



National Research Project Belle Valley Elementary School Overview 2005-2006

Introduction

During the 2005-2006 school year, a national study on the effectiveness of Reading Plus® was undertaken by Dr. John Shelley-Tremblay, Assistant Professor, Department of Psychology, University of South Alabama. Part of this involves a longitudinal study being conducted with nine schools which will continue until spring, 2007. Belle Valley North Elementary School in Belleville, IL currently has 29 students involved in the study spread among the second, third, and fourth grades.

Purpose of Research

This research project is being conducted to determine the long term effects of continued Reading Plus® instruction on students' standardized test scores using the Gates-MacGinitie Reading Test®. Many studies have been conducted in the past over a period of a semester or a school year. This study attempts to see the increased benefit of continued Reading Plus® instruction over a longer period.

Methodology

All 29 students involved in the research at Belle Valley North Elementary School were given the Gates-MacGinitie Reading Test in the fall and again in the spring using the grade level test, Form S in the fall and Form T in the spring.

The students used Reading Plus® over the course of the school year. They completed an average of 39 lessons in Guided Reading™ each. In the first year of Reading Plus® usage, the students involved used various programs in Reading Plus®, including: PAVE™, Word Memory™, Cloze Plus™, Guided Reading™, and Comprehension Power™. Many of these students will continue to use Reading Plus® for the next school year. We will be monitoring the progress of those who do use the program and of those who do not for the 2006-2007 year.



Results

A preliminary analysis has been conducted to examine the effectiveness of Reading Plus® on impacting the Gates-MacGinitie scores of the students involved. Both pre and post GE scores and NCE scores were examined. The results were compared with the expected results as put forth by Riverside Publishing as publishers of the Gates-MacGinitie Reading Test®. Although a statistical analysis has not yet been done, a lay analysis reveals a significant improvement in overall student scores.

According to the Gates-MacGinitie Reading Tests Manual for Scoring and Interpretation for Level 2*, if a student's score is less than 7 NCEs higher than his or her earlier score, there is still a 95% chance that his or her relative achievement has improved. Of the 16 students at Belle Valley who took the Level 2 tests, the average increase was 9.3 NCEs, with 9 of the students scoring more than 7 NCEs higher than their previous scores. Clearly a majority of the students showed a substantial improvement.

For level 3** students, if a student's score is less than 3 NCEs higher than his or her earlier score there is at least an 85% chance that his or her relative achievement has improved, with the chances going up to more than 95% with a score 3-9 points or more higher than the earlier score. Of the 6 students at Nicoma who tested at Level 3, the average increase was 13.8 NCEs, a dramatic improvement, with all of them scoring 10 points higher than their previous scores.

At Level 4***, if a student's scores are less than 3 points higher, then there is still an 80% chance that there has been a definitive change in the student's relative achievement. If a student scores 3-11 points higher, that chance goes up to at least 95%. Among the 7 students at Belle Valley North who took the Gates-MacGinitie Reading Test® at Level 4, the average increase was 11.7 NCEs with 4 students scoring more than 12 points higher, thereby having demonstrated a significant change in their relative achievement.

