The Effect of Curriculum for Developing Efficient Studying Skills on Academic Achievements and Studying Skills of Learners

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Abstract

Purpose of this study is to examine the effect of “Development of Efficient Studying Skills Curriculum” on academic achievements and studying skills of 7th grade primary school students. In this study, pre-test-post-test from experiment models and semi-experimental model with control group were preferred. The reason for the preference is our wish to make a comparison between the group on which curriculum was implemented (experiment group), and the group on which curriculum was not implemented (control group) in terms of academic achievement, and acquiring efficient studying skills. Study population of this research covers 7th grade students from Refika Küçükçalık Primary School in Kocasinan district of Kayseri which is located in the middle of Turkey during 2011-2012 academic year (8 units, 320 students). Sample of the study was determined according to purposive sampling which is one of non-probability sampling types. Obtained data were analysed employing Covariance Analysis (ANCOVA). As a result, this research indicated that students can acquire efficient studying skills by means of Curriculum for Developing Efficient Studying Skills and they increase their academic achievements thanks to these studying habits. In this sense, if quality of education is desired to be increased, students with high level of academic achievements are intended and growing youth is expected to compete with the young population of other states with the effect of globalization, it is necessary to make students acquire efficient studying skills.

Keywords: Study Skills, Curriculum Development, Academic Achievements
Introduction

Learning takes place through experiences influencing psychological functions which lead to differences in behaviours. There are five elements in learning which are learner, learning, learnt, teacher, and learning environment. Taking these five elements in terms of influencing learning shows that last two elements do not affect learning directly but they have an indirect effect since they influence other elements. Thus, elements influencing learning can be approached in three different groups which are factors regarding the learner, factors regarding the learning material, and factors regarding the learning method (Bacanlı, 2005). These define the quantity and quality of learning by interacting with each other. While factors regarding the learner can be compiled as level of readiness for learning, age, intelligence, motivation level, interests and skills, characteristics, cognitive styles, and learning styles; perceptual distinguishability, semantic connotation, and conceptual grouping are related to learning material. On the other hand, structure of the subject to be learnt, the duration of time allocated for learning, feedback, and active participation are the factors associated with learning method (Senemoğlu, 2005).

In the past, people used to think that efficient learning depends mainly on teacher’s teaching methods. However, today it is a commonly accepted fact that permanent and significant learning can be achieved only through learner efforts and contributions (Benson, 2001). From this point of view, learners can catch up with the intended achievement standards only by perceiving the given information accurately, analysing, and internalizing them. This process is briefly called studying (Bacanlı, 2005).

Studying behaviours are skills acquired during school years and they are difficult to change in the later periods of life. The most important factor influencing learner’s achievements possesses the skills necessary for efficient studying (Küçükahmet, 2002). Endowing learners with efficient studying skills means both making them study deliberatively and understand their courses and aiding them to succeed in their exams. Learners studying properly value their skills and abilities in the best way. Learners without efficient studying skills have low level of achievement both in schools and professional lives since they cannot get the reward in return to the effort and time spent for learning (Yılmaz, 1987; Teker, 2002). Learners without efficient studying skills or learners with wrong studying skills are considered as one of the most basic reasons for failure in schools (Türkcan & Öcal, 2003). Yeşilyaprak (2000) and Türkmenoğlu et al., (1996) expressed that many students cannot succeed though they spend loads of time for studying. The motive behind this fact was suggested as not having the efficient studying skills. In addition, it was emphasized that even students who can be considered as successful do not possess adequate level of efficient studying skills. Students who cannot improve efficient studying and learning skills can be incapable of motivating themselves for learning, planning their learning processes and evaluating them as the grade goes up. This situation negatively influences their school achievements and therefore their life after school (Yıldırım, Doğanay & Türkmenoğlu, 2000).

Studying skills are influenced by learner motivation and their full and accurate use of time. Besides, learners’ wish to study or not, difficulties in studying conditions, resistance against frustration and showing intimidation when faced with failure are factors influencing learning as well (Fidan, 1996).

