

The Use of Rehearsal Strategies in Social Studies Education Textbooks by Prospective Classroom Teachers

By

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Abstract

School materials help both students and teachers to reach planned objectives. Textbooks are the pioneering ones that students use the most. The way that the students use the course books is as worth investigating as designing which should include learning strategies. Behaviors and thoughts that the learner performs during the learning process, which are expected to affect his/her coding process could be described as learning strategies. The kinds of them, rehearsal, organizing, comprehensive and affective strategies are preferred by the students in various circumstances. The purpose of this study is to describe how prospective classroom teachers use rehearsal strategies as they study social studies education textbook. In line with the purposes of the study, the textbooks belonging to 197 prospective teachers were analyzed. It was concluded that prospective classroom teachers mostly used the strategy of underlining with a pencil. The least-used rehearsal strategy was the use of question marks alongside text.

Keywords: *Learning Strategies, Rehearsal Strategies, Social Studies, Social Studies Education Textbooks*

1. Introduction

Educational institutions have a role of graduate individuals for the purpose of preparing them social life. These institutions have many courses and different curriculum depending on the objectives. Social study is a field that aims to provide citizenship education at the universities. The course has been taught to the students from preschool education to twelfth grade in many countries. It was included in the Turkish curricula towards the end of the nineteenth century (Ozturk, Yigit & Karaduman, 2012). The field aims to raise effective and decent citizens and graduate individuals with the necessary knowledge, skills, values and habits they need to fit into the society and world in which they live. This course is taught by classroom teachers and social studies teachers in Turkey. Classroom teachers are trained with a four-year higher education program. Prospective classroom teachers are taught to raise citizens via the teaching of social studies courses as part of their training. They can only learn how to raise effective citizens by completing these courses successfully. During the instruction process, students benefit from many resources such as Internet, colleagues, experts and course books. Textbooks are not only written documents including the required information but also studying materials which university students can shape according to their needs (making a note, underlining, using symbols, drawing a concept map, drawing stars, using question marks).

The ways that students use or study can be considered as learning strategies of students. Learning strategies are the behaviors and thoughts that a learner performs during the learning process expected to affect his/her coding. The purpose of any of the strategies is to help individuals to construct affective ways to obtain, choose, organize and integrate new information (Weinstein & Mayer, 1986). Various classifications of learning strategies in the literature have been done by the recent studies (Weinstein & Mayer, 1986; Mayer, 1988; Gagne & Driscoll, 1988; O'Malley & Chamot, 1990; Hartley, 1998; Riding & Rayner, 1998; Warr & Downing, 2000). The classification of Weinstein and Mayer (1986) is the most widely used one. According to this classification, learning strategies can be examined under five groups

which are; rehearsal, elaboration, organizing, comprehensive monitoring and affective strategies. Rehearsal strategies which were constituted the basis of the research in the present study, can be described as the efficient reading and repeating of subject matter during a learning activity. The purpose of these activities is to choose and adopt the units that will be transmitted to long-term memory (Weinstein & Mayer, 1986). that are considered as low-level and simple strategies (Pintrich, Smith, Garcia & McKeachie, 1991; Warr & Downing, 2000; Dembo, 2001; Stefanou & Salisbury-Glennon, 2002) enable a low-level connection between the newly adopted knowledge and previous one in the memory (Pintrich, Smith, Garcia & McKeachie 1991; Warr & Downing, 2000; Dembo, 2001).

Rehearsal strategies include underlining, copying text, marking what is important, making a note, rewriting word-by-word, highlighting sections of notes or newspaper articles, repeating the subject matters to be learned, emphasizing to learn, determining what is important in a text, memorizing, reading aloud, listing the concepts, using specific symbols, using private symbols, using reminders, making personal notes, mentally reviewing what is important, summarizing, shadowing, circling unknown words, drawing stars alongside important information, and determining possible questions to be asked in the exam (Weinstein & Mayer, 1983; Weinstein & Mayer, 1986; Gagne & Driscoll, 1988; Pintrich, Smith, Garcia & McKeachie, 1991; Eggen & Kauchak, 1992; Bemt & Bugbee, 1990; as cited in Filcher & Miller, 2000; Styles, Beltman & Radloff, 2001; Dembo, 2001; Stefanou & Salisbury-Glennon, 2002; Cornford, 2002; Lewalter, 2003; Schlag, Florax & Ploetzner, 2007; Guven, 2008; Bagheri, Yamini & Riazi, 2009; Senemoglu, 2010; Simsek & Balaban, 2010; Wernke, Wagener, Anschuetz & Moschner, 2011).

