

# THE STATUS OF TEACHERS' USE OF MATERIALS ACCORDING TO TEACHERS' OPINIONS

**Selim Soner Sütçü, Şafak Bayır**  
*Baskent University, Ankara University, Turkey*  
[ssoner@baskent.edu.tr](mailto:ssoner@baskent.edu.tr), [sbayir@uludag.edu.tr](mailto:sbayir@uludag.edu.tr)

## ABSTRACT

The general aim of this research is to determine teachers' use of materials according to teachers' opinions. Research questions were formed within the framework of this aim.

This research was carried out within the settings of survey model and questionnaire application. Teachers working in primary schools located in provinces of Ankara constitute the population of this research. Teachers (n=278) working in 24 randomly selected primary schools located in 6 provinces (Altındağ, Beypazarı, Çankaya, Mamak, Sincan and Yeni Mahalle) of Ankara constitute the sample of this research.

The questionnaire draft formed as a result of literature review was presented to subject-field specialists and then topics obtained were transferred into questionnaire items. The questionnaire prepared was given to 10 teachers as a pilot study.

Frequency and percentage distributions were included in the analyses of the data. Descriptive statistics (t test for independent samples) were used to determine the relations between the variables covered by the research.

The findings of the analyses were interpreted within the framework of the research and suggestions were made under the light of these findings on the status of teachers' use of materials.

**Keywords:** Educational Technology, Instructional Technology, Use of Materials, Instructional Materials

## INTRODUCTION

### *Problem*

Rapid developments in science and technology have led innovations in education and caused inevitable shifts in current technologies. In order to catch up with the new situations arisen from rapidly developing science and technology, societies are struggling to become an information society. The importance of education is also increasing gradually in parallel. The emergence of the new technologies has increased the variety in technologies that could be utilized in educational settings and provided new opportunities for educational practices (Alkan, 1985; Keser, 2000). These varieties and opportunities have increased the importance of the relations between technology and education. Akkoyunlu (2002) stated that educators need to incorporate the technology into their own subject fields due to the important role of technology in the improvement of education. Also, Rodriguez (2000) emphasized the necessity of "Assistance of educators who will utilize the technology into curriculum and adapt technology to learning objectives of students".

Alkan et al. (1987) expressed the benefits that can be obtained by utilizing educational materials in instructional environments comprehensively. Also, Gözütok (2006) mentioned that teachers should plan to use the appropriate educational materials while planning their courses considering their benefits. Likewise, Yalın (2003) stated that educational materials should not be considered as separate from the other components constituting teaching-learning process. According to Gündüz and Odabaşı (2003), teacher trainees should acquire the necessary skills of developing instructional materials and using existing materials effectively since they are utilized to facilitate learning and to make the instruction permanent and fruitful in teaching-learning process. Callister and Dune (1992) expressed their ideas related to the subject in the following manner "Educational materials utilized in the courses assist teachers in establishing a diverse learning environment. If a teacher does not know what to do with the materials, or is afraid of the materials or misuses the materials, the materials will either be used ineffectively or will not be used at all. Hızal (1989) said that "The teachers that are not aware of the benefits of technological resources in learning-teaching processes are not expected to display any special efforts to utilize them". Moreover, Çilenti (1988) expressed his ideas related to the subject in the following manner "The more a teacher is trained in the field of educational technology, the more successful he/she becomes in choosing and providing materials for educational settings".

Within this context, studies on the improvement of curricula of the teacher training faculties which are being carried out by The Turkish Higher Education Council (YÖK) have been observed in the recent years. "Computer I", "Computer II" and "Instructional Technologies and Material Design" courses were included as must courses in all teacher training curricula in 2006-2007 academic year and onwards within the settings of curriculum development studies. However, in order to make these trainings [such courses as mentioned above] lasting, technology learning should be a continuous process (Akpınar, 2003).

Seferoğlu (2004) stated that "Especially when the literature of western countries on teacher competencies is taken into consideration, technology competencies are inherent part of the teacher competencies". ISTE (International Society for Technology in Education) has determined the standards and performance indicators of teachers' technology use accordingly

(ISTE, 2005). Also, in our country Ministry of National Education has determined the general competencies of teachers and included the topics of teachers' competencies and performance indicators of teachers' use and preparation of educational materials in the sub-competencies (C1, C2 and C3) of teaching and learning process (MEB-ÖYEGM, 2006).

