### DOCUMENT RESUME

ED 303 919 EA 020 759

AUTHOR Foyle, Harvey C.; Lyman, Lawrence

TITLE Homework: Research, Policy, and Implementation.

PUB DATE 14 Mar 89

NOTE 12p.; Paper presented at the Annual Meeting of the

Association for Supervision and Curriculum Development (44th, Orlando, FL, March 11-14,

1989).

PUB TYPE Speeches/Conference Papers (\_50) -- Information

Analyses (070) -- Viewpoints (120)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS \*Academic Achievement; Assignments; Educational

Assessment; Educational Methods; \*Educational Policy;

\*Educational Practices; Educational Research;

Elementary Education; Guidelines; \*Homework; \*Theory

Practice Relationship

#### ABSTRACT

This paper discusses homework policy as a product of 50 years of experimental research. Part 1 discusses homework guidelines in grades 3 through 8 by suggesting that homework should be assigned, graded, and individualized. In addition, homework should provide feedback about student achievement that includes parental monitoring. Part 2 recommends secondary school homework policies that include clear and concise graded assignments. Furthermore, the proposal that some homework be guided, voluntary, and nonwritten reflects outcomes of homework research in American education. The conclusion that the assigning of homework should follow a regular pattern aligned with classroom subject matter supports the notion that homework reinforces learning, thereby raising student achievement. Moreover, school districts should support homework policies that research findings link to raising student achievement. (JAM)

## **HOMEWORK**

RESEARCH, POLICY, AND IMPLEMENTATION

Harvey C. Foyle, Ph.D. Assistant Professor

Lawrence Lyman, Ph.D. Assistant Professor

The Teachers College Emporia State University Emporia, Kansas 66301

U.S. DEPARTMENT OF EDUCATION

H. P. 15-15, Alt. (a. FREWALL hand imprisement)

E. L. ICATIONA RESQUIRCLS INFORMATION

E. ENTER (ERIC)

This document has been reproduced as everywhite in the person or proportation or a harry to the person where we have the made to more very duction all all the control of the more very duction all all the control of the more very duction and the more very duction.

First typew in prinnsstated in this discurrent drinkt necessarily represent afficial ERI pasta in in princy.

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) "

A paper presented at the 44th Annual Conference of the Association for Supervision and Curriculum Development (ASCD) Orlando, Florida, March 14, 1989



Homework policies differ widely from district to district, school to school, and teacher to teacher. School districts may have district-wide homework policies (San Diego, California) or allow individual schools to have and implement homework policies (Cleveland, Ohio). The individual school homework policy is usually a reflection of the principal's or staff's ideas about homework (Sims Elementary, Austin, Texas). In many cases, homework policy is left up to individual teachers (Emporia, Kansas). Homework policies are often based on student and parent feedback, personal opinion, educational experience, and educational research (Toronto, Canada; Houston, Texas).

Student and parent feedback usually means that a committee was formed to study the assigning of homework or, at a minimum, someone is reacting to student and parent complaints about an individual teacher and the assigning of too much homework. The Toronto Board of Education has "The Homework Connection" which is meant to assist elementary schools develop their own homework policy. This is almost a step-by-step policy development kit. A version for the secondary level is also available.

Personal opinion often influences how much homework is assigned. Parents may request more homework since it is "good" for the student. Teachers may feel that students need the "discipline" of doing homework. In either case, homework is on shaky ground since opinions shift and change over time.

Educational experience relating to homework is a more solid foundation to base a homework policy upon. However, one person may have had a need for more independent practice in order to learn the material and a "gifted" person may have had no need for the homework in order to learn the material. Generally, teachers will say there is less need for homework in primary (K-3) and intermediate (4-6) grades than in secondary (7-12) grades. This situation occurs because teachers can expand learning through additional student time (homework). In addition, class lessons can cover other topics or expand on areas when the student has done some basic reading or work.

In regard to homework policy and for that matter any school policy, student and parent feedback, personal opinion, and educational experience are very important considerations from the practical and political points of view. The School District of Philadelphia has a pamphlet, "A Policy for Homework Assignments in the Philadelphia Public Schools," that spells out the roles of the teacher, principal, and parents in regard to homework. As school districts study the topic of homework, concerns about these roles are usually expressed. A draft document of the Indianapolis Public Schools deals directly with the involvement of persons other than the student.

