

DOCUMENT RESUME

ED 371 868

PS 022 469

AUTHOR Kazmierzak, Karen S.
 TITLE Current Wisdom on Homework and the Effectiveness of a Homework Checking System.
 PUB DATE 12 Apr 94
 NOTE 36p.; Exit Research Project, Indiana University at South Bend.
 PUB TYPE Tests/Evaluation Instruments (160) -- Dissertations/Theses - Undetermined (040)
 EDRS PRICE MF01/PC02 Plus Postage.
 DESCRIPTORS *Academic Achievement; Educational Attitudes; German; *Grades (Scholastic); High Schools; *High School Students; *Homework; *Influences; Questionnaires; Second Language Learning; Student Attitudes; *Student Evaluation

ABSTRACT

A study examined the efficacy of homework assignments on the learning and academic achievement of 13 high school students in a second-year German class. During the first and second quarters of the 1993-94 school year, each homework assignment was checked by the teacher and assigned a grade of two points if it was complete, one point if incomplete, and a zero if the assignment was not attempted. During the first quarter of the second semester, homework was assigned as before but was not checked by the teacher. The study found that students' quarterly grades were only one percentage point higher, on average, when home work was checked than when it was not, leading to higher letter grades for three students. A survey of student attitudes on the checking system and homework in general found that most students had a neutral position toward both, neither strongly favoring nor strongly opposing homework and homework grading. (Six appendixes provide information on student performance, a copy of the student questionnaire, and survey results.) (MDM)

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

PS

ED 371 868

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.

Current Wisdom on Homework

and

The Effectiveness of a Homework Checking System

Karen S. Kazmierzak

Indiana University at South Bend

E/S 591 Exit Research Project

April 12, 1994

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Karen S.
Kazmierzak

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

PS 022469

I would like to express my appreciation to the Schurz Library staff for their friendly assistance. I would also like to thank Dr. Gwynn Mettetal for her availability and expertise. Finally, I would like to thank the subjects of my experiment, the German IV students of Clay High School.

No matter what subject an educator teaches, one goal is common, to maximize the learning of each student. Effective teachers employ varied methods and approaches, and strive to fine-tune these to make education a reality. Homework has been perceived as a sound means to increased learning, and is an inherent part of modern secondary education.

Is homework effective in helping students learn? According to a synthesis of homework research since 1962, 14 out of 20 case studies have indicated that homework increases student achievement. In a hypothetical class of 25 high schoolers, the average student will outperform 69% of students in a no-homework class (Cooper, 1989). Other research has suggested a relationship between time spent on homework and achievement (Cooper, 1989). One study in England revealed that secondary students who did more than seven hours of homework per week tended to get one third of a grade better than students who worked less than two hours per week (Tymms, 1992). With this research in mind, many teachers believe that homework can increase student achievement. Consequently, great effort is expended in the homework process.

As a high school German teacher, my goal has been to help each of my students learn as much German as they can. I have viewed homework as many teachers do, as a necessary and worthwhile tool to maximize learning. In the years that I have taught, however, I have noticed that many students do not do homework. Often these students are achieving below-average

grades. I always felt that in most cases these same students could be more successful if they would do their homework. The problem, as I saw it, was in motivating students to do homework. If I could get students to complete the assigned work, then their achievement would improve.

Upon suggestion from the teacher across the hall, I instituted a daily homework checking system. At the beginning of each class, students would put their homework out on their desk. The usual type of homework that I would give was a worksheet. I would go up and down the rows and give two points credit to those students who finished their homework. To those who had the homework partially finished, one point was given. Students who did not have homework to show, would be given a zero. We would then discuss the homework together in class, and students were expected to correct their own papers. Homework points were added up and averaged in with other grades, to determine a student's final grade. Students, therefore, were held accountable for their homework, rewarded for completion, and punished for omission.

When I first started this several years ago, the checking system proved effective. Many more students were getting homework done. As time passed, however, these same students began to slack off. Only when they were in danger of an F or a D, and usually when there was less than three weeks left in the grading period, did students begin to do regular homework.

It was then that I began to wonder if daily homework checks were worthwhile. Boggled down with lesson plans, grading and

other commitments, I continued the daily checks and never took time to examine in detail whether my efforts at checking homework really paid off. For that matter, was I assigning appropriate homework in the first place? Did this homework help improve student learning? Did I need to make changes in my homework practices? Should I abandon the checking system altogether?

Hoping to get some answers for these questions, I have examined current research on homework and have experimented with my homework checking system. The results of my study are reported below.

Current Research on Homework

With the hope of improving my homework practices, current research provides much information. How do secondary educators deal with homework, and what are effective homework practices?

Based on the results of an Illinois survey of 92 high schools, the average teacher distributes approximately two hours of homework per class per week. Among the most common types of homework reported were answering textbook questions, (50% response), and worksheets, (25% response, Murphy, 1989). Assignments which require higher-order thinking skills like essays and research projects were assigned infrequently. Textbook questions and worksheets were seen by the researcher as ineffective homework, some unrelated to the curriculum, others unnecessary repetition of material already learned. That so many teachers give textbook and worksheet assignments may be a

reflection of time constraints. Teachers may not have the time to come up with better assignments.

