

## **Homework: Its Contribution to Students' Achievement and Teachers' Classroom Practice**

Adane Tessera\* and Dawit Mekonnen\*

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### **Introduction**

#### **Statement of the Problem**

Homework, due to its various senses and nature, has been a major cause of disagreement among parents, teachers, and educators. In fact, according to Hedges (1971), homework was listed as one of the ten contemporary issues in education. Similarly Coulter (1987) noted that there were few issues in education, which were as argumentative as homework. This may appear surprising when we observe the stable triumph homework has achieved in our country, though

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teachers' purpose and the advantage it provides to students remain unclear.

According to Coulter (1987), its advocates claim that homework facilitates students' desire to learn, develops independent learning skills, and allows time for practice and application of what has been learned in schools. Its critics, on the other hand, argue that it interferes upon students' leisure time and hampers their relationship with the outside community. However, its purposes, importance and nature being considered, interests in homework among school communities, professional educators and parents have remained high since the beginning of the nineteenth century (Hedges, 1971).

In spite of this fact, Rosenshine, as cited in Coulter (1987), noted that there was little study of teachers' or pupils' actual classroom behavior related to homework. He further noted that homework remains largely unmentioned in the writings of learning time by researchers even though it takes much of the school time, as students grow older.

Moreover, its contribution to students' academic achievement has been an issue of argument among educators. There are also research studies that are in favor of or are against homework's contribution to students' academic achievement. One of the most thorough investigations of the effects of homework was the one made by Goldstein (1960), as cited in Hedges (1971), who examined all the studies on homework listed in the education index. He reported that the data in most of the studies supported the idea that regularly assigned homework contributes to higher academic achievement. Besides, Coulter (1987) noted that more recent research on homework has offered a clear support for the view that homework enhances academic achievement if it is regularly assigned. Despite the fact that research studies on the effect of homework are scanty, a quantitative synthesis of available researches shows that homework facilitates achievement and attitudes of students, especially if teachers provide their feedback (Walberg et al, 1985).



One can see from these findings and views of scholars that regular assignment, proper follow up, and comments are indispensable attributes related to homework if it has to enhance students' achievement. Hence the benefit of homework seems to rely more on how it is carried out rather than on whether a teacher assigns homework or not.

Barber (1986) reported a study with somewhat a different conclusion. He said that a close examination of the research that Walberg et al (1985) reviewed does not support the idea that homework contributes to academic achievement. Like Walberg et al, he noted researchers have been trying to link homework with achievement test gains for many years but with very little luck. Seemingly, Barber noted, of the 15 studies reviewed by Walberg et al only four actually measured the effect of homework and had mixed results. Two of the four studies (Gray and Allison, 1971; Tupesis, 1973 as cited in Walberg et al, 1985) reported no statistically significant differences between the homework and no-homework treatment in achievement as measured by test scores.

On top of these arguments, there are also various views that emphasize its influence specific to some academic subjects and ability levels. For instance, Walberg et al (1985) said that homework contributes more to reading and social studies tests than to tests of other subjects. However, it conferred equally beneficial effects on children of different socio economic groups and various ability levels. In contrast to this, the International Association for Evaluation of Education Achievement, as cited in Coulter (1987), indicated positive relationships in certain subjects, the strongest relationship being for mathematics and science and the higher ability students to profit more from homework.

Apart from these, there are scholars who believe that the benefits of homework depend on grade level of students, teachers' behavior, and nature of the homework. Cooper (1989), for instance, argues that homework has a substantial effect on high school students,



intermediate effect on junior high school students, but negligible effect on elementary school students. This entails, according to him, that homework should have different purposes at different grades and be a mixture of mandatory and voluntary questions. As such, the purpose of homework could be fostering positive attitude and habits for younger students where as facilitating acquisition of knowledge for older students. To these ends, he noted, teachers should vary the frequency and duration of mandatory assignments on the basis of students grade level. According to him, students from grades 1 to 3 would be given one to three assignments in a week, students from grades 4 to 6 two to four assignments a week, each lasting 15 to 45 minutes, students from grades 7 to 9, three to five assignments, each lasting 45 to 75 minutes and students from grades 10 to 12, four to five assignments a week each lasting 75 to 120 minutes.

