

Home-Schooling Research Summary

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This study was a preliminary examination of some of the Academy for Academic Excellence's (AAE) home-schooling families. We were interested in finding out if some families do better than others home-schooling their children. The AAE has been a unique environment for examining home-schooling families in that it started off as being 100% home-schooling families and then during the 2002-2003 school-year the school switched to being 84% full-time families and 16% hybrid families. A rubric was designed to assess the families on 4 main factors: meeting attendance, completed paperwork, growth with behavior, and growth with schoolwork. Each family had an academic advisor who rated each of their families on a rating scale of 1 to 4 on each of these scales. A committee met to decide which families should be allowed into the home-schooling program in the fall of 2002 based on the rubric. The families that were not admitted to the home-schooling program were invited to participate in the full-time program. This situation gave the AAE a unique opportunity to examine both home-schooling and full-time families. In addition, we could examine what happened to the home-schooling families that switched to the full-time program. The main measure that we have to compare these families is their standardized test scores. Using grades would be difficult since different people are grading the students. In some cases it is the parents both years and in other cases it is the parent one year and the teacher the following year.

The purpose of this preliminary study was to examine differences in tests scores between the groups. Also we were interested in whether we could gain some additional information about the families through the rubric that was utilized in the spring of 2002.

- We found that those students who were in the hybrid program during the 2001-2002 and the 2002-2003 school years performed significantly better on the STAR 2002 test in the areas of reading, language, spelling, and math than those students who were in the hybrid program during the 2001-2002 school year and in the full-time program during the 2002-2003 school year. During the STAR 2003, no significant differences were observed between the groups. This indicates that the differences even out between the groups when some of the students who were being home-schooled were placed in the full-time program (See Table below).

| STAR Test 2002 | Families in the Hybrid Program during the 2001-2002 and the 2002-2003 school years (Scaled Score Means) | Families in the Hybrid Program during the 2001-2002 school year and in the Full-Time Program during the 2002-2003 school year (Scaled Score Means) | t-tests (this test examines whether means are significantly different from each other. The double star indicates which ones are significant) |
|-----------------------|---|--|--|
| Reading | 692.1 | 672.6 | $t(388) = -3.501, p = .001^{**}$ |
| Language | 674.2 | 655.2 | $t(389) = -3.514, p = .001^{**}$ |
| Spelling | 654.5 | 638.1 | $t(256) = -2.053, p = .041^{**}$ |
| Mathematics | 675.7 | 662.3 | $t(391) = -2.296, p = .022^{**}$ |
| Science | 687.2 | 681.3 | $t(134) = -1.323, p = .188$ |
| STAR Test 2003 | | | |
| Reading | 685.1 | 674.2 | $t(364) = -1.604, p = .109$ |
| Language | 678.5 | 666.7 | $t(364) = -1.775, p = .077$ |
| Spelling | 646.4 | 641.5 | $t(202) = -.449, p = .654$ |
| Mathematics | 682.5 | 674.1 | $t(364) = -1.150, p = .251$ |
| Science | 720.7 | 712.4 | $t(160) = -1.169, p = .244$ |

- The results also indicated that those students that were placed in the full-time program (who had been in the hybrid program during the 2001-2002 school year) did significantly better on the STAR 2003 than the STAR 2002 in all areas.
 - ☐ Reading: $t(270) = -2.937, p = .004^{**}$
 - ☐ Language: $t(271) = -6.307, p = .000^{**}$
 - ☐ Spelling: $t(153) = -4.149, p = .000^{**}$
 - ☐ Mathematics: $t(272) = -7.942, p = .000^{**}$
 - ☐ Science: $t(72) = -11.103, p = .000^{**}$

Once they were placed in the full-time program their scores increased. The above results indicate that for some students being in a full-time program may be more beneficial.

- The families who were in the hybrid program during the 2001-2002 and the 2002-2003 school years also improved their scores in language, math, and science on the STAR 2003 compared to the STAR 2002.
 - ☐ Reading: $t(75) = -1.213, p = .229$
 - ☐ Language: $t(75) = -3.802, p = .000^{**}$
 - ☐ Spelling: $t(40) = -.743, p = .462$
 - ☐ Mathematics: $t(76) = -4.658, p = .000^{**}$
 - ☐ Science: $t(22) = -10.574, p = .000^{*}$
- 30% of Hybrid children did not take the STAR 2003 (there were approximately 139 children in the hybrid program). It would be interesting to know more about why they did not take the test? Also how they would perform if they did take the test?
- Based on the hybrid rubric, families that had students with less behavior issues or had students that turned in quality schoolwork were more likely to have students with higher **science** scores on the STAR 2002 and the STAR 2003. In addition, those parents that more likely turned in their paperwork or had students that turned in quality schoolwork were more likely to have students with higher **language** scores on the STAR 2002
 - ☐ Unfortunately, the hybrid rubric did not breakdown the specifics of what certain families did at home that was beneficial. The rating scale was fairly general. It would be beneficial to examine the hybrid families more carefully and find out specifically what is working and not working at home. In addition, there were several academic advisors that rated the families and each advisor may have rated their families differently.
- One issue that makes some of the comparisons difficult is that starting in 2003 the STAR test was changed and a new company (ETS) took over the design of the test. The test was very similar, but overall across California students have generally been performing better than the previous years. Most of the analyses above are based on the differences in scores between the STAR 2002 and STAR 2003. This data is not the most accurate since the test changed. As a result, it would be helpful to continue following these students in the upcoming years to see if they are continuing to make progress on future exams.