Another common teacher practice involves the manner in which homework is given. Usually during the last five minutes of class, teachers will give the homework directions orally. Amongst the clock-watching and restlessness that occurs towards the end of a class period, it is inevitable that some students will "forget" the assignment. Other methods of giving homework should be developed. Some teachers give weekly assignment sheets and post the assignments on bulletin boards. With this method, students have no reason to say that they forgot. The Illinois study, in conclusion, describes types of homework and methods of giving homework. According to this research, there is room for improvement.

To make homework a more effective learning tool, homework should complement what students learn at school and should challenge, but not overwhelm the student. Teachers should ask themselves this question when developing homework assignments, "Do the educational benefits (of the assignment) justify the cost in terms of time and trouble (Alleman and Brophy, 1991)?" If unsure of the answer, teachers should re-examine and adapt the assignment to make it more suitable.

The most suitable assignments, according to Alleman and Brophy, engage students in higher-order thinking and allow for some individualizing. Instead of textbook questions and worksheets, which are usually practice work, assign homework that would involve the "making sense" of concepts learned at school.

Games, puzzles, measurement activities, surveys and projects are all alternatives to standard practice assignments. These activities can involve parents and siblings, and initiate dialogue about school.

For foreign language classes, students can be asked as homework to teach a family member what was learned at school and report back to the class. Students can also use a cassette player for listening and speaking skill development. If possible, incorporate television into homework assignments, bringing the world of school and the world outside together. Individualize assignments by giving students a choice. Let them select the vocabulary to learn or have them make up a homework assignment for a change.

Developing a variety of suitable and engaging assignments is a challenge that, when met, should improve the effectiveness of homework. What are other factors that can be controlled in the homework process? In his paper, "Student Accountability for Written Work in the Junior High Class", Worsham observed Math and English teachers to determine which practices were most effective in dealing with written homework (1981). In this paper, ineffective as well as effective practices are outlined.

Most teachers grade homework in one fashion or another. A common, but less effective practice is for the teacher to collect homework, grade it at night, and return it the next day. A weakness in this practice is the time lapse. Students would profit more from immediate feedback. Consequently, it is better to have students check each other's papers as the teacher reviews

and discusses the homework in class. Students would then give the grades to the teacher, who would put them in the grade book. A teacher would have to occasionally collect the papers, to make sure that students were conscientious in checking. An added plus to this method, according to Worsham, is that public knowledge of grades imposes a greater sense of individual accountability.

A second practice that some teachers fall into is waiting several weeks before discussing missed assignments with the students. By then, the quantity of unfinished work could be staggering, and the student might just give up. Effective teachers keep daily records and contact students more frequently about missing work.

Current research gives additional guidelines for more effective homework. Students with perceived low self-esteem, for example, find criterion-referenced grading more motivational (Tuckman, 1992). These students tend to do less homework as the length of an assignment increases. A teacher can expect a higher degree of completeness and quality when several short papers are assigned, rather than one long paper, for example. Therefore, assignments should be kept short.

Other suggestions for making the most out of homework deal with record-keeping and comments. Record-keeping should be kept to a minimum for the teacher. Haines (1990) proposed that the students themselves keep homework diaries and homework folders. These can be useful reference material when parents confer with the teachers. Written comments on homework increase achievement, at least according to the research of Walberg (1985). If

teachers could also give comments orally, then students would have a second source of input on the quality of their homework.

Two final guidelines for better homework concern last minute homework, and homework as punishment. If assigned at the last minute just for the sake of assigning something, homework will probably be no more than busy-work. Time is needed in preparing assignments, and in explaining them to the class. Homework as punishment is unwise, because learning outside the classroom is the point of homework. Learning should be a source of pleasure and should be a motivation in itself. When given as a punitive measure, homework cannot be seen in a positive light. Students will only continue to despise homework.

In summary, a teacher can make homework a more effective tool through careful planning and close attention to these guidelines, for both the type of homework and the mechanics of the homework process. Ideally, assignments should relate to both the curriculum and the real world. Homework should involve higher-order thinking skills and be given in a variety of forms, clearly explained and promptly graded, with appropriate comments. Assignments which meet these criteria are much more suitable than the standard practice worksheets and text questions, hurriedly given at the end of a class period. By observing these standards, a teacher can maximize the benefits of homework for the students.

The Homework Checking System

A teacher's homework practices can be flawless, but will students do the homework? According to one survey, the single most given reason for failure to complete an assignment was, "I didn't want to." Other reasons ranged from, "I forgot", to "It didn't matter to me", or "I didn't see the value in doing it (George, 1993)." In a recent study by Parish and Parish (1989), college students were more inclined to complete an assigned task if they felt that teachers were concerned about their welfare during their childhood. Perhaps student perception of a teacher's concern is also a factor in whether or not homework is completed.

The homework checking system mentioned earlier was the strategy I adopted as I confronted the many excuses given for unfinished homework, and as I observed a connection of low grades and incomplete assignments. Used by several other teachers in my department, this system gave two points credit for completed work and allowed for a brief encounter with each student on a daily basis. Thus, it may well have conveyed to students teacher concern. The homework checking system was instituted to get students to complete more homework with the ultimate goal of higher grades.

Based on the findings of Cooper (1989), Curtis and Nourie (1989), and Van Sciver (1990), this system was sound. The checking system was not overly time-consuming, it was organized, easy to follow, and the points were just the right value because "homework should become a factor in improving grades, not in

damaging them (Van Sciver, 1990, p. 104)." The homework checking system was also in accordance with the behavioral principles of reward and punishment, the two points being the reward, and the zero the punishment. For all of these plusses, I still had some misgivings about the system.

