DOCUMENT RESUME

ED 474 935

CS 511 907

AUTHOR

Jerome, Kathy; Gilman, David A.

TITLE

Writing Improvement Programs: Does This Type of Intervention

Really Work?

PUB DATE

2003-03-05

NOTE

15p.

PUB TYPE

Reports - Research (143)

EDRS PRICE

EDRS Price MF01/PC01 Plus Postage.

DESCRIPTORS

Academic Standards; Comparative Analysis; Early Intervention;

Grade 3; Primary Education; Program Effectiveness; State
Standards; *Writing Achievement; *Writing Improvement;

Writing Research; Writing Tests

IDENTIFIERS

Indiana; *Indiana Statewide Testing for Educ Progress

ABSTRACT

This study compared ISTEP+ (Indiana Statewide Testing for Educational Progress) writing test scores before the implementation of a writing improvement program with ISTEP+ writing test scores. The study was conducted two years after such a program was implemented. Data from two groups was collected for this comparison. The first group used was the 1999-2000 North Vermillion Elementary 3rd grade ISTEP+ writing test scores. This group of students did not participate in any writing improvement program. The second group used was the 2001-2002 North Vermillion Elementary 3rd grade ISTEP+ writing test scores. This second group of students participated for two years (prior to taking ISTEP+) in a school-wide writing improvement program. It was concluded that there was a significant difference in ISTEP+ writing test scores at the 0.05 level of significance. It can be further concluded that the writing improvement program did have a significant effect on ISTEP+ writing test scores. Contains 7 references, and 2 charts and 2 tables of data. (Author/RS)



Writing Improvement Programs: Does This Type of Intervention Really Work?

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

D.A. Gilman

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Kathy Jerome and David A. Gilman

Abstract

This study compared ISTEP+ writing test scores before the implementation of a writing improvement program with ISTEP+ writing test scores. The study was conducted two years after such a program was implemented. Data from two groups was collected for this comparison. The first group used was the 1999-2000 North Vermillion Elementary 3rd grade ISTEP+ writing test scores. This group of students did not participate in any writing improvement program. The second group used was the 2001-2002 North Vermillion Elementary 3rd grade ISTEP+ writing test scores. This second group of students participated for two years (prior to taking ISTEP+) in a school wide writing improvement program. It was concluded that there was a significant difference in ISTEP+ writing test scores at the 0.05 level of significance. Therefore, the null hypothesis must be rejected. It can be further concluded that the writing improvement program did have a significant effect on ISTEP+ writing test scores.

BEST COPY AVAILABLE



Background of the Problem

Student achievement in core subjects has been a major focus in many schools nationwide and writing is often identified as an area that needs improvement. The NAEP (National Assessment of Educational Progress) test is given every two years to students aged 9, 13, and 17. Between 1992 and 1994, Campbell, Reese, O'Sullivan, and Dossey (1994) reported that NAEP writing test scores fell in all three grade levels and that scores for grades 8 and 11 yielded even lower results than when the tests were first administered ten years prior.

In recent years, much emphasis has been placed on achievement test scores and the impact they can have on school accreditation status. Schools are required to strictly follow state standards in all grade levels and are held accountable for improvements in student performance. School corporations nationwide have implemented writing improvement plans in an attempt to improve lackluster writing test scores.

To better facilitate the implementation of a writing improvement program, Cowell and Butler (1984) reported that teachers from River Mill Elementary School in Estacada, Oregon attended workshops to learn assessment procedures, state rubrics, and the steps of the writing process for each grade level. In addition, grade level teachers brainstormed topics to use for classroom writing prompts and other writing related ideas, such as student journals and published student books. Samples of student writing were also used for scoring practice, to allow teachers to better understand how to help students improve their own writing.

Some programs, such as the one used at River Mill Elementary School in Estacada, Oregon (Cowell et al. 1984), include in-depth instruction to help students learn the steps of the writing process, scheduled writing prompts for all grade levels, and the assessment of writing assignments using rubrics. Educators must walk a fine line when implementing this type of intervention, since criticism of



"teaching the test" is a common response. New Hampshire Superintendent Champlin (Willett, 2001) answered this charge when questioned about his school's tutoring sessions, aimed at improving writing test scores. "We're not teaching the to the test. We're simply trying to help students improve their writing ability. We want our students to be able to communicate articulately through writing."