With regard to teachers' behavior, using homework as punishment is one that could negatively affect the value of homework (Good and Brophy, 1987). They warned that using homework as punishment might make students to view it as hard and unpleasant, and then develop unfavourable attitude towards it. Another such deterring teachers' practice is the emphasis on checking the completion of homework rather than the accuracy of performance (Arends, 1994). What this means to students, according to Arends, is that *homework is to get something on paper* (p.85) Similarly, Cole and Chan (1994) and Good and Brophy (1986) noted that teachers are expected not only to check whether homework is done or not, but also to provide feedback.

So far, attempts have been made to show the controversies on the effect of homework on learning and teachers' practice that would promote or hinder its value for students' learning. The research literature doesn't seem to be conclusive and consistent enough to support one position. Equally attention seeking factors are teachers' behaviors related to homework, that might imply a positive or negative outcome in the teaching learning process, and students' attitude toward homework. However, it is a paradox that there had been very



little study of teachers and pupils actual classroom behavior related to homework. The situation in our country seems even too astounding as the researchers hardly come across any local work on homework's contribution on learning and what the behaviours of teachers towards homework look like.

Homework is one of the commonest and well-known instructional activities in our school system. Though the purposes teachers want to accomplish might not be evident, teachers usually assign a number of questions from textbooks as homework. This is particularly true in mathematics and language.

In the light of the above arguments and the fact that no research of this kind has been made on our school system, the assessment into the practice of homework seems in order. This study is, therefore, designed to investigate the contribution of homework to students' achievement and examine teachers' classroom behavior in relation to homework in Bahir Dar Zuria schools.

This study, thus, is intended to seek answers to the following questions:

- Is there a significant difference in Math and English tests achievement between homework and no-homework group students?
- Does homework have a similar effect on various ability level students?
- To what extent do teachers classroom homework practice match with suggested principles?
  - What purposes do teachers want to accomplish when assigning homework?
  - Do teachers appropriately assign homework?



- Do teachers follow up and provide feedback to the students?
- Does the amount and frequency of teachers homework match with students grade level?

The answers to these questions, it is hoped, would provide additional evidence in the homework research literature and promote the development of a comprehensive view on the benefits of homework. Schools at large and teachers in particular could also get the chance to look into their practice and make necessary improvements based on the findings. Above all, the study would help to break the ice and initiate other research work and discussion on the issue in our country.

### **Design of the Study**

This study is a combination of experimental and survey methods.

### **Subjects of the Study**

For the experimental study two grade ten sections consisting of students who had a relatively similar first semester result in mathematics and English were purposely selected from Tana Haik Senior Secondary School. The average first semester result of the students in the two sections were found to be 69.6 and 66.8 for English and 67.2 and 64.5 for mathematics.

The students in these sections were classified as high achievers, average achievers and low achievers by adapting the Ministry of Education criteria as cut-off points. That is, students who scored 80 and above were labeled as high achievers, those who scored from 50 to 79 were labeled as average achievers and those who scored below 50 were assigned as low achievers.

Based on these demarcations, from a total of 153 students, 27 students were found to be in the high achiever category; 63 students



were found to be in the average achiever category; and the other 63 students were found to be in the low achiever category in English. In mathematics, 24 students were found to be in the high achiever category, 67 in the average achiever category and 62 students in the low achiever category.