One misgiving concerned the reward/punishment psychology surrounding the system. As B.F. Skinner once maintained, "Education is a form of manipulation (Dilman, 1988, p. 52)." Clearly, the assignment of grades is the final and only "gun" that teachers have in getting students to work. Without the reward of a good grade and the punishment of a bad grade, a teacher has little authority over a student. Making homework part of the grade and evaluating it daily through the checking system might force more students to do homework. But when does daily reinforcement change to daily nagging or intimidation? Foreign languages are requirements for college admission and, as a college prep course, German should also prepare students for the challenges of a university. Will professors give students two points each day for studying and practicing? Does the homework checking system encourage self-motivation? Does this system respect student free will? However effective the checking system may be, I am not in complete agreement with the underlying philosophy. "Thus, where Hamlet saw man as 'like a god', Pavlov and Skinner see him as 'like a dog' (Dilman, 1988, p. vii)."

A second misgiving with the homework checking system concerns its effectiveness. When I first started using homework checks, many more students were doing homework. As time passed,

however, students began to slack off and were less inclined to do assignments, despite the reward of two points or the punishment of a zero. When the homework was done, some of it was done very carelessly. When I would collect homework, it became apparent that some students were not correcting their errors. These same students were also inconsistent in doing homework to begin with. These students were the ones who were in most need of homework and feedback, yet the homework checking system did not seem to affect them.

Although effective at first in terms of getting more students to do homework, my view of the homework checking system changed as time passed. Therefore, I began to question whether the checking system actually had a positive effect on student achievement. Were student grades in German better with or without the system? In the process of checking, recording and tallying homework points, have I, "strayed from the intention of this important learning tool and reduced it to a mere bookkeeping process? (Van Sciver, 1990, p. 104)." This may well be the case with the checking system. Thus, through an experiment with my second-year German students, I attempted to find out how effective the checking system was in promoting student achievement. Through a student survey, I also tried to discover how students perceived the checking system, whether they saw it as intimidating or as motivating. The results of the experiment and the survey, along with the current wisdom about homework in general, are the basis for a self-evaluation of my homework practices.

To determine whether the homework checking system positively influenced student achievement in German class, grades from two nine-week quarters were compared. During the first grading period, November 1, 1993 to January 25, 1994, the homework checking policy was used. Students were assigned grammar or vocabulary exercises from the workbook, three to four times per week. These they would show the following day, and be given two points credit if completed. Homework checked in this manner, accounted for 8.5 percent of the total grade. During the next quarter, January 31, 1994 to March 25, 1994, the homework checking system was dropped. Although homework was assigned and discussed in class as before, students were basically policing themselves.

Have any researchers conducted similar experiments? Unfortunately, there have been few studies about homework checking in the past. According to Harris Cooper, "Research on variations in feedback strategies reveals little reason to choose one strategy over another. Though common sense dictates that some monitoring of homework assignments is important, there is no credible empirical test of this assumption (1989, p. 148)." Consequences for completing homework will increase the rate of completion, according to Cooper, but will not affect in-class performances.

With this in mind, I predicted that the total effect of the checking system on student grades will have been negligible. Some students' grades might go down. These are the ones who may have needed daily reinforcement. An equal number might show an

Increase in grades. There were also a few, no doubt, for whom the system would be neither a benefit nor a detriment. Therefore, my hypothesis was that the homework checking system would play no role in student achievement, as measured by grades.

To explore the fear that the system is construed as manipulative, I surveyed the same group of students who were in the experiment. Towards the end of the second grading period, students were asked to answer a 24-question opinionnaire. The information from this survey will help me determine any negative affective consequences of the homework checking system. This will help me decide whether to continue or abandon the homework checks. My prediction for this survey, is that the results will be evenly divided as to students very much against homework checking, to those in favor of it.

Subjects

The students involved in the homework checking experiment comprised a small class of 13 second-year German students, ages 14-17, six male and seven female. Their ability ranges from exceptional to poor, with the average student grade falling in the C range. This group is of middle-class to affluent status. One student in the group had lived in Germany for a while, and has an advantage over the others. He is not, however, at the top of the class. I implemented the checking system with this group, because language-learning is most difficult at the second-year level. Daily study and practice are necessary, because the

vocabulary and sentences become more complex. Of any group that would need daily homework checks, this would be the one.

Procedures

As mentioned earlier, the second-year students were exposed to the homework checking system for the first semester, 1993-1994 school year. Their grades from the second quarter of this period were compared with those from the first quarter, second semester, 1993-1994 school year.

As the second semester began, I explained to my students that I was conducting an experiment on the homework checking system. I would not go up and down the rows, checking homework and awarding points every day, as I did last semester. Homework would still be assigned and discussed in class, but it would not be checked. I asked students if anyone had an objection to this. No one said anything. They actually smiled and acted pleased that I would not be checking homework. One student asked me about my hypothesis. Not wishing to influence the outcome of the experiment by creating a mind-set in the students, I did not go into details and promised that there would be a complete de-briefing once the experiment was over.

