Success for All: Prevention and Early Intervention in Schoolwide Reform

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Despite the constant public outcry about the crisis in American education, every community has one or more outstanding and often widely recognized public schools. Some of these appear to succeed because they serve children of wealthy, well-educated parents, or because they are magnet schools that can screen out unmotivated or low achieving students. However, there are also schools that serve disadvantaged and minority children in inner city or rural locations and, year after year, produce outstanding achievement outcomes. Such schools play a crucial role in reminding us that the problems of our school system have little to do with the capabilities of children; they provide our best evidence that all children can learn. Yet the success of these lighthouse schools does not spread very far. Excellence can be demonstrated in many individual schools but rarely in whole districts or communities. An outstanding elementary school benefits about 500 children, on average. Yet there are millions of children who are placed at risk by ineffective responses to such factors as economic disadvantage, limited English proficiency, or learning difficulties.

How can we make excellence the norm rather than the exception, especially in schools serving many at-risk children? How can effective practices based on research and on the experiences of outstanding schools be effectively implemented every day by hundreds of thousands of teachers?

Success for All was designed in an attempt to answer these questions. Born in one Baltimore school in 1987, Success for All is used (as of fall, 2006) in more than 1200 schools in 47 states, plus schools in Britain, Canada, and Israel. More than two million children have attended Success for All schools. These schools are highly diverse. They are
in most of the largest urban districts, but also hundreds of rural districts, inner suburban districts, and Indian reservations. Most are Title I schoolwide projects with many children qualifying for free lunches, but many are in much less impoverished circumstances.

Success for All is by far the largest research-based, whole-school reform model ever to exist. It is the first model to demonstrate that techniques shown to be effective in rigorous research can be replicated on a substantial scale with fidelity and continued effectiveness.

The purpose of this chapter is to describe Success for All, its rationale, and its research base, as one example of a replicable approach to prevention and early intervention in elementary schools.

Success for All: Prevention and Early Intervention

With few exceptions, children enter kindergarten with enthusiasm, intelligence, creativity, and an expectation that they will succeed. The first goal of school reform should be to ensure that every child, regardless of home background, home language, or learning style, achieves the success that he or she so confidently expected in kindergarten, that all children maintain their motivation, enthusiasm, and optimism because they are objectively succeeding at the school’s tasks. Any reform that does less than this is hollow and self-defeating.

What does it mean to succeed in the elementary grades? The elementary school’s definition of success, and therefore the parents’ and children’s definition as well, is overwhelmingly success in reading. Very few children who are reading adequately are
retained, assigned to special education, or given long-term remedial services. Other subjects are important, of course, but reading and language arts form the core of what school success means in the early grades.

When a child fails to read well in the early grades, he or she begins a downward progression. In first grade, some children begin to notice that they are not reading adequately. They may fail first grade or be assigned to long term remediation. As they proceed through the elementary and middle grades, many students begin to see that they are failing at their full-time jobs. When this happens, things begin to unravel. Failing students begin to have poor motivation and poor self-expectations, which lead to continued poor achievement, in a declining spiral that ultimately leads to despair, delinquency, and dropout (see Alexander, Entwisle, & Kabbani, 2001; Ensminger & Slusaricick, 1992; Juel, 1988; Lloyd, 1978).

Remediating learning deficits after they are already well established is extremely difficult. Children who have already failed to learn to read, for example, are now anxious about reading, and doubt their ability to learn it. Their motivation to read may be low. They may ultimately learn to read but it will always be a chore, not a pleasure. Clearly, the time to provide additional help to children who are at risk is early, when children are still motivated and confident and when any learning deficits are relatively small and remediable. The most important goal in educational programming for students at risk of school failure is to try to make certain that we do not squander the greatest resource we have: the enthusiasm and positive self-expectations of young children themselves (Adams, 1990).
In practical terms, what this perspective implies is that schools, and especially Title I, special education, and other services for at-risk children, must be shifted from an emphasis on remediation to an emphasis on prevention and early intervention (Barr & Parrett, 2001; Snow, Burns, & Griffin, 1998). Prevention means providing developmentally appropriate preschool and kindergarten programs so that students will enter first grade ready to succeed (Berrueta-Clement et al., 1984; Ramey & Ramey, 1992), and it means providing regular classroom teachers with effective instructional programs, curricula, and professional development to enable them to ensure that most students are successful the first time they are taught (Waxman, Padrón, & Arnold, 2001). Early intervention means that supplementary instructional services are provided early in students' schooling and that they are intensive enough to bring at-risk students quickly to a level at which they can profit from good quality classroom instruction.

Success for All is built around the idea that every child can and must succeed in the early grades, no matter what this takes. The idea behind the program is to use everything we know about effective instruction for students at risk to direct all aspects of school and classroom organization toward the goal of preventing academic deficits from appearing in the first place; recognizing and intensively intervening with any deficits that do appear; and providing students with a rich and full curriculum to enable them to build on their firm foundation in basic skills. The commitment of Success for All is to do whatever it takes to see that every child becomes a skilled, strategic, and enthusiastic reader by the end of the elementary grades and beyond.
Usual practices in elementary schools do not support the principle of prevention and early intervention (Vaughn, Bos, & Schumm, 2007). Starting in first grade, a certain number of students begin to fall behind, and over the course of time these students are assigned to remedial programs (such as Title I) or to special education, or are simply retained.

Our society's tacit assumption is that those students who fall by the wayside are defective in some way. Perhaps they have learning disabilities, or low IQ's, or poor motivation, or parents who are unsupportive of school learning, or other problems. We assume that since most students do succeed with standard instruction in the early grades, there must be something wrong with those who don't.

Success for All is built around a completely different set of assumptions. The most important assumption is that every child can learn. In particular, every child without organic retardation can learn to read. Some children need more help than others and may need different approaches than those needed by others, but one way or another every child can become a successful reader.

The first requirement for the success of every child is prevention. This means providing excellent preschool and kindergarten programs, improving curriculum, instruction, and classroom management throughout the grades, assessing students frequently to make sure they are making adequate progress, and establishing cooperative relationships with parents so they can support students learning at home.