Having unsuccessful learners at the end of education process leads to considerable amount of waste in investments made for education as well as supporting the worry about not being able to raise human force that society demands. It is known that learner failures are not limited with educational life but have much more wide effect. Currently, it is accepted that student failures is a problem growing each day. It is expressed that one of the biggest
underlying reasons for student failures is inadequacy of studying skills and attitudes (Küçükahmet, 2002).

There are many various definitions for studying skills in literature; however, studying skills are generally defined as “using specific methods efficiently to learn something” (Thomas, 1993; Uluğ, 2000; Yıldırım, Doğanay & Türkoğlu, 2000).

Studying skills are generally examined under the titles of planned studying, organizing study environment, efficient reading, listening lecture, note-taking, efficient writing expression, and doing homework (Dodge, 1994; Smith, 2000; Thomas, 1993; Uluğ, 2000; Yeşilyapprak, 2000; Yıldırım, Doğanay & Türkoğlu, 2000). Although these skills are independently important, they are not independent from each other. Strategies in relation to these skills are supportive of each other and high level of success can only be achieved by using all of them responsively together. (Crow, 1968; Gettinger & Seibert, 2002; Uluğ, 2000; Yıldırım, Doğanay & Türkoğlu, 2000).

Of studying skills, planned studying means having a purpose and this prevents students from disarrangement (Demir, 2011). Setting the period for studying is characterized by paying attention to studying courses at times close to the day and time of course lectures, making daily, weekly or monthly plans, providing flexibility to shift studying periods in case of sudden obstacles, defining durations in accordance with the course characteristics and knowing for certain what to study beforehand.

The concept of studying environment covers the environment both in and outside of school where learners continue their activities regarding the school. Preparing for studying can be expressed as organizing the place in such a way that it facilitates studying in terms of environment and the adopting the atmosphere suitable to read both physically and psychologically in terms of person (Baltaş, 1998).

Skills for reading and making sense of what you read, which have a place in educational process, are two of the most important elements contributing meaning to people’s lives. Reading “broadens and deepens one’s horizon by teaching new words, gaining new comprehensions, creating dreams and improving creativity” (Akyol, 2006, p. 29; Binbaşioğlu, 1995). This process is influenced by past experiences of the reader, ability to use language, skill for making meaning of unknown words, and purpose of reading (Yüksel, 1997).

Efficient listening is not only hearing what is being said. It is an active process intended for spending effort to consider what is said as important, comprehend, and evaluate (Türkoğlu, Doğanay & Yıldırım, 1996). The concept of understanding is mainly related to listening skill. Listening skill, which is one of the basics in the development of native language skills, means “understanding, interpreting, evaluating, and organizing the suggested thoughts in the speech as well as detecting the relations between them and assorting the ones significant enough to store in the mind” (Taşer, 1996, p. 214). 42% of human communication covers listening and students listen both each other and their teacher in school for about 2, 5-4 hours. These results indicate that there is a strict relationship between learning in school and listening (Göğüş, 1978, p. 227). Yağcı, (2002, p. 45) claims that learners should be given a systematic listening education starting from the level they start to understand their teacher.

Note-taking is the process of writing the summary of information regarding a subject on a proper place to be used in the future. Note-taking and benefiting from the taken notes have a distinct and special importance from other learning materials in terms of efficient learning. This enables learners to think actively about the lectured subject and convey the information s/he internalized in an appropriate form on the paper.
From this aspect, note-taking increases learner concentration for listening the course. Similarly, since the information is processed and interpreted while reading, note-taking increases the efficiency of individual study. Thus, note-taking is of great importance in terms of both lecture and individual study. Notes taken during the courses aid students in determining what was important in the lecture (Ertuğrul, 2004, pp. 116-117).

Santangelo et al. (2007) stated that writing is extremely powerful means for communication since it creates a bound between times and distances, collects, and protects information, provides information about newly organized or spreading subjects, and creates a flexible environment for expressing yourself in terms of art, spirit and politics. Emphasizing that writing is a skill inseparable with communication and handled in educational activities, Temur (2011) denoted that past experiences are one of the elements influencing the efficiency of writing process. Temur (2011) said that some of the primary school beginners acquire important skills regarding reading and writing (vocal awareness, writing awareness) while some of them cannot.