On the basis of these figures an attempt was made to match the two sections in different achievement levels. In doing so, 13 students were found with scores of 80 and above in one of the sections and in the other section 14 students were found with scores of 80 and above in their first semester English result. One student was excluded from the study by lottery system to match the two sections. In the case of mathematics first semester achievement, 11 students were found with scores of 80 and above in one of the sections and 13 students were found in the other section. Two of the students were taken out from the study through lottery system. In matching the two sections in relation to average achievers and low achievers, only those students with equal result in the first semester were included. Finally, the two sections were assigned as homework (experimental group) and no-homework (control group) through randomization by tossing a coin. Mathematics and English were selected to be used in the experiment.

For the survey study, 33 teachers were selected from Bahir Dar Zuria Woreda Schools on the basis of the schools' accessibility and time convenience for observation. Fourteen of these teachers teach from grades 1 to 4, 10 of them teach from grades 5 to 8 and the remaining 9 teachers teach from grades 9 to 12. Ten of the teachers teach Mathematics, 9 of them teach English and/or Amharic and 14 teach different subjects including English, Amharic and mathematics.

### **Data Gathering Tools and Procedures**

Tests, questionnaire and classroom observation were used to gather data. As indicated above, two grade ten sections were selected for the experimental study. The two sections were taught English for 20 periods by one of the researchers and an assistant of the researchers



(B.Ed in Mathematics) taught Mathematics for 20 periods. This was done by taking over the responsibility of the regular teachers class time. Hence, though all students in the two sections were taught, only those that were purposely selected were used for the analysis.

In the process of teaching, the homework group students were assigned homework in 12 of the periods for each subject. The students were monitored for doing their homework and were provided feedback by the teachers. The feedback was provided by answering all homework questions. The students were also made to take part by answering questions orally and in certain cases by writing their responses on the blackboard. The no-homework group students were taught in the conventional way and they were not given any homework.

From the 12 periods homework, 35 students failed to fulfill their assignments in mathematics and 28 students in English. At the end, the teachers (researchers) who handled the classes developed tests for mathematics and English. The English test, consisting of 20 items, was multiple choice type. The mathematics test, consisting of 20 items, was multiple choice type (16) and work out (4). Subject area experts (an assistant professor in mathematics and a lecturer in English) gave their comments on the tests. Finally, the tests were given to the two sections and the reliability coefficients (using split half method) were found to be 0.85 and 0.88 for English and mathematics, respectively.

A questionnaire was also used to examine the practice of teachers in relation to homework. The questionnaire items (7) were partially open-ended. They were intended to examine teachers' beliefs related to homework, its frequency, the duration teachers expected students to spend and the purposes they wanted to accomplish. Observation was also used to examine teachers' actual classroom practice related to homework. The observation was intended to uncover teachers' behavior related to the way they assigned and monitored homework. In examining their assignment techniques, checklists from Good and



Brophy (1987) were adapted. In looking into their monitoring techniques, observers simply recorded what they were doing. Each teacher was observed twice, hence a total of 66 observations were made. The observers were one of the researchers and the assistant.

### Data Analysis Tools

In analyzing the data percentage, mean value, t-test, and a two-way ANOVA were used.

### Presentation and Analysis of Data

In the following section results obtained were presented, analyzed and interpreted.

**Table 1: Mean: Sum & Scores of Homework and No-Homework Groups in English**

Grouping	Achievement Level			Total
	High Achievers	Average Achievers	Low Achievers	
Home work group	$\Sigma x_{11}=210$ N = 13 $\bar{X} = 16.15$	$\Sigma x_{12} = 192$ N = 17 $\bar{X} = 11.29$	$\Sigma x_{13} = 215$ N = 29 $\bar{X} = 7.41$	$\Sigma x = 617$ $\bar{X} = 10.45$
No-Homework group	$\Sigma x_{21} = 188$ N = 13 $\bar{X} = 14.46$	$\Sigma x_{22} = 174$ N = 17 $\bar{X} = 10.23$	$\Sigma x_{23} = 200$ N = 29 $\bar{X} = 6.89$	$\Sigma x = 562$ $\bar{X} = 9.62$
Total	$\Sigma x = 398$ $\bar{X} = 15.30$	$\Sigma x = 366$ $\bar{X} = 10.76$	$\Sigma x = 415$ $\bar{X} = 7.15$	

