

EVALUATION REPORT

SANRON Educational Enterprises, Inc.



Focus, Organize and Elaborate

A School Wide Sequential Writing Program: K - 5

EVALUATION REPORT

Prepared by:

Paul A. Rendulic, Ph.D.

3162 Foxwood Drive

Apopka, FL 32703

Phone: (407) 389-0134

Fax: (407) 389-0719

email: rendulic@mindspring.com

This evaluation report was presented
at the 47th Annual Conference of the
Florida Educational Research Association
meeting held in Gainesville, Florida

November 6-8, 2002

Improving K-5 Student Writing:
Teach Me Writing

by

Paul A. Rendulic
Barry University at Orlando

Presented at the 47th Annual Conference of the Florida Educational Research Association
(FERA), November 6-8, 2002, Gainesville, FL

Improving K-5 Student Writing: Teach Me Writing

Paul A. Rendulic
Barry University at Orlando

Abstract

This article examines the effectiveness of the Teach Me Writing program on the writing performance of elementary school students in a large urban school district located in South Florida. Teach Me Writing was developed within the context of Piaget's metacognitive and cognitive development theories. This study examined two research questions. First, to what extent does the Teach Me Writing program improve the writing performance of elementary school students? Second, how do teachers view the program's quality and effectiveness? A causal-comparative study involving 4th grade students from 28 program participating schools and 28 comparison schools was conducted. The study showed that the average writing ability of 4th grade students improved in comparison with the previous year's group of 4th graders. More importantly, the students that used the Teach Me Writing program showed significantly higher levels of improved ability versus the comparison group. Teachers supported the use of Teach Me Writing as a method to improve their teaching effectiveness and their students' writing.

For many people the three R's, reading, writing, and arithmetic, are the symbolic pillars of education. To be a successful learner, students must gain mastery in each of these areas. Unfortunately, the evidence points to the fact that many American public school children are not proficient in these basics. For instance, according to Crowe (1999), America is experiencing a literacy crisis. No matter what their grade level, American students do not read or write very well. Crowe's claims are supported by the 1998 National Assessment of Educational Progress (NAEP) report that states approximately 17% of the national sample of 8th grade public school students that participated in the writing assessment scored below the "Basic" level with 59% performing at the "Basic" level. The NAEP defines basic level as the partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade. Only 24% of the participating students performed at or above the level deemed "Proficient." In comparison to the national average, Florida students performed at lower levels. More specifically, about 22% of the Florida 8th grade public school students that participated in the writing assessment study performed below the basic level, while 58% performed at the basic level. Only 19% of the participating Florida students were at or above the proficient level.

Teach Me Writing is a program adopted by several Florida schools as an effort to turn this problem around.

Teach Me Writing is a school wide, sequential, K-5 writing program that reflects Piaget's metacognitive and cognitive development theories. According to Piaget and Inhelder (1969), children develop a certain level of metacognition when they develop schemata. Activities such as planning how to approach a given learning task, monitoring comprehension, and evaluating progress toward the completion of a task are metacognitive in nature. Planning, therefore, is an important part of good writing (Troia, Graham, & Harris, 1999). Skilled writers are more likely to set a goal that guides the writing process than will less skilled writers. They will generate and organize their writing content in a way that supports meeting their writing goals.

Piaget (1971) also identified four stages of mental development. Following Piaget's theory of development, Johannessen (2001) stresses that writing instruction should move from the concrete to abstract, and from simple to the complex. Therefore, the initial instructional process should include more teacher directed activities and control over the process when new skills and writing strategies are introduced to students. As students gain mastery over these new skills and strategies, including the procedural knowledge needed to perform these tasks on their own, they should become more independent writers with less teacher control. Effective writers and teachers of writing should also focus procedural and conditional knowledge. According to Collins (1998) procedural knowledge focuses upon how to accomplish a task while conditional knowledge focuses upon when to employ a particular choice.

