

EXECUTIVE SUMMARY

First Year Results of The Student Achievement Guarantee in Education Program

December 1997

Introduction

The Student Achievement Guarantee in Education (SAGE) evaluation is being conducted under contract to the Department of Public Instruction by the Center for Urban Initiatives and Research (CUIR) at the University of Wisconsin - Milwaukee. This is the first of five annual evaluation reports. Schools participating in the SAGE program are also required to implement a rigorous academic curriculum, provide before and after school activities for students and community members, and implement professional development and accountability plans.

During the 1996-97 school year SAGE was implemented in thirty schools located in twenty-one school districts. The first year of SAGE encompassed 84 kindergarten classrooms, 96 first grade classrooms, and 5 mixed grade classrooms enrolling 1715 kindergarten and 1899 first grade students. SAGE was expanded to include second grade in 1997-98. Third grade will be added in 1998-99.

Academic Achievement

First grade students in SAGE and in a group of comparison schools were tested in October 1996 and again in May 1997 using the Comprehensive Test of Basic Skills (CTBS) Terra Nova Complete Battery, Level 10. Kindergarten students were not tested.

Findings

*** Evaluation of the 1996-97 results of the SAGE program suggests that students in

SAGE first grade classrooms have a consistent achievement advantage over first grade students in comparison schools. As a group, SAGE students scored significantly higher on the post-test in reading, language arts, and mathematics. The total score of SAGE students was also significantly higher than the total score of comparison group students. The achievement advantage associated with participation in the SAGE program is revealed both in the analysis of individual student scores and in the analysis of averaged classroom scores.

*** After truncating the sample based on pre-test results to minimize the impact of a large number of SAGE students scoring 100 percent on the post-test, and controlling for pre-test scores, income, absenteeism, and race, the post-test performance of SAGE first grade students compared to that of comparison group students is, on average, 4.4 scale score points higher in reading, 4.0 scale score points higher in language arts, 4.6 scale score points higher in math and 4.6 scale score higher in the total test score than comparison school students. These results are statistically significant. **See Tables 25, 27, 29 and 31.**

*** After adjusting for pre-test results, socio-economic status (SES) as defined by eligibility for free or reduced lunch, and student attendance, when post-test achievement scores of SAGE and comparison group first grade classrooms are compared participation in SAGE shows a statistically significant advantage of 6.4 scale score points in the total score and 8.1 scale score points on the math sub-test. Results for the reading (4.5 scale score points) and language arts (6.0 scale scorepoints) sub-tests were somewhat below this and not statistically significant. **See Table 35.**

*** The data on the averaged performance of students in SAGE classrooms suggests that

the lower student-teacher ratio in SAGE classrooms mitigates the negative achievement consequences of poverty. SAGE classrooms achieved at a higher level than comparison school classrooms despite the fact that, as a group, SAGE classrooms enrolled more students who received free (as opposed to reduced price or full price) lunches. **See Table 35.**

*** When socio-economic status is controlled for the post-test scale score advantage on the CTBS total score increases to 9.8 for SAGE first grade classrooms. The advantage is 7.1 on the reading sub-test, 9.0 on the language arts sub-test, and 12.3 on the math sub-test. These results are all statistically significant. **See Table 35.**

*** African-American students in SAGE first grade classrooms outperformed their counterparts in comparison school classrooms on the post test. It appears that African-American males, in particular, may benefit from participation in the SAGE program. **See Tables 32 and 33.**

*** As a group, first grade African-American students scored lower than White students on the pre-test in both SAGE and comparison schools. The analysis of post-test results suggests that the gap in the achievement between African-American students, as a group, and White students, as a group, widened in comparison school first grade classrooms during the 1996-97 school year. In contrast, African-American students, as a group, and White students, as a group, appeared to increase their achievement by similar amounts in SAGE school first grade classrooms. **See Table 34.**

A Word of Caution

First year results of the SAGE program suggest that it shows promise for increasing the

academic achievement of children living in poverty. However, for a variety of reasons, these first year results must be interpreted cautiously. As data about the relative performance of SAGE students over time becomes available it will be possible to draw much firmer conclusions about the impact of the program.

The 15:1 Student - Teacher Ratio and Life in SAGE Classrooms

During the 1996-97 school year members of the SAGE evaluation team conducted teacher interviews, made classroom observations, analyzed logs kept by SAGE teachers describing their classroom activities, and tabulated the results of teacher surveys on a variety of teaching and learning topics. Taken together, these data provide a picture of life in SAGE classrooms.

In SAGE classrooms:

- 1) Little time is required to manage the class or to deal with discipline problems.
- 2) Much time is spent on instruction, actively teaching.
- 3) A large portion of instruction is individualized, in diagnosing student needs providing help, and in monitoring progress.
- 4) The type of instruction used is mainly teacher-centered (students listen, practice, answer, etc), but some learner-centered instruction (students create, manipulate, problem solve, etc.) also occurred.

Rigorous Academic Curriculum

SAGE legislation calls for the implementation of a “rigorous academic curriculum” in schools participating in the SAGE program. However, the law does not specify what a “rigorous academic curriculum” is. Not surprisingly, therefore, SAGE schools show considerable variety in

their academic programs. To assess whether or not SAGE schools were implementing a “rigorous academic curriculum” SAGE teachers were surveyed to determine the extent to which the curriculum in their classrooms was consistent with the standards developed and recommended by professional associations in reading and language arts (International Reading Association/National Council for Teachers of English), and math (National Council for Teachers of Math). **See Table 43.** Survey results indicate considerable consistency between the standards established by professional associations and the curriculum of SAGE classrooms as reported by SAGE teachers..

Lighted School House Programs

A survey of SAGE schools suggests that the activities conducted for students and community members at SAGE schools before and after the school day are quite varied and that the number of participants in those activities has, in general, increased during the first year of the SAGE program.. Most SAGE schools report that they have expanded activities already underway rather than developed new programs in order to satisfy the SAGE “Lighted School House” requirement.

Staff Development and Professional Accountability

SAGE schools appear to have done relatively little in the area of staff development and professional accountability that was not already underway at the time SAGE was implemented. Twenty-one percent of the teachers surveyed responded that their districts staff development program was in the “initialization” phase of staff development. Two thirds of the teachers surveyed reported that their school district was in the “implementation” phase, and slightly over nine percent characterized their district as being in the “institutionalization” phase. Almost 60 percent of teachers responding to survey questions on the subject reported they had no

personal, formal, written development plan.