

Achievia Tutoring[®]

Successful Students • Satisfied Parents

Student Academic Progress Assessment (SAPA) Report

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Evaluation Summary

Achievia Tutoring has offered after school programs for many years as a mean to bolster at-risk student learning. This year Achievia Tutoring, in partnership with schools, provided tutoring services to students in the states of Kansas, Missouri, and Florida. This report focuses on the results and interpretation of student academic growth in the Achievia Tutoring program. The data used were collected during academic year 2007-2008.

Data for this evaluation were gathered from student pretests and posttests taken after a **minimum of thirty (30) hours** of tutoring. Data are gathered from these tests using the math and reading subtests of the California Achievement Test. The analysis of the data addressed: Did all students improve in the basic skills of reading and math, were the gains equal for males and female students, was the program effective for students in each racial group, and was the program effective for each age group and all grade levels.

The results of the analysis indicate that ALL students, regardless of gender, ethnicity, and grade level demonstrated statistically significant gains based on posttest results.

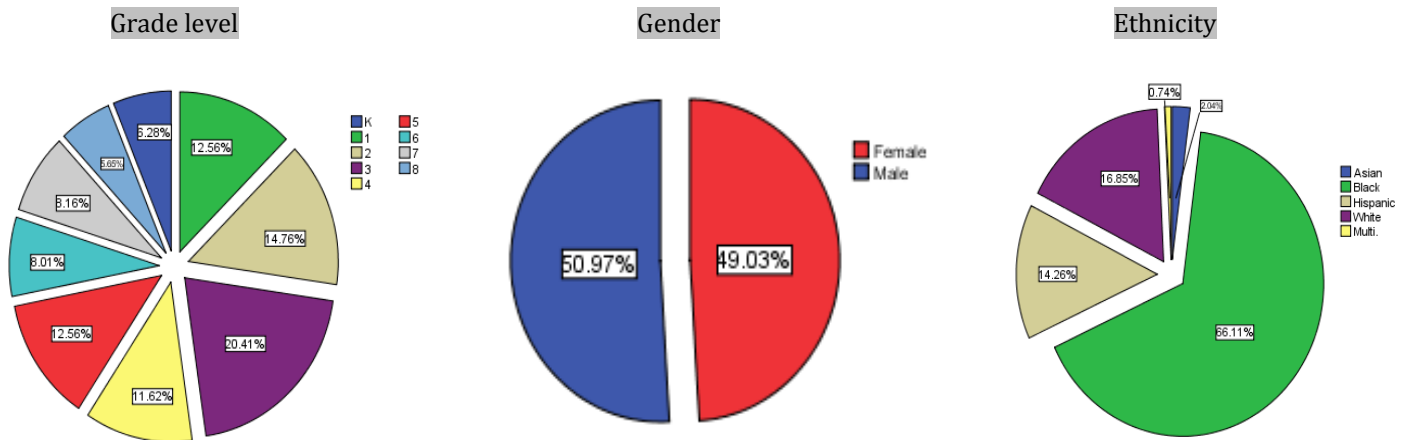
The average NCE gain from pretest to posttest was **12** points for both vocabulary and comprehension, **17** points for computation, and **13** points for concepts and applications. These gains are also reflected by ethnicity and grade level. In terms of grade equivalent score, the data show that ALL students progressed from below grade-level at pre-assessment time to at or above grade-level at post-assessment. All these changes were statistically significant.

National, State and Local standards for education programs have continued to rise over the past several years. Programs that meet and exceed these standards must demonstrate overall improvements in academic performance and must ensure equity in that performance. The Achievia Tutoring Learning System has demonstrated that it has met or exceeded both of these goals by the significant gains in academic performance and that these gains are experienced by all groups of students. The learning and assessment materials employed by Achievia Tutoring Learning System are in alignment with each respective State's standards.

Learning outcome data is reported as before-after instruction difference scores using Normal Curve Equivalent (NCE). The NCE score ranges from 1 to 99, with a mean of 50. NCE score is used for its familiarity by state and federal educational agencies. It is also easier to use to interpret and explain student's scores. Grade equivalent score is also used, which indicates whether student-learning outcome is at the expected grade level.