A textbook as a fundamental material which enables teachers to be more effective and teach what they want on a more systematic basis; and enables students to repeat what the teachers suggest at anytime and anywhere depending on their pace preference (Kücükahmet, 2004). The particular rehearsal strategies used by prospective classroom teachers while following courses or study on their own, and evaluate themselves. Most of the studies in the literature were found to focus on determining the learning strategies that students use while studying, and their effects on different variables (Shrager & Mayer, 1989; Schutz & Lanehart, 1994; Filcher & Miller, 2000; Lewalter, 2003; Dahl, Bals & Turi, 2005; Sizoo, Agrusa & Iskat, 2005; Bagheri, Yamini & Riazi, 2009; Simsek & Balaban, 2010; Taylor-Sims, 2011; Wernke, Wagener, Anschuetz & Moschner, 2011), teaching learning strategies and their effects on different variables (Weinstein, 1977; Weinstein & Mayer, 1983; Pokay & Blumenfeld, 1990; Cornford, 2002; Schlag, Florax & Ploetzner, 2007; Tay, 2007; Gargallo, Suarez-Rodriguez & Perez-Perez, 2009; Nordell, 2009; Unal, 2015) and on scales for determining learning strategies or the reliability and validity (Pintrich, Smith, Garcia & McKeachie 1991; Melancon, 2002; Flowers, 2003; Entwistle & McCune, 2004; Cano, 2006; Prevatt, Petscher, Proctor, Hurst & Adams, 2006; Stroud, 2006). Although, some studies focused on the relationship between learning strategies and social studies education, few studies examined the relationship between learning strategies and textbooks (Ozkal & Cetingoz, 2006; Tay & Yangın, 2008; Celikkaya, 2010; Tay, 2005; Tay, 2013). So, present research focused on whether students used rehearsal strategies while listening or studying “teaching of social studies” course taught at the department of classroom teaching. It is believed that understanding the rehearsal strategies used by students in the Social Studies Education course offered at the department of classroom teaching will supply many benefits on social studies training. The first benefit would be redesigning social studies education textbooks by including the strategies that students have already using, and the second one might be to dedicate sections of the book to directly teach the strategies that students are unfamiliar with or rarely use. This study is expected to fill the research gap regarding the relationship between learning strategies and social studies textbooks and may guide future studies.

In this study it was attempted to describe how prospective class teachers used rehearsal strategies in their social studies education course books. In line with this purpose, the following research questions were examined.

Do prospective classroom teachers use the rehearsal strategies of;

- a) Rewriting the exact information,
- b) Underlining the text with a pencil,
- c) Underlining the text with colored pens,
- d) Making notes beside the text,
- e) Drawing stars beside what is important,
- f) Using questions marks beside what is not understood,
- g) Putting symbols indicating the marked part will be asked,
- h) Using symbols indicating summary sentences (frames, brackets, large dots etc.),
- i) Circling what is important,
- j) Marking important pages and
- k) Using visuals when studying their social studies education textbooks?

2. Methodology

In present study, qualitative research method of case studies was used to describe the rehearsal strategies of prospective class teachers while studying social studies education textbooks. Document analysis was employed to analyze the data collected from the participants who indicated the strategies on social studies textbooks. Qualitative studies depict a detailed picture of a certain individual, group, state or problem (Fraenkel & Wallen, 1996). They are conducted in order to identify the natural state of the topic, event, phenomena or perceptions and generally use the techniques of interview, observation and document analysis (Ekiz, 2003; Kus, 2003; Yıldırım & Simsek, 2011). Document analysis is a systematic procedure for reviewing or evaluating documents both printed and material. Like other analytical methods in qualitative research, document analysis requires that data be examined and interpreted in order to elicit meaning, gain understanding, and develop empirical knowledge (Corbin & Strauss, 2008; see also Rapley, 2007 cited in Bowen, 2009).

Data Sources

In this study, data were collected from the textbooks of the Social Studies Education Course which were used by the students at Ahi Evran University, Department of Classroom Teaching during 2013-2014 academic years. A total of 197 social studies education textbooks were taken as analysis documents that were used by prospective teachers. Convenience Sampling was preferred in the study for the purpose of including appropriate and willing participants (Creswell, 2005). The study was conducted with volunteering 57 (28.9%) male and 140 (71.1%) female prospective classroom teachers.

Procedure

Rehearsal strategies stated in the learning strategies classification of Weinstein and Mayer (1986) were examined in social studies education textbooks and determined by using document analysis method. According to Forster (1995), document analysis consists of five stages listed below.

- a) Access to the documents
- b) Checking the originality of the documents
- c) Understanding the documents
- d) Analyzing the data
- e) Using the data

In addition, in the study more comprehensible and detailed descriptions were included in order to increase its transferability. So, data acquisition process was presented in detail. Such as the characteristics of data source, how they were chosen, data analysis process and the constraints of the study in details, which all contributed to the transferability of the study (Creswell & Miller, 2000). Moreover the data obtained from research were shared with experts who have conducted studies on learning strategies.

The stages followed in this study were explained below.