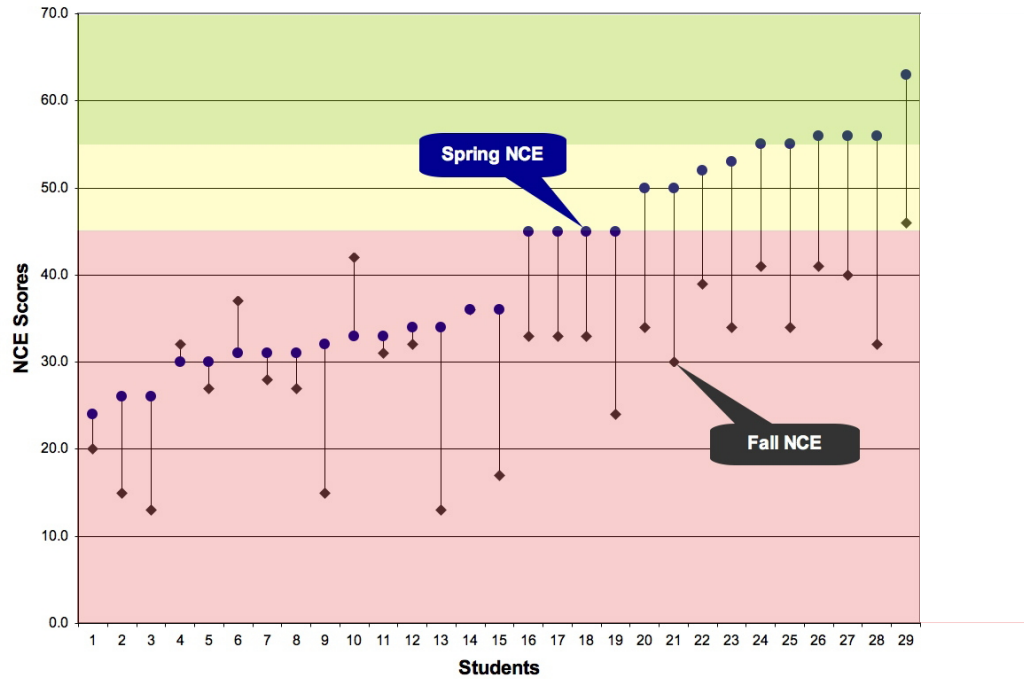
* NCEs measure progress in reading by describing a student's position within the norming group at successive grade levels. A student who maintains about the same NCE from one year to the next is progressing in reading at a rate that is typical for students at his or level of achievement... As a rough guide, if a student's Total score is less than 7 NCEs above or below his or her Total score on an earlier testing with Level 2, there is about a 5% chance that the student's relative achievement has actually changed. – Gates-MacGinitie Reading Tests®: Level 2 Forms S&T: Manual for Scoring and Interpretation: Riverside Publishing, 2000, p30.

** As a rough guide, if the student's Total score is less than 3 NCEs above or below his or her Total score on an earlier testing with Level 3, there is at least a 15% chance that the student's relative achievement has not actually changed. If the student's Total score is less than 10 NCEs above or below the earlier score, there is still at least a 5% chance that the student's relative achievement has not changed. - Gates-MacGinitie Reading Tests®: Level 3 Forms S&T: Manual for Scoring and Interpretation: Riverside Publishing, 2000, p32

*** As a rough guide, if a student's Total score is less than 3 NCEs above or below his or her Total score from the year before, there is at least a 20% chance that the student's relative achievement has not actually changed. If the student's Total score is less than 12 NCEs above or below the earlier score, there is still at least a 5% chance that the student's relative achievement has not changed. -Gates-MacGinitie Reading Tests®: Levels 4-6 Forms S&T: Manual for Scoring and Interpretation: Riverside Publishing, 2000, p37



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Extended Scale Scores (ESSs) provide a means of tracking individual student scores across a period of time and class averages over the course of a year or more. All but three of the students at Belle Valley exceeded the expected increase for their initial scores, and each class far surpassed the expected increase for the class average benchmark set with the fall test.

Grade Level	Fall Benchmark ESS	Spring Average ESS	Expected Average Gain	Actual Average Gain
Grade 2	391.7	424.3	23	42.6
Grade 3	412.8	448.5	12	35.7
Grade 4	440.6	467.3	8	26.7