When the relevant researches are taken into consideration, it is seen that the educational materials are not used adequately and traditional educational materials are still being used.

In many studies to establish the baseline, it is observed that teachers' dependence on the use of traditional educational materials such as course book and blackboard still continues (Şahinkesen, 1989; Cabbar, 1995; Ekici, 1996; Karahan and Şimşek, 1998).

In Özdemir's (2000) research, it is revealed that most of the teachers either rarely use slide projector, motion film (picture) cinema machine and opaque projector (episcope) or never use them at all. In the same research, it is also stated that almost all the teachers rarely use television, cassette player with CD, data show, fabric covered board and bulletin board, overhead projector, video, computer, models, boards, pictures and photos are used sometimes.

Yıldız (1999) maintains that computers are not used effectively in education and that educators are not competent enough in using computers mainly because of their lack of experience in using computer and their limited access to computers.

In his research Kocasarıç (2003) found that teachers do not consider themselves competent in computer assisted instruction.

In the research carried out by The Ministry of National Education, Educational Research and Development Centre Chairmanship (EARGED), it was found out that teachers could not meet the expected standards especially in their attitudes towards technology use and innovations (MEB-EARGED, 1999).

Also, Dursun (1998) states in his research that almost all teachers participated in one or two in-service training courses on computers, however, the training they received is not sufficient for computer assisted instruction activities.

However, nowadays a rapid transition from traditional to modern technologies is observed. Great emphasize is put on innovative technologies and investments are made by The Ministry of National Education. Yet, it is still unknown how much the teachers utilized from these new technologies. As it is seen obviously from the relevant literature, the determination of the status of teachers' use of materials according to teachers' opinions has become necessary.

### *Aims of the Research*

The general aim of this research is to determine the status of teachers' use of materials according to teachers' opinions. Answers to the following research questions are going to be sought within the framework of this general aim:

1. What is the frequency of teachers' use of educational materials?
2. Is there any statistical significance in the frequency of teachers' use of educational materials compared to professional experience, gender, educational status, branch, whether they had any courses related to educational technologies during their education, participation in any in-service training or seminar related to educational technologies?
3. How competent do the teachers consider themselves in utilizing educational materials?
4. Is there any statistical significance in the competencies of teachers' use of educational materials compared to professional experience, gender, educational status, branch, whether they had any course related to educational technologies during their education, participation in any in-service training or seminar related to educational technologies?
5. What are the reasons of teachers for not using educational materials?
6. Is there any statistical significance in the reasons of teachers for not using educational materials compared to professional experience, gender, educational status, branch, employment position, whether they had any course related to educational technologies during their education, participation in any in-service training or seminar related to educational technologies?
7. What are the training needs of teachers on the use of educational materials and what are the topics that teachers wish to be included in an in-service training course on the use of educational materials which will be arranged in the future?
8. What are the supports and encouragements provided by school administration to prepare educational materials that are going to be utilized by the teachers within their courses?
9. What are the changes observed by teachers in their students as a result of teachers' use of educational materials?

### *Importance of the Research*

It is believed that this research provides information on the issues of the status of teachers' use of materials and in-service training needs, determining the reasons of teachers for not using existing materials and providing contribution in determining the institutional and individual aspects of educational technology investments that the Ministry of National Education is planning to realize in schools.

### *Assumptions*

It is assumed that data obtained from primary school teachers participated in this research reflect the current situation accurately and also teachers' true opinions and evaluations.

### *Limitations*

Items of the questionnaire are limited with specialists' opinions and the related resources that could be obtained. Data obtained in this research are limited with the answers given to the questionnaire by teachers employed in twenty four primary schools located in the provinces (Altındağ, Beypazarı, Çankaya, Mamak, Sincan and Yeni Mahalle) of Ankara.

## **METHODOLOGY**

### *Research Design*

This research aiming to determine the status of teachers' use of materials according to teachers' opinions employed in primary schools is carried out within the settings of survey model and questionnaire application.

### *Population and Sample*

Teachers working in primary schools located in provinces of Ankara constitute the population of this research. Teachers (n=278) working in 24 randomly selected primary schools located in 6 provinces (Altındağ, Beypazarı, Çankaya, Mamak, Sincan and Yeni Mahalle) of Ankara constitute the sample of this research.