The first stage involved accessing social studies education textbooks of the students as the documents. According to Bogdan & Biklen (1992) and Goetz & LeCompte (1984), textbooks, curriculum guidelines, internal or external correspondences, student records, minutes of meetings, student counseling records and files, student and teacher handbooks, student assignments and exams, lesson and unit plans, teacher files and other official documents may all be used as data sources in studies of education (Cited in Yıldırım & Simsek, 2011)

The second stage involved checking the originality of documents. In order to preserve the originality of the documents, the students were not informed of the study at the beginning of the term, thus enabling them to naturally use rehearsal strategies. Documents contain text (words) and images that have been recorded without a researcher's intervention (Bowen, 2009). At the end of the term, the students were asked to bring their textbooks would be evaluated as a part of the final exam. At the end of the exam, the students were informed about the study and then textbooks and voluntary participants' textbooks were collected.

The third stage was comprised of understanding/ analyzing the documents. This stage requires the analysis of documents within a certain system and comparison (Yıldırım & Simsek, 2011). To this end, the documents were analyzed one by one and compared to the others to explore the strategies.

The fourth stage involved data analysis in the following ways:

Stage 1 (Selecting the sample): The sample was formed by using the convenience sampling technique. A total of 197 documents were gathered to be examined only with respect to involving rehearsal strategies.

Stage 2 (Developing categories): In this step categories were defined. For this purpose, a closed approach, grouping and recording units according to an existing category system in a certain field (Bilgin, 2006) were preferred. The behaviors included in the rehearsal strategies were determined by scanning the literature. Rehearsal strategies the students used in textbooks were examined according to 11 groups. In this framework rehearsal strategies were determined as follows:

1. Rewriting the exact information,
2. Underlining the text with a pencil,
3. Underlining the text with colored pens,
4. Making notes beside the text,
5. Drawing stars beside what is important,
6. Using questions marks beside what is not understood,
7. Putting symbols indicating the marked part will be asked,
8. Using symbols indicating summary sentences (frames, brackets, large dots etc.),
9. Circling what is important,
10. Marking important pages,
11. Using visuals.

The categories defined were submitted to the approval of 6 academicians who have conducted studies on learning strategies from Ahi Evran, Atatürk, Hacettepe, İnönü, Mugla and Necmettin Erbakan Universities, and were asked to evaluate as “appropriate”, “appropriate if reviewed” and “inappropriate”. The evaluations were compared to the defined categories and the level of approval was determined. Then the reliability of the categories was calculated via the formula of $\text{Reliability} = \frac{\text{consensus}}{\text{consensus} + \text{dissensus}}$ (Miles and Huberman, 1994). The resulting coefficient of concordance was found as 0.89, which indicated the high reliability of the categories. Moreover, the names of the categories were changed in light of the opinions of the experts; e.g., the category of “using questions marks” was changed to “using question marks beside what is not understood”, and the category of “underlining with a pencil” was changed to “underlining important text with a pencil”.

Stage 3 (Identifying the analysis unit): The analysis unit was the rehearsal of strategies by prospective teachers.

Stage 4 (Digitizing): Documents were examined using these categories and the obtained data were analyzed by determining the frequency of the categories. Each document was examined in terms of the 11 categories of rehearsal strategies. The results were presented using tables and sample quotations which were included in the interpretations in order to support the comments of the researcher and reflect how the students used the rehearsal strategies. These quotations were presented using the codes. For example, 95-M and 154-F represented the order of examination and the gender of the student respectively. After the document analysis was employed using the data, findings with comments and explanations, discussion, conclusion and suggestions were given in related parts.

3. Findings

In line with the purpose of the study, prospective classroom teachers' usage of rehearsal strategies was determined and represented in Table 1.

Table 1: The use of underlining the text with a pencil strategy by prospective teachers

Learning Strategy	Yes		No	
	f	%	f	%
Underlining the text with a pencil	176	89.3	21	10.7

According to Table 1, 89.3% (f=176) of the prospective classroom teachers were found using the rehearsal strategy of underlining important text with a pencil while they were listening to the teaching of social studies course or studying alone, while 10.7% (f=21) did not use this strategy. For example, the student, 95-M, underlined important parts on the paper. Original studies with the interpretations were given in Figure 1.

Figure 1: Sample study of Student 95-M.

<p>Etkili Vatandaşlık</p> <p>Ülkelerin eğitim sistemlerinden beklentileri, kendi yönetim rejimlerinin devamını sağlayacak bireyler yetiştirmektir. Bu nedenle vatandaş yetiştirmek ülkeler için eğitim sistemlerinin genel amacı olmuştur. Bu amaç kimi zaman tek disiplinli anlayışla tarih, coğrafya ve vatandaşlık bilgisi şeklinde ayrı ayrı dersler olarak; kimi zaman çok disiplinli ve disiplinler arası anlayıştaki sosyal bilgiler dersi olarak gerçekleştirilir. Sosyal bilgiler ile ilgili tanımların hemen hepsi etkili vatandaşlık kavramına vurgu yapmaktadır. Sosyal bilgiler dersi, ülkemizde vatandaşlık eğitimi kapsamında, ilköğretim okullarında okutulmakta olan "Hayat Bilgisi" dersinin toplumsal boyutunun devamı niteliğindedir.</p>	<p>In the sample, the student who was coded as 95-M has selected the important information in the paragraph and underlined it with a pencil. The text was as follows:</p> <p>Effective Citizenship <i>Countries expect their education systems to raise individuals who will maintain their administrative regimes. Therefore, raising citizens is the overall purpose of education systems.</i> This is sometimes realized through a single-discipline approach and separate courses such as history, geography and civic education, and sometimes through a multi or interdisciplinary approach and the social studies course. <i>Almost all definitions of social studies emphasize the concept of effective citizenship.</i> Within the scope of citizenship education in Turkey, the social studies course <i>is the continuation of the social dimension of the elementary school "Life Studies" course.</i></p> <p>The student has underlined the bold and italic parts in the text with a pencil.</p>
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Table 2: The use of making a note beside the text strategy by prospective teachers

