

The Maryland Core Knowledge Implementation

First Year Evaluation — April, 1996

Executive Summary

Beginning in the spring of 1994, the Abell Foundation has supported the implementation of the Core Knowledge curriculum (Hirsch, 1988, Core Knowledge Foundation, 1995) in six Maryland Schools. An initial two-year evaluation of the effort has been funded by the Abell Foundation and is being conducted by the Center for the Social Organization of Schools at Johns Hopkins University.

The design of the evaluation is as follows. Each of the six schools was demographically matched with a similar, within-district school. All students attending first and third grades during the 1994-1995 school year at all six Core Knowledge schools and all six demographically matched non-Core Knowledge schools were tested at the beginning of the study, using the Reading Comprehension and Mathematics Concepts subtests of the Comprehensive Test of Basic Skills (CTBS). Third grade students were retested the following spring, including the CTBS and the Maryland State Performance Assessment Program (MSPAP). In addition, all students will be tested using the CTBS in the spring of 1996.

Detailed observations in experimental schools indicated the following:

Strong general support for the reform, with few objections. All six principals and the majority of teachers remain clearly in favor of continuing with, and expanding Core Knowledge in their schools.

Strong Implementations in many classrooms in each school. Core Knowledge tends to produce some spectacularly successful classroom exhibitions pouring out into the halls (see, for example, Mentzer & Shaughnessy, 1996). These schools were not exceptions.

Uneven implementation at all schools. This fits the pattern we have seen at Barclays Woodson, and other schools involved in new reforms. First year implementation tends to be somewhat spotty and stiff. Over time, enthusiastic teachers become more comfortable with the reform, and others join in. We note that there is a much smaller investment in ongoing staff development and technical assistance in the Core Knowledge schools than in Barclay or Woodson, so this somewhat slower rate of implementation across all classrooms was anticipated.

Teachers who "teamed" to develop units consistently appeared to find the transition to Core Knowledge units less burdensome and more professionally rewarding. Not all schools were able to find time in their schedules to facilitate team planning, but where the effort to achieve teaming was successful, teachers found the process beneficial.

Regarding outcomes, data from two sources are being analyzed: CTBS tests and MSPAP data. Both are relevant to the Core Knowledge effort. If students are learning more generally over time, students' CTBS scores should rise. If students are learning more on a wider variety of topic areas, then over time MSPAP scores should rise. Note that MSPAP data can not be disaggregated to the student level, so that in-transfers muddy the picture somewhat.

First Grade CTBS data were analyzed for fall '94 to spring '95 achievement gains in the areas of reading comprehension and mathematics concepts. Weighting each school to an equal level, Core Knowledge schools produced a mean gain on CTBS Reading Comprehension of +2.33 NCEs. Carefully matched control schools produced a mean gain of +0.50 NCEs. On Mathematics Concepts, the school-weighted mean fall '94 to spring

'95 mean gain was +10.8 NCEs, and for controls was +7.00 NCEs. Note that all changes, for experimental and control schools were positive, and that the differences in size of gain favor the Core Knowledge schools, by +1.83 and +3.8 NCEs, respectively.

Third Grade CTBS data were examined over the same period. For the six Core Knowledge schools the mean change on CTBS Reading Comprehension was +0.16 NCEs. For the matched controls, the mean change was an identical, +0.16 NCEs. On the Mathematics Concepts subtest, the Core Knowledge schools produced a mean gain of +6.50 NCEs, and the six control groups' mean gain was +6.66 NCEs. As with third grade reading comprehension, these math gains are essentially identical.

Third Grade MSPAP data were examined for the spring of 1994 (pre-Core Knowledge) and the spring of 1995 (first year Core Knowledge). The data presented in Figure 1 are mean school level changes in the percentages of third grade students achieving scores of satisfactory or better on the various subtests. As the following table demonstrates, the six Core Knowledge schools obtained mean MSPAP gains that exceeded the state average gain in all six MSPAP areas. Rather strikingly, almost the same could be said for the control schools, whose students exceeded the mean state gain in five of six areas. Core Knowledge schools' students achieved greater mean increases than did control schools' students in five of six areas (reading, mathematics, social studies, writing, and language usage. Control schools' students produced unusually high increases on the science subtest (15.8%), and surpassed the perfectly respectable 8.4% advance made by the Core Knowledge schools' third grade students.

Mean Change (1995-1994)	Reading	Math	Social Studies	Science	Writing	Language Usage
Six Core Schools	+7.8%	+9.5%	+9.5%	+8.4%	+12.2%	+13.4%
Six Control Schools	+8.0%	+7.6%	+7.6%	+15.8%	+8.8%	+10.2%
State Average Change	+3.5%	+8.2%	+5.7%	+6.4%	+4.2%	+8.9%

In summary, both qualitative and quantitative data indicate reason for cautious optimism regarding the Maryland Core Knowledge project. Observations indicate often stunningly attractive student products, and CTBS and MSPAP data indicate progress. These findings are particularly encouraging given the tendency of new reforms to show greater results in later years than in the first year. However, as with all other projects in their early years, we note that these are early results. Education, and educational change, are long term propositions.

References

Core Knowledge Foundation (1995). **Core Knowledge Sequence**. Charlottesville, VA; Core Knowledge Foundation.

Hirsch, E.D. (1988). **Cultural Literacy**. New York: Vintage.

Mentzer, D., & Shaughnessy, T. (1996). Hawthorne Elementary School: The teachers' perspective. **Journal of Education for Students Placed At Risk** 1 (1), 13.24.