
Academy of READING Academy of MATH

▶▶▶▶ EFFICACY STUDY

Evergreen Elementary School, WI

Preliminary Research Report
For Period of January – June 2007

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AutoSkill[®]

A helping hand for literacy ◀

Introduction

The award-winning Academy of READING® and Academy of MATH® intervention software use patented, research-based methodology to build fluency in the foundation skills. AutoSkill solutions provide effective tools to help accelerate achievement in struggling learners.

The goal of this project was to evaluate the efficacy of the Academy of READING and Academy of MATH with struggling students in third through fifth grade. Gains were examined on the AutoSkill Placement tests and Measures of Academic Progress (MAP) standardized test.

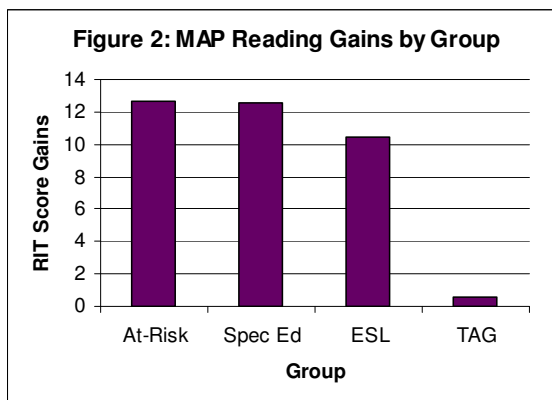
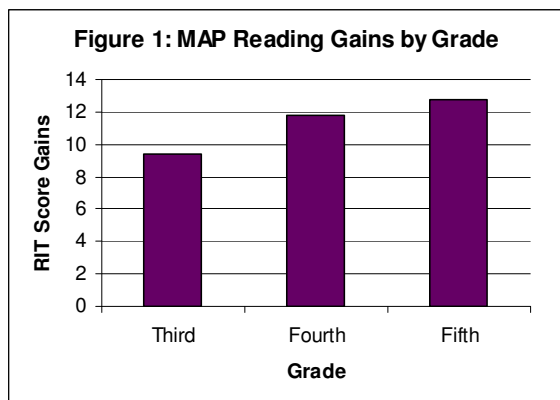
Data from the 95 students in third (n = 54), fourth (n = 26), and fifth grade (n = 15) who used the Academy of READING (n = 83) and/or the Academy of MATH (n = 43) from January-June 2007 were analyzed. Students working on the Academy were identified as At-Risk (n = 40), Special Education (n = 25), ESL (n = 14), or Talented and Gifted (n = 16).

Academy of READING

In Academy of READING, students spent 15.3 hours, on average, in the program and 11.3 hours on focused training. Students completed an average of 60% of the program and mastered 29 skills. Students made gains of 1.3 levels on the AutoSkill Cloze Paragraph test of reading proficiency, roughly equivalent to 1.3 grade levels. **Students using the Academy of READING made gains of 10.7, on average, on MAP Reading RIT scores from fall to spring testing.**

As expected, gains in the Academy of READING were significantly correlated with skills mastered ($r = .36$). Gains were also significantly correlated with pre-test scores ($r = -.42$); thus students who started out at a lower reading-proficiency level made larger gains – allowing them to close the proficiency gap.

Overall, students using the Academy of READING made statistically significant gains of 1.3 levels on the AutoSkill Cloze Paragraph test and 10.7 RIT scores on the MAP Reading test, $t(82) = 8.05$ and $t(77) = 12.23$, respectively, both $p < .001$. For each grade, students made statistically significant gains on the AutoSkill Cloze Paragraph test and the MAP Reading test, all $p < .005$. As shown in Figure 1, gains on the MAP Reading test increased by grade. Gains on the MAP Reading test by student group are shown in Figure 2; At-Risk, Special Education, and ESL students all made statistically significant gains, all $p < .001$.

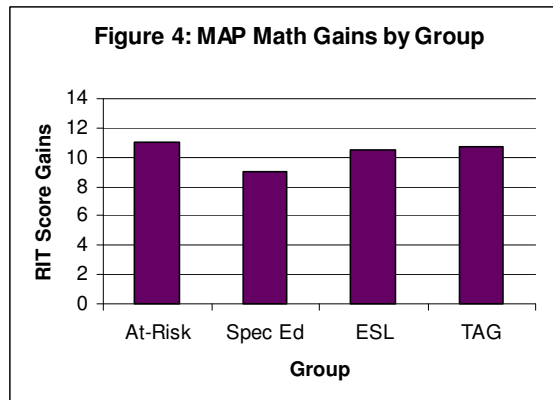
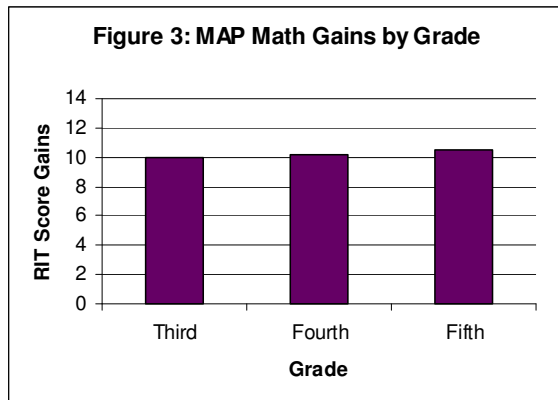