Learning Strategy	Yes		No	
	f	%	f	%
Making a note beside the text	173	87.8	24	12.2

According to Table 2, 87.8% (f=173) of the prospective classroom teachers made notes next to the text body, whereas 12.2% (f=24) of them did not use this strategy. An example was given in Figure2.

Figure 2: Sample study of Student 154-F.

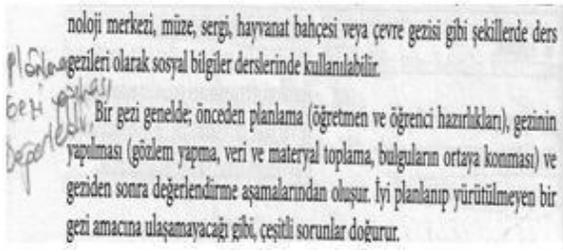
 <p>noloji merkezi, müze, sergi, hayvanat bahçesi veya çevre gezisi gibi şekillerde ders gezileri olarak sosyal bilgiler derslerinde kullanılabilir.</p> <p>Bir gezi genelde; önceden planlama (öğretmen ve öğrenci hazırlıkları), gezinin yapılması (gözlem yapma, veri ve materyal toplama, bulguların ortaya konması) ve geziden sonra değerlendirme aşamalarından oluşur. İyi planlanıp yürütülmeyen bir gezi amacına ulaşamayacağı gibi, çeşitli sorunlar doğurur.</p>	<p>In the sample, the student, 154-F, took notes in the margin in relation to the trip method. The text was as follows:</p> <p>A trip usually consists of prior planning (teacher and student preparations), the trip itself (observation, data and material collection, displaying the findings) and the post-trip evaluation. A poorly-planned and executed trip will not only fail to achieve its purpose, but also lead to various problems.</p> <p>The student has written the following notes in the margin:</p> <ul style="list-style-type: none"> -planning -organizing a trip -evaluate
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Table 3: The use of circling what is important strategy by prospective teachers

Learning Strategy	Yes		No	
	f	%	f	%
Circling what is important	151	76.6	46	23.4

According to Table 3, 76.6% (f=151) of the prospective classroom teachers used the rehearsal strategy of circling important words or items, whereas 23.4% (f=46) of them did not prefer this strategy. An example was given Figure3.

Figure 3: Sample study of Student 157-F

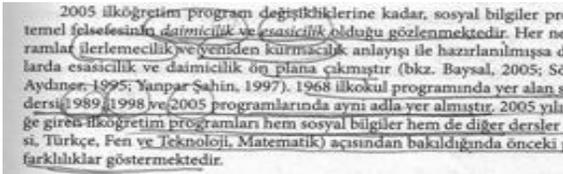
 <p>2005 ilköğretim programı değişikliklerine kadar, sosyal bilgiler programı temel felsefesinin daimicilik ve esasçılık olduğu gözlenmektedir. Her ne kadar ramlar ilerlemecilik ve yeniden kurumsalcılık anlayışı ile hazırlanmışsa da uylarda esasçılık ve daimicilik ön plana çıkmıştır (bkz. Baysal, 2005; Sonmez, Aydınar, 1995; Yanpar Şahin, 1997). 1968 ilkököl programında yer alan sosyal dersleri 1989, 1998 ve 2005 programlarında aynı adla yer almıştır. 2005 yılında geçiren ilköğretim programları hem sosyal bilgiler hem de diğer dersler (Hırsi, Türkoçe, Fen ve Teknoloji, Matematik) açısından bakıldığında önceki program farklılıklar göstermektedir.</p>	<p>In the sample, the student, 157-F, has circled some words related to the social studies curriculum. The text was as follows:</p> <p>Until the elementary school curriculum change in 2005, their main philosophy was perennialism and absolutism. Even though the curricula have been based on progressivism and reconstructivism, here absolutism and perennialism were emphasized (See Baysal, 2005; Sonmez, 2005; Aydınar, 1995; Yanpar Sahin, 1997).</p> <p>The student has circled the following words in the text:</p> <ul style="list-style-type: none"> - perennialism - absolutism - progressivism - reconstructionism
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Table 4: The use of using symbols indicating summary sentences (frames, brackets, large dots etc.) strategy by prospective teachers

Learning Strategy	Yes		No	
	f	%	f	%
Using symbols indicating summary sentences (frames, brackets, large dots etc.)	146	74.1	51	25.9

According to Table 4, 74.1% (f=146) of participants used symbols indicating summary sentences (frames, brackets, large dots etc.), whereas 25.9% (f=51) did not use this strategy. For instance, the participant, 97-

F, used a bracket while studying (Figure 4).

