

DOCUMENT RESUME

ED 172 216

CS 204 868

AUTHOR DeRoche, Edward F.
 TITLE NIE Research: In Education "Only Significant Differences Count."
 PUB DATE May 79
 NOTE 19p.; Paper presented at the Conference for Newspaper in Education Program Development (Boston, Massachusetts, May 15-18, 1979)

EDRS PRICE MF01/PC01 Plus Postage.
 DESCRIPTORS *Current Events; Daily Living Skills; *Educational Research; Elementary Secondary Education; Knowledge Level; Mass Media; News Media; *Newspapers; *Reading Improvement; *Reading Research; *Teaching Methods

ABSTRACT The effects of using newspapers as adjunct materials in education have been documented in recent research. Research results indicate that students are seriously deficient in civic knowledge, and that the newspaper can serve as a bridge between home, school, and community by educating youth about the real world and by influencing their knowledge of current affairs and governmental functions and their daily reading habits and attitudes. Newspapers are useful in involving parents in the education of their children, in improving communication within the family, and in minimizing summer educational losses. Newspaper use in elementary and secondary classes encourages educational gains in such areas as current events knowledge, reading ability and comprehension, communication skills, and daily living skills. (DF)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *



THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN-
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT
OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY.

ED172216

NIE RESEARCH: IN EDUCATION

Only Significant Differences

Count

Edward F. DeRoche, Ph.D.
Professor, School of Education
Marquette University
Milwaukee, Wisconsin

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY"

Edward F. DeRoche

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

May, 1979

CS 204 P68

Newspapers in education, as you well know, is like making love--it's not the technique but the enthusiasm that counts.

But, in educational research, the technique--or what is called the research design--is a most important element, particularly if the researcher wishes to generalize the findings. The concept behind research is simple--when we need to know about something we do research. It is obvious to you and me that we need to know more about the effect that newspaper use has on teaching and learning. "The need to know" is not a simple matter. To carry out this charge, we need to know how to satisfy this need to know. For example, there may be a need to know how daily newspaper use affects youngsters' knowledge of and interest in current affairs and governmental functions. The problem is how do we design a research study that will help us get some answers to this question. One of our concerns with educational research is that when someone points a finger at a problem many of us end up studying the finger.

Let me outline for you what I plan to discuss with you in the time allotted and why.

I think it may be of interest to you to hear some of the results from the studies done by the National Assessment of Educational Progress and the work that George Gallup did for the National Municipal League. Why? Well, it seems to me that this information sets the stage for the next two discussion points--namely, newspapers for home and school, and the current NIE research.

The use of newspapers as a bridge between home and school is something that is being explored by many newspapers. Many of you are conducting or considering newspaper programs involving parents. I believe that it would



be helpful to you to pin this interest, your parent programs, rationale, some existing research about parents as teachers of their own children.

The remaining portion of this discussion will focus on existing NIE research. But let me tell you at this point what I have done. During the past year, with Judy's help and the assistance of many of you who have answered my letters, I have put all of the studies I could find on the computer--by name, title, and year. My intent is to write an abstract of each study and also put that on the computer. Then, if you are interested in a particular study on the computer list, after reading the title and abstract, you can write for the completed copy which I hope to have in the files. I can pull this study, Xerox it, and mail it to you. At least, that is the plan to date. Presently, I have more study titles than actual studies in the files.

National Studies: Surveys

With this overview in mind, let's now examine some of the data from national studies that I feel help make an excellent case for using newspapers in every classroom. You should know that what follows is merely an abstract of information that is important to me in my NIE work and in no way reflects the complete findings of these studies.

A nationwide survey of 145,000 teenagers, conducted by NAEP, has found that

- * teenagers know less about government and are less willing to participate in politics than they were at the start of the 1970's.
- * less than one-half of the 17-year-olds and only one-fifth of the

13-year-olds could name any of their senators or representatives in Congress.