Top-quality curriculum and instruction from age four on will ensure the success of
most students, but not all of them. The next requirement for the success of all students is intensive early intervention. This means one-to-one tutoring for primary-grade students having reading problems. It means being able to work with parents and social service agencies to be sure that all students attend school, have medical services or eyeglasses if they need them, have help with behavior problems, and so on.

The most important idea in Success for All is that the school must relentlessly stick with every child until that child is succeeding. If prevention is not enough the child may need tutoring. If this is not enough he or she may need help with behavior or attendance or eyeglasses. If this is not enough he may need a modified approach to reading or other subjects. The school does not merely provide services to children, it constantly assesses the results of the services it provides and keeps varying or adding services until every child is successful.

Overview of Success for All Components

Success for All is a schoolwide reform model, not just a classroom instructional program. It has somewhat different components at different sites, depending on the school’s needs and resources available to implement the program. However, there is a common set of elements characteristic of all. These elements are summarized in Table 1, and then explained in more detail. Also see Slavin, Madden, & Datnow (in press) for theoretical and empirical rationales for program components.
Reading Program

Success for All uses a reading curriculum based on research and effective practices in beginning reading (e.g., Adams, 1990), and an appropriate use of cooperative learning (Slavin, 1995; Stevens, Madden, Slavin, and Farnish, 1987).

Reading teachers at every grade level begin the reading time by reading children's literature to students and engaging them in a discussion of the story to enhance their understanding of the story, listening and speaking vocabulary, and knowledge of story structure. In kindergarten and first grade, the program emphasizes development of basic language skills with the use of Story Telling and Retelling (STaR), which involves the students in listening to, retelling, and dramatizing children's literature. Big books as well as oral and written composing activities allow students to develop concepts of print as they also develop knowledge of story structure. Specific oral language experiences are used to further develop receptive and expressive language.

Reading Roots (Madden, 1995) is introduced in the second semester of kindergarten. This K-1 beginning reading program uses as its base a series of phonetically regular but meaningful and interesting minibooks and emphasizes repeated oral reading to partners as well as to the teacher. The minibooks begin with a set of “shared stories,” in
which part of a story is written in small type (read by the teacher) and part is written in large type (read by the students). The student portion uses a phonetically controlled vocabulary. Taken together, the teacher and student portions create interesting, worthwhile stories. Over time, the teacher portion diminishes and the student portion lengthens, until students are reading the entire book. This scaffolding allows students to read interesting literature when they only have a few letter sounds.

Letters and letter sounds are introduced in an active, engaging set of activities that begins with oral language and moves into written symbols. Individual sounds are integrated into a context of words, sentences and stories. Instruction is provided in story structure, specific comprehension skills, metacognitive strategies for self-assessment and self-correction, and integration of reading and writing.

Spanish bilingual programs use an adaptation of Reading Roots called Lee Conmigo (“Read With Me”). Lee Conmigo uses the same instructional strategies as Reading Roots, but is built around shared stories written in Spanish.

When students reach the second grade reading level, they use a program called Reading Wings (Madden et al, 1996), an adaptation of Cooperative Integrated Reading and Composition (CIRC) (Stevens, Madden, Slavin, & Farnish, 1987). Reading Wings uses cooperative learning activities built around story structure, prediction, summarization, vocabulary building, decoding practice, and story-related writing. Students engage in partner reading and structured discussion of stories or novels, and work toward mastery of the vocabulary and content of the story in teams. Story-related writing is also shared within
teams. Cooperative learning both increases students' motivation and engages students in cognitive activities known to contribute to reading comprehension, such as elaboration, summarization, and rephrasing (see Slavin, 1995). Research on CIRC has found it to significantly increase students' reading comprehension and language skills (Stevens et al., 1987).

In addition to these story-related activities, teachers provide direct instruction in reading comprehension skills, such as clarification, graphic organizers, and summarization (Pressley & Woloshyn, 1995) and students practice these skills in their teams. Classroom libraries of trade books at students' reading levels are provided for each teacher, and students read books of their choice for homework for 20 minutes each night. Home readings are shared twice a week during "book club" sessions.

Materials to support Reading Wings through the sixth grade level (and beyond) exist in English and Spanish. The English materials are build around children’s literature and around the most widely used basal series and anthologies. Supportive materials have been developed for more than 100 children’s novels and for most current basal series (e.g., Houghton Mifflin, Scott Foresman, Harcourt, Macmillan, Open Court). The upper-elementary Spanish program, Alas para Leer, is built around Spanish-language novels and basal series.

Beginning in the second semester of program implementation, Success for All schools usually implement a writing/ language arts program based primarily on cooperative learning principles (see Slavin, Madden, & Stevens, 1989/90).
Students in grades one and up are regrouped for reading. The students are assigned to heterogeneous, age-grouped classes most of the day, but during a regular 90-minute reading period they are regrouped by reading performance levels into reading classes of students all at the same level. For example, a reading class taught at the 2-1 level might contain first, second, and third grade students all reading at the same level. The reading classes are smaller than homerooms because tutors and other certificated staff (such as librarians or art teachers) teach reading during this common reading period.

Regrouping allows teachers to teach the whole reading class without having to break the class into reading groups. This greatly reduces the time spent in seatwork and increases direct instruction time, eliminating workbooks, dittos, or other follow-up activities which are needed in classes that have multiple reading groups. The regrouping is a form of the Joplin Plan, which has been found to increase reading achievement in the elementary grades (Slavin, 1987).

**Quarterly Reading Assessments**

At nine-week intervals, reading teachers assess student progress through the reading program. The results of the assessments are used to determine who is to receive tutoring, to change students' reading groups, to suggest other adaptations in students' programs, and to identify students who need other types of assistance, such as family interventions or screening for vision and hearing problems.
**Reading Tutors**

One of the most important elements of the Success for All model is the use of tutors to promote students' success in reading. One-to-one tutoring is the most effective form of instruction known (see Slavin, Karweit, & Madden, 1989; Wasik & Slavin, 1993a). Most tutors are certified teachers with experience teaching Title 1, special education, and/or primary reading. Often, well-qualified paraprofessionals also tutor children with less severe reading problems. Tutors work one-on-one with students who are having difficulties keeping up with their reading groups. The tutoring occurs in 20-minute sessions during times other than reading or math periods.