In contrast to this point of view, Hegarty (2000) reported that some Florida schools, like A. A. Dixon Elementary in Pensacola, FL, direct their instruction to follow the Florida Writes test. This particular test, introduced in 1993, uses a student writing prompt and a 45-minute writing period. The "prompts" are scored on a scale of 1 - 6, with 6 being the highest score. Teachers expressed that "practice, practice, practice," as well as "teaching tailored to the statewide test" has given their students a positive advantage. Principal Judith Ladner of A.A. Dixon Elementary comments, "It gets to be like breathing. Constant writing. Every day." Her school, along with other "F-rated" Florida schools, improved their state writing test scores tremendously after implementing a writing improvement program. In 1993, 20% of fourth grade students in these schools scored a 3.0 or higher on the state writing test. By 1996, 40% of fourth graders improved their scores and in 2000, 84% of fourth grade students scored a 3.0 or higher on the Florida Writes test.

Logically, the more students are involved in their own writing experiences, the more enthusiastic they will be. Eve Bearne (2000) suggested, "Getting children to write their own books and then to reflect on the process of writing" is a good way to bring writing into school curriculums. Bearne added, "One way of improving children's writing is to get them to talk about their work."

Another approach involves using parents and peers to assist the writer during the pre-writing and draft stages. According to Topping, Nixon, Sutherland and Yarrow (2000), this method, known as paired writing, encourages the writer to read his/her piece aloud and to edit the work to the final copy stage with the help



of an adult or peer. This method allows students to benefit from both a structured and collaborative approach, so that "writing is increasingly seen as a social rather than a solitary activity."

In Indiana, many schools have not only been confronted with low test scores, but have also been bombarded with PBA (Performance Based Accreditation) guidelines and must show progress in selected areas in order to maintain an accredited school status. To accomplish this task some corporations, like the Monroe County Community Schools, (Adams, 2000) have enlisted the help of grant monies and initiated programs to improve student test scores in the area of writing. Staff development, with the help of a professional consultant, the use of rubrics, and a school wide writing program are all included in these intervention strategies.

This approach was similar to that used at River Mill Elementary School in Estacada, Oregon, where Cowell et al. (1984) reported the use of a consultant to assist teachers in learning the "holistic" writing approach. This program "requires teachers, students, and evaluators to consider a piece of writing as a whole -- a single, integrated, unique expression, rather than as a collection of parts to be subjected to a separate analysis and evaluation for spelling, grammatical usage, construction, etc." This method also requires a subjective assessment to critique whether each piece of writing is "competent" or not. Competency is scored on a scale of 1 - 4, with 4 being the highest mark. This writing model yielded an increase from 26% of students passing the Estacada Writing Assessment Test, to 54% of students passing the test, after only one year of use.

It seems that writing competency has become a focal point for many schools across the nation. Numerous state tests and assessments now include a strong writing component that can weigh heavily on the total reading/language student score. To compound this issue, some schools are under pressure to show improvements in writing in order to receive both a favorable rating from the state. To accomplish this task, writing improvement programs of various kinds have been



implemented at every grade level and many include the use of writing prompts, scoring rubrics, and instruction in the steps of the writing process. With all of these interventions in place, improved writing test scores would seem to be the obvious result. If these plans are well thought out and executed by teachers and administrators, then the effect on student writing test scores should be a positive one and in time, these endeavors will prove to be worthwhile.



Statement of the Problem

In recent years, many Indiana schools have found themselves facing the reality of low ISTEP+ test scores. One subject area that has received much attention is writing. Pressure from the state to show improvement in these scores, has lead some schools to the question, "Can low achievement scores in writing be improved?"

North Vermillion Elementary School faced a similar dilemma two years ago and was urged by the state to devise a way to improve low student writing test scores. A school wide writing improvement program was chosen as a possible solution. Does strict adherence to this type of intervention, which included teaching the steps of the writing process, the use of practice writing prompts, and the use of state rubrics for assessment, help students improve writing test scores?

For the purpose of this study, a null hypothesis was tested: There is no difference between the test scores of students who participated in the writing improvement program and the test scores of students who did not participate in the writing improvement program.

BEST COPY AVAILABLE



Methodology

The sample used for this study was taken from North Vermillion Elementary, which is a consolidated, rural school, and the only elementary in that corporation. The socioeconomic status of students in this area ranges from low to middle class, which is typical of many smaller schools in Western Indiana. Northern Vermillion County has a slightly diverse population, although most people are Caucasian. This sort of population is indicative of other rural schools in this geographic area.

Two years ago, North Vermillion Elementary implemented a school wide program for improving writing test scores. Teachers received both training and guidance in planning a writing curriculum for each grade level, which followed state standards. In-service workshops were held to allow staff to familiarize themselves with the state writing rubrics and assessment procedures. "Hallway walks" were used to give teachers a chance to observe other staff members during instructional writing times, and to gather information and/or ideas for use in their own classrooms. This plan also included in-depth classroom instruction to help students learn the steps of the writing process, 3 scheduled writing prompts per school year for all grade levels, and the assessment of selected writing assignments using state rubrics. In addition, daily writing times, published student books, and student writing journals were used to encourage interest and improvement in writing. Data, in the form of ISTEP+ writing test scores, was gathered from the 1999-2000 and the 2001-2002, 3rd grade classes. The 1999-2000 classes had a total enrollment of 69 students, from 3 classrooms, which did not participate in any writing improvement program. The 2001-2002, classes had a total enrollment of 63 students, from 3 classrooms, who had participated in a writing improvement program for two years prior to taking the ISTEP+ test.