For the rest of the grading period, I conducted class as I normally did, with the exception of the homework checking. At the end of the grading period, I totalled and averaged grades. These grades were compared to the grades from the previous quarter. At this time, students were asked to answer a 24-question survey about homework and the homework checking

system in German class. Students were told not to consult with their neighbor, and not to put their names on the form. I also instructed the students to answer the survey honestly, not to write down what they think I wanted to hear, but to check off the answer that most closely reflects their opinion. I observed the students as they filled out the surveys. The students were silent, and took their time in reading and checking off answers. I believe that their response to the opinionnaire was sincere.

Before the results are discussed, there are some weaknesses in the experimental procedure worth noting. The first weakness involves the teacher as experimenter. Ideally, a teacher should not conduct an experiment on her own students, because personal beliefs can interfere with the administration and treatment of the class. Without even being conscious of it, a teacher's pacing and enthusiasm can have subtle, but nonetheless marked influence on the outcome of the experiment. Whether I personally believe that homework and homework checking are worthwhile could show through. I certainly tried to be the same teacher to my students during the no-checking period, but again, subtleties could have played a role.

A second weakness in homework research concerns the nature of homework itself. Homework is a very complex issue and involves many factors. Why students choose to do or not do homework has even more to do with the nature of the homework assignment and students' other free-time activities, than with the checking policy itself. Therefore, student achievement as reflected in grades could well be tied to extraneous factors.

The results of the grade comparisons, therefore, must be interpreted cautiously.

Finally, the circumstances under which this particular experiment was conducted were far from ideal. Comparing grades from two different grading periods means that, although teaching methods were identical except for the checking system, the curriculum was different. A better method of comparison would involve two classes of many more students. These classes would be taught by the same teacher and would learn the same material. The grade comparison, then, would be less influenced by the nature of the curriculum. For reasons of research, the number of students I teach is, unfortunately, small. Although conclusions from this research are consequently tentative, at least I can profit from a better understanding of how well the checking system promotes achievement for my students.

Results

At the conclusion of the second grading period, the grades of the students were averaged and compared to their grades from the previous quarter, November 1, 1993 to January 25, 1994. Three comparisons were made. (See Appendix A for summaries). The first comparison was from two sets of grades from the first grading period, one set including the homework scores, the other without homework scores. This comparison was made to determine

how many percentage points homework was worth in the final grade under the checking system. There was a significant difference between the grades ($t=2.943$, $p=0.012$). This difference was approximately one percent.

A second grade comparison involved the grades from the first quarter, which included homework, to the grades of the second quarter. The results, ($t=1.060$, $p=0.310$), indicate no significant difference between the two grading periods.

A third comparison used the grades from the first grading period, adjusted to exclude the points from the homework checking system. Not including homework in this calculation gave a more accurate measurement of achievement. The adjusted grades were then compared to the grades from the second quarter. The results of this comparison, like that of the previous one, reveal no significant difference, ($t=0.658$, $p=0.523$).

The survey results, (see Appendices B-F), were also analyzed. As an indicator of general attitudes towards homework in German class, the checking system, its effectiveness, and student independence, the survey revealed an average total student response of 3.096. This is on a scale of 1 to 5, 1 being negative and 5 being positive. When broken down into categories, student general attitude towards homework in German class was $M=3.198$ or about average. Student attitude toward the checking system itself was $M=3.169$. How students perceived the effectiveness of the checking system was $M=3.000$. Concerning the question of student autonomy from the checking system, the mean was 2.744. (See Appendices E and F).

Discussion

The grade comparison study indicated a significant difference in student grades when homework was included versus when it was not included for the first grading period. When homework was included in the grade, student averages increased approximately one percent. When final grades are given in letter form, however, a one percent difference is only significant for those few students who fall on the border line. An examination of the grade differences, (see appendix A), reveals that in only three cases, the inclusion of homework increased the letter grade of the student. Since homework grades do not significantly alter the final grades when both are computed together, then the practicality of the time and effort on homework checking comes into question. Is it really worth the trouble to check each student's homework every day? Particularly when teachers have larger classes, the cost in energy is too high in terms of benefits.

The second two grade comparison studies are supposed to measure the effectiveness of the checking system on student achievement as measured by grades. In both instances, no significant difference in grades was indicated. Whether grades that included homework or grades that did not include homework were compared to grades without the checking system, student grades were hardly affected. In some cases, student grades went down, in others, student grades went up. Class grade point averages from the first quarter without homework and the second quarter without checking were 77.7% and 76.3%, respectively.

This underscores my original hypothesis that the effect of the homework checking system is minimal.

A similar result was reached in an experiment conducted on remedial math students by Cobb and Peach (1990). Although the experiment did not focus on a checking system, it did compare achievement of one group of students who were exposed to two weeks of intensive homework, and two weeks without homework. As in my comparison study, there was no significant difference in the achievement under either condition. This experiment, although considered a pilot study, calls into question the need for daily practice homework. My study casts doubt on the need for daily homework checks. An underlying question, however, concerns the need for daily homework, at least the type that I traditionally assign.

The results of the student survey are important to consider in evaluation of the checking system and my homework policies in general. Basically, each of the 24 questions in the survey fell into one of these categories: attitudes toward the checking system, perceived effectiveness of the checking system, autonomy from the checking system and general attitudes toward homework in German class. Taking all 24 questions together, the average response on a scale of 1-5, 1 being low/negative, 5 being high/positive, was 3.096. This corresponds to the "undecided" column of the survey. In other words, most students had neither negative nor positive views about homework and the homework checking system.