The results of Table 2 indicate that there is a significant difference ( $F_{1,112} = 7.51, P < 0.05$ ) between students who were assigned homework and students who were not assigned homework in English. The sample students were given a 20 item English test based on what they were taught and the mean score of homework group students was 10.45 and the mean of no-homework group students was 9.62



(Table 1) indicating that homework group achieved better than no-homework group.

**Table 2: Two –way ANOVA for Homework Grouping and Achievement Levels in English**

Source of Variation	Df	SS	MS	F	F-critical
Homework Grouping	1	25.54	25.54	7.51	3.92
Achievement Level	2	1221.58	610.79	179.53	3.07
Grouping Vs Achievement Levels (interaction)	2	6.53	3.265	0.959	3.07
Within cells	112	381.26	3.404		

**Table 3: Means and Sum of Scores of Homework and No Homework Groups in Mathematics**

Grouping	Achievement Level			Total
	High Achievers	Average Achievers	Low Achievers	
Homework Group	$\sum x_{11} = 177.5$ N = 11 $\bar{X} = 16.13$	$\sum x_{12} = 226.5$ N = 19 $\bar{X} = 11.92$	$\sum x_{13} = 203.5$ N = 26 $\bar{X} = 7.82$	$\sum x = 607.5$ $\bar{X} = 10.84$
No-Homework Group	$\sum x_{21} = 161$ N = 11 $\bar{X} = 14.63$	$\sum x_{22} = 212.5$ N = 19 $\bar{X} = 11.18$	$\sum x_{23} = 189$ N = 26 $\bar{X} = 7.26$	$\sum x = 562.5$ $\bar{X} = 10.04$
Total	$\sum x = 338.5$ $\bar{X} = 15.38$	$\sum x = 439$ $\bar{X} = 11.55$	$\sum x = 392.5$ $\bar{X} = 7.54$	

Similarly, the same table shows that there is a significant difference ( $F_{2,112} = 179.53, P < 0.05$ ) among high, average and low achievers in their performances of the test. The mean score of high achievers was 15.30, the mean score of average achievers was 10.76 and those of low achievers was 7.15 (Table 1). However, the interaction effect (the grouping of students as homework and no-homework versus achievement level) was not found to be statistically significant ( $F_{2,112} = 0.95, P > 0.05$ ).



The results in Table 4 indicate that there is a significant difference ( $F_{1,106} = 7.05$ ,  $P < 0.05$ ) between students who were assigned homework and students who were not assigned homework in mathematics. The mean score of homework group students was 10.84 while that of no-homework group students was 10.04, indicating homework group students performed higher mean score than no-homework group students. The same table shows that there is a significant difference ( $F_{2,106} = 237.65$ ,  $P < 0.05$ ) among high, average and low achievers in their performance of the test.

However, the interaction effect was found to be non-significant ( $F_{2,106} = 1.5$ ,  $P > 0.05$ ) concerning their performance.

**Table 4: A Two-way ANOVA for Homework Grouping and Achievement Level in Mathematics**

Source of Variation	Df	SS	MS	F	F-critical
Homework Grouping	1	15.1	15.1	7.05	3.92
Achievement Level	2	1017.18	508.59	237.65	3.07
Grouping Versus Achievement (interaction)	2	6.48	3.225	1.507	3.07
Within cells	106	227.2	2.14		

The results of this study as presented in Tables 3 and 4 show a statistically significant difference of achievement in favor of homework group students in both subjects. This may be due to the fact that as students were assigned homework, they might have the opportunity to deal with it without any limit in time, hence an increase in studying time. Moreover, they could also be exposed to a situation where they could manage things independently. Therefore, homework group students may have better opportunity of achieving than those without homework. Supporting this idea, Davies (1981) said that homework facilitates independent learning through practice and application. The findings of Foyle (1974), as cited in Polachek et al (1978), favors this. He did an experiment by assigning two groups as homework and no-homework in social studies and found that students assigned homework achieved a significantly higher level than those without assignment.