One area that does provide a solid foundation to base homework policy upon is experimental research (Foyle, 1985). This body of literature is being added to yearly. For example, currently, members of The Teachers College of Emporia State University (Kansas) are



looking at Cooperative Learning and the effects of adding honework to it. The results will add to the body of knowledge about home work. However, at this time, there is general agreement about educational research results. Homework increases student achievement. (Foyle, 1985)

Between 1904 and 1989 at least 84 homework experiments were conducted. Early experiments lead to contradictory conclusions. However, since the 1960s, at least 66 homework experiments were conducted and have lead to the general conclusion that homework increases student achievement. These research results provide a basis for homework policies. (Foyle & Bailey, 1985) A number of school districts and/or individual school staffs base part of their homework policies on these research findings. Some selected policies are noted in relationship to homework experimental findings.

## ELEMENTARY SCHOOLS

Most elementary teachers and schools that advocate the use of homework "view homework as an extension of learning opportunities and an integral part of the teaching and learning process" (Montgomery County Public Schools). The homework research base at the elementary school level gives some specific guidance which is applicable to homework policies.

Thirty-three homework experiments were conducted in elementary schools (3-8). One homework experiment reinforces many elementary school educators ideas about homework. In fact, many educators who often state its general findings do not recall the experiment itself. Crawford & Carmichael (1937) conducted an elementary school homework experiment in which they compared a three year period wherein the school allowed homework in grades five through eight with another three year period in which the school did not allow homework. Crawford & Carmichael found no difference in student achievement between the two periods of time. However, they found that students without homework received lower grades in high school than the students with homework. Homework appeared to be necessary for successful high school work but not necessary for achievement in elementary schools. Experimental research in grades 3 through 8 provides us with some clear homework policy guidelines. (Foyle & Foyle, 1989)

## 1. Homework should be assigned.

When teachers assign homework and students do homework, higher student achievement results when compared to the assigning of no-homework. In addition, the assigning of homework produced similar achievement results as other proposed alternative methods. For example, the Willow School (Cleveland, Ohio) homework policy states that "Students in grade four, five and six will be assigned homework at least four times per week." The Rancho Santa Fe School District in



California expects that "All youngsters should have homework--Monday through Thursday--and each should be reading one of the books from the selected reading list..."

# 2. Homework should be graded.

The homework becomes required through the use of grades. In any event, required homework results in higher student achievement than voluntary or encouraged homework. Planned, systematic, checked, and graded homework raises student achievement. Further, student achievement gains were the same when teachers graded all or selected mathematics homework problems.

## 3. Homework should be individualized.

Individualized homework raises achievement levels for girls and higher scholastic achievers than identical assignments given to all students. Homework assignments that mix exploratory homework and review homework produce higher student achievement when compared to homework which only covers the daily topic. The use of problem-solving homework produces higher achievement than basic computational homework. Perhaps, individualizing homework provides for the variety of academic levels and needs of elementary students. The Houston Independent School District notes that "Every student needs to do homework; every student need not do the same homework."

# 4. <u>Homework should provide feedback.</u>

Extrinsic rewards such as candy, grades, verbal comments, and written comments not only provide students with feedback about the homework assignment but are a necessary part of raising student achievement. Students have higher achievement on learning word lists when earning points which are traded for free time in the classroom. Written comments on homework produce higher student achievement than only marking items correct or incorrect, and written criticism and praise on homework assignments produce higher student achievement than no comments. The Montgomery Board of Education homework policy recognizes that instructional feedback is important in that "Completed homework assignments are to be reviewed by the teacher (or a designee) and appropriate instructional follow-up shall occur." The feedback about homework may also involve parents. At Sims Elementary School (Austin, Texas) in the third grade parental feedback is gained through the following policy: "The classwork that is not finished is to be taken home for homework. On Wednesday of each week, folders are sent home with the student's paper and is to be returned signed."



## SECONDARY SCHOOLS

Secondary school homework experiments examined all levels of students, types of homework, and methods of homework. (Foyle & Bailey, Winter, 1986) The following homework policy guidelines for the secondary level are found in twenty homework experiments.

# 1. Homework should be assigned.

Research findings suggest that educators should assign homework in order to increase student achievement. The Lyndon Baines Johnson High School (Austin, Texas) even goes so far as to state that "Home study is a necessary part of each student's educational program. Each student must be expected to spend some time in addition to scheduled class instruction to achieve satisfactor work."