In general, tutors support students' success in the regular reading curriculum, rather than teaching different objectives. For example, the tutor generally works with a student on the same story and concepts being read and taught in the regular reading class. However, tutors seek to identify learning problems and use different strategies to teach the same skills. They also teach metacognitive skills, such as clarification and summarization, beyond those taught in the classroom program. Schools may have several teachers serving as tutors depending on school size, need for tutoring, and other factors.

During daily 90-minute reading periods, certified teacher-tutors serve as additional reading teachers to reduce class size for reading. Reading teachers and tutors use brief forms to communicate about students' specific problems and needs and meet at regular times to coordinate their approaches with individual children.

Initial decisions about reading group placement and the need for tutoring are based
on informal reading inventories that the tutors give to each child. Subsequent reading
group placements and tutoring assignments are made based on curriculum-based
assessments given every eight weeks, which include teacher judgments as well as more
formal assessments. First graders receive priority for tutoring, on the assumption that the
primary function of the tutors is to help all students be successful in reading the first time,
before they fail and become remedial readers.

Preschool and Kindergarten

Most Success for All schools provide a half-day preschool and/or a full-day
kindergarten for eligible students. The preschool and kindergarten programs focus on
providing a balanced and developmentally appropriate learning experience for young
children. The curriculum emphasizes the development and use of language. It provides a
balance of academic readiness and non-academic music, art, and movement activities in a
series of thematic units. Readiness activities include use of language development
activities and Story Telling and Retelling (STaR), in which students retell stories read by
the teachers. Reading instruction begins during the second semester of kindergarten.

Solutions Team

Parents are an essential part of the formula for success in Success for All. A
Solutions Team (Slavin & Madden, 2007) works in each school, serving to make families
feel comfortable in the school and become active supporters of their child's education as
well as providing specific services. The Solutions Team consists of the Title I parent liaison, vice-principal (if any), counselor (if any), facilitator, and any other appropriate staff already present in the school or added to the school staff.

The Solutions Team first works toward good relations with parents and to increase involvement in the schools. Solutions Team members may complete “welcome” visits for new families. They organize many attractive programs in the school, such as parenting skills workshops. Most schools use a program called “Raising Readers” in which parents are given strategies to use in reading with their own children. Solutions Team staff also help introduce a social skills development program called "Getting Along Together," which gives students peaceful strategies for resolving interpersonal conflicts (Levin & Nolan, 2004).

The Solutions Team also intervenes to solve problems. For example, they may contact parents whose children are frequently absent to see what resources can be provided to assist the family in getting their child to school. Solutions Team staff, teachers, and parents work together to solve school behavior problems. Also, Solutions Team staff are called on to provide assistance when students seem to be working at less than their full potential because of problems at home. Families of students who are not receiving adequate sleep or nutrition, need glasses, are not attending school regularly, or are exhibiting serious behavior problems, may receive family support assistance.

The Solutions Team is strongly integrated into the academic program of the school. It receives referrals from teachers and tutors regarding children who are not making
adequate academic progress, and thereby constitutes an additional stage of intervention for students in need above and beyond that provided by the classroom teacher or tutor. The Solutions Team also encourages and trains parents and other community members to fulfill numerous volunteer roles within the school, ranging from providing a listening ear to emerging readers to helping in the school cafeteria.

**Program Facilitator**

A program facilitator works at each school to oversee (with the principal) the operation of the Success for All model. The facilitator helps plan the Success for All program, helps the principal with scheduling, and visits classes and tutoring sessions frequently to help teachers and tutors with individual problems. He or she works directly with the teachers on implementation of the curriculum, classroom management, and other issues, helps teachers and tutors deal with any behavior problems or other special problems, and coordinates the activities of the Solutions Team with those of the instructional staff. Facilitators use a coaching model called Goal Focused Implementation Support, which focuses on the measurable outcomes of teachers’ instruction, such as performance on frequent assessments, student engagement in lessons, and effective uses of cooperative learning (see Haxby, Rolewski, Holmes, Morrison, & Seabrook, 2007).

**Teachers and Teacher Training**

The teachers and tutors are regular certified teachers. They receive detailed teacher's
manuals supplemented by three days of inservice at the beginning of the school year, followed by classroom observations and coaching throughout the year. For classroom teachers of grades one and above and for reading tutors, training sessions focus on implementation of the reading program (either Reading Roots or Reading Wings), and their detailed teachers' manuals cover general teaching strategies as well as specific lessons. Preschool and kindergarten teachers and aides are trained in strategies appropriate to their students' preschool and kindergarten models. Tutors later receive two additional days of training on tutoring strategies and reading assessment.

Throughout the year, additional inservice presentations are made by the facilitators and other project staff on such topics as classroom management, instructional pace, and cooperative learning. Facilitators also organize many informal sessions to allow teachers to share problems and problem solutions, suggest changes, and discuss individual children. The staff development model used in Success for All emphasizes relatively brief initial training with extensive classroom follow-up, coaching, and group discussion.

Special Education

Every effort is made to deal with students' learning problems within the context of the regular classroom, as supplemented by tutors. Tutors evaluate students' strengths and weaknesses and develop strategies to teach in the most effective way. In some schools, special education teachers work as tutors and reading teachers with students identified as learning disabled as well as other students experiencing learning problems who are at risk
for special education placement. One major goal of Success for All is to keep students with learning problems out of special education if at all possible, and to serve any students who do qualify for special education in a way that does not disrupt their regular classroom experience (see Slavin, 1996).

None of the elements of Success for All are completely new or unique. All are based on well-established principles of learning and rigorous instructional research. What is most distinctive about them is their schoolwide, coordinated, and proactive plan for translating positive expectations into concrete success for all children. Every child can complete elementary school a confident, strategic, and joyful learner and can maintain the enthusiasm and positive self-expectations they had when they came to first grade. The purpose of Success for All is to see that this vision can become a practical reality in every school.

**Research on Success for All**

One of the guiding principles in the development of Success for All is an emphasis on rigorous evaluation. The elements of the program are themselves derived from current research on reading and writing, on early childhood, second language learning, and special education, and on parent involvement, professional development, and school change, among many others. However, it is not enough for a program to be based on good research: it must also be rigorously and repeatedly evaluated in many schools over meaningful periods of time in comparison to similar control schools.