- * one-third of all teenagers do not know that a U.S. senator is elected.
- * less than half understand that the Senate must confirm a nomination to the Supreme Court.
- * only 36% of the 17-year-olds know how presidential candidates are selected. (Note: This survey was conducted during an election year.)
- * one-fifth of those tested are opposed to or undecided about allowing a newspaper to criticize an elected official.
- * one-third cannot suggest some means of researching a political candidate's background.
- * only 45% of our 13-year-olds can correctly match four governmental functions with the appropriate level of government.
- * more than half of the 9- and 13-year-olds and 35% of the 17-year-olds are unable to extract the "main idea" from material read and have difficulty discriminating fact from opinion.
- * about 21 million Americans over 16 years of age cannot read a want ad.
- * teenagers seem to be losing their ability to communicate clearly through written English.
- * it has been estimated that students forget about 20 to 80% of what they learned the previous year over the summer vacation.

In a test of 17- and 18-year-olds, conducted by Gallup for the National Municipal League, the findings include that:

- * only 3% could identify Alaska and Hawaii as the most recent states in the Union.
- * only 4% could name the three presidents prior to Gerald Ford.



- * 25% didn't know that New Jersey is on the east coast and Oregon is on the west coast.
- * 71% didn't know that conventions make the final choice of presidential nominees.
- * 40% could not name the war in which states' rights was an issue.
- * 60% did not know what NATO is.

A 1975 survey of students, the cream of the crop, listed in Who's Who among American High School Students, showed that:

- * 83% do not believe that our system provides equal justice for all citizens.
- * 81% believe that elected officials lack honor and integrity.
- * 79% of 18- to 21-year-olds who registered to vote did not go to the polls in November's election.

It is apparent that NIE programs in both the home and the school should make some attempt to educate our youth about the real world and hopefully influence their knowledge of current affairs, governmental functions, and daily reading habits and attitudes.

To do this, it may be important to view the newspaper as a bridge between the home, the school, and the community.

Home and School: NIE Rationale

There is renewed interest by educators about the involvement of parents in the education of their children. Let me share with you some reasons for this current interest.

Benjamin Bloom's studies have shown the tremendous influence of the home environment on a child's intellectual development, citing that about

50% of the ability to learn is acquired by the age of four.¹ Robert Thorndike reported in his book, Reading Comprehension Education in Fifteen Countries, that home and family background are dominant in determining achievement in reading.²

Smith and Brahce, in their experimental program, "School and Home: Focus on Achievement," report that involving parents in what their children are learning "has definitely resulted in improved student work habits and attitudes to schoolwork" and has increased reading achievement.³

The evidence found in the Stanford University studies supports the involvement of parents as tutors of their children. These studies report that "parent involvement programs (specifically as teachers of their children) produced significant immediate gains in children's IQ scores and seemed to alter in a positive direction the teaching behavior of parents."⁴

Dorothy Rich reported in her dissertation ways the family could reinforce and supplement reading and math for children in four first-grade classes from both inner-city and suburban schools. These strategies resulted in significantly higher scores in reading than those of the classes in a control group. Incidentally, it was typical work that was sent home, pinned to the clothing of these first-graders. The exercises and assignments featured real-life activities.⁵

Totten and Manley reported that parental involvement in the school program has a favorable influence on the child's attitude toward school and toward his own position in life.⁶

There are other studies that could be added to this brief list. I wanted to share this information with you because: One, it illustrates how we in NIE should examine studies to support what we are doing or want to do.

Two, it seems to me that we should encourage and help teachers to create newspaper activities that can be accomplished at home with the parent as a teacher-aide or a tutor. I am also convinced that parents should be taught how to use the newspaper for helping their children to read, for improving communication within the family and sharing ideas, solving problems, and so on. One last point on this topic. Some studies reveal that certain students lose 20 to 80% of what they learned the previous year in school. Newspaper-in-the-home programs, particularly during the summer months, may greatly reduce this loss. The idea is exciting and worthy of our continued attention and action.

NIE Research

The research collected to date has been categorized into four parts-- elementary/secondary, reading, general, and teaching. These categories will suffice for the present, but it is obvious to me that another, and better, classification system has to be used because of the overlap, i.e., elementary and secondary studies with reading studies. Nevertheless, it's a start.

Before I share some generalizations with you, let me caution you about the findings. Most NIE studies are short-term studies; that is, they are two-, three-, or four-week studies. A few are longer. Small numbers of students are involved in most studies. In many studies, generalizations are not possible because of the design of the study. Many variables, other than newspaper use, are not accounted for and in fact may influence the results of the studies. For example, I'm thinking particularly of the researcher's biases and the fact that the researcher in many studies is the

teacher of the treatment group--the newspaper group.