Student Profiles

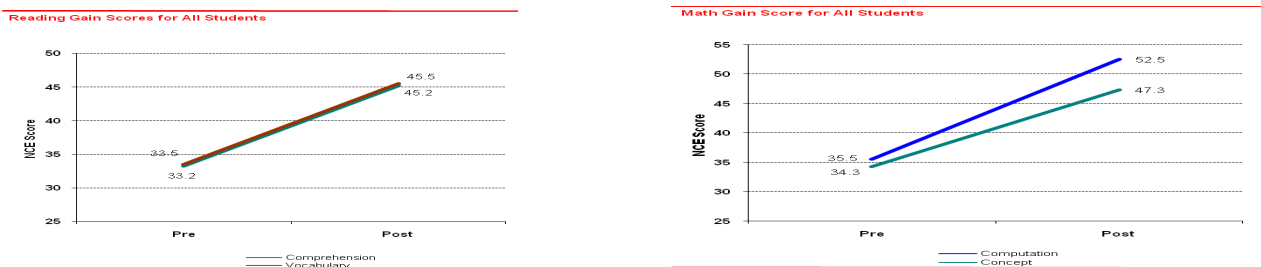
The following figures show the student profile regarding their gender, grade level, and ethnicity. It can be seen that Achievia Tutoring helps students of wide range.



Overall Learning Outcomes

Pre and posttest reading and math grade equivalent scores by sub-content areas are presented in Figure 1. As shown in the figure, there are significant gains from pretest to posttest scores for both reading (n=637) and math (n=247). Significant growth gains indicated an effective program. Achievia Tutoring average gains were 12 and 14 points for reading and math, respectively. There were no overlaps in score distributions between pre and post measurements, suggesting that all students had a significant gain as can be seen in Figure 1.

Figure 1
Reading and Math Grade Equivalent Scores



Achievement Growth by Gender and Ethnicity

In Figures 2 and 3, the pre and posttest math and reading NCE scores by sub-content areas are presented by gender and by ethnicity. Based on the results shown in the figure and table, it can be interpreted that students are making statistically significant progress across gender and ethnicity in the knowledge areas of both reading and mathematics. This indicates that **ALL** students are substantially making progress regardless of their personal background.

Figure 2
NCE Reading and Math Scores by Gender

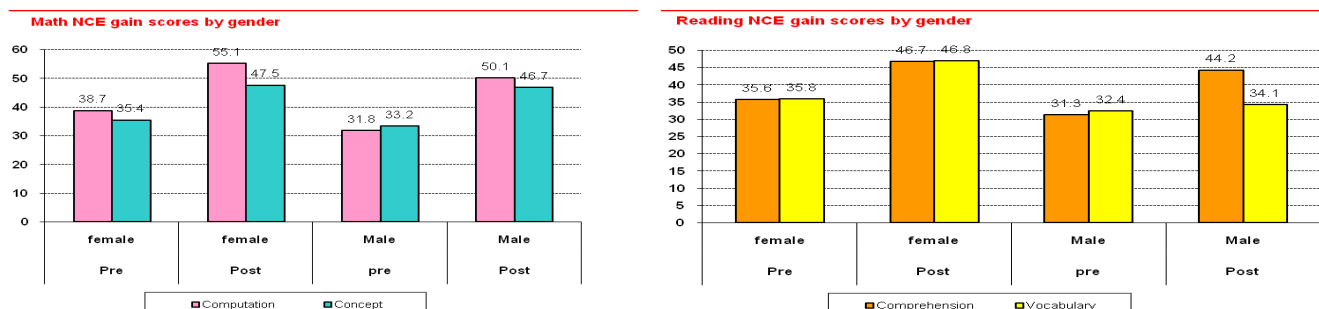
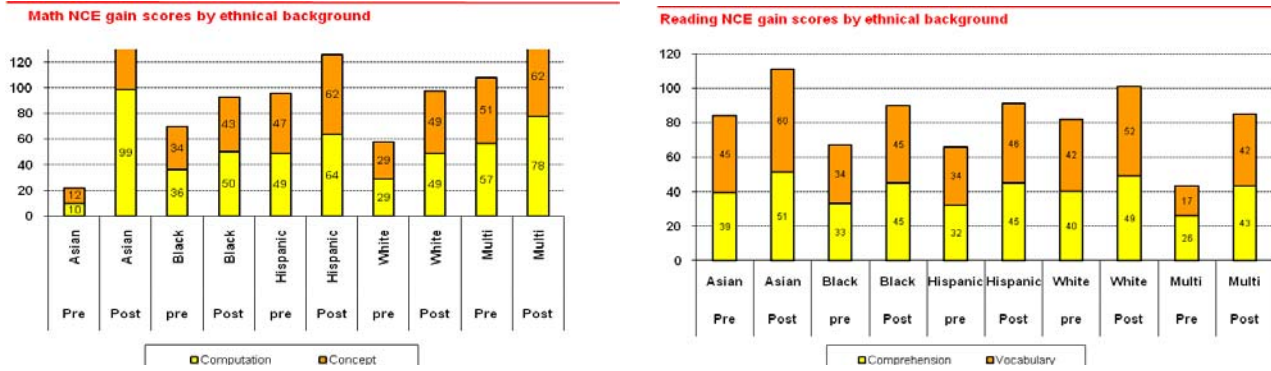