Academy of MATH

In Academy of MATH, on average students spent 13.7 hours in the program and 10.3 hours on focused training. Students completed an average of 35% of the program and mastered 25 skills. Students made gains of 0.7 on the AutoSkill Math Placement test – roughly equivalent to 0.7 grade levels. **Students using the Academy of MATH made gains of 10.2, on average, on MAP Math RIT scores from fall to spring testing.**

As expected, gains in the Academy of MATH were significantly correlated with skills mastered ($r = .64$). Gains were also significantly correlated with pre-test scores ($r = -.55$); thus students who started out at a lower math-proficiency level made larger gains – allowing them to close the proficiency gap.

Overall, students using the Academy of MATH made statistically significant gains of 0.7 levels on the AutoSkill Math Placement test and 10.2 RIT scores on the MAP Math test, $t(42) = 2.18$ and $t(37) = 9.14$, respectively, both $p < .05$. For each grade, students made statistically significant gains on the MAP Math test, all $p < .005$. As shown in Figure 3, gains on the MAP Math test were consistent across grades. Gains by student group are shown in Figure 4; At-Risk, Special Education, ESL, and Talented and Gifted (TAG) students all made notable gains in MAP scores. MAP gains were statistically significant for At-Risk, Special Education, and Talented and Gifted students, all $p < .005$ (significance was not tested for ESL students, as there were only two ESL math students).

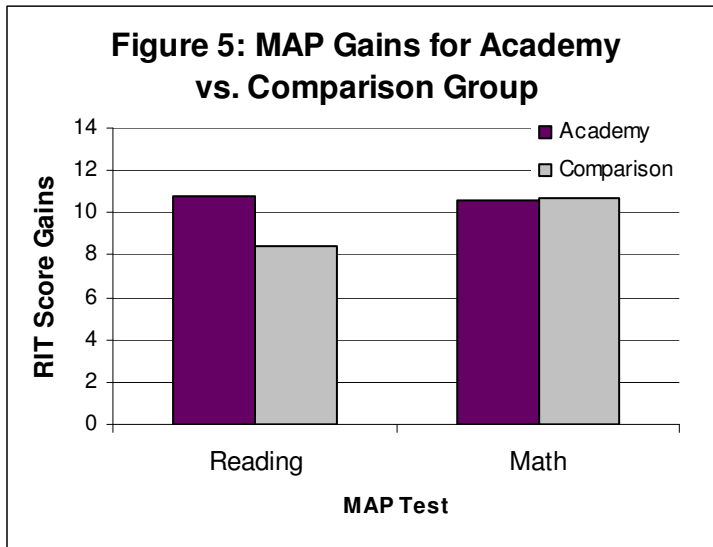


Map Gains for Academy vs. Comparison Group

MAP scores were available from third to fifth grade students who did not train on the Academy of READING or the Academy of MATH for use as a comparison group. It is important to note that the students in the comparison group were not identified as struggling students. The gains demonstrated by struggling students are generally much lower than their more proficient peers. The comparison group had significantly higher Q1 MAP Reading and Math scores than the groups using the Academy of READING and Academy of MATH, $F(1, 473) = 48.10$ and $F(1, 474) = 12.58$, respectively, all $p < .001$.

As shown in Figure 5, students who trained with Academy of READING had significantly higher MAP Reading gains than the comparison group (10.8 vs. 8.4, respectively), $F(1, 461) = 5.45, p < .05$.

There was no significant difference in MAP Math gains for students who trained with the Academy of MATH versus the comparison group. However, given that struggling students generally show lower gains than their more proficient peers, the equivalent gains of the struggling students who used the Academy of MATH are a positive and promising outcome. Students training in the Academy of MATH had completed much less of the program (35 vs. 60%) and had spent less time training than students using the Academy of READING. With greater program completion, students may well demonstrate significant gains in comparison to the controls.



Summary

The goal of this project was to evaluate the efficacy of the Academy of READING and Academy of MATH with struggling students in third through fifth grade.

- ▶ Across grades, students using the Academy of READING and Academy of MATH made MAP gains.
- ▶ For reading, gains were highest for At-Risk, Special Education, and ESL students.
- ▶ For math, gains were high for At-Risk, Special Education, and Talented and Gifted students.
- ▶ Lower proficiency students made the highest gains in reading and math – helping them close the proficiency gap!

About AutoSkill

AutoSkill International Inc. delivers highly effective and scalable reading and math intervention solutions to help struggling elementary, middle and high school students develop fluency in the foundation skills of reading and math. AutoSkill products use a research-based approach that is proven to generate significant and sustainable gains for at-risk students of all ages and abilities. The company's award-winning software provides an individualized and engaging experience for students, and comprehensive set of monitoring, management and reporting tools for teachers and administrators. AutoSkill deploys its reading and math intervention solutions across schools and districts in North America and Europe.

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