The purpose of this study was to examine the effectiveness of the Teach Me Writing program in terms of meetings the instructional and learning needs of teachers and students. More specifically, this study examined two research questions. First, to what extent does the Teach Me Writing program improve the writing performance of elementary school students? Second, how do teachers view the program's quality and effectiveness?

Furthermore, the following hypotheses were examined at the .05 level of significance.

H₁: There will be a significant improvement in the writing ability of students in general over time.

H₂: Students who were taught writing via the Teach Me Writing program will have significantly higher levels of writing ability compared with students who were not taught writing via the Teach Me Writing program.

H₃: There will be a significantly larger proportion of students scoring at FCAT Level 3 and above on Writing that were taught writing via the Teach Me Writing program compared with students who were not taught writing via the Teach Me Writing program.

METHODOLOGY

This study takes place in a large urban public school district located in South Florida. The study used a causal-comparative research design. This methodology was selected for two reasons. First, a total of 28 elementary schools within this public school district voluntarily decided to use the Teach Me Writing program as a writing intervention, so random assignment was not possible. More specifically, a group of 12 elementary schools within the public school district first started using the Teach Me Writing program during 1999 and are continuing to use the program today. Subsequently, another 13 elementary schools within this school district implemented the Teach Me Writing program as a writing intervention during 2000. Finally, three more schools within this district introduced Teach Me Writing during 2001. Based upon an analysis of demographic profiles, a comparison group of 28 schools that did not participate in the Teach Me Writing program was identified to serve as a comparison group of schools. Comparison schools were selected based upon: 1) percent of students classified as ESE and ESOL; 2) percent of students on free and reduced lunch; 3) percent of Limited English Proficient (LEP) students; and 4) mobility index.

Table 1

Percentage of Students by Demographic Variable

<u>School Demographic Variables</u>	<u>Teach Me Writing</u>		<u>Comparison Group</u>	
	<u>Mean %</u>	<u>SD</u>	<u>Mean %</u>	<u>SD</u>
Percent ESE	16.9	7.44	15.6	5.98
Percent LEP	17.9	14.82	19.5	12.54
Percent Free and Reduced Lunch	80.5	15.62	80.5	18.60
Mobility Index	33.1	9.86	31.6	8.09

Table 1 displays the means and standard deviations of the percentage of students by school demographic variables that were used to select the 28 elementary schools that are not using the Teach Me Writing program that served as the comparison group for data analysis purposes. As shown, the differences in the percentage of students classified as ESE, LEP, and on Percent on Free and Reduced Lunch, as well as the school's Mobility Index are very similar among the schools implementing the Teaching Writing program versus the schools selected to represent the comparison group of schools not using the Teach Me Writing program. In fact, separate t-Tests for Independent Samples were conducted on each of the demographic variables to determine if there were any significant differences between the Teach Me Writing schools and the schools used for the comparison group on the demographic variables. None of the tests were significant at the .05 level of significance.

The second reason for using the causal-comparative methodology was the retrospective nature of the data collection procedures used to obtain the annual fourth grade Florida Comprehensive Achievement Test (FCAT) on writing ability. The data were recently obtained from the State's Department of Education Web Site while the writing intervention was first introduced during 1999 followed by the continual addition of elementary schools in later years. The FCAT writing assessment data represents approximately 1,800 fourth grade children per year, after adjusting for ESE, LEP and ESOL students in each of the two groups; i.e., the Teach Me Writing students and the Non-Teach Me Writing students. Keep in mind that each year's data represents that year's class of fourth grade students. Therefore, the analyses that follow are not on the same group of students in each of the years involved in the comparison. For example, the fourth grade

students represented in the 1999 data are now in the fifth grade for the year 2000. The fourth graders represented in the 2000 results were in the 3rd grade during 1999.