Success for All is arguably the most extensively evaluated school reform model
ever to exist. Experimental-control comparisons have been made by researchers at eighteen universities and research institutions other than Johns Hopkins, both within the U.S. and in five other countries. Taken together, more than 50 studies have compared Success for All and control schools on individually administered standardized tests and on state accountability measures.

**Independent Reviews**

A number of independent reviews of research on comprehensive school reform and reading programs have all concluded that Success for All is among the most successfully evaluated of programs. Most recently, Success for All was cited as one of only two elementary comprehensive designs that met the highest standards for research given in a review of 22 programs done by the Comprehensive School Reform Quality Center at the American Institutes for Research (CSRQ, 2005). The CSRQ review identified 31 “convincing” studies of Success for All, 10 for Direct Instruction, and no more than 6 for any other program. The same conclusion was reached in an earlier AIR review (Herman, 1999) and in studies commissioned by the Fordham Foundation (Traub, 1999) and the Milliken Family Foundation (Schacter, 1999). A meta-analysis of research on 29 comprehensive school reforms by Borman, Hewes, Overman, & Brown (2003) listed Success for All among three CSR models with “strongest evidence of effectiveness (p. 142)”.
Longitudinal Studies

Longitudinal experiments evaluating SFA have been carried out since the earliest program implementations in Baltimore and Philadelphia. Later, third-party evaluators at the University of Memphis, Steven Ross, Lana Smith, and their colleagues, added evaluations in many districts across the U.S. Studies focusing on English language learners in California have been conducted by researchers at WestEd, a federally-funded regional educational laboratory. Each of these evaluations compared Success for All schools to comparison schools on measures of reading performance, starting with cohorts in kindergarten or in first grade and following these students as long as possible (details of the evaluation design appear below). Several studies were able to follow Success for All schools for many years. Data comparing matched SFA and traditional control schools on individual reading measures have been collected from schools in many U.S. districts, and other studies have compared Success for All to a variety of alternative reform models, have compared full and partial implementations of SFA, and have made other comparisons.

Most recently, a three-year national randomized experiment involving 41 schools has compared SFA and control schools. In addition, there have been many studies involving group-administered standardized tests including both national norm-referenced tests and state criterion-referenced tests used in state accountability programs. Experimental-control comparisons have also been carried out in Canada, England, Australia, and Israel.

The largest number of studies has compared the achievement of students in Success for All schools to that of children in matched comparison schools using traditional
methods, including locally-developed Title I reforms.

A common evaluation design, with variations due to local circumstances, was used in a foundational set of Success for All evaluations carried out by researchers at Johns Hopkins University, the University of Memphis, and WestEd. Each Success for All school was matched with a control school that was similar in poverty level (percent of students qualifying for free lunch), historical achievement level, ethnicity, and other factors. Schools were also matched on district-administered standardized test scores given in kindergarten or on Peabody Picture Vocabulary Test (PPVT) scores given by the evaluators in the fall of kindergarten or first grade.

The measures used in these evaluations were as follows:

1. **Woodcock Reading Mastery Test.** (Woodcock, McGrew, & Mather, 2001).
   
   Three Woodcock scales, Word Identification, Word Attack, and Passage Comprehension, were individually administered to students by trained testers. Word Identification assesses recognition of common sight words, Word Attack assesses phonetic synthesis skills, and Passage Comprehension assesses comprehension in context. Students in Spanish bilingual programs were given the Spanish versions of these scales.

2. **Durrell Analysis of Reading Difficulty** (Durrell & Catterson, 1983). The Durrell Oral Reading scale was also individually administered to students in grades 1-3 in some studies. It presents a series of graded reading passages which students read aloud, followed by comprehension questions.
3. **Gray Oral Reading Test** (Wiederholt & Bryant, 1994). Comprehension and passage scores from the Gray Oral Reading Test were obtained in some studies from students in grades 4-5.

Analyses of covariance with pretests as covariates were used to compare raw scores in all evaluations, and separate analyses were conducted for students in general and, in many studies, for students in the lowest 25% of their grades at pretest.

Each of the evaluations summarized in this chapter follows children who began in Success for All in first grade or earlier, in comparison to children who had attended the control school over the same period. Students who start in it after first grade are not considered to have received the full treatment (although they are of course served within the schools).

**Reading Outcomes**

**National Randomized Evaluation of Success for All**

The definitive evaluation of the reading outcomes of Success for All was a U.S. Department of Education-funded evaluation (Borman et al., 2005 a, b; Borman et al., in press) involving 41 Title I schools throughout the U.S. Schools were randomly assigned to use Success for All or to continue with their existing reading programs in grades K-2. At the end of the three-year study, children in the Success for All schools were achieving at significantly higher levels than control students on all three measures, (Woodcock Word Attach, Word Identification, and Passage Comprehension) (Borman et al., in press) using
conservative hierarchical linear modeling analyses with school as the unit of analysis. In individual-level effect sizes (difference in adjusted posttests divided by unadjusted standard deviations), the differences were ES=+0.38 for Word Attack, ES=+0.23 for Word Identification, and ES=+0.21 for Passage Comprehension. This study is of particular importance for several reasons. First, the use of random assignment to conditions eliminates selection bias (the possibility that schools that chose SFA might have been better schools than the control schools). Random assignment has become extremely important in program evaluation as the U.S. Department of Education has virtually required randomized designs and emphasized this design element in its What Works Clearinghouse reviews of effective programs. Second, the large sample size allowed for the use of hierarchical linear modeling (HLM), which uses the school as the unit of analysis. This is the appropriate analysis for schoolwide interventions (all previous studies used student as the unit of analysis). Third, the size of the evaluation is of great importance for the study’s policy impact. In small studies, there is always the possibility that researchers can ensure high-quality implementations. Cronbach et al. (1980) called this the “superrealization” of a program’s impact, where the program is evaluated at a level of quality far beyond what could be achieved at a large scale. In the Borman et al. (in press) study, implementation of SFA was actually found to be of lower quality than that typical of SFA schools. A study on such a large scale is a good representation of the likely policy effect, or what would be expected if a district or state implemented the program on a broad scale. For example, the Borman et al. (in press) findings imply that if many schools serving African-American or
Hispanic students experienced Success for All, the minority-White achievement gap (about 50% of a standard deviation on the National Assessment of Educational Progress) would be reduced by half.