Active participation in lectures is possible only through active learning. Active learning is a process in which learner bears the responsibility of learning process, learner is granted with the opportunity to make decisions and self-arrangements in relation to various aspects of learning process and learner is forced to use his/her mental abilities with various educational tasks. Theoretical background of active learning is based on constructivism.

Homework is one of the teaching methods outside of the school. It is also one of the most efficient instruments in giving importance, and meaning for old learning experiences, and acquiring new learning experiences (Tan & Erdoğan, 2004). Salend and Schliff (1998, p.398) consider homeworks as one of the methods for teaching and skill development. They explain the reasons for giving homework as follows; facilitating learning by making applications, individualizing learning for both slow learners and advanced learners, completing the subjects which are left unfinished in schools outside of school time, making learners acquire independent studying habits, and delivering what was taught in class to parents.

The fact that there is a difference between achievement levels of learners who acquired necessary methods, and habits for an efficient study, and learners who either possess none or limited amount of those habits was supported by researches. Researches regarding this topic revealed that students lack in terms of studying skills (Bay, Tuğluk & Gençdoğan, 2005; Kesiktaş, 2006; Koşar, 2004; Küçükahmet, 1987; Uluğ, 1981; Yıldırım et al., 2000) and indicated that a studying skills-aware education increases academic achievement, and self-confidence (Gall et al, 1990). Additionally, knowing these skills and using them in this process make important contributions to shortening the period for learning, saving the information, and developing skills for using (Gall et al, 1990). Besides, researches proved that there is a positive relationship between learner studying skills and academic achievements (Eliot, Godshall, Shrout & Withy; 1990; Bay, Tuğluk, Gençdoğan, 2005). Benjamin (1991) searched studying strategies of successful students to detect whether they are different from failed students in terms of quality in processing their knowledge. Findings indicated that successful students are more active, purposeful and flexible in using their strategies and more satisfied with their academic performances (eg., Tümkaya & Bal, 2006).

To Gall (1990), today many educators accept that “teaching learning” and therefore “developing studying skills” are as much important as teaching traditional courses (such as Mathematics and Turkish). For instance; studying skills has become one of the courses either for primary or secondary school level in many states of USA. Or studying skills are being taught to learners in the form of seminars. As for higher education, studying skills has started to be given as a course in undergraduate programmes since 1920s. These courses became
widespread since 1960s in many universities and some of the universities included it as a compulsory course. Also, private sector put too much stress on studying skills and studying skills seminars by private consultancy institutions regarding this sector are becoming widespread (Türkoğlu, Doğanay & Yıldırım 1996, p. 2-3).

Studying skills, which is given as a course in different grades in various states, is not a course covered in Turkish curriculum yet. There is also limited number of research made on this matter (Bay et al, 2005; Koşar, 2004). This indicates the lack of an important database regarding this matter in Turkey and the importance of this paper. In addition, it expected from the findings of this study to shed a light upon the authorities of ministries, school managers, teachers and parents.

Purpose of this study is to examine the effect of “Development of Efficient Studying Skills Curriculum” on academic achievements and studying skills of 7th grade primary school students. Questions below were tried to be answered to achieve this purpose:

1- Is there a significant difference between Post-Test Scores of students from experiment and control groups which they got from the entire Academic Achievement Test?

2- Is there a significant difference between Post-Test Scores of students from experiment and control groups which they got from the entire Efficient Studying Skills Habit Inventory?

Method

Research Model

In this study, pre-test-post-test from experiment models and semi-experimental model with control group were preferred. The reason for the preference is our wish to make a comparison between the group on which curriculum was implemented (experiment group), and the group on which curriculum was not implemented (control group) in terms of academic achievement, and acquiring efficient studying skills. This experimental pattern enables making such comparisons (Karasar, 2006, p. 110). Two of the present groups are appointed randomly to operation groups in semi-experimental pattern without random appointment (Fraenkel & Wallen, 2000, p. 283). In this way, examinees are similarly matched with each other as much as possible. The fact that central education is being applied in Turkey, where research took place, and classes are formed by school managers played a role in making this preference. That is because in Turkey, it is not possible for a researcher to form his/her own classes and use random appointment while making this process with specific number of students in classes for it is against the education system in Turkey. Therefore, of these two classes which were formed by school management at the same grade, one was selected as experiment and the other was selected as control group.