### *Data Collection*

The questionnaire draft formed as a result of literature review was presented to subject-field specialists and then topics obtained were transferred into questionnaire items. The questionnaire prepared was given to 10 teachers as a pilot study.

### *Data Analysis*

In the analyses of data, frequency and percentage distributions were initially done in the analyses of the teachers' demographic data. Afterwards, descriptive statistics related to the frequency of teachers' use of educational materials, the training needs of teachers on the use of educational materials, the topics that teachers wish to be included in an in-service training course on the use of educational materials which will be arranged in the future and competencies of teachers' use of educational materials were performed. Besides, frequency and percentage distributions related to the reasons of teachers for not using educational materials, the supports and encouragements provided by school administration to prepare educational materials that are going to be utilized by the teachers within their courses and the changes observed by teachers in their students as a result of teachers' use of educational materials were performed.

## **FINDINGS and INTERPRETATION of DATA**

When the findings related to the frequency of teachers' use of educational materials are taken into consideration, it was seen that the mostly used educational materials were class bookstand, photocopy machine, fabric covered board and primary school mathematics and social sciences educational materials sets respectively.

Findings related to the frequency of teachers' use of educational materials compared to various variables are given below:

According to professional experience, statistical significance was merely found out in favour of teachers having experience of 11 years or more from the point of audio-visual interactive materials, while, no statistical significance was found out from the point of other material groups (visual, audio-visual, auidial). Why the teachers having more professional experience say that they use materials more frequently compared to the teachers having less experience could be because of the decrease in idealism towards being a teacher as the professional experience increases along with teachers' effort to pretend themselves as more competent. When the findings related to the frequency of teachers' use of educational materials compared to gender are regarded, statistical significance was found out in favour of both genders from the points of visual and audio-visual materials' use frequency. It was found out that male teachers use both material groups mentioned above more frequent compared to female teachers. Educational status is not a significant variable from the standpoint of the frequency of teachers' use of educational materials. Classroom teachers tend to use visual and audial materials more than the teachers of other branches. It can be said that teachers having courses related to educational technologies during their education use visual, audio-visual interactive and audial materials more frequent than the teachers that did not take such courses. Teachers having participated in an in-service training or a seminar related to educational technologies used educational materials more frequently than the

teachers that did not participate in such courses and activities. In other words, teachers having participated in an in-service training related to educational technologies tend to use educational materials more in their courses.

Educational materials that the teachers consider themselves most competent in utilizing are “television, radio, class bookstand, cassette player, photocopy machine” respectively.

Findings related to the competencies of teachers’ use of educational materials compared to various variables are as follows:

It can be said that the teachers’ duration of employment does not lead to a change in the competencies of teachers’ use of educational materials. Male teachers believe that they have more competencies in utilizing visual, audio-visual and audial materials in their courses compared to female teachers. Teachers having graduate and post graduate degrees believe that they are more competent in utilizing audial educational materials than the teachers having under graduate degrees. Classroom teachers believe that they have more competencies in utilizing visual materials in their courses more than the teachers of other branches. Teachers having courses related to educational technologies during their education think that they have more competencies in utilizing visual, audio-visual interactive and audial materials than the teachers that did not take such courses. Teachers having participated in an in-service training related to educational technologies consider themselves more competent in utilizing educational materials in their courses.

When the reasons of teachers for not using educational materials are taken into consideration, they state that “the educational materials are not found adequate enough in their schools” as the main reason.

Findings related to the reasons of teachers for not using educational materials compared to various variables are as follows:

When the reasons of teachers for not using educational materials are compared to their professional experience, both teacher groups having more and less professional experience stated the reason “the educational materials are not found adequate enough in their schools” much more than the other reasons. When the reasons of teachers for not using educational materials are compared to their gender, the percentage of the item “the educational materials are not found adequate enough in the schools” is found higher in both gender groups with females slightly higher. When the reasons of teachers for not using educational materials are compared to educational statuses, the ratios stated for the item “the educational materials are not found adequate enough in the schools” are much higher compared to the other items. The educational statuses of teachers who have chosen this item are post graduate, graduate and under graduate in sequence. When the reasons of teachers for not using educational materials are compared to teachers’ branches, it was found out that the item “the educational materials are not found adequate enough in the schools” is preferred more than the other items. When the reasons of teachers for not using educational materials are compared to teachers’ employment positions, it was seen that the item “the educational materials are not found adequate enough in the schools” was preferred more by both teachers with cadre and contract. When the reasons of teachers for not using educational materials are compared to whether they had any courses related to educational technologies during their education, the item “the educational materials are not found adequate enough in the schools” was stated by both the teachers having taken courses related to educational technologies during their education and the teachers that did not take such courses. When the reasons of teachers for not using educational materials are compared to participation in any in-service training related to educational technologies, the item “the educational materials are not found adequate enough in the schools” was chosen more by the teachers having participated in an in-service training related to educational technologies and the teachers who did not participate in such training.