**Matched Longitudinal Studies**

In the 1990’s, researchers at Johns Hopkins University and other research institutions carried out a series of longitudinal matched studies to evaluate Success for All (e.g., Dianda & Flaherty, 1995; Madden et al., 1993; Ross et al., 1995; Ross, Nunnery, & Smith, 1996; Slavin et al., 1994). A common design and set of measures was used for these studies, as noted above. Schools in 13 districts across the country were involved.

The results of the matched experiments evaluating Success for All are summarized in Figure 1 for each grade level, 1-5, and for followup measures into grades 6 and 7. The analyses average cohort means for experimental and control schools. A cohort is all students at a given grade level in a given year. For example, the Grade 1 graph compares 68 experimental to 68 control cohorts, with cohort (50-150 students) as the unit of analysis. In other words, each bar is a mean of scores from more than 6000 students. Grade equivalents are based on the means, and are only presented for their informational value.

No analyses were done using grade equivalents.

Combining across studies, statistically significant (p=.05 or better) positive effects of Success for All (compared to controls) were found on every measure at every grade level, 1-5 (Slavin & Madden, 1993). For students in general, effect sizes averaged around a
half standard deviation at all grade levels. Effects were somewhat higher than this for the Woodcock Word Attack scale in first and second grades, but in grades 3-5 effect sizes were more or less equivalent on all aspects of reading. Consistently, effect sizes for students in the lowest 25% of their grades were particularly positive, ranging from ES=+1.03 in first grade to ES=+1.68 in fourth grade. Again, cohort-level analyses found statistically significant differences favoring low achievers in Success for All on every measure at every grade level. A followup study of Baltimore schools found that positive program effects continued into grade 6 (ES=+0.54) and grade 7 (ES=+0.42), when students were in middle schools.

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**Long-Term Outcomes**

Borman & Hewes (2002) carried out a longitudinal study of children from five Success for All and five control schools in Baltimore. They located children citywide who had attended these schools in first grade and remained from one to six years (mean = 3.8 years). At posttest, students who had been promoted each year would have been in the eighth grade, having been out of a Success for All school for at least three years.

Long-term differences were found on achievement, retentions, and special education placements. In achievement, former SFA students still scored significantly better
than controls on standardized, district-administered CTBS reading scores (ES = +0.29, p<.001). Surprisingly, there was also a small difference favoring the former SFA students in math (ES=+0.11, p<.05), even though mathematics was not part of the intervention.

Success for All students were far less likely to have been retained in elementary school. Nine percent of SFA students and 23% of control students had been retained at least once by fifth grade (ES=+0.27, p<.001). Similarly, control students spent 50% more time in special education, on average, than SFA students (ES=+0.18, p<.001).

The importance of the Borman & Hewes (2002) study is in its finding that at entry to high school, former Success for All students were in much better shape than control students. The best predictors of high school success are reading achievement and avoidance of retention and special education placements (Alexander, et al., 2001; MacIver, 1990). Success for All students were substantially higher on all of these measures.

The Success for All Middle School

The Success for All Middle School was evaluated in a national study by Slavin, Daniels, & Madden (2005). In this study, reading results at the school level from 2001 to 2004 were obtained from state web sites. Analyses compared achievement gains on state high-stakes reading measures in SFA middle schools to those in matched comparison schools.

In all of the seven school pairs, students in the SFA Middle Schools gained more on their state reading assessments than did students in comparison schools. In many cases,
these differences were striking. For example, at Tahola School, a K-12 school primarily serving Native American students in rural Washington State, the Success for All seventh graders gained 95.5 percentage points, to 100% of students meeting standards on the Washington Assessment of Student Learning (WASL). The comparison school gained 18.4 percentage points, while the state average gained 20.7 percentage points. Similarly, seventh graders at Richards Middle School in rural Missouri gained 31.5 percentage points in students passing the Missouri Assessment Program (MAP) Reading Scale, while a matched control school gained 10.3 points and the state declined by 2.4 points.

Recognizing the problems inherent in averaging across different state measures, it is still interesting to note that across the seven SFA schools, students gained an average of 24.6 percentage points on state reading tests, far better than the gain of 2.2 percentage points in matched control schools and the average gain made by middle schools in their respective states, 4.2 percentage points.

Table 2 summarizes the gains in each SFA school, its matched control, and its state.

Table 2 Here

A randomized evaluation of the middle school program by Chamberlain, Daniels, Madden, & Slavin (2007) also found positive effects of the program. Within two schools in Florida and West Virginia, sixth grades were randomly assigned to the SFA reading model or to remain in their usual reading instruction. At the end of the year, students in the SFA
classes scored significantly better on the Gates McGinitie reading test.

**Success for All and English Language Learners**

The education of English language learners is at a crossroads. On one hand, research on bilingual education continues to show that children who are initially taught in their home language and then transitioned to English ultimately read as well or better in English than children taught only in English (Slavin & Cheung, 2005; National Academy of Sciences, 1998). Despite these findings, political pressure against bilingual education, most notably in California’s Proposition 227, has mounted in recent years, based largely on the fact that Latino children perform less well than Anglo children on achievement tests, whether or not they have been initially taught in Spanish.

While language of instruction is an essential concern for children who are acquiring English (Slavin & Cheung, 2006), the *quality* of instruction (and corresponding achievement outcomes) is at least as important, whatever the initial language of instruction may be. There is a need for better programs for teaching in the home language and then transitioning to English, and for better programs for teaching English language learners in English with support from English as a second language strategies, such as using clear language, pictures, objects, and actions to clarify meaning and build vocabulary in daily instruction (see August & Shanahan, 2007). Both development and research on Success for All have focused on both of these issues.

Six studies have evaluated adaptations of Success for All with language minority
children (see Cheung & Slavin, 2005; Slavin & Madden, 1999). Three of these evaluated Éxito Para Todos (“Success for All” in Spanish), the Spanish bilingual adaptation, and three evaluated a program adaptation incorporating English as a second language strategies.