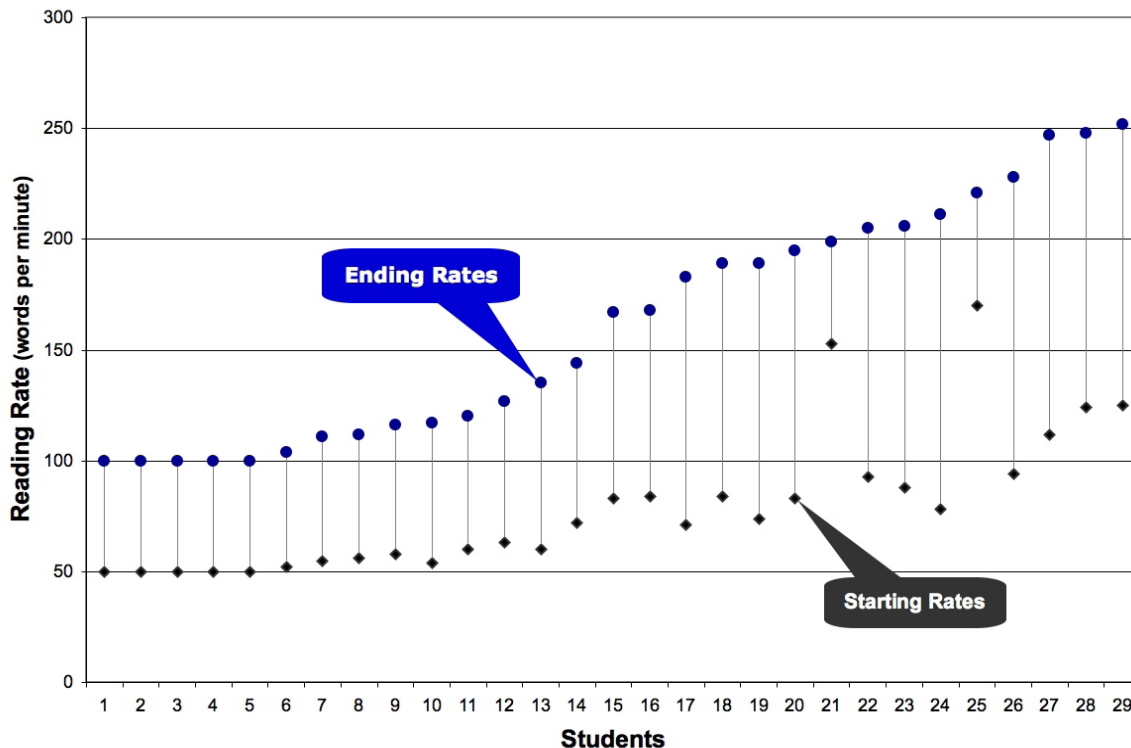
In looking at the demographic breakdown for Belle Valley North, it is interesting to note that neither gender nor ethnicity had a tremendous impact on student achievement. In fact, the average increase for boys (17 students) was 11.2 NCEs, while girls (12 students) improved only 10.3 NCEs. The difference between ethnicities is similarly close, Black and Multiracial students (20 students) increased by an average of 11.2 NCEs, while White students (9 students) increased by a slightly lower 10.1 NCEs.



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Demographic	Beginning NCE	Ending NCE	Change in NCE
Boys (n=17)	30.2	41.5	11.2
Girls (n=12)	30.4	40.7	10.3
Black or Multiracial (n=20)	29.2	40.3	11.2
White (n=9)	32.9	43.0	10.1

Within the Reading Plus® programs, the students maintained an average comprehension of 77% over an average of 39 Reading Plus®: Guided Reading™ lessons. The average Part B rate increased by 83 words per minute, or 108%, demonstrating a definite increase in the flexibility of the students' reading abilities. The range of usage by the students was from 1-3 times per week with periodic weeks away from Reading Plus®.



Conclusion

Some of the results from this study, particularly those relating to the impact, or lack thereof, of gender and ethnicity on the effectiveness of Reading Plus® definitely bear further scrutiny. The sample size at Belle Valley North Elementary School is too small to support definitive conclusions; however, it does pose an intriguing possibility. As the larger study continues, close attention will be paid to determine if these effects are replicated in the overall sample population.