Figure 4: Sample study of **Student 97-F**

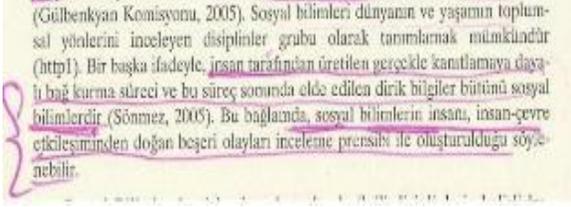
 <p>(Gülbenkyan Komisyonu, 2005). Sosyal bilimleri dnyanan ve yařamın toplumsal ynlelerini inceleyen disiplinler grubu olarak tanımlamak mümkündür (http). Bir başka ifadeyle, insan tarafından üretilen gerçeğe anlamaya dayalı bağ kurma süreci ve bu süreç sonunda elde edilen dirik bilgiler bütünü sosyal bilimlerdir (Sönmez, 2005). Bu bağlamda, sosyal bilimlerin insana, insan-çevre etkileşiminden doğan beçeri olayları inceleme prensibi ile oluşturulduğu söylenebilir.</p>	<p>In the sample, the student, 97-F, made a mark in the margin to point to the sentences that summarize the paragraph containing the definitions of social studies and social sciences. The marked text was as follows: ... In other words, social sciences are the process of making associations based on human generated reality and evidence, and the dynamics obtained as a result of this process (Sönmez, 2005). Thus, it may be stated that social sciences are based on the principle of examining humans and human events born out of human-environment interaction.</p>
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Table 5: The use of drawing stars beside what is important strategy by prospective teachers

Learning Strategy	Yes		No	
	f	%	f	%
Drawing stars beside what is important	129	65.5	68	34.5

According to Table 5, 65.5% (f=129) of the prospective classroom teachers were found to use the rehearsal strategy of drawing stars next to the important information, while 34.5% (f=68) did not use this strategy. An example was given in Figure 5.

Figure 5: Sample study of **Student 146-M**

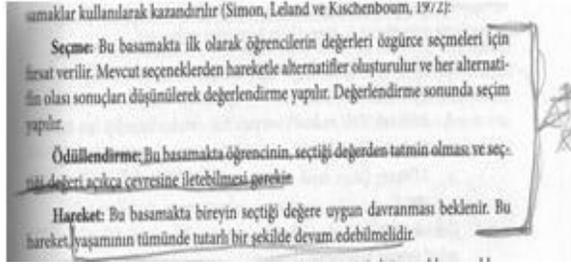
 <p>umaklar kullanılarak kazandırılır (Simon, Leland ve Kischenbom, 1972): Seçme: Bu basamakta ilk olarak öğrencilerin değerleri değürece seçmeleri için fırsat verilir. Mevcut seçeneklerden hareketle alternatifler oluşturulur ve her alternatifin olası sonuçları düşünülerek değerlendirme yapılır. Değerlendirme sonunda seçim yapılır. Ödüllendirme: Bu basamakta öğrencinin, seçtiği değerden tatmin olması ve seçtiği değeri açıkça çevresine iletibilmesi gerekir. Hareket: Bu basamakta bireyin seçtiği değere uygun davranması beklenir. Bu hareket, yaşamının tümünde tutarlı bir şekilde devam edebilmelidir.</p>	<p>In the sample, the student, 146-M, asterisked the stages of the values clarification approach. The asterisked text was as follows: Selection: Here, students are first given an opportunity to freely choose values. Alternatives are formed starting from the existing options, and each alternative is evaluated by considering its potential outcomes. Evaluation is followed by selection. Rewarding: In this stage, the student should be satisfied with the value selected and be able to clearly express it. Action: In this stage, the individual is expected to act in accordance with the value s/he selected. This action should be displayed consistently throughout his/her life.</p>
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Table 6: The use of putting symbols indicating the marked part will be asked strategy by prospective teachers

Learning Strategy	Yes		No	
	f	%	f	%
Putting symbols indicating the marked part will be asked	123	62.4	74	37.6

According to Table 6, 62.4% (f=123) of the prospective classroom teachers were found using the rehearsal strategy of putting symbols indicating the marked part will be asked, while 37.6% (f=74) did not to use this strategy. For example, the participant, 31-F put a symbol next to the information indicated that could be asked in the exam (Figure 6).