When the training needs of teachers on the use of educational materials are taken into consideration, it is seen that their training needs are rather high in materials that require advanced competencies and which are rare in schools. The topic of “material development” is the mostly demanded topic that teachers wish to be included in an in-service training course which will be arranged in the future on the effective and appropriate use of educational materials correspondingly.

According to teachers’ opinions on the supports and encouragements provided by school administration to prepare educational materials that are going to be utilized by the teachers within their courses, it is seen that the “material support” and “praise” were mentioned more than the other types of support and encouragement.

When the changes observed by teachers in their students as a result of teachers’ use of educational materials are taken into account, the mostly preferred item was “their interest toward the course increased”.

## **RESULTS and SUGGESTIONS**

### *Results*

The teachers having more professional experience use materials more frequently than the teachers having less experience. Male teachers and classroom teachers use visual and audio-visual materials more frequently compared to female teachers and the teachers of other branches. Both teachers having courses related to educational technologies during their education and teachers having participated in an in-service training or a seminar related to educational technologies believe that they use materials more frequent than the teachers that did not take such courses and trainings. These differences display similarities also in the competencies of teachers’ use of materials. Educational materials that the teachers consider themselves most

competent in utilizing are the materials which are considered as the traditional materials in the relevant literature.

It is seen that teachers are aware of the fact that the utilization of educational materials in their courses is useful and the topic of “material development” is the most demanded topic that teachers wish to be included in an in-service training course which will be arranged in the future on the effective and appropriate use of educational materials.

When the training needs of teachers on the use of educational materials are taken into consideration, it is concluded that their training needs are rather high in materials that require advanced competencies and which are rare in schools.

The majority of the teachers mostly state fewness of educational materials in the schools as the reason of teachers for not using educational materials.

“Material support” and “praise” were mostly provided by school administration as types of support and encouragement respectively to prepare educational materials that are going to be utilized by the teachers within their courses.

When the changes observed by teachers in their students as a result of teachers’ use of educational materials are taken into account, it is seen that the use of educational materials has positive effects on students.

### *Suggestions*

More emphasis should be given to graduate courses related to the educational technologies (content, coverage, duration of practice, etc.). There is also a necessity for in-service training to meet such needs of teachers who did not have courses during their education. The topics of “material development” and “utilization of materials that require advanced competencies” should be emphasised in the courses that will be arranged in the future. In-service training should be arranged primarily for teachers having less experience (1-10 years) particularly on the use of audio-visual interactive materials. Why the teachers having more professional experience say that they use materials more frequently compared to the teachers having less experience could be because of the decrease in idealism towards being a teacher as the professional experience increases along with teachers’ effort to pretend themselves as more competent. There is a need for a research to reveal the reasons behind it distinctly.

That the classroom teachers use educational materials in their courses more than the teachers of other branches and classroom teachers believe that they have more competencies than the teachers of other branches and similarly male teachers think that they use educational materials more competently compared to female teachers are noteworthy. There is also a need to carry out researches on these issues.

The fewness of educational materials in the schools hinders the teachers’ use of materials. Materials should be supplied to overcome the problem mentioned above by negotiating with the relevant authorities (educational policy makers, authorised people that are responsible for taking decisions, etc.).

It will be appropriate to assign the teachers graduated from “Computer and Instructional Technologies Education Department” to provide necessary support services for teachers to use educational materials effectively and appropriately in their courses. There is also a need for an appropriate place where technical support is provided and educational materials that are going to be utilized.

School administrations should primarily increase the support, particularly in finance, on the teachers’ use of educational materials and also vary the types of encouragements which are considered to increase the teachers’ use of educational materials.

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