When broken down into various categories, student opinion differs slightly from the general mean. Concerning student attitude towards the checking system, statements like, "The homework checking system is fair", "I like the homework checking system", or "Resume the homework checking system next quarter" were surveyed, with the mean response being 3.169, undecided. This category of statements also asked questions which were based on my own misgivings about the behavioral underpinnings of the checking system. Statements like, "The homework checking system makes me nervous", "I resent having to show my homework every day", and "I feel pressure when homework is checked" related to this. Again, with the average responses being undecided, students were indifferent to the checking system.

Another category of survey items deals with the perceived effectiveness of the checking system. Statements like, "I learned more" and "I did my homework more often" were included to see how the students valued the checking system. Student answers ranged on the average from 1.5 to 4.0, the mean response being a perfect 3.0, which is "undecided".

The survey questions dealing with autonomy included only three statements, "I do homework, even when it is not checked", (M=3.385), "I will not do homework if it is not checked by the teacher", (M=2.077) and "Daily homework checks will not make me do homework, if I don't want to" (M=2.769). Just how autonomous are the students when it comes to doing homework? The mean for this category of questions was (M=2.744), slightly below the

"undecided" range, indicating a small degree of independence from the checking system.

The student opinionnaire, hovering around a rating of 3.875 total average, did not reveal any significant findings to aid my evaluation of the homework checking system. Student opinion was undecided as to the system's effectiveness, student attitude, and independence from the system. This information, coupled with similar findings from the grade comparison test would, again, lead to the conclusion that the checking system has neither a positive nor a negative effect on attitude and achievement. Its effectiveness, therefore, is insignificant and perhaps not worth the effort.

Lastly, student general attitudes about homework in German class were surveyed. (See Appendices E and F). These items did not deal with the checking system, but with homework for German class in general. Statements that were in this part concerned matters like frequency, degree of difficulty and attitudes towards homework. The bar graph, Figure 5, shows no extreme student attitudes, the range being a minimum of 2.714 and maximum 4.000, $M=3.198$, undecided. Perhaps my general homework policies as far as quantity and frequency are at the right mark. In particular, student mean response to "I like to do homework for German class" was at 2.846, near the undecided mark. "We get too much homework in German class" earned a mean rating of 3.231, slightly over the undecided mark. Not many students agreed with this statement, "We don't get enough homework in German class." ($M=1.769$, significant disagreement).

With undecided results from the student survey, and the same concerning the checking system, what changes and improvements should I make in my homework practices? The first change would be to discontinue the daily homework checks. Students do not favor it one way or the other, and the grade comparison has not revealed any pivotal connection between the system and grades. Based on other research, there are a few additional changes that I could make to improve my homework policies. One would concern the types of homework assigned. The checking system kept track mostly of grammar and vocabulary worksheet assignments. If the checking system had no particular bearing on student achievement, perhaps the homework itself is not the right kind, assuming less homework was done when the system was dropped. Many homework experts are calling for the incorporation of higher-order thinking skills into homework in replacement of standard worksheets and questions. A careful analysis of learning objectives and necessary skills could indicate more appropriate homework. Until this is done, homework in my class will be reserved for such assignments as writing paragraphs and preparing for tests.

It is interesting to note here that many of my German students agreed with these suggested changes. During the promised de-briefing session, I shared the results of the survey and grade comparisons. After I wrote the grade point averages from the checking and no-checking quarters on the board, students responded with comments like, "Is that all?" and "So what?" If the checking system was not very effective in helping improve

grades, I suggested, then maybe the homework I assigned was not helpful. At this point, many students were eager to share their views with me. One was quite honest and confessed that during the checking period, she and many of her classmates would just copy the homework before they would come into class. Another student complained that the worksheet assignments were too repetitive. This homework just seemed like busy-work to him.

At this point, I asked the students what types of homework they found helpful to their learning. Among several suggestions, one stood out. If they had to do homework, then writing paragraphs would be the most beneficial. Using German to express their own thoughts was more meaningful than filling out worksheets which expressed the thoughts of others. The de-briefing session, however humbling it was for me, reaffirmed my conclusions about the checking system and types of homework I was assigning. There are, however, additional changes to be made.

Concerning certain day-to-day procedures for dealing with homework, there are a few weaknesses in my practices which can be improved. First of all, time must be taken to explain my written remarks on homework to individual students. Sometimes students do not understand or they choose to ignore what a teacher has written on a paper. By talking individually with students, any uncertainties can be cleared and students will also be compelled to examine their mistakes. Time for this will come from time saved by dropping the checking system.

Another practice which I can improve upon is the manner in which I make assignments. Like many other teachers, I wait until the end of the period and give instruction orally. If I were to give directions for assignments at the beginning of class, students would do homework in class rather than participate in the lesson. The only alternative is to combine the oral with the written, writing the assignment on the blackboard or overhead and also explaining it verbally. Again, time should not be a concern. Students will be getting less worksheet assignments and I will have more class time to properly explain the homework I will be giving.

These are just two of many areas which I can improve upon in my homework practices. Many studies have indicated a relationship between homework and achievement. The grade comparison study of my checking system, however, showed little effect of checks upon achievement. Further study and experimentation are in order. Experiments like this one need to be done under more ideal conditions and with a greater number of students. Then perhaps more valid and reliable findings can give better direction to the educator, whose ultimate goal is to perfect all methods and practices, thus maximizing learning for each student.