Table 2

Number of Students by Group by Year of Program Introduction within FCAT Writing Prompt

<u>Year of Program Adoption</u>	<u>FCAT Writing Prompt Type</u>			
	<u>Expository</u>		<u>Narrative</u>	
	<u>Teach Me Writing</u>	<u>Comparison Group</u>	<u>Teach Me Writing</u>	<u>Comparison Group</u>
Number of Students in 1999	1,760	1,676	1,735	1,728
Number of Students in 2000	1,783	1,838	1,805	1,846
Number of Students in 2001	1,836	1,907	1,807	1,938
Number of Students in 2002	1,794	1,887	1,782	1,877

Table 2 displays the number of fourth grade students that took the FCAT Writing assessment in each of the years used in the data analysis by the Teach Me Writing schools versus the comparison group. In general the differences in the number of students in each of the two groups is small.

In order to determine the effectiveness of the Teach Me Writing program, the FCAT Writing results were analyzed using a split plot design. This design enabled a comparison across four years, i.e., from 1999-00 through 2002. In addition, the design enables a comparison between schools that participated in the program against those that did not. Four analyses were conducted on the data. First, analyses were conducted comparing the students' mean scores for each of the four years on the students' FCAT results on the Expository Writing prompt and then a separate analyses on Narrative Writing Prompt. Second, the percentage of students scoring at FCAT Level 3 or above was analyzed separately for the Expository Writing results and then the Narrative Writing results. It should be noted, the State of Florida makes certain adjustments to the initial FCAT results to eliminate the effect of students that are classified as ESE. These adjustments are included in the 1999, 2000, and 2001 data collected from the Department of Education's Web Site. The 2002 data do not include this adjustment. Based upon previous year's adjustments, this researcher believes such an adjustment would improve the results for Teach Me Writing group more than for the comparison group.

RESULTS

The FCAT Writing results were analyzed by way of a series of split plot analysis. The split plot analysis was conducted on the students' mean score on the FCAT Expository Writing prompt.

Table 3

Mean Scores and Standard Deviations on the FCAT Expository Writing Prompt by Year

Year of Adoption	Teach Me Writing		Comparison Group	
	Mean Score	SD	Mean Score	SD
1999	2.53	.35	2.39	.26
2000	3.09	.34	2.86	.22
2001	3.40	.39	3.30	.26
2002	3.17	.32	3.05	.35

As reflected within Table 3, the students in the Teach Me Writing group had a mean score in 1999 on the FCAT Expository Writing prompt of 2.53, which was about .14 points above the comparison group of students that did not have the Teach Me Writing program. In each subsequent year, both group's writing performance on the Expository prompt improved, except for the last year of 2002 which reflects a slight decrease from 2001. As noted previously, this is mostly the effect of the adjustment for ESE status not having been made on the 2002 FCAT results. Regardless, the fourth graders who were taught using the Teach Me Writing program maintained its higher level of performance over the comparison group of fourth graders who were not taught using the Teach Me Writing program in each of the four years.

The results of the split plot analysis on the FCAT Expository Writing results for the within-subjects analysis, i.e., the main effect of writing, was significant, $F(3, 52) = 112.965, p < .0005$. The Effect Size was estimated to be very large at .867. The interaction effect of time period and group was not significant, $F(3, 52) = 1.506, p = .224$. The ETA Square estimate of Effect Size was .080. Finally, the between-subjects analysis was significant, $F(1, 54) = 4.474, p = .039$. Effect Size was estimated at .077, which would be considered medium in size. The performance

of the fourth grade students taught writing using the Teach Me Writing program was significantly higher compared with the students not using the Teach Me Writing program.