When the interaction between variables (achievement versus grouping) is considered, Polachek et al (1978) stated that homework may have a compensatory effect. For example, in his study, it appeared that low ability students who completed a 3 to 5 hours a week of homework achieved higher grades than average ability students who did no-homework at all. But the findings of this study (presented in Tables 2 and 4) failed to show consistency with the results of Polachek et al. This may be due to the shortage of time in which the students were under treatment.

The aforementioned results indicate the contribution of homework in toto without specifically indicating which group of students in homework (high achievers, average achievers, or low achievers) outscores their counterparts in no- homework group. To this end, a t-test was applied.

**Table 5: Comparison of English Test Achievement between Homework and No-Homework Groups within Achievement Levels**

Groups	df	t-calculated	t-critical
Homework high achievers versus no-homework high achievers	24	2.25*	1.71
Homework average achievers versus no-homework average achievers	32	1.61	1.69
Homework low achievers versus no-homework low achievers	56	1.02	1.67

\* $P < 0.05$

A statistically significant difference was found between high achievers of homework group and no-homework group as the t-calculated value (2.25) is greater than the t-critical value (1.71) at alpha level of 0.05. That is, high achievers in homework group outscores their counterparts in no-homework group. But there were no significant difference in the remaining two cases.

Table 6 indicates that high achievers and low achievers in homework group outperformed significantly their counterparts in no-homework



group. But no significant difference was observed between the average achievers in the two groups.

Supporting the findings of this study the International Association for Evaluation of Educational Achievement, as cited in Coulter (1987), reported that higher ability students benefited more from homework than the average and low ability students. One possible reason might be higher ability students could have a better understanding of classroom instruction which would help them to do homework questions successfully, thereby giving them the opportunity for further practice that could lead to mastery. Secondly, such students may have a positive view to work out homework questions.

**Table 6: Comparison of Mathematics Test Achievement between Homework and No-Homework Groups within Achievement Levels**

Groups	df	t-calculated	t-critical
Homework high achievers versus no-homework high achievers	20	2.84*	1.72
Homework average achievers versus no-homework average achievers	36	0.69	1.68
Homework low achievers versus no-homework low achievers	50	4.14*	1.67

\*P < 0.05

Though not true in English, low achiever students of homework group achieved better than their counterparts in mathematics. Notwithstanding the critics that the justification could not lend itself to the absence of variation in English achievement, the assumption that homework may have compensatory effect on low achievers sounds worth mentioning to explain the variation in mathematics achievement. That is to say, low achievers could use the homework as make up in grasping the points which they might have missed in classroom instruction.

Thus far we have seen that homework group students outperformed their counterparts in no-homework group both in English and



mathematics. In the following section we shall investigate teachers' practice in relation to homework.

Results in Table 7 indicate that 14 (42.4%) teachers assign homework four times a week, 16 (48.5%) three times a week and 3 (9.1%) and 2 times in a week. Most teachers (89.9%), and, of course, all the teachers who teach from grades 1 to 4, reported that they gave homework three or four times in a week.

When the frequency of homework assigned by teachers is examined against Cooper's (1989) recommendations, teachers who teach from grades 1 to 4 appear to overestimate the frequency and engage students in homework more frequently. According to him, students from grade 1 to 3 are expected to work 1 to 3 assignments in a week that may last no more than 15 minutes for each assignment. Though teachers in this study reported that the minimum frequency of assigning homework in a week is three, it would certainly be more than that as students might be expected to do homework in different subject matters. That is to say students may have to do this amount (i.e. 3) of homework for various subjects, at least English, mathematics and Amharic.