First hypothesis of the research is “There is a significant difference between Post-Test Scores of students from experiment and control groups which they got from the entire Academic Achievement Test”, and the second hypothesis is “There is a significant difference between Post-Test Scores of students from experiment and control groups which they got from the entire Efficient Studying Skills Habit Inventory”.

Population and Sample

There are two populations emphasized in scientific researches. One of these is general population which covers whole units wanted to be generalized with a large scope. Study population is the one which is available. The population about which the researcher will make comment is the study population. Practically, researchers are made with study
population. Thus, it is inevitable to generalize the results to this population (Karasar, 2006). Study population of this research covers 7th grade students from Refika Küçükçalık Primary School in Kocasinan district of Kayseri which is located in the middle of Turkey during 2011-2012 academic year (8 units, 320 students). Sample of the study was determined according to purposive sampling which is one of non-probability sampling types. In purposive sampling, which is also called as judgement sampling, researcher uses his/her own judgement about whom to select and includes those who are most appropriate to the purpose of the research (Balci, 2004: 90). Taking these principles into consideration, 7-F class of the above mentioned school was accepted as experiment group while 7-B class was accepted as control group. Some of the qualities included in independent variables of experiment and control groups are as follows: 51,51% of students are female and 48,48% is male. 7,57% of students is single child, 27,27% of students has one sibling apart from himself, 42,42% has two siblings apart from himself, 18,18% has three siblings apart from himself and 4,54% has four or more siblings apart from himself. The rate of students whose mothers are primary school graduates is 45,45%, the rate of students whose mothers are secondary school graduates is 27,27%, the rate of students whose mothers are high school graduates is 24,24% and the rate of students whose mothers are university graduates is 3,03%. The rate of students whose fathers’ education level is primary is 18,18%, the rate of students whose fathers’ education level is secondary is 31,81%, the rate students whose fathers’ education level is high school is 33,33% and the rate of students whose fathers’ education level is university is 16,66%. 6,06% of students are from low, 77,27% is from medium and 16,66% is from high level income families. 6,06% of students are from medium and 83,33% is living with a nuclear family. Besides, while 28,78% of experimental objects is attending training centre, 71,21% is not.

Data Collection Instruments

As data collection instruments, “Studying Habits Inventory” developed by (1) Uluğ (1981) and Achievement Tests for 7th Grade Students of Refika Küçükçalık Primary School (1st Pilot and 2nd Pilot Exams) (2) were employed.

There are explanations below in relation to them.

(1)- Studying Habits Inventory:

Studying Habits Inventory consists of 60 questions in total. First 50 questions of these are related to intended habits (starting studying, making plans, note-taking, summarizing, preparing for exam, studying individually, and in groups, organizing studying environment, efficient reading, and listening). Last 10 questions in inventory were prepared as control items to check the accuracy of the answers. Reliability of Studying Habits Inventory was defined as 0.79 correlation coefficient which was obtained as a result of test-retest method applied on experiment group containing 16 people in 1981.

(2)- Achievement Tests for 7th Grade Students of Refika Küçükçalık Primary School:

Achievement tests are tests which are periodically applied in primary schools by Ministry of National Education to prepare students for Placement Tests which are implemented for placing students in high schools and to test student achievements. In this study, first and second Achievement Tests from the abovementioned tests were employed.
Collecting Data

Table 1. Data Collecting Process

<table>
<thead>
<tr>
<th>Groups</th>
<th>Pre-Test</th>
<th>Process</th>
<th>Post-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Experiment Group</strong></td>
<td>Studying Habits Inventory 1st Academic Achievement Test (Pilot Test)</td>
<td>Implementing Efficient Studying Skills Curriculum for 4 weeks</td>
<td>Studying Habits Inventory 2nd Academic Achievement Test (2nd Pilot Exam)</td>
</tr>
<tr>
<td><strong>Control Group</strong></td>
<td>Studying Habits Inventory 1st Academic Achievement Test (Pilot Test)</td>
<td></td>
<td>Studying Habits Inventory 2nd Academic Achievement Test (2nd Pilot Exam)</td>
</tr>
</tbody>
</table>