A random sample of ISTEP+ writing test scores, ranging from a low of 1 to a high of 6 possible points was taken from the total class summary report, from both



the 1999-2000 and 2001-2002 classes. This sample included every third score on the list, starting alphabetically from the bottom up. A total of 23 scores was gathered for each group used in the study. Two additional scores were collected from the 2001-2002 classes, by using the first and last score on the alphabetical class list. This was done so that both groups would have the same amount (23) of test scores.

An unpaired t test with a two-tailed P value was used to check for statistical significance.



Results

Table I

ISTEP+ Writing Test Scores					
Classes	Mean	Standard Deviation			
1999- 2000	3.22	0.736			
2001-2002	2.83	0.491			

Table I shows a mean score of 3.22 for the 1999-2000 classes, as compared to a lower mean score of 2.83 for the 2001-2002 classes. A standard deviation of 0.736 was found for the 1999-2000 classes, while the 2001-2002 classes showed a standard deviation of only 0.491. These results were found after conducting an unpaired t test.

Table 2

Statistical Test Results					
t	df	р			
2.12	44	0.04			

Table 2 shows a t value of 2.12 with 44 degrees of freedom. The two-tailed probability of this result equals 0.04, which is statistically significant at the 0.05 level.



Chart 1

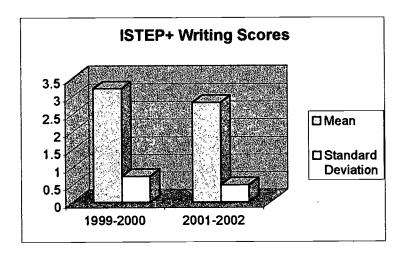


Chart 1 shows the mean of group 1 (1999-2000) as 3.22 and the mean of group 2 (2001-2002) as 2.83. The standard deviation for group 1 is 0.736 and the standard deviation for group 2 is 0.491.

Chart 2

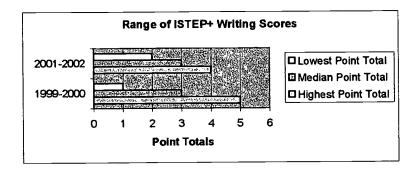


Chart 2 breaks down the range of point totals for each group of the 3rd grade test scores used in the study. Some students in the 1999-2000 group did score somewhat higher than the 2001-2002 group, with a point total of 5 out of a possible 6 points. However, some students in the 1999-2000 group also scored somewhat lower than the 2001-2002 group with a point total of 1 out of a possible 6 points. This chart also shows a modest gain at the low end of the point total scale, as well as a slight loss on the high end of the point total scale for the 2001-2002 group, as compared to the point totals of the 1999-2000 group.



Discussions, Conclusions, and Recommendations

This study examined the effectiveness of a writing improvement program at North Vermillion Elementary School. Group 1 (1999-2000) did not participate in any writing improvement program, while group 2 (2001-2002) did participate in a school wide writing improvement program for two years prior to taking the ISTEP+ test. ISTEP+ writing test scores from these two groups of 3rd grade classes were compared to ascertain if any difference in test scores was evident after the implementation of that program.

Statistical tests revealed lower mean test scores for group 2 (2001-2002) after participating in the writing improvement program for two years. A computed probability value of 0.04 was also found. This difference is statistically significant at the critical 0.05 level of significance, and the null hypothesis: there is no difference between the test scores of students who participated in the writing improvement and the test scores of students who did not participate in the writing improvement program, must be rejected.

Possible explanations for this outcome include:

- 1. The populations used in the study were congruent, indicating that there was no difference between them. Higher mean scores in one group and lower mean scores in the other were acquired by chance.
- 2. The populations were actually different; therefore the mean scores for each group were different and most likely this discrepancy was not caused by random sampling or chance.
- 3. One group was stronger academically than the other group; therefore, the test scores would reflect that result, with or without the help of a writing improvement program.
- 4. The amount of instruction and teaching styles used by teachers was different for each group, which might result in different writing test scores.



Looking back at Chart 2 (Range of ISTEP+ Writing Scores), the 2001-2002 classes did make gains in writing test scores at the low end of the scale, even though they did not score as high over-all, as compared to the 1999-2000 classes. This indicates that the lower achieving students in the 2001-2002 group did benefit from the writing improvement program; even though the statistical test revealed that this group had lower scores over-all than the 1999-2000 group. Many times, the amount of instruction and additional attention given to certain students, be it the high, medium, or low achievers, leads to academic improvement for that group. In all likelihood, the lower skill students in the 2001-2002 group benefited from the new writing improvement program for that reason.