Nevertheless, the replication process does seem to suggest that certain things do happen when newspapers are used for teaching and learning. Please remember this is my interpretation of the research. Others may read the same studies and come to different conclusions.

Elementary/Secondary

The elementary school studies provide evidence for five major generalizations:

1. Newspaper use in the elementary classroom does seem to increase children's current-events knowledge.
2. There is evidence that elementary school students are interested in and interested by newspaper content.
3. Several studies show that, when newspapers are used in the classroom, children's knowledge of newspapers as a business, and their attitudes toward newspapers and newspaper personnel, improves.
4. There is some indication that newspaper use may increase children's daily newspaper reading habits and the amount of time spent reading the newspaper.
5. A couple of studies report significant differences between experimental (newspaper use) groups and control (no newspapers) groups in skill development in certain subjects such as social studies, language arts, and arithmetic.

I'll discuss reading as a separate subject. At the secondary level, there are some interesting findings.

In a well-designed research study of 1800 high-school-aged students

attending the Presidential Classroom for Young Americans program, the investigator found that the data clearly support the proposition that study of the mass media plays a direct role in the political socialization of adolescents insofar as overt political behavior is concerned. This researcher states that "it remains for the social studies educator to . . . convert the media from a supplementary or support device to a primary tool." Yet it has been my observation that NIE programs have not convinced social studies teachers of the value and usefulness of newspapers to teach social studies content.

An experiment called "Textbook World" in Santa Monica, California, involved the use of two daily newspapers plus periodicals for one semester in English and Social Studies classes. The results were that these high school students showed reading gains that moved them from one-half year behind average students to more than $1\frac{1}{2}$ years ahead in the five-month trial period for a two-year gain. Social Science results showed increases from a full year behind average to over $1\frac{1}{2}$ years ahead for a total gain of almost three years.

The Copley study of 200 high school students reported that young people seem to have little knowledge of how newspapers gather, prepare, and disseminate the news. Their ideas about newspapers are often erroneous and detrimental to the image of newspapers. It is interesting to note that the author of this study also reports that NIE programs are failing to achieve their stated objectives and are, in fact, adding to the generally poor image held by youth concerning today's newspapers.

Several researchers of both elementary and secondary studies report some interesting "side effects"--benefits, if you will--regarding their

studies of newspaper use.

For example, one study reports an improvement in attendance in NIE classes compared to non-NIE classes. Another study, using newspapers in language arts and reading classes, with no expressed intent to have the students learn current events, reported an improvement in knowledge of these events. Another study reports such "side benefits" as developing geographic skills, communication, poise, self-assurance, and research skills. Another study, in following up parental reaction to a two-week unit, suggested that parents generally responded favorably to newspaper use in the school and thus family discussions of newspaper content resulted.

Reading

If you have had the opportunity to read John Carroll and Jeanne Chall's book Toward a Literate Society (1975), you know that these two reading authorities are challenging the current view of functional literacy. One of their major questions is this one: "Can students at reading grade 7.0 read newspapers, college textbooks, or even the text in comic books competently?" As these authors state: "A grade-level score does not provide us with any information on just what kinds of real-world tasks a person can perform competently." They cite Bormuth's study as part of their evidence for this view, and I want to share this with you because of what it implies about newspaper reading skills and the other research to be reviewed.

In 1969 Bormuth took a sample of eight articles from news publications and, using a cloze readability test, he tested students in grades 3 through 12 from middle-class homes in a residential suburb of a large midwestern city.

In other studies, Bormuth had found that one must answer at least 35% of the test items correctly; otherwise, little or no information is gained. On the average of the eight articles, only 33% of the students in grade 6 and only 65% of those in grade 12 reached the criterion of being able to answer 35% of the cloze questions on the test.

Using statistical procedures, he found that, in order to answer 35% of the questions correctly, "the average person is literate with respect to half of the newspaper articles only after 10.5 years of school."

One conclusion may be that the real test of literacy is not a grade level score, one that we may be setting too low, but whether or not the student performs competently on real-world reading tasks.