Bilingual Studies. One study compared students in Éxito Para Todos to those in a matched comparison school in which most reading instruction was in English. Both schools served extremely impoverished, primarily Puerto Rican student bodies in inner-city Philadelphia. Not surprisingly, Éxito Para Todos students scored far better than control students on Spanish measures. More important was the fact that after transitioning to all-English instruction by third grade, the Éxito Para Todos students scored significantly better than controls on measures of English reading. These differences were significant on Word Attack, but not on Word Identification or Passage Comprehension.

An evaluation of Éxito ParaTodos in California bilingual schools was reported by Livingston & Flaherty (1997), who studied three successive cohorts of students. On Spanish reading measures, Éxito Para Todos students scored substantially higher than controls in first grade (ES= +1.03), second grade (ES= +0.44), and third grade (ES= +.23). However, the second and third grade differences almost certainly understate the true effects; the highest-achieving students in the bilingual programs were transitioned early to English-only instruction, and the transition rate was twice as high in the Éxito Para Todos classes as in the controls.

A large study in Houston compared LEP first graders in 20 schools implementing Éxito Para Todos to those in 10 control schools (Nunnery, Slavin, Madden, Ross, Smith,
Hunter, & Stubbs, 1996). As an experiment, schools were allowed to choose Success for All/Éxito Para Todos as it was originally designed, or to implement key components. The analysis compared three levels of implementation: high, medium, and low. None of the Éxito Para Todos programs were categorized as “high” in implementation, as a bilingual teacher shortage made it impossible to hire certified teachers as Spanish tutors, a requirement for the “high implementation” designation. Medium-implementation schools significantly exceeded their controls on all measures (mean ES= +0.24). Low implementers exceeded controls on the Spanish Woodcock Word Identification and Word Attack scales, but not on Passage Comprehension (mean ES= +0.17).

One additional study evaluated Bilingual Cooperative Integrated Reading and Composition (BCIRC), which is closely related to Alas Para Leer, the bilingual adaptation of Reading Wings. This study, in El Paso, Texas, found significantly greater reading achievement (compared to controls) for English language learners in grades 3-5 transitioning from Spanish to English reading (Calderón, Hertz-Lazarowitz, & Slavin, 1998).

ESL Studies. Three studies have evaluated the effects of Success for All with English language learners being taught in English. In this adaptation, ESL strategies (such as total physical response) are integrated into instruction for all children, whether or not they are limited in English proficiency. The activities of ESL teachers are closely coordinated with those of other classroom teachers, so that ESL instruction directly supports the Success for All curriculum, and ESL teachers often serve as tutors for LEP
children.

The first study of Success for All with English language learners took place in Philadelphia. Students in an Asian (mostly Cambodian) Success for All school were compared to those in a matched school that also served many Cambodian-speaking children. Both schools were extremely impoverished, with nearly all children qualifying for free lunches.

At the end of a six-year longitudinal study, Success for All Asian fourth and fifth graders were performing far ahead of matched controls. On average, they were 2.9 years ahead of controls in fourth grade on the Woodcock measures (median ES= +1.49), and 2.8 years ahead in fifth grade (median ES= +1.33). Success for All Asian students were reading about a full year above grade level in both fourth and fifth grades, while controls were almost two years below grade level. Non-Asian students also significantly exceeded their controls at all grade levels (see Cheung & Slavin, 2005; Slavin & Madden, 1999).

The California study described early (Livingston & Flaherty, 1997) also included many English language learners who were taught in English. Combining results across three cohorts, Spanish-dominant English language learners performed far better on English reading measures in Success for All than in matched control schools in first grade (ES= +1.36) and second grade (ES= +0.46), but not in third grade (ES= +0.09). As in the bilingual evaluation, the problem with the third grade scores is that many high-achieving children were transitioned out of the ESL designation in the Success for All schools, reducing apparent experimental-control differences. Corresponding effect sizes for
students who spoke languages other than English or Spanish were +0.40 for first graders, +0.37 for second graders, and +0.05 for third graders.

An Arizona study (Ross, Nunnery, & Smith, 1996) compared Mexican-American English language learners in two urban Success for All schools to those in three schools using locally-developed Title I reform models and one using Reading Recovery. Two SES school strata were compared, one set with 81% of students in poverty and 50% Hispanic students and one with 53% of students in poverty and 27% Hispanic students. Success for All first graders scored higher than controls on Woodcock reading measures in both strata. Hispanic students in the high-poverty stratum averaged three months ahead of the controls (1.75 vs. 1.45). Hispanic students in the less impoverished stratum scored slightly above grade level (1.93), about one month ahead of controls (1.83).

The effects of Success for All for language minority students are clearly positive, both for the Spanish bilingual adaptation, Éxito Para Todos, and for the ESL adaptation. What these findings suggest is that whatever the language of instruction may be, student achievement in that language can be substantially enhanced using improved materials, professional development, and other supports.

**Success for All and Special Education**

The philosophy behind the treatment of special education issues in Success for All is called “neverstreaming” (Slavin, 1996). That is, rather than waiting until students fall far behind, are assigned to special education, and then may be mainstreamed into
regular classes, Success for All schools intervene early and intensively with students who are at risk to try to keep them out of the special education system. Once students are far behind, special education services are unlikely to catch them up to age-appropriate levels of performance. Students who have already failed in reading are likely to have an overlay of anxiety, poor motivation, poor behavior, low self-esteem, and ineffective learning strategies that are likely to interfere with learning no matter how good special education services may be (Vaughn et al., 2007; Snow et al., 1998). Ensuring that all students succeed in the first place is a far better strategy, if it can be accomplished. In Success for All, the provision of research-based preschool, kindergarten, and first grade reading, one-to-one tutoring, and family support services are likely to give the most at-risk students a good chance of developing enough reading skills to remain out of special education, or to perform better in special education than would have otherwise been the case.