An example of one homework experiment is the one conducted by Ann North and Harvey Foyle, two classroom social studies instructors, at Emporia High School (Kansas) in the fall of 1983. This homework versus no-homework experiment involved 131 students in six sections of American History. In this tenth-grade experiment, the findings indicated that students who had homework attained higher achievement than students who did not have any homework. Homework did increase student achievement. In well-designed homework experiments at the secondary level, homework produced student chievement gains. (Foyle, 1985; Foyle & Bailey, April/May, 1988)

The Robert H. Jamison Junior High School (Cleveland, Ohio) homework policy states that "Homework will be assigned by every teacher a minimum of (3) days per week." Collinwood High School (Cleveland, Ohio) states that a minimum of three homework assignments per week will be given in the following departments: (a) English, (b) Foreign Language, (c) Mathematics, (d) Science, and (e) Social Studies.

# 2. Selected homework items should be graded.

Student achievement increased in mathematics when specific selected items were graded rather than the whole homework assignment. Grading selected items will reduce teacher homework grading time and still increase student achievement. The Robert H. Jamison Junior High School (Cleveland, Ohio) homework policy even goes so far as to state that "Homework will be checked and returned to the pupil not more than (2) days from the given assignment."

# 3. Homework assignments should be shorter.

Shortening homework assignments produced similar achievement results as more lengthy assignments. Thus, teacher time grading homework assignments is again reduced while student achievement goes up.



# 4. Homework comments should be specific.

Teachers' comments provide students with guidance. But on homework assignments, these comments may or may not raise student achievement. Thus, teachers can save time grading homework by limiting written comments. This was clearly the case in mathematics. However, comments for the purpose of student feedback are important. The Fairfax County Public Schools (Virginia) homework policy states that a teacher is to "Evaluate homework and return it promptly so that errors are not repeated." Commenting on student homework for this type of error catching is extremely important.

## 5. Some homework should be voluntary.

Required homework produced greater student achievement than no-homework. However, some voluntary homework may produce similar results as required homework. Thus, not all homework needs to be written, collected, graded, and returned.

# 6. Some homework should be nonwritten.

Reading a homework assignment may produce similar results to reading and then actually writing about that reading. This research is noted in the Cincinnati Public Schools (Ohio) homework policy. "Homework can be classified into four categories: written, non-written, reading and that homework requiring another person or a parent for completion."

# 7. Students should be provided guided practice.

Supervised study or guided practice under the direction of a teacher can reduce student time spent on homework outside of the classroom. If more homework is assigned, how can conflicting claims on student time be handled? As early as 1912, supervised study was used as an alternative to homework. Students who start their homework assignment correctly under the guidance of the teacher are more likely to correctly complete their homework assignments. The Cincinnati (Ohio) homework policy recognizes this by stating that "Time should be spent in class preparing pupils for homework assignments. Time allotted for "his preparation will vary with assignments."

# 8. Homework helps/hints should be provided.

Specific teacher help should be given during class time and on written handouts. Hints and answers produced higher student achievement than no-homework or only problem solutions. Students who were provided immediate reinforcement through teacher provided helps gained the greatest achievement.



# 9. Homework should follow a specific pattern.

Experimental research indicates a specific pattern for homework implementation. Homework must be regularly assigned - usually three to five times a week. Homework must be clearly stated to the student in the text or on a written handout. Homework must be regularly collected - usually the next class period. Homework must be promptly graded - usually that day or evening. Homework must be promptly returned - usually the next class period after it was collected. This pattern also provides immediate feedback or nearly immediate feedback to the student. Providing student feedback is an important psychological principle of learning. (Foyle & Bailey, Sping, 1985)

## OTHER FACTORS

A typical time frame is often stated by school district policies. The Milwaukee Public Schools homework policy indicates that "Generally, one to two homework hours per school day are the rule for high school and middle school. At the elementary school level, oue-half hour to one hour of homework is recommended for grades 4-6, and 15 minutes to one-half hour for grades 1-3."

Homework should never be used as filler or busy work. Nor should homework be used as punishment. Homework is an instructional activity (Foyle, 1989). The Fairfax County Public Schools (Virginia) homework policy clearly states that "Homework should be used as a technique for learning. "Busy work" turned in by the pupil and discarded by the teacher does not further learning; it merely inspires resentment and lessens the effectiveness of the teacher." In addition, "Homework should not be assigned as punishment under any circumstances."

Use of research better inrorms homework policy. Suzanne Ziegler wrote two literature reviews for the Toronto Board of Education.

Homework, document #180, June, 1986 and The Effects of Parent
Involvement on Children's Achievement: The Significance of
Home/School Links, document #185, October, 1987.

The research is clear. Homework reinforces learning. Homework raises student achievement when assigned following specific researched findings. School districts, school staffs, or individual teachers should tie their homework policies to research findings. When those research findings are followed student achievement can be raised.