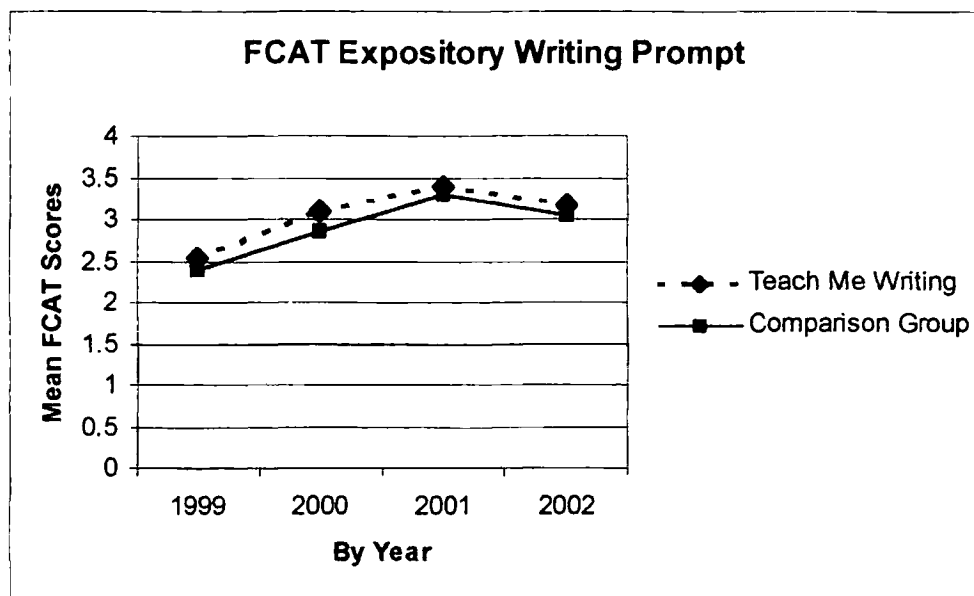


Figure 1: *FCAT Expository Writing Mean Scores by Group by Year*

Another view of the results is presented within Figure 1. Notice how the mean FCAT Expository Writing results generally increase in each year on that year's fourth graders who were tested. Also note that the Teach Me Writing students remain above the comparison in each year.

The next analysis is on the results of the FCAT Narrative Writing prompt.

Table 4

Mean Scores and Standard Deviations on the FCAT Narrative Writing Prompt by Year

<u>Year of Adoption</u>	<u>Teach Me Writing</u>		<u>Comparison Group</u>	
	<u>Mean Score</u>	<u>SD</u>	<u>Mean Score</u>	<u>SD</u>
1999	2.83	.34	2.60	.22
2000	3.11	.24	2.98	.20
2001	3.26	.36	3.08	.31
2002	3.31	.32	3.26	.34

The students in both groups showed increased writing ability on the Narrative FCAT prompt over time, with the students taught using the Teach Me Writing program having higher levels of performance versus the comparison group (see Table 4). The Teach Me Writing group had a mean score in 1999 on the FCAT Narrative Writing prompt of 2.83, which was about .23 points above the comparison group of students that did not have the Teach Me Writing program. In each subsequent year, both groups' writing performance on the Expository prompt improved.

The results of the split plot analysis on the FCAT Narrative Writing results for the within-subjects analysis, i.e., the main effect of writing, was significant, $F(3, 52) = 50.265, p < .0005$. The Effect Size was estimated to be very large at .744. The interaction effect of time period and group was not significant, $F(3, 52) = 1.495, p = .227$. The ETA Square estimate of Effect Size was .080. Finally, the between-subjects analysis was significant, $F(1, 54) = 5.626, p = .021$. Effect Size was estimated at .094, which would be considered medium in size. The fourth grade students taught writing using the Teach Me Writing program demonstrated significantly higher levels of writing ability of the FCAT Narrative Writing prompt compared with the students that did not use the Teach Me Writing program.