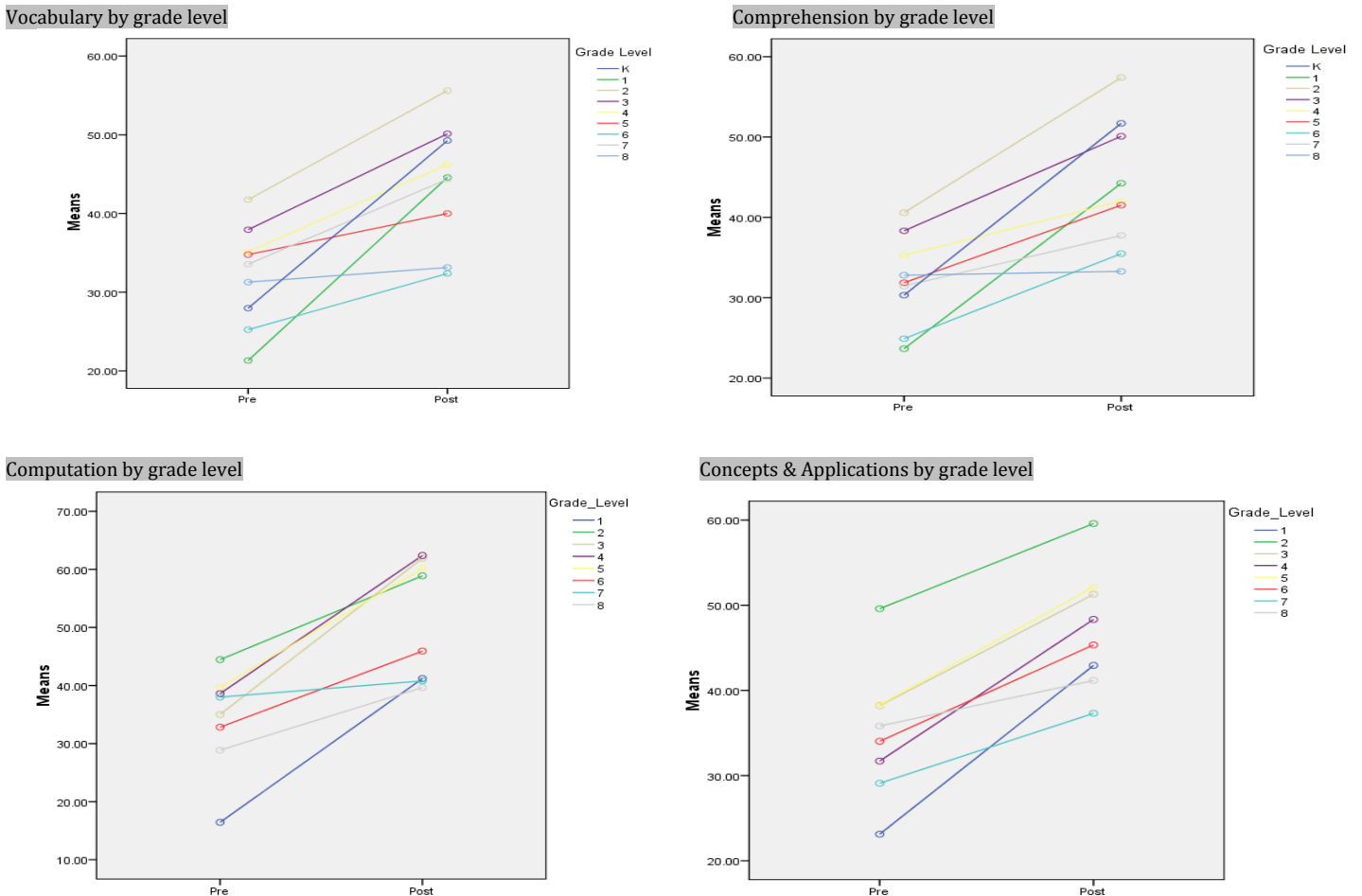
Figure 3
NCE Reading and Math Scores by Ethnicity