## Selected School Districts

Dr. Timy Baranoff Director of Elementary Curriculum Austin Independent School District 6100 Guadalupe Austin, Texas 78752-4495

Dr. Bernard M. Barbadora Director of Planning, Research and Evaluation Claude V. Courter Education Center 230 East Ninth Street Cincinnati, Ohio 45202

Ofelia Halasa, Chief Research and Analysis Department Cleveland Public Schools 1380 East 6th Street Cleveland, Ohio 44114

Janie R. Smith
Dir:ctor, Office of Curriculum Services
Fairfax County Public Schools
Department of Instructional Services
The Donald Lacey Instructional Center
3705 Crest Drive
Annandale, Virginia 22003

Terri Stein
Director for Testing Research
Research and Evaluation
Houston Independent School District
3830 Richmond Avenue
Houston, Texas 77027-5838

Dr. Richard D. Frisbie Director, Research, Evaluation and Testing Department Indianapolis Public Schools 120 East Walnut Street Indianar Jis, Indiana 46204

Research Department
Milwaukee Public Schools
Administration Building
P.O. Drawer 10K
Milwaukee, Wisconsin 53201-8210

Joy A. Frechtling Acting Director, Department of Educational Accountability Montgomery County Public Schools 850 Hungerford Drive Rockville, Maryland 20850



Office of Systemwide Student Promotion Programs Rcom 504, Administration Building School District of Philadelphia 21st and The Parkway Philadelphia, Pennsylvania 19103

Porter W. Sexton, Director Planning Department Planning, Research, and Evaluation Division San Diego City Schools 4100 Normal Street San Diego, California 92103-2682

Rancho Santa Fe School District P.O. Box 809 Rancho Santa Fe, California 92067

Suzanne Ziegler Manager, Research Services Toronto Board of Education 155 College Street Toronto, Ontario M5T 1P6 Canada



## Selected References

- Crawford, C. C., & Carmichael, J. A. (1937). The value of home study. Elementary School Journal, 38(3), 194-200.
- Foyle, H. C. (1985). The effects of preparation and practice homework on student achievement in tenth-grade American history (Doctoral dissertation, Kansas State University, 1984). <u>Dissertation Abstracts International</u>, 45, 2474A.
- Foyle, H. C. (1988). <u>Homework: Additional Selected References</u>. A paper presented at the Rocky Mountain Regional Social Studies Conference, Salt Lake City, Utah, April 8, 1988. (ERIC Document Reproduction Service No. ED 294 810)
- Foyle, H. C. (1989). Homework in the Classroom: Can It Make a Difference in Student Achievement. Videotape #904. Sponsored by Instructivision, Inc., National Association of Secondary School Principals, & Research for Better Schools. InService Video Network, 3 Regent Street, Suite 305, Livingston, New Jersev 07039.
- Foyle, H. C. (1989). <u>Homework: A Practical Teacher's Guide</u>. Portland, Maine: J. Weston Walch, Publisher, 321 Valley Street, P.O. Box 658, Portland, Maine 04104-0658. (A Reproducible Book)
- Foyle, H. C. & Bailey, G. D. (1984). <u>Homework:</u> <u>Selected references</u>. (ERIC Document Reproduction Service No. ED 250 275)
- Foyle, H. C. & Bailey, G. D. (1985). <u>Homework in the classroom: Can it make a difference in student achievement?</u> A paper presented at the 40th Annual Conference of the Association for Supervision and Curriculum Development (ASCD), Chicago, Illinois, March 25, 1985. (ERIC Document Reproduction Service No. ED 257 796).
- Foyle, H. C. & Bailey, G. D. (Spring, 1985). A homework guide: Winning the game of student achievement. <u>Kappa Delta Pi Record</u>. Lafayette, Indiana: Kappa Delta Pi. <u>21</u>(3), 68-70.
- Fcyle, H. C. & Bailey, G. D. (Winter, 1986). High school homework: Increasing student achievement. <u>Illinois School Research and Development</u>. <u>22</u>(2), 71-77.



Foyle, H. C. & Bailey, G. D. (April/May 1988). Homework experiments in social studies: Implications for teaching. <u>Social Education</u>. <u>52</u>(4), 292-298.

Foyle, H. C. & Foyle, J. C. (Spring, 1989). Homework guidelines for elementary schools. <u>KASCD RECORD</u>. 7(2). (A journal of the Kansas Association for Supervision and Curriculum Development)

Lyman, Lawrence and Others. (1987). <u>Clinical Instruction and Supervision for Accountability</u>. Second Edition, Dubuque, IA: Kendall/Hunt Publishing Company.