This particular program at North Vermillion Elementary was implemented just two years ago. Such interventions must be given time to reach all students at all achievement levels. Perhaps in time, greater results in writing achievement test scores are possible for all skill levels and all students, with the assistance of a writing improvement program.



References

Adams, Karen. (2002). I Step Up grant, Monroe County Community School Corporation. (Online) Available http://ideanet.doe.state.in.us.

Bearne, Eve. (2000). "Classroom research: Talking about writing," The Primary English, vol. 5, no. 4.

Campbell, Jay R., Reese, Clyde M., O'Sullivan, Christine and Dossey, John A. of Educational Testing Service. (1994). The NAEP 1994 Trends in Academic Progress. School Reform News, The Heartland Institute.

Cowell, Richard N. and Butler, Jocelyn A. (1984). Improving Writing Skills River Mill Elementary School. EFFECTIVE SCHOOLING PRACTICES: A RESEARCH SYNTHESIS (Northwest Regional Educational Laboratory).

Hegarty, Stephen. (2000, June). Why are Florida children writing so much better? St. Petersburg Times.

Topping, Keith, Nixon, Jillian, Sutherland, Jennifer and Yarrow, Fiona. (2000). "Paired Writing: a framework for effective collaboration," Reading, vol. 34, no. 2.

Willett, Mark. (2001, March). Test scores worrisome Laconia district making writing tutors available. The Citizen, Laconia/Lakes, NH. (Online) Available http://www.msnbc.com.





U.S. Department of Education

Office of Educational Research and Improvement (OERI)

National Library of Education (NLE)

Educational Resources Information Center (ERIC)



REPRODUCTION RELEASE

		(Specific Document)		CS 511 907
I. DOCUM	ENT IDENTIFICATION	N:		<u> </u>
		OGRAMS: DOES THIS TYPE OF	INTERVENTION	REALLY WORK?
Author(s):	Cathy Jerome and Dav	vid A. Gilman		
Corporate S	ource: Indiana State Unive	rsity		Publication Date: 5th March 2003
	DUCTION RELEASE			
abstract journal media, and sole	of the FRIC system. Resources	le timely and significant materials of interest in Education (RIE), are usually made avail teproduction Service (EORS). Credit is given to the document.	able to users in microficl	he, reproduced paper copy, and electroni
If permission the page.	on is granted to reproduce and d	isseminate the identified document, please	CHECK ONE of the follo	owing three options and sign at the bottom o
The samp	ole sticker shown below will be d to all Level 1 documents	The sample sticker shown below wi affixed to all Level 2A document		The sample sticker shown below will be affixed to all Level 2B documents
DISSEM	SION TO REPRODUCE AND INATE THIS MATERIAL HAS BEEN GRANTED BY	PERMISSION TO REPRODUCE DISSEMINATE THIS MATERIA MICROFICHE, AND IN ELECTRON FOR ERIC COLLECTION SUBSCRIB HAS BEEN GRANTED BY	AL IN IC MEDIA ERS ONLY, MIC	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN CROFICHE ONLY HAS BEEN GRANTED BY
	Sample	sample	_ .	Sample
	EDUCATIONAL RESOURCES RMATION CENTER (ERIC)	TO THE EDUCATIONAL RESOL INFORMATION CENTER (EF		TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
1			2B	
	Level 1	Level 2A		Level 2B
	X			
and dissemination	evel 1 release, permitting reproduction on in microfiche or other ERIC archival g., electronic) <i>and</i> paper copy.	Check here for Level 2A release, permitting and dissemination in microfiche and in electr ERIC archival collection subscriber	ronic media for	ck here for Level 2B release, permitting reproduction and dissemination in microfiche only
	lf permissi	Documents will be processed as indicated provided repront to reproduce is granted, but no box is checked, documents	oduction quality permits. ments will be processed at Leve	el 1.
	as indicated above. Reproductions requires permissi	nal Resources Information Center (ERIC) no ction from the ERIC microfiche or electroni on from the copyright holder. Exception is n needs of educators in response to discre	ic media by persons oth s made for non-profit re te inquiries.	ner than ERIC employees and its system production by libraries and other service
		J. Gelman	Printed Name/Position/T David Alan Gilman	itle a, Ph. D., Professor of Education
here, → please	Organization/Address: David Alan Gilman, Ph. D.		Phone: 812-237-2925	FAX: 812-237-4348
	Professor of Education Indiana State University 1015 School of Education		E-Mail Address: efdavid@befac.indsta	
	Indiana State University			<u> 5th March 2003</u>