Appendix A

Table 1
Student Grades

<u>STUDENT</u>	<u>First Quarter with homework</u>	<u>First Quarter without homework</u>	<u>Second Quarter without checks</u>
Lisa	90.4 (A-)	89.5 (A-)	87.3
Jon	58.7 (F)	57.6 (F)	53.7
Nike	88.5 (B+)	88.9 (B+)	79.1
Angela *	74.9 (C)	72.3 (C-)	73.8
Erin *	80.4 (B-)	79.0 (C+)	73.1
Jesse	88.3 (B+)	87.3 (B+)	88.0
Adam	81.3 (B-)	82.2 (B-)	80.5
Sandra *	69.6 (C-)	69.4 (D+)	78.3
Ryan	69.3 (D+)	67.8 (D+)	48.5
Deana	71.6 (C-)	70.1 (C-)	70.8
Kara	89.8 (A-)	89.8 (A-)	96.2
Carrie	72.8 (C-)	70.4 (C-)	79.8
John	<u>85.9 (D)</u>	<u>86.0 (B)</u>	<u>82.8</u>
Class G.P.A.	78.6	77.7	76.3

* Indicates student for whom homework determined a difference in letter grade.

Table 2
Results of Comparison Studies

First Quarter without Homework to First Quarter with Homework

PAIRED SAMPLES T-TEST ON FIRST9 VS FIRSTNOH WITH 13 CASES

MEAN DIFFERENCE = 0.862
SD DIFFERENCE = 1.056
T = 2.943 DF = 12 PROB = 0.012 Was a significant difference between them

First Quarter with Homework to Second Quarter without Checks

PAIRED SAMPLES T-TEST ON FIRST9 VS SECOND9 WITH 13 CASES

MEAN DIFFERENCE = 2.277
SD DIFFERENCE = 7.742
T = 1.060 DF = 12 PROB = 0.310 NOT significantly different

First Quarter without Homework to Second Quarter without Checks

PAIRED SAMPLES T-TEST ON FIRSTNOH VS SECOND9 WITH 13 CASES

MEAN DIFFERENCE = 1.415
SD DIFFERENCE = 7.758
T = 0.658 DF = 12 PROB = 0.523 NO significant difference between them

Student Survey - Homework Checking System

Dear Students:

To aid my evaluation of the homework checking system, I ask that you respond to the following questions. Place a check mark in the column of the response that best reflects your honest opinion. Do not consult with your neighbor. Do not put your name on the form. Thank you for your help!

Frau Kazmierzak

When answering the questionnaire, the terms homework and homework checking system refer only to homework in German class and the daily checks that we used to have last semester.

1. It is my responsibility to do homework.
2. The homework checking system is fair.
3. The homework checking system makes me nervous.
4. I learned more, when my homework was checked daily.
5. I did my homework less often, when it was not checked daily.
6. I like the homework checking system.
7. I resent having to show my homework every day.
8. Resume the homework checking system next quarter.
9. I will not do homework, if it is not checked by the teacher.
10. I like to do homework for German class.

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree

Appendix C

Table 3
Student Survey Results

(The sequence of figures is in the same order as the questions in the student survey.)

TOTAL OBSERVATIONS: 13

	RESPONSE	FAIR	NERVOUS	LEARNMOR	DIDLESS
N OF CASES	13	13	13	13	13
MINIMUM	4.000	1.000	1.000	1.000	1.000
MAXIMUM	5.000	5.000	5.000	4.000	4.000
MEAN	4.462	3.615	3.462	2.692	2.846
STANDARD DEV	0.519	0.961	0.967	1.032	1.068

	LIKESYS	RESENT	RESUME	WONTDO	LIKEHW
N OF CASES	13	13	13	13	13
MINIMUM	1.000	1.000	1.000	1.000	1.000
MAXIMUM	5.000	4.000	5.000	4.000	4.000
MEAN	3.000	3.385	2.923	2.077	2.846
STANDARD DEV	1.155	1.121	1.256	0.954	1.068

	TOOMUCH	TEACHJOB	UNFAIR	PRESSURE	EVENNOT
N OF CASES	13	13	13	13	13
MINIMUM	2.000	2.000	1.000	1.000	2.000
MAXIMUM	4.000	5.000	5.000	5.000	5.000
MEAN	3.231	4.000	3.615	3.385	3.385
STANDARD DEV	0.832	1.225	0.961	1.193	1.044

	LEARNLES	WONTMAKE	ABOLISH	NOTENOUG	TOOEASY
N OF CASES	13	13	13	13	13
MINIMUM	1.000	1.000	1.000	1.000	1.000
MAXIMUM	5.000	5.000	4.000	3.000	4.000
MEAN	3.538	2.769	3.077	1.769	2.769
STANDARD DEV	1.127	1.235	0.954	0.725	0.927

	SERIOUSL	MOREOFTE	LESSPRES	HARD
N OF CASES	13	13	13	13
MINIMUM	1.000	1.000	1.000	2.000
MAXIMUM	4.000	4.000	4.000	5.000
MEAN	2.923	2.923	2.308	3.308
STANDARD DEV	1.115	1.256	0.947	0.947