Before I review the NIE research that is in the files, you should know that there was a temptation to separate the studies in elementary and secondary reading, but the reading levels of several of the students in these studies (particularly in junior and senior high schools) ranged well into the lower elementary grades so that I decided to categorize the entire group of studies under the heading of "reading."

It was very difficult deciding how to report information about newspaper use and its influence on students' reading skills, habits, and attitudes, particularly in a short period of time. So here are some highlights.

Let's start with the ANPA Foundation Reading Test. Paul B. Diederich, Senior Research Associate, Educational Testing Service, reported that, in 1971, 13,000 students (9,000 junior-high students, 4,000 senior-high students) were administered the ANPA Foundation Test. The results brought him to two important conclusions. One, that students in classes that did not use newspapers could answer less than 60% of the "fair, straightforward

questions on typical newspaper articles that were read during the test." Two, students in "newspaper in the classroom" programs produced significant improvement in newspaper reading.

In almost every study where this test was used as a method of evaluation, newspaper-use groups (whether integrated in subject matter or as a separate unit) significantly outscored groups of students who did not use newspapers in their classrooms.

One doctoral dissertation and a couple of master's research papers have been completed regarding newspaper reading skills or newspapers as a supplement to reading classes. Pat Wandell has done the only doctoral dissertation in this area and concludes that "students' proficiency in distinguishing between facts and opinions and between major ideas and minor details and their total newspaper reading ability is increased through classroom use of materials based on actual newspaper writings; students in ninth grade exhibit proficiency in the skill of locating information; and students with high intelligence and low socioeconomic level, and students with low intelligence and high socioeconomic level seem to benefit most from instruction in newspaper reading skills."

This last point is an interesting one and worthy of expansion. During the 1969-70 school year, a study was done in Rochester (New York) involving 300 "disadvantaged students" in grades 4, 5, and 6. These students participated in an experimental reading program in which they received a newspaper for 120 of the 184 days of the school year. The goal of the program was to "significantly raise reading scores of students and help develop their skills in reading newspapers." The students were tested by the Durrell Analysis of Reading Difficulties. The pre-test was administered

in October 1969, the post-test in May 1970--a seven-month period. For fourth- and fifth-grade students, there was a 17-month gain score; for sixth-graders, there was a 20-month gain score.

Other studies, specifically those that use gain scores, suggest similar results both for disadvantaged students, special education students, and students exhibiting poor reading ability.

One more example is worth sharing. A study involving two junior high schools with 178 seventh-grade and 186 eighth-grade minority students provides some interesting results. Using newspapers, magazines, and paperbacks, and the criterion of one-month gain for one month of instruction, the researcher reported the following:

seventh-graders averaged a gain of 2.37 months for each month of instruction; this was six times greater than the state average of .4-month gain for other seventh-grade Title I Reading Programs. eighth-graders averaged a gain of 2.12 months for each month of instruction compared to a statewide average of .7 month.

Studies conducted with control groups also favor the newspaper-use groups. For example, one teacher used newspapers with her sixth-grade class for six weeks. Her class and a control-group class were pre- and post-tested using the Weekly Reader Diagnostic Silent Reading Test that measures four skills--comprehension, interpretation, main idea, and vocabulary in context. There were no pre-test differences between the two sixth-grade classes. After six weeks, the post-test results showed that the newspaper-use group scored significantly higher on comprehension, interpretation, and vocabulary in context. There were no significant differences in "main idea," but the mean score for the newspaper group was higher

than the mean score of the control group.

Obviously, one has to be careful about the interpretation of the results from a single class, with a teacher who is doing the research and instructing the experimental class, but there are five other studies that generally support these findings.

Teacher/Student Attitudes--Interaction

It appears from the results of a couple of studies that teachers who participate in NIE workshops have more favorable general opinions about newspapers; more favorable opinions on the quality of news coverage by newspapers; better acceptance of all the media for educational purposes; a better understanding of editorial views by newspapers; and more favorable attitudes toward using newspapers as a teaching tool.

One study of 162 teachers from 92 different schools who used newspapers in their classrooms judged the newspaper to be an effective instructional tool, a tool that increases student interest and motivation to learn specific skills and specific subjects; and that it helps create a positive behavioral and attitudinal change in students.