Figure 6: Sample study of **Student 31-F**

<p>Proje tabanlı öğrenme yönteminin aşamalarını ise aşağıdaki tabloda özetlemek mümkündür (Korkmaz ve Kaptan, 2000).</p>			
<p>611 →</p> <p>Aşamalar</p>	<p>Yapılacak işlemler</p>	<p>Öğretmenin rolü</p>	<p>Öğrencinin rolü</p>
<p>1. Konuyu ve alt konuları belirleme, grupları kendi içerisinde organize etme</p>	<p>Öğrenciler kaynakları araştırır, bir çerçeve proje için sorular önerilebilir.</p>	<p>Araştırmanın genel konusunu sunar, konuları ve alt konularını tartışılmasında gruplara rehberlik eder.</p>	<p>İlgili problemler yaratır ve sonuçları kategorize ederler, proje gruplarını oluşturmada katkıda bulunurlar.</p>
<p>2. Grupların proje planlarını oluşturmaları</p>	<p>Grup üyeleri hep birlikte proje planını yaparlar. Nereye ve nasıl göçecekleri, neleri öğrenecekleri</p>	<p>Grupların projelerini formüle etmelerine yardım eder, gruplarla toplantılar yapar. Gerekli materyal ve</p>	<p>Ne çalışacaklarını planlar, kaynakları seçer, rolleri tanımlar, planların dağıtımını sağlar.</p>

In the sample, the student, 31-F, has made a mark and a note next to the table displaying the stages of project-based learning to indicate that this may be a question. 31-F noted that “This will be asked in the exam” and put an asterisk alongside the relevant information.

Table 7: The use of underlining the text with colored pens strategy by prospective teachers

Learning Strategy	Yes		No	
	f	%	f	%
Underlining the text with colored pens	116	58.9	81	41.1

According to Table 7, 116 of the prospective classroom teachers were found using the rehearsal strategy of underlining important text with colored pens, while 41.1% (f=81) did not use this strategy. An example was given in Figure 7.

Figure 7: Sample study of **Student 144-F**

	<p>In the sample, the student, 144-F, selected important information from the text and underlined it with a colored crayon. The text was as follows: Having a crucial effect on learning, attitude “is a cognitive, affective and behavioral reaction pattern against oneself or any social object or event, based on the experiences and prior knowledge of the individual” (Baysal, 1981). According to Thurstone (1967) ... The student underlined the parts in bold italics</p>
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Table 8: The use of marking important pages strategy by prospective teachers

Learning Strategy	Yes		No	
	f	%	f	%
Marking important pages	72	36.5	125	63.5

According to Table 8, 63.5% (f=125) of the prospective classroom teachers did not mark important pages, while 36.5% (f=72) used this strategy. Examples were given in Figure 8.

Figure 8: Sample studies of **Student 162-M and 22-F**

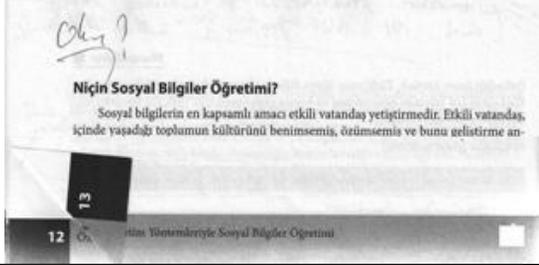
	<p>In the sample, the student, 162-M, dog-eared the page containing the chapter summary</p>
	<p>In the sample, the student, 22-F, put a colored sticky note on the page symbolizing intelligence areas.</p>

Table 9: The use of using visuals strategy by prospective teachers

Learning Strategy	Yes		No	
	f	%	f	%
Using visuals	48	24.4	149	75.6

According to Table 9, 24.4% (f=48) used visual strategies but 75.6% (f=149) of the prospective classroom teachers did not use them. An example from 109-F was given in Figure 9.

Figure 9: Sample study of **Student 109-F**

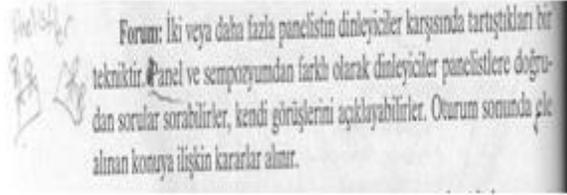
	<p>In the sample, the student, 109-F, drew a visual next to the paragraph about the “forum” technique to explain it. The visual contains two tables and two panelists at each. The paragraph states that “Forum: A technique in which two or more panelists discuss in front of an audience”. The visual illustrates this.</p>
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Table 10: The use of rewriting the exact information strategy by prospective teachers

Learning Strategy	Yes		No	
	f	%	f	%
Rewriting the exact information	29	14.7	168	85.3

According to Table 10, 14.7% (f=29) of the prospective classroom teachers were found using the rehearsal strategy of rewriting the exact information while 85.3% (f=168) of them did not use this strategy. Examples were given in Figure 10.