**Table 7: Weekly Frequency in Assigning Homework in Relation to the Grade Levels**

Weekly Frequency	Grade levels teachers teach			Total
	1-4	5-8	9-12	
5	-	-	-	-
4	6	5	3	14(42.4%)
3	8	2	6	16(48.5%)
2	-	3	-	3(9.1%)
1	-	-	-	-

Similarly, teachers of grades 5 to 8 exaggerated the frequency of homework to be assigned to students. Cooper (1989) recommended two to five assignments in a week to this level students. The teachers in the study, however, reported a frequency of 2 to 4 times in a week. This figure (2 to 4) shows the number of homework a single teacher



could assign at that level. One could think of what the frequency would be as students would be expected to do homework for various subjects.

No matter how better it is found to be, the same holds to be true for teachers of grades 9 to 12 (3 to 4 assignments by a single teacher as opposed to three to five assignments in a week).

As a whole, the majority of teachers responses indicate that they are using homework more frequently than from what is suggested. Worth noticing, but unfortunate, is that teachers at lower grades reported that they gave homework to their students more than the frequency that is recommended to higher grade students. Interestingly enough, though the frequency of homework was found to be exaggerated by the majority of teachers, their perception of the frequency of homework tended to come slightly closer to the recommended one as the grade level they taught increased.

**Table 8: Average Number of Questions and Amount of Time Reported by Teachers Assigned as Homework to the Students to Do in a Week**

	Grade levels teachers teach		
	1 - 4	5 - 8	9 - 12
Average number of Questions in a week	20.8	24.7	21.4
Average number of hours in a week	6.50hrs	7.45hrs	7.18hrs
	<i>15 - 180 min.</i>	<i>30 - 375 min.</i>	<i>375 - 600min.</i>

Note: The minutes in italics show the suggested time (Cooper, 1989)

The number of homework questions teachers assigned in a week and amount of time teachers expected students to spend in doing homework was also assessed by the study. The minimum number of questions reported by teachers was found to be 15 and the maximum number of questions, 35. As to the amount of time, the minimum number was found out to be 5 and the maximum, 12. The average



number of questions assigned as homework and the time students spent doing homework were calculated.

Like the frequency of assignment, the average duration of time lower grade level teachers expected their students to spend in doing homework appeared to be more than the suggested one. Students from grades one to four were expected to spend from 15 minutes to 3 hours in a week (Copper, 1989). Whereas the average amount of time expected to be spent in teachers' belief (and probably what they were assigning) was 6.5 hours. It was well above three fold of what should be. One could think of the consequences this burden might bear on students' attitude toward homework and learning. The amount expected by teachers from grade 5 to 8 was also high, 7.45 hours, which was above the maximum limit. The amount (7.18 hours) expected by teachers from 9 to 12 was between the minimum and the maximum limit, but very well close to the minimum amount suggested in literature. The discrepancy between the amount of time recommended in the literature and teachers' expectation was found to be too large for lower grade teachers. An improvement in the gap was observed as the grade level teachers taught increased.

The other intent of the study was to examine whether teachers assigned mandatory and voluntary questions as homework, and the purposes they wanted to accomplish. All teachers responded that they assigned only mandatory questions. The literature, however, maintained the importance of including voluntary questions so as to meet the need of individual or group of students (Keith and Page, 1985). All teachers also stated that the purposes of giving homework were 'to develop student learning' and 'to cover contents in a textbook in a specified period of time'. Seventeen (51.6%) and sixteen (48.4%) teachers also said that the purposes were 'to fulfill what was expected of them by higher bodies' and 'to punish those students who did not complete homework,' respectively.

Although it seems that teachers assign homework for developing students' learning, one could still see a number of teachers assign



homework for content coverage and/or punishment thus going against their purpose. In this regard, Good and Brophy (1987) warned that students might view homework as hard and unpleasant experience and develop unfavorable attitude if teachers use it as a punitive tool.