These findings are tempered by the results of a study of 124 secondary English teachers that showed, while most teachers had a positive attitude toward the NIE program, many were hostile toward it because they did not want to be told that they had to use it and/or because they did not like it. This same study reported that some teachers do not understand or use the program properly; that is, they work under the assumption that NIE means that one teaches about newspapers rather than using the product as a relevant, effective, and meaningful language arts tool.

Student attitudes seem to be affected by newspaper-in-the-classroom programs as well. It seems that newspaper use improves attitudes towards newspapers and towards reading. It also appears that newspaper use in school has some influence on newspaper reading habits out of school and on one's willingness to subscribe to newspapers. For example, one study of 148 students in six classes in which newspapers were used for four weeks reported positive changes in these students' attitudes toward community, school, and school subjects. However, to balance this finding, another study reported that students perceive little carryover or application of skills acquired in newspaper courses to other subject-matter areas and minimal usage of skills in other classrooms.

It is interesting to note that, on a short-term basis, newspaper use in the classroom seems to affect the verbal interaction of students; that is, the amount and quality of student talk seems to be influenced by the teacher's use of newspapers. There is also some evidence that newspaper use influences student verbal participation in class. These findings should be coupled with teacher testimony that newspaper use seems to contribute to group processes in teaching and learning.

General

Under this category, I filed studies relating to general questions about NIE. For example, what are the critical elements that should be evaluated in NIE programs? How many copies of the newspaper are required to conduct an effective NIE program? What general research studies have been reported in NIE on newspaper readership?

You can review the short list of studies in this category and, if one

intrigues you, details can be supplied. One study examined the question of how many newspapers are required for in-class programs. To find out, this study used the ANPA Foundation Newspaper Test as a pre- and post-test. In each of four different schools (twelve junior and senior high classes), one class was scheduled to receive one copy of the newspaper for every four students; another class in the same school got three copies for every four students; and in another class each student received a copy of the newspaper.

In general, as most other studies have shown, the use of newspapers in these classes results in significant increases in scores on the ANPA Foundation Newspaper Test. In addition, the post-test data suggest that, when at least one copy of the newspaper for every four students is used, the improvement in scores will be just as substantial as if one copy per student were employed. The "why" of this is not known and this study, like many other studies reported here, requires replication and farther analysis.

Conclusions and Recommendations

It is my opinion, given the cautions I raised earlier, that newspaper use has a positive effect on the teaching and learning of certain school subjects. It also appears that, because of the nature of this instructional tool, it creates situations whereby the classroom environment is enhanced/improved. It would be difficult to read all of the studies and conclude that newspaper use has no effect on attitudes, skills, and knowledge.

With the evidence we do have, I am of the opinion that newspaper use in the classroom does improve/increase reading skills; that it contributes

to improved attitudes towards reading and other school subjects; that it does improve in- and out-of-school reading habits; that it does make one more knowledgeable of current affairs and governmental functions; that it does influence the classroom environment (communication, interaction, sharing). But you see, I'm biased and a good researcher must be objective. Nevertheless, we need to share what we know with the decision-makers--every publisher, editor, superintendent, and principal in our areas.

We need to encourage them to help us implement and evaluate newspaper use in every classroom at various levels, with a variety of students.

We need to continue the research. We need bigger and better studies. We need to ask more questions like the ones I've listed that are in your packets.

References

1. Benjamin Bloom. Stability and Change in Human Characteristics.
New York: John Wiley and Sons, 1964.
2. Robert Thorndike. Reading Comprehension Education in Fifteen Countries. New York: John Wiley and Sons, 1973.
3. Mildred B. Smith and Carl I. Brahce. "School and Home: Focus on Achievement." Educational Leadership, February 1963, 314-318.
4. Stanford Research Institute. Parent Involvement in Compensatory Education Programs. Washington, D.C.: Office of Planning, Budgeting, and Evaluation, U.S. Office of Education, 1973.
Barbara Goodson and Robert Hess. Parents as Teachers of Young Children: An Evaluative Review of Some Contemporary Concepts and Programs. Palo Alto: Stanford University, 1975.
5. Dorothy Rich. "The Relationship of the Home Learning Lab Technique to First Grade Student Achievement." Dissertation, Catholic University of America, 1976.
6. Fred Totten and Frank Manley. The Community School--Basic Concepts, Function, and Organization. Michigan: Allied Educational Council, 1969.