

A CHANCE TO GROW
TWO DECADES OF EVALUATION

SUMMARY

Since the early 1990s, A Chance To Grow (ACTG) has completed over 30 assessments of the impacts of its brain-centered interventions on learning readiness and early literacy skills. In order to document these studies and to summarize them in one place, ACTG contracted with Gary J. Miller, Ph.D., to review each of these evaluations and to provide a comprehensive report of these results.

This is a brief summary of the comprehensive report. To order a copy of the comprehensive report, please email us at actg@actg.org and we will contact you when the report is ready for distribution.

Why is it important to summarize this body of research? First, the lessons from these many assessments can get lost in the sheer volume of the work. Secondly, while we have witnessed a veritable explosion of recent brain research, most of it focused on mapping the internal workings of the brain, we still know relatively little about brain effects in practical settings, most especially early learning in schools. A comprehensive review and analysis of ACTG's S.M.A.R.T. intervention is overdue. Thirdly, there are many assessments, and it is easy to get lost in the details. We have grouped them to assist in sorting through the individual assessments. And, finally, the strength of these studies is uneven. We have ordered the assessments from strongest on down (a very rough categorization).

The Impacts of S.M.A.R.T. Interventions on Learning Readiness

1. Comparison Group Studies: There have been six evaluation studies in which students who received the S.M.A.R.T. intervention were compared to students not receiving S.M.A.R.T.
 - In five of these studies, students who received the S.M.A.R.T. intervention scored statistically higher than comparison students on tests of learning readiness and early reading.
 - In one study, there were mixed results – S.M.A.R.T. students scored higher on one early reading skill test, while there was no statistical difference between the two groups on two other reading tests.

2. Follow-Up Studies: In three studies, children who received S.M.A.R.T. were tracked for one or more years after completing S.M.A.R.T. In all three studies, the gains of S.M.A.R.T. students were retained over the next one to three years.
3. Continuous Testing in a Charter School: Over a ten-year period, all students in a charter school operated by ACTG participated in S.M.A.R.T. programming and other special services. The great majority of students enrolled in this particular charter school because of prior reading difficulties. Each year, students were tested for improvements in vocabulary and on reading comprehension. Students improved by 1.4 years on a vocabulary test and 1 year on a comprehension test – both strong improvements for students struggling with reading. As or more importantly, these gains were basically the same for white students and students of color – 1.3 vs. 1.5 for vocabulary and 1.1 vs. 1.0 for comprehension.
4. Title 1 Schools: Five schools were Title 1 Schools – schools with high levels of students struggling with reading and/or in poverty. In each school, S.M.A.R.T. students scored at a level higher than the national norm or proficiency levels on word recognition, early reading skills, or phonemic awareness measures.
5. Urban Schools and Urban School Districts: Urban schools and school districts are of special interest because of higher concentrations of poverty and greater racial diversity, as well as large schools.
 - Urban Schools: In three schools in urban areas, two had positive results while one had *mixed results*.
 - Urban School Districts: In one urban school district with 40+ schools included, SMART students showed improved early literacy; in one other urban school district with 48 classes included, the *results were mixed*.
6. Single School Studies: Seven schools from around the country found that S.M.A.R.T. students performed positively relative to national norms or proficiency levels on reading readiness, early reading skills, word recognition, or phonemic awareness.
7. Multi-School Study: Testing results from over 20 individual elementary schools in Minnesota were aggregated and assessed for the relationship between S.M.A.R.T. programming and reading test results. Results at K, 1st, and 2nd grade levels were generally positive.
8. Mostly Native American Schools: Three studies were conducted in two schools with all Native American students and one school with high numbers of Native American students in Northwest Minnesota located within or on the border of an Ojibway reservation. *Results were mixed*.

Vision Improvement

It has been estimated that vision problems are prevalent in about a quarter of all schoolchildren in the United States. And, this problem is even greater in school districts in disadvantaged neighborhoods or communities – children from poor urban areas experience more than twice the normal rate of vision problems. Vision is a critical prerequisite skill for reading and learning, although it is not often identified as such. In one study, students with vision problems attending a charter school were referred to developmental vision therapy, as well as receiving S.M.A.R.T. programming. Vision skills improved substantially. After a year of S.M.A.R.T., vision scores improved significantly more than the vision scores of comparison school students. ACTG students who scored higher on a vision test scored higher on vocabulary test and a reading comprehension test than students with lower vision scores.

Specialty Services

A Chance To Grow also offers specialty services for children who need specific and more intensive interventions for developmental needs, such as Neurotechnology and Audio-Visual Entrainment (AVE) and Hemispheric-Specific Auditory Stimulation (HSAS). There is some evidence that addressing these special challenges will better equip the child for improved learning in the classroom.