As seen in Table 1, students were applied Studying Habits Inventory and Academic Achievement Test for 7th Grade Students of Refika Karaçalık Primary School at the beginning of experimental operation. Afterwards, students in experimental group were applied Curriculum for Developing Efficient Studying Skills. Curriculum for Developing Efficient Studying Skills was completed in four weeks with two applications in each week which made 8 applications in total. Meanwhile, control group students were not put subject to any operation. After the implementation of Curriculum for Developing Efficient Studying Skills, Studying Habits Inventory and Achievement Test for 7th grade Students of Refika Karaçalık Primary School were applied as post-test and the results were compared.

**Curriculum for Developing Efficient Studying Skills:**

Curriculum for Developing Efficient Studying Skills, which was planned to support development of students' efficient studying skills, was prepared in accordance with the systematic below.

Initially, target for curriculum were determined. Related literature was taken into consideration while determining the targets. Afterwards, scope of Curriculum for Developing Efficient Studying Skills was set. Setting of the scope was based on review of related literature. At this stage, the place where education will take place, implementer and experimental objects were determined. The scope was formed in such a way that it will aid acquisition of the targets. Also, it is appropriate for different learning and teaching activities, and reasoning. At the beginning of each activity, student opinions regarding that day's topic were taken and they were informed about the subject. Students were asked to discuss lectured subject with the group and to compare their old knowledge with the new information they had learnt. They were made to conduct reasoning by presenting various sample events. Curriculum for Developing Efficient Studying Skills employed lecturing, question-answer, discussion, sample event, and brainstorming methods during the education process. White board, photocopy notes, projection machine, and related slide shows were utilized as learning material.

Targets of Curriculum for Developing Efficient Studying Skills are as follows: (1) Knowledge of determining target. (2) Organizing the study environment and starting to study. (3) Conceiving the obstacles against efficient studying. (4) Conceiving the steps of planning time. (5) Conceiving the steps of efficient reading. (6) Conceiving the steps of efficient listening. (7) Proper note-taking and doing homework. (8) Comprehending the importance of repeating. (9) Being able to evaluate Curriculum for Developing Efficient Studying Skills. As for the scope of the curriculum it contains; (1) Determining target. (2) Organizing the study

**Data Analysis**

Obtained data were analysed employing Covariance Analysis (ANCOVA). “ANCOVA is used to determine whether there is a statistically significant difference between groups” (Büyüköztürk, 2007: 47-48). Therefore, “if the researcher is focused on whether the experimental operation was effective or not in a pattern with pre-test/post-test control group, the most appropriate statistical operation is the single factor ANCOVA in which pre-test is considered as the common variable” (Büyüköztürk, 2004, s. 106). Due to this quality of ANCOVA, data of this research were analysed using this method. At least .05 level of significance was taken as basis in these analyses.

**Findings and Commentary**

Is there a significant difference between Post-Test Scores of students from experiment and control groups which they got from the entire Academic Achievement Test?

This sub-problem, which was taken as covariant that is changing with pre-tests, was tested via Covariance Analysis (ANCOVA). To this end, arithmetic average of pre-test and post-test scores of students from experiment and control groups which they got from “The Exam for 7th Grades Implemented by Refika Küçükcakal Primary School” were corrected according to pre-test with standard deviation and arithmetic average values regarding post-test were determined. In this sense, pre-test arithmetic average of experiment group is 217.0 and standard deviation is 46 while arithmetic average of control group for pre-test is 217.3 and standard deviation is 46.6. Post-test arithmetic average of experiment group is 228.2 and standard deviation is 38.8 while arithmetic average of control group for post-test is 217.6 and standard deviation is 39.6. Arithmetic average of experiment group for post-test which was corrected according to pre-test scores is 228.40 while this score was calculated as 217.51 for control group. This data show that post-test average scores of experiment group which were corrected according to pre-test scores of “The Exam for 7th Grades Implemented by Refika Karaçakal Primary School” are higher than those of control group. ANCOVA test was applied in order to reveal how to interpret this difference between groups statistically. Results of this test are given in Table 2.