Figure 10: Sample study of **Student 35-F**

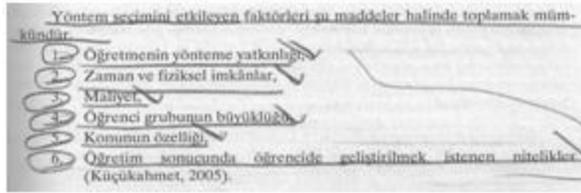
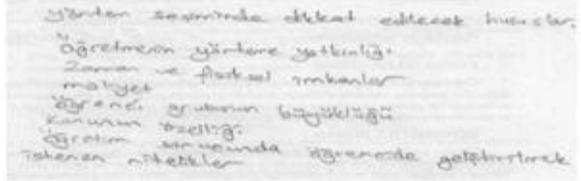
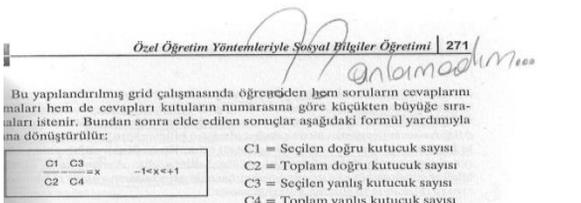
	<p>In the sample, the student, 35-F, fully copied the part of the text s/he thought was important in the margins. The text was as follows: It is possible to summarize the factors that affect method selection as follows: 1. The inclination of the teacher to the method, 2. Time and physical facilities, 3. Costs, 4. Size of the student group, 5. Characteristics of the topic, 6. The student qualities targeted at the end of instruction (Küçükahmet, 2005).</p>
	

Table 11: The use of using questions marks beside what is not understood strategy by prospective teachers

Learning Strategy	Yes		No	
	f	%	f	%
Using questions marks beside what is not understood	24	12.2	173	87.8

According to Table 11, 12.2% (f=24) of the prospective classroom teachers used questions marks alongside information that is not understood but 87.8% (f=173) of them used this strategy. For instance, the participant, 27-F, put a question mark next to the explanation in the text (Figure 11).

Figure 11: Sample study of **Student 27-F**

	<p>In the sample, the student, 27-F, could not understand the calculation of the constructed grid in the text and s/he put a question mark next to this information, followed by the statement “I don’t understand”.</p>
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4. Conclusions, Discussion and Suggestions

As a conclusion, prospective classroom teachers were determined using the rehearsal strategy in various proportions. The strategy used the most was “underlining the important text with a pencil”, while the least used strategy was found as “question marks alongside what is not understood”. Other results of the study were given and discussed below.

Approximately 90% of prospective classroom teachers underlined important text with a pencil. Similarly, Tasdemir (2010) found that 82.1% of post-graduate students underlined text. Rehearsal strategies

represent the choosing and acquisition processes for memorizing and repeating information (Schlag, Florax & Ploetzner, 2007). Underlining important text with a pencil includes choosing to repeat. This strategy may enable students to easily acquire the necessary information. Students who were asked to underline sentences remembered more information than those who read without underlining the sentences. According to Mayer (1988), some learning strategies enable students to focus on certain types of information. So the activities which students were in need of focusing, underlined text as well

The rehearsal strategy of “underlining important text with colored pens” was used by approximately 60% of the prospective classroom teachers. According to Cornford (2002), rehearsal strategies are the most common ways of consigning information to long-term memory, and include simple and complicated techniques; for example, repeating the letters of the alphabet and remembering numbers and events are considered to be simple techniques, while copying the key words while preparing a document, and using markers to highlight sections text are considered complicated techniques.

Therefore, underlining important text with colored pens may be considered as more complicated technique than the other rehearsal techniques. Underlining important text with both a pencil and colored pens requires distinguishing important information from unimportant one. According to Senemoglu (2010), underlining key words or main ideas enables students to focus on the information to be learned. Choosing the information in these ways affects the process of acquisition and recall. Harris (1991) suggested that underlining text was effective in short-term memory. Examining the sample quotations given in the findings part of the study, prospective classroom teachers sometimes underlined the first or the last sentences of a paragraph, or some words inside it with a pencil or colored pens.

Another rehearsal strategy was found as “making a note alongside the text”. According to Weinstein and Underwood (1985), the term ‘learning strategy’ was given various meanings, such as memorizing information for future uses; and having many competences required for efficient learning, one of which was making a note. According to Arends (1997), that enables students to repeat information, prepare for further information and to code obtained information. Moreover, Eggen and Kauchak (1992) stated that the efficiency of strategies such as underlining and making a note depended on whether the individual focused on the content and meaning. Students internalize to make a note with what is told continue to choose and distinguish the topics and important aspects and finally, express them in their own words (Topses, 2009). In the present study, it was observed that prospective classroom teachers chose the important parts in the text and expressed them in their own word groups or sentences. Examining the sample quotations in the findings part of the study, participant 98-M was observed to take the following notes for the part “That is, a small group discusses the subject matter among themselves in front of an audience. The group consists of 3–5 people. The speakers discuss an issue among themselves in front of an audience until the end of the time given to them”. Likewise, participant 154-F wrote the following note alongside text about travelling “planning, travelling, evaluate”. This note was understood to summarize the subject matter in the relevant paragraph. The samples indicated that students used the rehearsal strategy of making notes alongside the text on an accurate and appropriate basis.