Observation was also made to assess teachers classroom behaviors related to homework. Research has identified some classroom behaviors that teachers should carry out during and after assigning homework. Good and Brophy (1987) stated that giving direction by solving example problems, checking for understanding and dealing with confusions (if students are confused) are key behaviors in assigning homework.

From the 66 observations carried out in this study, it was found out homework was assigned in 41 of the observations.

From Table 9, it is observed that only in seven instances teachers gave directions by demonstrating how the assignment was to be performed. In the remaining 34 cases the teachers' directions were coming through verbal descriptions as to which questions were to be done as homework: 'Do the questions on page this from number this to this' or 'Do the even or odd numbered questions' were the commonest directions used by teachers. It was also only in three observations that teachers asked whether directions were understood and only in one occasion that students asked for more clarification and the teacher told them to ask their friends.

**Table 9: Teachers Behavior in Assigning Homework**

Behaviors	Observed frequency	Not seen
Giving direction by solving example problems	7	34
Checking for understanding	3	38
Dealing with confusions	2	39

Follow up (monitoring) and feedback were two indispensable activities that shaped students' view of whether homework was relevant and



important (Cole and Chan, 1994) and greatly determined the effect of homework on learning (Arends, 1994). From the 66 observations, teachers were observed beginning their lessons with homework questions in 31 instances. In all of the 31 cases teachers began their lessons by "attempting to monitor the fulfillment of assigned homework."

In many of the observations, teachers' monitoring strategy was coming in the form of verbal order: 'Those of you who don't do homework raise your hand'. One could pose a straight forward refuting reaction to this strategy. It is likely for students not to raise their hand though they don't do the assigned homework. It is also unrealistic to attempt to assess students homework in seconds eye shot, and unfortunately it may develop undesirable behavior or belief on part of students. It is just saying, as Arends (1994:85) writes, "homework is to put something on paper."

**Table 10: Ways Teachers Used to Monitor Homework**

Ways	Frequency
Asking students who didn't do homework to raise their hand	23(74.2%)
Wandering and making a glimpse on students exercise book	5(16.1%)
Making students see their peers' exercise books	3(9.8%)

**Table 11: Teachers Feedback-Providing Strategies**

Strategies	Frequency
Doing all questions turn by turn by asking students	13
Doing some questions which teachers suppose are difficult to students	9
Doing some questions identified by students as difficult	6
Allowing students to exchange exercise books and giving the correct answers	3

Equally important to following up the completion of homework is the provision of feedback to assigned questions.



In all these four ways the teachers' feedback was given orally and in written form in the blackboard. Clarifications and explanations for the responses were rarely given. Teachers simply told the students the correct responses or confirmed students' correct responses. According to Nadler (1987) this is a traditional teacher directed method of providing feedback which doesn't foster responsibility and attentiveness. Furthermore, such an endeavor of checking students' homework reveals teachers' conception of homework management. Teachers seem to regard homework as an end in itself but not as a means to a certain end - learning.

### **Discussions and Implications**

The findings of the study appear to support the view that homework enhances the achievement of students. Certainly there is a broad consensus among scholars (Walberg et al, 1985; Cooper, 1989; and Coulter, 1987) that homework increases the achievement of students in higher grades though the research findings (Barber, 1986) do not always fall in this category.

What is more attention catching, unveiled by the study, is the discrepancy between teachers actual classroom practice and what they are expected to do in relation to homework. To begin with, teachers seem to overload students with homework. This is particularly serious in lower levels. Paradoxically, the purpose of homework on this level is to foster positive attitude toward learning. This purpose could be accomplished when children are allowed to do a reasonable number of questions with an optimum amount of time. However, what the majority of teachers in the study were doing was against the basic essence of homework. This may influence students to have a negative attitude toward homework. In this regard, what students say about their experience in relation to homework could be an area for further research.