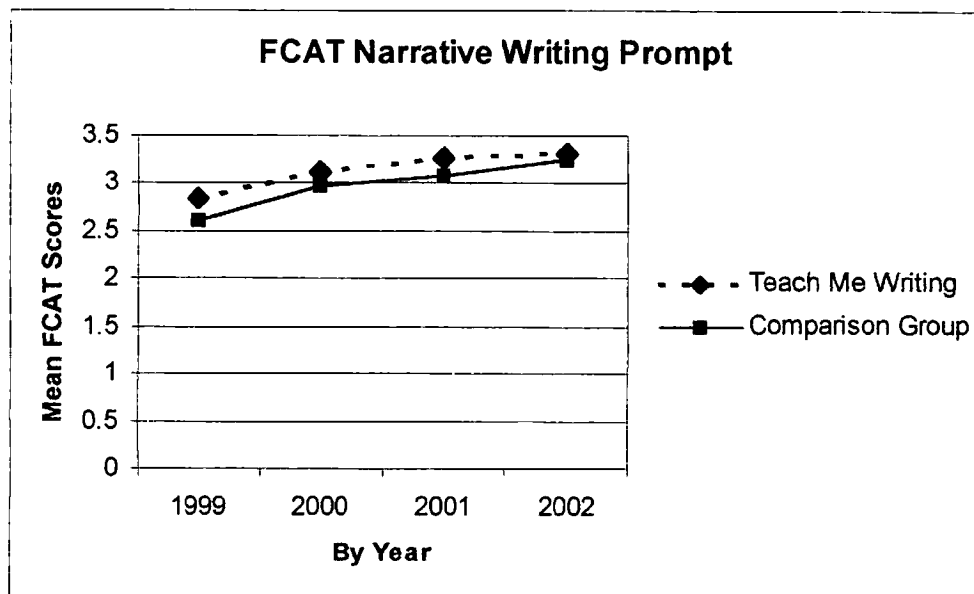


Figure 2: *FCAT Narrative Writing Mean Scores by Group by Year*

Figure 2 displays the means scores of the two groups on the FCAT Narrative Writing prompt across time. The Narrative Writing results increase in each year on that year's fourth graders who were tested with the Teach Me Writing students remaining above the comparison in each year.

The remaining two analyses examine the percentage of students that scored at FCAT Level 3 or above on writing. The first of these two analyses considers the students' performance on the Expository prompt.

Table 5

Mean Percentages and Standard Deviations of Students Scoring at FCAT Level 3 or Above on the Expository Writing Prompt by Year

<u>Year of Adoption</u>	<u>Teach Me Writing</u>		<u>Comparison Group</u>	
	<u>Mean %</u>	<u>SD</u>	<u>Mean %</u>	<u>SD</u>
Percent Scoring at Level 3 & Above in 1999	47.8	16.86	47.8	11.67
Percent Scoring at Level 3 & Above in 2000	71.6	13.24	66.5	9.83
Percent Scoring at Level 3 & Above in 2001	80.0	11.23	79.8	9.50
Percent Scoring at Level 3 & Above in 2002	74.8	11.74	70.1	11.79

The students in both groups showed a considerable increase in the percentage of students that scored FCAT Level 3 or above on Expository Writing from the 1999 fourth grade class to the year 2000 fourth grade class (see Table 5). There is virtually no difference between the two groups in 1999, but this changes in the 2000. For the year 2000 the students taught using the Teach Me Writing program have a larger percentage of students scoring at FCAT Level 3 and above versus the comparison group, i.e., 71.6% versus 66.5%, respectively. Both groups experienced increased percentages of students scoring at FCAT Level 3 and above in 2001, but the two groups have nearly identical percentages, i.e. 80.0% for the Teach Me Writing students and 79.8% for the comparison group. The results for 2002 reveal a decrease in the percentage of students scoring at FCAT Level 3 and above; however, the Teach Me Writing group remained above the comparison groups at 74.8% versus 70.1%, respectively.

The results of the split plot analysis on the percentage of students scoring at FCAT Level 3 or above on the Expository Writing results for the within-subjects analysis, i.e., the main effect of writing, was significant, $F(3, 52) = 100.72, p < .0005$. The Effect Size was estimated to be very large at .853. The interaction effect of time period and group was not significant, $F(3, 52) = 1.543, p = .227$. The ETA Square estimate of Effect Size was .082. Finally, the between-subjects analysis was not significant, $F(1, 54) = .959, p = .332$. Effect Size was very small at .017. Therefore, while the first analysis showed that the fourth grade students taught writing using the Teach Me Writing program demonstrated significantly higher levels of writing ability of the FCAT Expository Writing prompt compared with the students that did not use the Teach Me Writing program, this analysis reveals that there is not a significant difference between the two groups on the percentage of students scoring at FCAT Level 3 or above on Expository Writing.