Appendix D

Summary of Student Survey

Figure 1

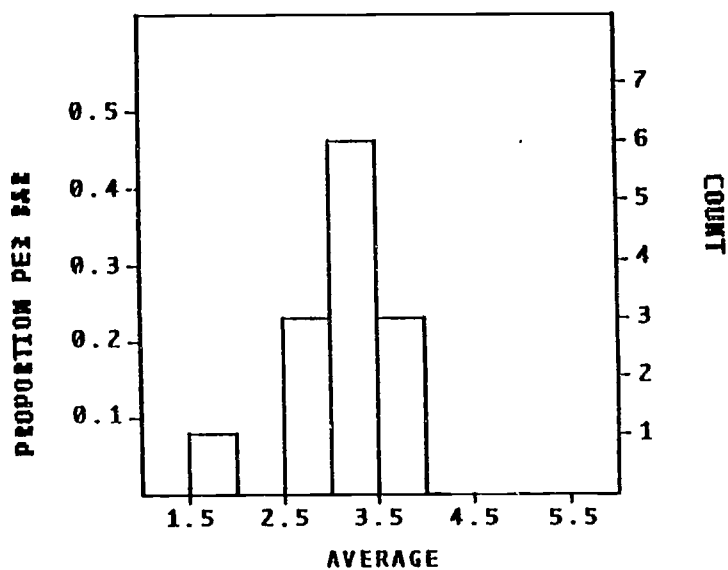


Table 4

	AVERAGE
N OF CASES	13
MINIMUM	1.875
MAXIMUM	3.875
MEAN	3.096
STANDARD DEV	0.555

Appendix E

Student Survey Results - Categorized

(Survey Items were grouped and analyzed as follows:

Attitude Towards Checking System

Figure 2

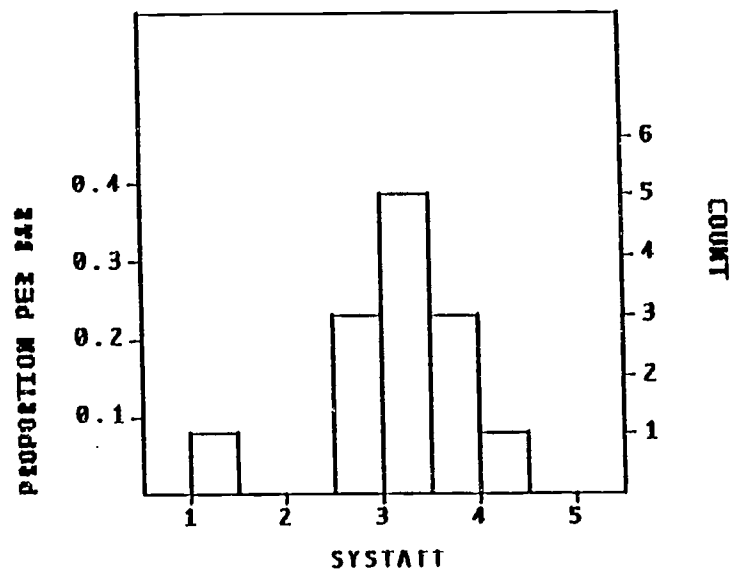
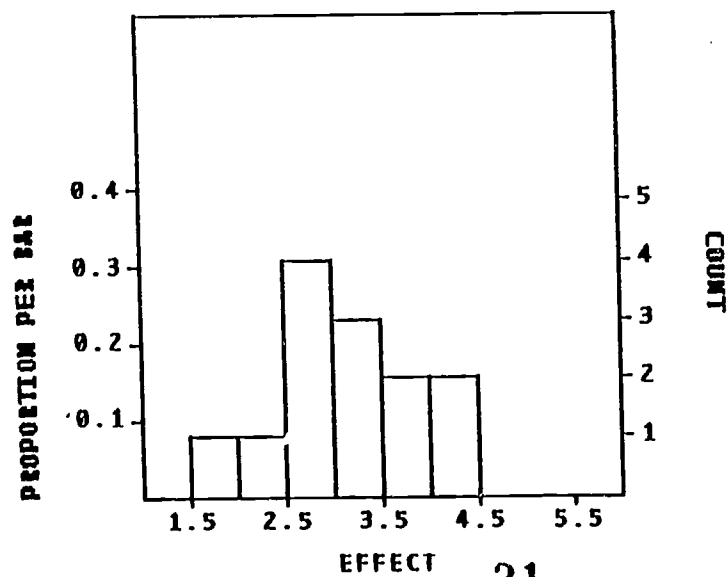
Perceived Effectiveness of Checking System

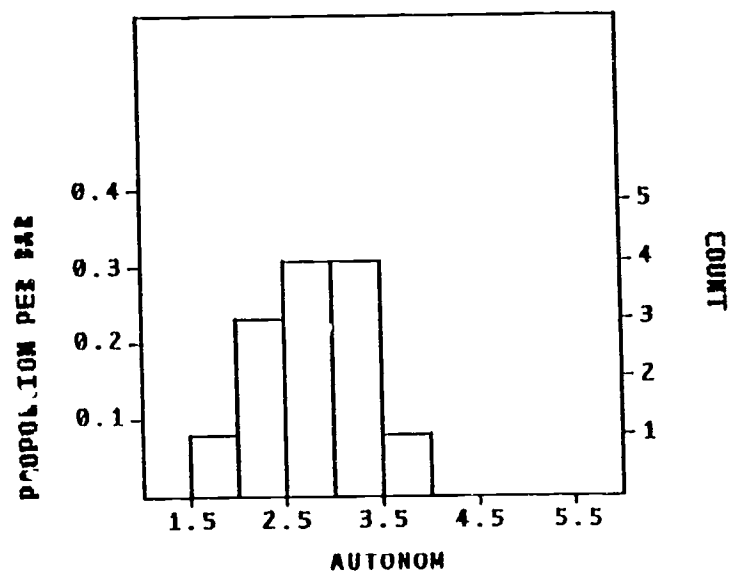
Figure 3



Appendix E., cont.