**Table 2. ANCOVA Analysis Results Applied for Entire Academic Achievement Test**

<table>
<thead>
<tr>
<th>Source</th>
<th>KT</th>
<th>Sd</th>
<th>KO</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>89971,429</td>
<td>2</td>
<td>44985,714</td>
<td>268,303</td>
<td>.000</td>
</tr>
<tr>
<td>Covariant</td>
<td>88096,356</td>
<td>1</td>
<td>88096,356</td>
<td>525,42</td>
<td>.000</td>
</tr>
<tr>
<td>Group</td>
<td>1956,165</td>
<td>1</td>
<td>1956,165</td>
<td>11,667</td>
<td>.001</td>
</tr>
<tr>
<td>Error</td>
<td>10563,074</td>
<td>63</td>
<td>167,668</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100534,502</td>
<td>66</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When Table 2 is examined, it is seen that there is a significant difference between post-test academic achievement test scores of groups which were corrected according to re-test academic achievement test (F(1;63)=11.667, p <.05). ANCOVA model defining this is significant [F(2;63)= 268,303, p <.05]. This finding indicates that academic achievement test scores of students change significantly depending on the implemented experimental operation.
Is there a significant difference between Post-Test Scores of students from experiment and control groups which they got from the entire Efficient Studying Skills Habit Inventory?

This subproblem, which was taken as covariant that is changing with pre-tests, was tested via Covariance Analysis (ANCOVA). To this end, pre-test and post-test arithmetic average of students from experiment and control group which they got from “Studying Habits Inventory” were corrected according to pre-test with standard deviation and arithmetic average values regarding post-test were determined. In this sense, pre-test arithmetic average of experiment group is 28.3 and standard deviation is 4.8 while pre-test arithmetic average of control group is 27.3 and standard deviation is 7.6. Post-test arithmetic average of experiment group is 34.3 and standard deviation is 5.4 while post-test arithmetic average of control group is 28.6 and standard deviation is 6.3. Post-test arithmetic average of experiment group which were corrected according to pre-test scores is 34.2 while this score is 28.7 for control group. This data shows that experiment group has higher post-test average scores which were corrected to pre-test named as “Studying Habits Inventory” than control group. ANCOVA test was implemented to see if this difference between groups is statistically significant. Results of the related test are given in Table 3.

Table 3. ANCOVA Analysis Results Implemented for Entire Efficient Studying Habits Inventory

<table>
<thead>
<tr>
<th>Source</th>
<th>KT</th>
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<th>KO</th>
<th>F</th>
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<tbody>
<tr>
<td>Model</td>
<td>564,710</td>
<td>2</td>
<td>282,355</td>
<td>8,064</td>
<td>.001</td>
</tr>
<tr>
<td>Covariant</td>
<td>40,528</td>
<td>1</td>
<td>40,528</td>
<td>1,158</td>
<td>.286</td>
</tr>
<tr>
<td>Group</td>
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<td>497,307</td>
<td>14,204</td>
<td>.000</td>
</tr>
<tr>
<td>Error</td>
<td>2205,775</td>
<td>63</td>
<td>35,012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2770,485</td>
<td>65</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When Table 3 is examined, it is seen that there is a significant difference between groups in terms of post-test score averages they got from efficient studying habits inventory which were corrected according to pre-test efficient studying inventory scores of groups \( F(1;\ 63)=14.204, \ p <.05 \). ANCOVA model defining this is significant \( F(2;63)= 8.064, \ p <.05 \). This finding indicates that student scores regarding efficient studying habits inventory change significantly according to the applied experimental operation.

Conclusion and Discussion

In relation to first sub-question of research, a significant difference on behalf of experiment group was detected between academic achievement levels of experiment and control group according to analysis results obtained from achievement test scores. As a result of comparison made between post-test scores of experiment and control group, first hypothesis of the research which was “there is a significant difference on behalf of experiment group between academic achievements of experiment and control groups” was confirmed. That post-test scores of experiment group are significantly different from control group is an indicator of the fact that curriculum for developing efficient studying skills was effective on increasing 7th grade students’ achievements.