The data relating to special education outcomes clearly support these expectations. Several studies have focused on questions related to special education. One of the most important outcomes in this area is the consistent finding of particularly large effects of Success for All for students in the lowest 25% of their classes. While effect sizes for students in general have averaged around + 0.50 on individually administered reading measures, effect sizes for the lowest achievers have averaged in the range of +1.00 to +1.50 across the grades. In the longitudinal Baltimore study only 2.2% of third graders averaged two years behind grade level, a usual criterion for special education placement. In contrast, 8.8% of control third graders scored this poorly. Baltimore data also showed a reduction in
special education placements for learning disabilities of about half (Slavin et al., 1992). A longitudinal study following Baltimore children to eighth grade found that students who had been in control schools had spent 50% more time in special education, on average, than those who had been in SFA schools (Borman & Hewes, 2002). A study of two Success for All schools in Ft. Wayne, Indiana found that over a two year period 3.2% of Success for All students in grades K-1 and 1-2 were referred to special education for learning disabilities or mild mental handicaps. In contrast, 14.3% of control students were referred in these categories (Smith, Ross, & Casey, 1994).

Taken together, these findings support the conclusion that Success for All both reduces the need for special education services (by raising the reading achievement of very low achievers) and reduces special education referrals and placements. Both of these outcomes have significant consequences for long-term costs of educating students placed at risk.

Another important question concerns the effects of the program on students who have already been assigned to special education. Here again, there is evidence from different sources. In the Ross, Nunnery, & Smith (1996) study comparing Reading Recovery and Success for All, it so happened that first graders in special education in the Reading Recovery group were not tutored, but instead received traditional special education services in resource rooms. In the Success for All schools, first graders who had been assigned to special education participated in the mainstream SFA program in the same way as all other students. As noted earlier, special education students in Success for All
were reading substantially better (ES = +.77) than special education students in the comparison school. In addition, Smith et al. (1994) combined first grade reading data from special education students in Success for All and control schools in four districts: Memphis, Ft. Wayne (IN), Montgomery (AL), and Caldwell (ID). Success for All special education students scored substantially better than controls (mean ES = +.59).

**Embedding Technology in Success for All**

In recent years, the Success for All Foundation has added two technology tools to its early reading programs, and studies of these additions find them to be effective in improving students’ reading performance. *Reading Reels*, used in kindergarten and first grade classes, provides appealing video content to supplement Reading Roots. This includes animations to teach letter sounds, puppet skits to teach sound blending, and live action skits to teach vocabulary. In a study in which high-poverty, majority-Hispanic schools in Hartford, Connecticut were randomly assigned to use SFA either with or without *Reading Reels*, students who experienced the videos performed significantly better on the Woodcock Word Attack scale than those who did not experience *Reading Reels* (Chambers, Cheung, Madden, Slavin, & Gifford, in 2007).

The second technology enhancement is called *Alphie’s Alley*. It is designed for use in SFA tutoring. *Alphie’s Alley* helps tutors assess their students, plan their instruction, and provide them with compelling, animated presentations and practice opportunities. Embedded in the content are professional development videos in which experienced tutors
demonstrate tutoring strategies. A study involving 25 high-poverty SFA schools around the U.S. randomly assigned children in tutoring (and their tutors) to tutoring with or without *Alphie’s Alley*. In schools that used the program as intended, *Alphie’s Alley* students scored significantly better than students given usual paper-and-pencil tutoring on the Woodcock Letter-Word Identification and Word Attack scales as well as DIBELS Fluency (Chambers, Abrami, Tucker, Slavin, Madden, Cheung, & Gifford, 2005).

A third randomized study evaluated outcomes in schools that used both *Reading Reels* and *Alphie’s Alley*. Students in two high-poverty, mostly Hispanic schools who received tutoring and experienced both embedded technology interventions scored substantially better than tutored SFA students in the same schools who did not experience the technology on the Woodcock Letter-Word and Word Attack scales and the Gray Oral Reading Test Fluency and Comprehension scales. Students who were not tutored, and therefore experienced *Reading Reels* but not *Alphie’s Alley*, also scored better than non-tutored SFA students who did not experience the videos on Woodcock and Gray reading measures (Chambers, Slavin, Madden, Abrami, Tucker, Cheung, & Gifford, 2005).

These studies suggest that using multimedia content embedded in teachers’ lessons along with Success for All can significantly enhance learning for children. This type of application, in which technology supplements instead of replacing teachers’ instruction, may help teachers reinforce content and skills through visual as well as auditory pathways. The positive findings have led the Success for All Foundation to include both *Reading Reels* and *Alphie’s Alley* as standard components of Reading Roots.
Conclusion

The results of evaluations of dozens of Success for All schools in districts in all parts of the U.S. clearly show that the program increases student reading performance. A large, national randomized evaluation found clear positive effects of the program, compared to a control group. Across more than fifty matched studies done by dozens of researchers, Success for All students learned significantly more than matched control students. Significant effects were not seen on every measure at every grade level, and effect sizes varied widely, but the consistent direction and magnitude of the effects show unequivocal benefits for Success for All students. Effects on district-administered standardized tests and criterion-referenced tests used in state accountability programs reinforce the findings of the studies using individually administered tests. Large impacts have been seen on the achievement of limited English proficient students in both bilingual and ESL programs, and on both reducing special education referrals and improving the achievement of students who have been assigned to special education. The Borman & Hewes (2003) study found that effects of Success for All maintained to the end of eighth grade and that students who had been in SFA schools were significantly less likely than matched controls to have been retained or assigned to special education. This and other studies suggest that Success for All can make meaningful differences in the developmental trajectories of at-risk students.

The Success for All evaluations have used reliable and valid measures, in particular individually administered tests that are sensitive to all aspects of reading: comprehension,
fluency, word attack, and word identification. Positive effects on state accountability assessments and on other standardized measures have also been documented many times. Performance of Success for All students has been compared to that of students in similar control schools, who provide the best indication of what students without the program would have achieved. Replication of high-quality experiments in such a wide variety of schools and districts is extremely unusual. As noted earlier, reviews of research by the Comprehensive School Reform Quality Center (2005), Borman et al. (2003), the American Institutes for Research (Herman, 1999) and the Fordham Foundation (Traub, 1999) all found Success for All to be one of only two or three comprehensive elementary reform models to have rigorous, frequently replicated evidence of effectiveness.