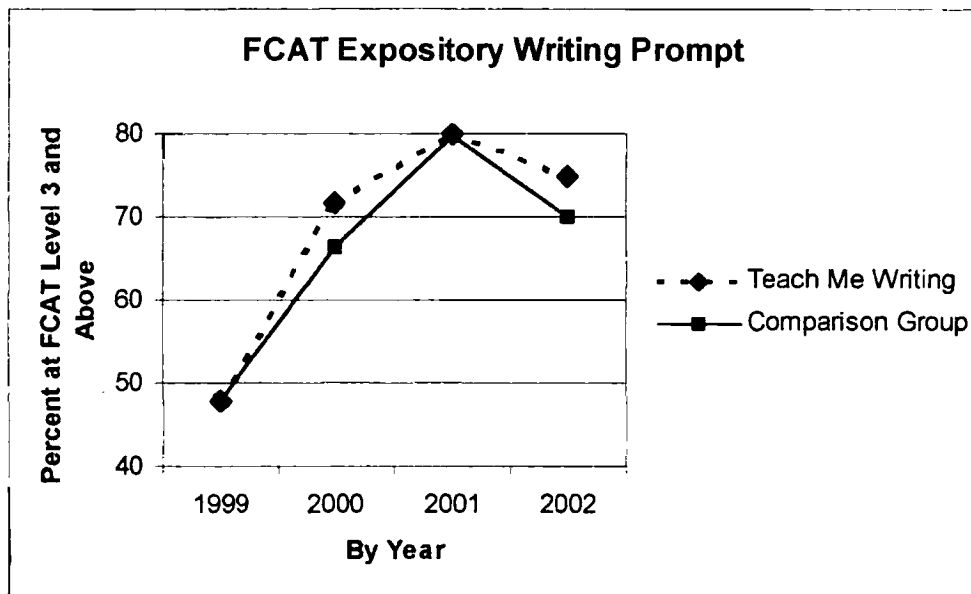


Figure 3: *Mean Percentages at FCAT Level 3 and Above by Group by Year on Expository Writing*

Figure 3 displays the mean percentages of fourth grade students that scored at FCAT Level 3 over time. In general, the percentage of students in the Teach Me Writing group was equal to or above the percentage of students in the comparison group.

The final analysis examines the percentage of students that scored at FCAT Level 3 or above on Narrative Writing.

Table 6

Mean Percentages and Standard Deviations of Students Scoring at FCAT Level 3 or Above on the Narrative Writing Prompt by Year

<u>Year of Adoption</u>	<u>Teach Me Writing</u>		<u>Comparison Group</u>	
	<u>Mean %</u>	<u>SD</u>	<u>Mean %</u>	<u>SD</u>
Percent Scoring at Level 3 & Above in 1999	61.8	14.26	55.4	9.24
Percent Scoring at Level 3 & Above in 2000	76.0	10.38	69.4	10.18
Percent Scoring at Level 3 & Above in 2001	80.0	11.08	75.2	11.73
Percent Scoring at Level 3 & Above in 2002	80.0	10.00	78.4	10.62

Table 6 displays the mean percentages of students that scored FCAT Level 3 or above on Narrative Writing. In every year the Teach Me Writing fourth grade students had a larger percentage of students attaining FCAT Level 3 and above compared with the Non-Teach Me Writing students. The Teach Me Writing schools had approximately 61.8% of their students attaining FCAT Level 3 and above in 1999 versus 55.4% for the comparison group. These percentages increased to 80.0% and 78.4%, respectively, for the fourth grade students in 2002.

