or educators are presented. It also recommends measures the federal government can take to help improve education for disadvantaged students.

This book is about organizing schools to prevent at-risk children from falling behind and eventually dropping out of school before achieving full socialization in the values, skills, and knowledge needed for successful participation in society. The editors of this book have assembled an impressive cadre of authors to write about positive steps that school leaders and teachers together can take to improve education for at-risk students and put an end to the cycle of failure.

This book examines the implementation of major federally funded categorical programs for special-needs students in elementary and secondary schools, including compensatory education, special education, the Education for All Handicapped Children Act, and programs for children with limited English proficiency. These programs enacted in the 1960s and the early 1970s now have a reliable base for critical reassessment. The analyses and reform ideas in this book are drawn from diverse disciplines and offer a coherent view on the future of federal education policy and its categorical arrangement.
EVALUATION REPORT: WHAT WORKS WITH LOW ACHIEVERS?
A RESOURCE GUIDE

Authors
This was a team project and therefore nearly all of the evaluation staff contributed.

Bethany Prohm
Evaluation Intern

Kristin Lomax
Testing Intern

Ginger Bethune
Evaluation Intern

Nancy Baenen
Director of Evaluation

Margaret Willoughby
Evaluation Technician

Alissa Bernholc
Evaluation Consultant

Helmuts Feifs
Evaluation Specialist

April Reese
Evaluation Assistant

April 1995
E&R Report No. 95.07

Wake County Public School System
Department of Evaluation and Research