An important indicator of the robustness of Success for All is the fact that schools stay with the program. In 2007, the median school has used SFA for seven years. When schools do drop the program, it is usually due to a district decision (forced by policy changes or funding cuts), not a school decision. Hundreds of Success for All schools have survived changes of superintendents, principals, facilitators, and other key staff, major cuts in funding, and other serious threats to program maintenance. The initial buy-in by teachers, ongoing training and networking, and the clear impact of the program on children’s reading are all reasons for the sustained use of Success for All (Slavin & Madden, 2001).

The research summarized here demonstrates that comprehensive, systemic school-by-school change can take place on a broad scale in a way that maintains the integrity and
effectiveness of the model. The schools we have studied are typical of the larger set of schools currently using Success for All in terms of quality of implementation, resources, demographic characteristics, and other factors. Program outcomes are not limited to the original home of the program. The widely held idea based on the Rand study of innovation (Berman & McLaughlin, 1978; McLaughlin, 1990) that comprehensive school reform must be invented by school staffs themselves is certainly not supported in research on Success for All. While the program is adapted to meet the needs of each school, and while school staffs must agree to implement the program by a vote of 80% or more, Success for All is an externally developed program with specific materials, manuals, and structures. The observation that the program can be implemented and maintained over considerable time periods and can be effective in each of its replication sites certainly supports the idea that every school staff need not reinvent the wheel.
Table 1
Major Elements of Success for All
Success for All is a schoolwide program for students in grades pre-K to six which organizes resources to attempt to ensure that virtually every student will reach the third grade on time with adequate basic skills and build on this basis throughout the elementary grades, that no student will be allowed to “fall between the cracks.” The main elements of the program are as follows:

A Schoolwide Curriculum. During reading periods, students are regrouped across age lines so that each reading class contains students all at one reading level. Use of tutors as reading teachers during reading time reduces the size of most reading classes to about 20. The reading program in grades K-1 emphasizes language and comprehension skills, phonics, sound blending, and use of shared stories that students read to one another in pairs. The shared stories combine teacher-read material with phonetically regular student material to teach decoding and comprehension in the context of meaningful, engaging stories.

In grades 2-6, students use novels or basals but not workbooks. This program emphasizes cooperative learning and partner reading activities, comprehension strategies such as summarization and clarification built around, narrative and expository texts, writing, and direct instruction in reading comprehension skills. At all levels, students are required to read books of their own choice for twenty minutes at home each evening. Cooperative learning programs in writing/language arts are used in grades 1-6.

Tutors. In grades 1-3, specially trained certified teachers and paraprofessionals work one-to-one with any students who are failing to keep up with their classmates in reading. Tutorial instruction is closely coordinated with regular classroom instruction. It takes place 20 minutes daily during times other than reading periods.

Preschool and Kindergarten. The comprehensive, theme-based, preschool and kindergarten programs in Success for All cover all domains of learning, with a particular focus on language and literacy.

Quarterly Assessments. Students in grades 1-6 are assessed every quarter to determine whether they are making adequate progress in reading. This information is used to suggest alternate teaching strategies in the regular classroom, changes in reading group placement, provision of tutoring services, or other means of meeting students’ needs.

Solutions Team. A Solutions Team works in each school to help support families in ensuring the success of their children, focusing on parent education, parent involvement, attendance, and student behavior. This team is composed of existing or additional staff such as parent liaisons, social workers, counselors, and vice principals.

Facilitator. A program facilitator works with teachers to help them implement the reading program, manages the quarterly assessments, assists the Solutions Team, makes sure that all staff are communicating with each other, and helps the staff as a whole make certain that every child is making adequate progress.
Table 2
Gains in Percent of Students Passing State Reading Tests in Success for All and Control Middle Schools, 2001 to 2004

<table>
<thead>
<tr>
<th>School (State)</th>
<th>Measure</th>
<th>Grades Tested</th>
<th>Gains in Percent Passing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>SFA</td>
</tr>
<tr>
<td>Washington</td>
<td>WASL</td>
<td>7</td>
<td>+95.5</td>
</tr>
<tr>
<td>Missouri</td>
<td>MAP</td>
<td>7</td>
<td>+31.5</td>
</tr>
<tr>
<td>Indiana-pair 1</td>
<td>ISTEP</td>
<td>6, 8</td>
<td>+9.0</td>
</tr>
<tr>
<td>Indiana-pair 2</td>
<td>ISTEP</td>
<td>6, 8</td>
<td>+15.5</td>
</tr>
<tr>
<td>Mississippi</td>
<td>MCT</td>
<td>6, 7</td>
<td>+5.8</td>
</tr>
<tr>
<td>Arizona</td>
<td>AIMS</td>
<td>8</td>
<td>+3.0</td>
</tr>
<tr>
<td>Louisiana</td>
<td>LEAP</td>
<td>8</td>
<td>+12.0</td>
</tr>
<tr>
<td>Means*</td>
<td></td>
<td></td>
<td>+24.6</td>
</tr>
</tbody>
</table>

*Means across different state assessments should be interpreted cautiously.
Figure 1
Comparison of Success for All and Control Schools in Mean Reading Grade Equivalents and Effect Sizes 1988-1999

<table>
<thead>
<tr>
<th>Grade</th>
<th>SFA Effect Size</th>
<th>Control Effect Size</th>
<th>Followup</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 1 (68 cohorts)</td>
<td>ES=.52</td>
<td>ES=.51</td>
<td>ES=.54</td>
</tr>
<tr>
<td>Grade 2 (49 cohorts)</td>
<td>ES=.51</td>
<td>ES=.49</td>
<td>ES=.54</td>
</tr>
<tr>
<td>Grade 3 (38 cohorts)</td>
<td>ES=.39</td>
<td>ES=.39</td>
<td>ES=.42</td>
</tr>
<tr>
<td>Grade 4 (21 cohorts)</td>
<td>ES=.49</td>
<td>ES=.49</td>
<td></td>
</tr>
<tr>
<td>Grade 5 (12 cohorts)</td>
<td>ES=.62</td>
<td>ES=.62</td>
<td></td>
</tr>
<tr>
<td>Grade 6 (10 cohorts)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 7 (5 cohorts)</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Note: Effect size (ES) is the proportion of a standard deviation by which Success for All students exceeded controls. Includes approximately 6000 children in Success for All or control schools since first grade.
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