The results of the split plot analysis on the percentage of students scoring at FCAT Level 3 or above on the Narrative Writing results for the within-subjects analysis, i.e., the main effect of writing, was significant, $F(3, 52) = 54.150, p < .0005$. The Effect Size was estimated to be very large at .758. The interaction effect of time period and group was not significant, $F(3, 52) = 0.993, p = .404$. The ETA Square estimate of Effect Size was .054. Finally, the between-subjects analysis was significant, $F(1, 54) = 4.823, p = .032$. Effect Size was estimated at .082, which would be considered medium in size. Therefore, there is a significant difference between

the groups with the Teach Me Writing program attaining a significantly higher percentage of students at FCAT Level 3 and above on Narrative Writing versus the comparison group.

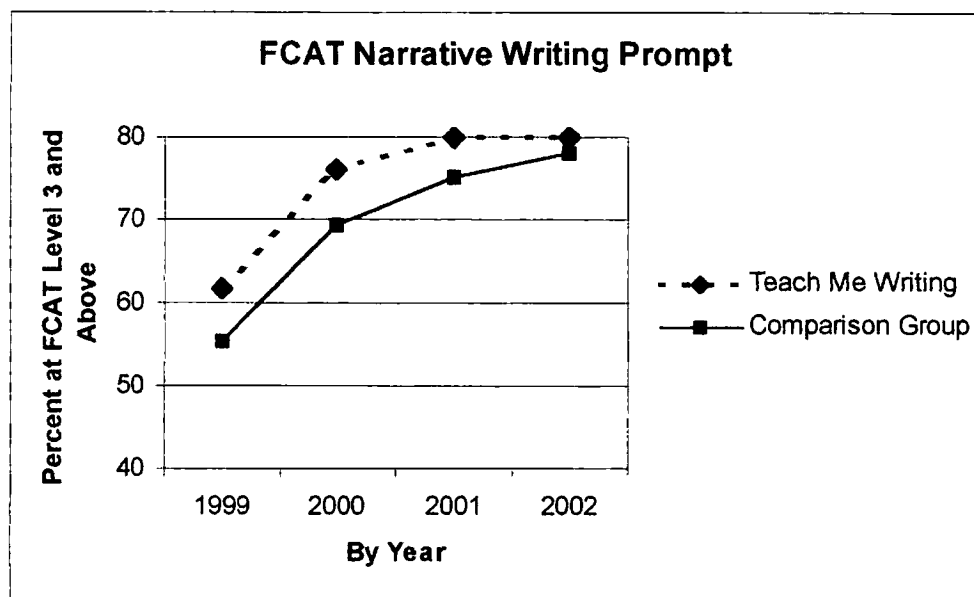


Figure 4: *Mean Percentages at FCAT Level 3 and Above by Group by Year on Narrative Writing*

Figure 4 displays the mean percentages of fourth grade students that scored at FCAT Level and 3 over time. The Teach Me Writing group clearly has attained much high levels of writing performance on Narrative Writing versus the comparison group.

Finally, anecdotal information collected from the teachers within the schools using the Teach Me Writing program support the results found above. They attribute their students' improved writing ability to the Teach Me Writing program. Teachers have also commented on how they have witnessed their students taking a real interest in writing where as prior to the Teach Me Writing program they did not.

CONCLUSIONS

The purpose of this study was to examine the effectiveness of the Teach Me Writing program in terms of meeting the instructional and learning needs of teachers and students, with two research questions being addressed. First, to what extent does the Teach Me Writing program improve the writing performance of elementary school students? Second, how do teachers view the program's quality and effectiveness?

With regard to the first research question, three hypotheses were investigated. The results of this study found support for all three hypotheses. More specifically, the results support the hypothesis that all students, regardless of group, would demonstrate a significant increase in their writing ability over time. The increased emphasis on meeting the Sunshine State Standards has caused a significant emphasis being placed by classroom teachers on those content areas measured by the FCAT. This of course includes writing. Therefore, it is of no surprise that both groups experienced significant increases in their writing ability over time.