The study also indicates that teachers are more concerned with the quantity of homework rather than with the quality of homework. The



majority of teachers from grades 1 to 4 tend to assign many questions and expect students to spend long hours (6.5) in doing homework. And of course it is above or close to the average time a 14 years old child spends on homework in some European and Asian countries such as in Sweden (4.5 hours), Finland (5.5 hours), England (6.0 hours), Hongkong (6.1 hours), Japan (8.5 hours), and Norway (6.2 hours) (Walberg and Paschal, 1995). Conversely, teachers failed to manifest properly the behavioral patterns associated with homework's effect on learning. Thus it appears that teachers are overdoing and thus overburdening students with less important aspects of homework while overlooking the important aspects.

It is also discouraging to learn that content coverage and punishment were the driving motives for teachers behind assigning homework. This would ultimately make students to view schoolwork as drudgery.

If so, what should be done? First and foremost, it seems inescapable to bear in mind the suggestions of scholars in the field. Cooper (1989: 87) states that *while homework may be useful for some students at some grade levels, it should not be seen as a solution for the time pressures teachers may feel during the school day.*

This idea entails that textbook writers and teachers should give due consideration to the number of questions to be included in textbooks and assigned to students. Textbook writers should avoid incorporating many questions in textbooks that would make teachers to run for content coverage. To this end, it is appropriate to consider students' grade level and teachers' teaching time. This would allow teachers to deal with a reasonable number of questions as homework and create a room for demonstrating important behavioral patterns related to homework.

Teachers, too, should realize that assigning homework to cope up with time shortage not only muffles the basic essence of homework but also becomes tedious work for students that reduces their interest toward learning. Hence they need to limit the number of questions on



the basis of students' grade levels. Here readers should bear in mind that the suggestion for reducing the amount of homework assigned by teachers should not be perceived contrary to Walberg's et al (1985) call for an increment in time spent by students in doing homework in American school systems. Their call might be sound when seen from the three hours duration an average American high school student reported to spend in doing homework questions.

In addition to this, textbook writers and teachers should pay attention to the kind of questions to be assigned as homework. Literature indicated that homework questions should be those that students could do successfully, and the questions need to vary with grade levels. That is, the questions in lower grades need to be simple enough to foster positive attitude where as questions for higher levels might be challenging enough to promote learning and receive weight from students with some encouragement from teachers.

Equally important to assigning reasonable amount and appropriate kinds of questions is how homework is assigned. Directions like 'do all the questions on page this' or 'do the even/odd numbers' may mean to students that the questions are chosen without taking into consideration their difficulty levels or the teacher is assigning questions with no purpose in mind. This may erode students' expectation that the teacher takes the assignment seriously and they may assume that the teacher is *laissez-faire*. Hence, when they assign homework, teachers should provide their students with clear instructions, such as, by solving sample questions, checking understanding and dealing with confusions, if there are any. Also textbook writers could help in this regard by including in the teachers' guide an outline of the procedures to be followed by teachers in assigning homework.

Apart from these, the know how of managing homework efficiently and effectively in large classes is an issue pertinent to our country. One possible measure could be collecting four to five homework papers a day from each class. In doing so, it is important to apply



randomness so as not to make students know when their paper would be collected. This helps to keep students alert each day that homework would be assigned (Artzt, 1987). Hand in hand with this, teachers may allocate grades to homework and make students write the answers on the board which will make them active participants and responsible for their own learning (Marquis, 1989).

Lastly there is no guideline or policy in our country that suggests what teachers should do in relation to homework despite the broad agreement in recent literature that homework is a vital element in increasing students academic learning time and in making students feel responsible to their own learning (Arends, 1994; Cruickshank et al, 1995). And without such a guideline what teachers' practice does not only remain in vain but may also produce other undesirable and harmful consequences. Therefore, it is an area researchers and educational authorities could think of developing if we have to benefit from homework.

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