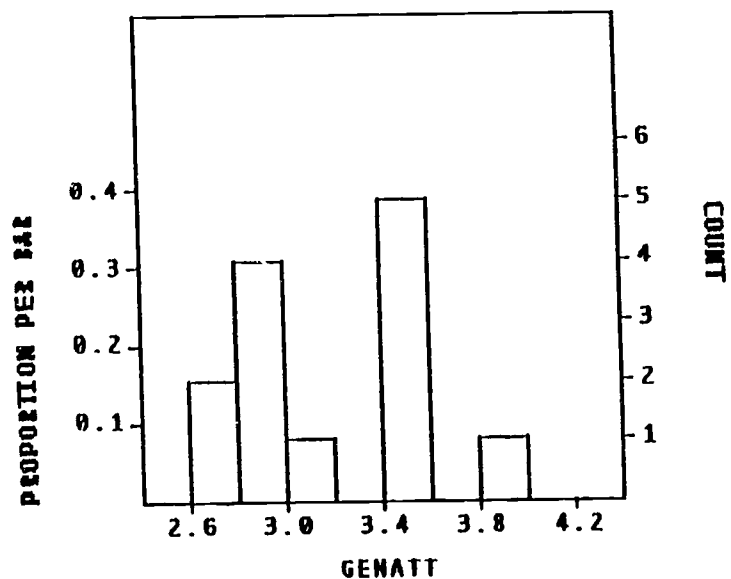
Student Autonomy: Homework Checking System

Figure 4



General Attitude Towards Homework In German Class

Figure 5



Appendix E

Table 5
Summary of Four Categories

TOTAL OBSERVATIONS: 13

	GENA11	SYSTAT1	EFFECT	AUTONOM
N OF CASES	13	13	13	13
MINIMUM	2.714	1.000	1.500	1.667
MAXIMUM	4.000	4.200	4.000	3.667
MEAN	3.198	3.169	3.000	2.744
VARIANCE	0.162	0.662	0.510	0.392
STANDARD DEV	0.402	0.814	0.714	0.626

References

- Alleman, J., & Brophy, J. (1991, May). Reconceptualizing Homework as out of School Learning Opportunities. Occasional paper 135 sponsored by the Institute for Research on Teaching, College of Education, Michigan State University, East Lansing.
- Cobb, S., & Peach, W. (1990). The Effects of Homework on Academic Performance of Learning Disabled and Non-handicapped Math Students. Journal of Instructional Psychology, 17, 168-171.
- Cooper, H. (1989). Homework. New York and London: Longman Press.
- Cooper, H. (1989). Synthesis of Research on Homework. Educational Leadership, 47, 89-91.
- Curtis, D. & Nourie, B. (1989) Homework: More than Its Trouble. American Secondary Education, 30-33.
- Dillman, I. (1988). Mind, Brain and Behaviour: Discussions of B.F. Skinner and J.R. Searle. London and New York: Routledge.
- George, C. (1993). The Quantity of Homework at the Junior High School Level. Unpublished exit project, Indiana University at South Bend, South Bend, Indiana.
- Haines, J. (1990). A Homework Checking System - Maximizing the Information, Minimizing the Time. Clearing House, 63, 229-230.
- Murphy J. & Decker, K. (1990). Homework Use at the High School Level: Implications for Principals. National Association of Secondary School Principals Bulletin, 74, 40-43.
- Parish, J. & Parish, T. (1989). Why Doesn't Johnny do his Homework? Reading Improvement, 26, 237-238.
- Tuckman, B. (1992). Does the Length of Assignment or the Nature of Grading Influence the Amount of Homework Students are Motivated to Produce? The Journal of General Education, 41, 190-198.

Tymms, P.B. & Fitz-Gibbon, C.T. (1992). The Relationship of Homework to A-Level Results. Educational Research, 34, 3-10.

Van Sliver, J. (1990). Is More Homework Better? National Association of Secondary Schools Principals Bulletin, 74, 103-104.

Walberg, H., Paschal, R. & Weinstein, T. (1985). Homework's Powerful Effects on Learning. Educational Leadership, 42, 76-79.

Worsham, M. (1981). Student Accountability for Written Work in Junior High Classes. (R&D Rep. No. 6112). Austin, Texas: Research and Development Center for Teacher Education, The University of Texas.

Karen S. Kazmierzak

23364 Lawrence
South Bend, Indiana 46628
219-233-3799

Education

M.S. Secondary Education, Indiana University, South Bend, 1994
B.A. German, University of Notre Dame, 1981
Indiana Secondary Teacher's License, 1991

Professional Experience

German Teacher, grades 9-12, Clay High School, South Bend,
Indiana, 1984-present.

Participant, "Deutschland 1988" - Summer workshop for German
teachers, Flensburg, Germany, sponsored by St. Olaf College,
Northfield, Minnesota.