That teaching studying skills increases academic achievements of students was stated in different sources and previous research findings supported this claim were taken into consideration while creating the first hypothesis of the research. When related literature was reviewed; Bol, Warkentin, Nunnery and O’Connel (1999) detected a positive relationship between college studying habits survey and achievements of college students. Gonzales stated that there is a medium or high level of relationship between Spanish origin university students’ studying habits and their grade point averages (Gonzales,1984, p. 2). Özbey (2007)
revealed that secondary school students with high level of mathematics achievements are more conscious than other students with lower level of mathematics achievement (Özbey, 2007, p. 97). Subaşı (2000) stated in his research that education regarding efficient studying habits increases students’ academic self-concept levels and academic achievements. Jegede and Jegede (1997) denoted in their study that studying habits and academic motivation are related to each other positively. These results show that students’ academic achievements increase as their efficient studying habits increase.

In relation to second sub-problem of the research, it was concluded that there is a significant difference between post-test studying habit inventory score averages which were corrected according to pre-test studying habits inventory scores of groups. This result expresses that there is a significant change in students’ studying habits inventory scores depending on the applied experimental operation. This case confirmed the hypothesis that “there is a significant difference on behalf of experiment group in terms of efficient studying habits of experiment group and control group”. These results can be evaluated as such; curriculum for developing efficient studying skills enable students organize the study environment and use some specific methods effectively such as efficient reading, listening lectures, note-taking, efficient writing and doing homework. In this sense, it is possible to say that it helps increasing student motivations.

Second hypothesis of research was created taking into account the fact that various sources state that students do not possess efficient studying skills adequately. Various research findings support this case (Fletcher, 1980; Uluğ, 1981; Subaşı, 2000; Kaya, 2001). Abovementioned researchers revealed that education, seminars and guidance regarding improvement of studying habits positively influence studying habits and attitudes. Besides, other findings obtained as a result of literature review showed that students do not use proper studying habits, more importantly; they fail since they cannot demonstrate studying behaviours (Yenilmez & Özbey 2007). In a research conducted by Zeyrek et al (1990), it was revealed that students are moderate in relation to the wish to study (eg., Memiş 2007). Another point to be emphasized is that 55% of students state that they consider the factor “I fail because I do not know how to study” as an important determinant for their failures (Olcay & Düş, 2009). Derviş (1993) in his study examining the effect of group work on student studies came to the conclusion that group work positively influence achievement and it makes students acquire the habit of planned studying, self-confidence and sense of responsibility. In addition, it was revealed by various researches that students with proper studying skills and habits are academically successful as well (Uluğ, 1981; Schultz, 1989; Elliot et al, 1990; Slate et al, 1990; Jones et al, 1993; Lawler, Slate & Jones, 1993; Agnew et al, 1993; Gordon, 1997; Ley & Young, 1998; Sünbül et al, 1998; Carter, 1999; Arslantaş, 2001; Memiş, 2007, Özsoy, Memiş & Temur, 2009).

As a result, this research indicated that students can acquire efficient studying skills by means of Curriculum for Developing Efficient Studying Skills and they increase their academic achievements thanks to these studying habits. In this sense, if quality of education is desired to be increased, students with high level of academic achievements are intended and growing youth is expected to compete with the young population of other states with the effect of globalization, it is necessary to make students acquire efficient studying skills. To this end, legal regulations can be made for the preparation of Curriculum for Developing Efficient Studying Skills. Teachers of all grades can be given seminars regarding the Development of Efficient Studying Skills. In departments educating teachers, information concerning the how to teach efficient studying skills can be covered by pedagogical formation courses. Besides, activities in relation to implementation of this curriculum can be
practiced in practical courses. In addition, repeating this study with different groups, different content and different educational approaches may be beneficial as well.

References


Carter, D. D. G. (1999). *The Relationship of Study Habits, Attitude, and Motivation to Academic Achievement in a Selected Course of Study at an Historically Black University*. Morgan State University, The Faculty of The School of Graduate Studies and Research, UMI Number: 9945902.