Next, the results of this study support the hypothesis that students who were taught writing via the Teach Me Writing program will have significantly higher levels of writing ability compared with students who were not taught writing via the Teach Me Writing program. In both of the analyses that examined the students' FCAT performance separately on Expository and Narrative Writing found that the fourth grade students taught writing through the Teach Me Writing approach had significantly higher levels of writing ability versus the comparison group. The findings on the percentage of students attaining FCAT Level 3 and above were mixed. More specifically, there was no significant difference found between the groups on Expository Writing, even though the Teach Me Writing students did have an overall higher percentage of students attaining that benchmark versus the comparison group. On the other hand, the schools that adopted the Teach Me Writing program had significantly higher percentages of students that attained FCAT Level 3 and above on Narrative Writing in contrast with the schools in this study that served as the comparison group.

Finally, the teachers' comments support the quantitative findings of this study. They view their students as being more engaged in the writing process and becoming writers. Therefore, the results of this study offer strong support to the belief that Teach Me Writing is an effective tool that helps teachers and students meet their respective instructional and learning needs. Moreover, the results of this study help to confirm the appropriateness of the theoretical framework behind the design of the Teach Me Writing program. As previously stated, Teach Me Writing is a school wide, sequential, K-5 writing program that reflects Piaget's metacognitive and cognitive development theories.

The results of this study clearly demonstrate the effectiveness of the Teach Me Writing program. When considering the issue of high-stakes testing of writing, it is helpful for teachers to have a consistent set of expectations for the writing curriculum across all grade levels. Research has demonstrated that more students are successful in both reading and writing on state mandated assessments when the teachers in entire school and/or district have applied a consistent approach to teaching language arts across K-12 grade levels (Sinatra, 2000). Therefore, when a standards based curriculum is implemented carefully and constructively, each grade level then accepts responsibility for improving student performance and not just the grade level being judged by the high-stakes tests (Strickland, Bodino, Buchan, & Jones, 2001). The Teach Me Writing program helps teachers to have a consistent set of expectations for the writing curriculum across all grade levels.

One very obvious weakness of this study was the use of a causal-comparative design. Therefore, a recommendation for future research would be conducting a study wherein an experimental design could be employed. This would give the research considerably more control over the study and provide for a sound basis for establishing cause and effect.

REFERENCES

- Collins, J. (1998). Strategies for Struggling Writers. New York: Guilford Press.
- Crowe, P. (1999). *Losing our language: How multicultural classroom instruction is undermining our children's ability to read, write and reason*. Journal of Adolescent & Adult Literacy, 43 (1), 83-85.
- Gersten, R., & Baker, S. (2001). *Teaching expressive writing to students with learning disabilities: A meta-analysis*. The Elementary School Journal, 101 (3), 251-272.
- Lysaker, J. (2000). *Beyond words: The relational dimensions of learning to read and write*. Language Arts, 77 (6), 479-484.
- Piaget, J. (1971). Science of Education and the Psychology of the Child. New York: Viking Press.
- Piaget, J. & Inhelder, B. (1969). The Psychology of the Child. New York: Basic Books.
- Salomon, G. & Globerson, T. (1987). *Skill may not be enough: the role of mindfulness in learning and transfer*. International Journal of Educational Research, 11, 623-637.
- Sinatra, R. C. (2000). *Teaching learners to think, read, and write more effectively in content subjects*. The Clearing House Washington, 73 (5), 266-273.
- Strickland, D. S., Bodino, A., Buchan, K., & Jones, K. M. (2001). *Teaching in a time of reform*. The Elementary School Journal, 101 (4), 385-397.
- Troia, G. A., Graham, S., & Harris, K. R. (1999). *Teaching students with learning disabilities to mindfully plan when writing*. Exceptional Children, 65 (2), 235-252.
- Wiley, M. (2000). *The popularity of formulaic writing (and why we need to resist)*. English Journal, 90 (1), 61-67.

About the Author:

Paul A. Rendulic is an Associate Professor of Educational Research in the School of Education at Barry University, 6641 E. Colonial Drive, Orlando, FL, 32807. His research interests include school improvement, self-regulated learning, and evaluation. He can be contacted at: prendulic@mail.barry.edu.