Do Students Perform at Expected Grade Level?

One of the key questions that need to be addressed is whether students perform at the expected grade level after obtaining additional instructional and learning time. Grade equivalent scores for reading and math for each grade level are presented in figures below. Based on the results shown, the Achievia Tutoring Learning System is effectively helping students at all grade levels. Typically, student performance level spread around the expected grade level after they attended the program.. The results suggest the utility of Achievia Tutoring in helping student to catch up so that they can make adequate progress rather than be left behind.

Figure 4
NCE Reading and Math Scores by Grade Level



As shown in these figures, all students are performing at or above the expected grade level at the post assessment time. If the sustained efforts continue, Achievia Tutoring can successfully move student upwards, and students and their parents could watch the improvement.

Do Students Benefit From More Hours of Tutoring?

The table below indicates that when students spent more time with Achievia Tutoring, they seemed to achieve a higher NCE score on achievement tests. As can be seen in the table, NCE score increased when 30 to 40 hours of tutoring was delivered. The results suggested the positive experiences that students obtained

	Computation	Concepts & Applications	Vocabulary	Comprehension
10 to 20 hours	39.70	43.73	28.50	31.25
20 to 30 hours	46.46	49.03	34.16	35.61
30 to 40 hours	51.34	43.94	48.63	47.15
40 to 50 hours	55.32	49.26		

How do Students from Different Tutoring Locations Perform?

Since students attend the program at different geographic locations, one natural question is whether different tutoring centers offer the instructional program of the same quality. Student achievement at post assessment time was compared (1) between tutoring centers and (2) school types the students attended within each state. The analyses results indicated that there were no statistically significant differences in achievement among these different locations and types. This implies that regardless of locations, Achievia Tutoring provides the high quality instructional program so that students with low initial achievement made a faster growth to reach the grade level.

The Keys to Success: Value-added Assessment

For any type of instructional program, the main concern is: “How to most effectively bring about student learning? And how much value did the program staff add to the students who attend the tutoring program?” The proprietary learning system, developed and implemented by Achievia Tutoring, addresses these fundamental issues in a way that is consistent with value-added assessment practice—describing the absolute levels attained by students in their end-of-program test and describing the progress in test scores made over the instructional period. The posttest evaluation is done after students complete a minimum 30 hours of tutoring with a student-teacher ratio that never exceeds 5:1. Achievia Tutoring will continue this assessment practice and will continue to expand its database from the relatively small number in this initial report to include students from all of the learning centers in multiple states.

In addition, the curriculum of Achievia Tutoring is in alignment with each respective State’s standards. That is, what teachers taught in Achievia Tutoring was consistent with assessment strategies that have been provided in the “What Students Should Be Able To Do” section to assist teachers in better understanding the identified performance objectives.

This report documents the significant learning progress made by all students across gender, race/ethnicity, and grade levels. In order to evaluate achievement in its true form, it must be done live and where observation of the actual performance can be judged. This is continually done by Achievia Tutoring.

Dr. Cody Ding holds a Master of Science from the Pennsylvania State University and a Ph.D. in measurement psychology from the College of Education, University of Minnesota. He is currently on the faculty at the University of Missouri-St. Louis.

Dr. Ding’s current teaching interests include educational and psychological testing and assessment, research designs, behavioral analysis, and other methodological related courses. His teaching is based on the philosophy of active learning and cooperative learning models, with emphasis on student’s accountability in their own learning.

Dr. Ding’s research interests include exploratory growth profile analysis, applications of Item Response Theory and Structural Equation Modeling in studying human behaviors, and assessment of psychosocial adaptation of students and young adults. The results of his studies have been published in peer-reviewed journals.