The third most common strategy (used by approximately three-quarters of the students) involved circling important sections; this was followed by using symbols indicating summarizing sentences. Rehearsal strategies enable students to choose and acquire important information by repeating it (Guen, 2008). According to Weinstein and Mayer (1983), one of the two purposes of rehearsal strategies is choosing, which enables the students to focus on important parts in the text. Both circling what is important and using symbols indicating summarizing sentences involve choosing. In the present study, the sample quotations for the circling and summarizing strategies indicated that the students have chosen important parts in the text. For example, the participant 157-F only circles the phrase “perennialism, essentialism, progressivism and re-constructivism” in a text about the foundations of the philosophy of social studies programs. These four words in combination effectively indicated what should be learned from the text. That was supported by amendments made later in the paragraph, in which only three relevant dates were

circled. Another sample quotation of 61-M showed that the words “cognitive, research, conceptual, social, cooperation, finding and study” were circled in a text about constructivism. When combined, these words convey the meaning of constructivism. In both examples, use of symbols indicated summarizing sentences that the last parts of the paragraph were chosen and brackets were used; student 141-M additionally drew stars alongside sections that were important and underlined important texts whereas 97-F underlined important sections in addition to using brackets.

The fifth most common rehearsal strategy was drawing stars alongside important information. Approximately two-thirds of the prospective teachers were found using this strategy, which was followed by putting symbols indicating the marked part will be asked. According to Weinstein and Mayer (1983), one of the rehearsal strategies is to mark important parts of the text. The purpose of this strategy, as well as other strategies, is to choose important information. The same situation applies to put symbols indicating the marked part will be asked. The students thereby choose the important information and focus directly on these parts when reviewing the text later. Senemoglu (2010) suggested that students may focus on what should be learned by using one of the strategies for managing attention. According to Karakis and Celenk (2007), this strategy includes reviewing the headings, sub-headings, graphs and examining the questions, thereby choosing and marking the important parts, asking relevant questions, and making notes alongside the text. The sample quotations for drawing stars alongside what is important and putting symbols indicating the marked part will be asked shows that the students chose the important information. Participant 54-F was observed that she drew stars in the text that indicated the specific skills required for the social studies program, thus choosing and ranking information according to importance. Moreover, in the example, 31-F noted that “This will be asked in the exam” and drew a star alongside the relevant information. This illustrated that students employed preferred rehearsal strategies to prepare and acquire relevant information.

Approximately one-third of the students marked important pages in the textbooks. Students generally used bookmarkers and colored “Post-it” notes to mark important pages. Moreover, participant 162-M folded the pages, including the abstracts at the end of all sections, while 22-F marked important pages using a colored post-it.

Approximately 25% of students used visuals in their textbooks. According to Simsek and Balaban (2010), using reminders is one example of a rehearsal strategy. This strategy may be considered to be more difficult to use, because it requires selecting important information and associating it with a visual prompt. The finding that two-thirds of the students did not use this strategy indicated the difficulty of associating specific information with one or more visuals. Only a few visual examples were found, which usually consisted of simple drawings. For instance, participant 189-F used a human “stick graph” in association with the teaching of directions. A similar a table was used by 109-F, in a good example of choosing information and associating it with a visual. As it was seen in the sample quotation, 109-F drew a visual of two desks and two panelists at each table, which was associated with the word “forum”: “a technique in which two or more panelists discuss in front of an audience”. This was a good example of how the expression “two or more panelists” was associated with visuals.

The least common rehearsal strategy (approximately 10%) was the use of questions marks alongside information that was not understood. A similar proportion of the students used the strategy of rewriting the exact information. In the classification of Weinstein and Mayer (1986), rehearsal strategies are grouped under two categories which are simple and complex. Simple strategies include simple rehearsals, while complicated ones require the student not only to repeat the information but, to a certain extent, also to apply a personal meaning. According to Simsek (2006), reading materials aloud, listing basic concepts, rewriting, putting symbols with special meanings alongside the text, making notes from certain parts of the text and underlining the text can be regarded as complicated strategies. Rewriting here, or making word-by-word notes, as Guven (2008) states, and putting symbols with special meanings alongside the text are considered as complex strategies which gives personal meanings to the information to a certain

extent.

To summarize the results, more than two-thirds of the prospective classroom teachers used some of the strategies, while two-thirds of them did not use any of the strategies. Some of the strategies were used by most of the students, whereas others were not. One reason for this situation may be referred to that students were either unaware of the learning strategies or unsure how to use them. Thus, prospective teachers can be taught what the learning strategies are and how they can be used in textbooks.

In the present study, students were given no prior instruction on rehearsal learning strategies. Thus, it can be said that prospective teachers may be taught what rehearsal strategies they can use on teaching of social studies education textbooks. In addition to rehearsal strategies, elaboration, organizing and affective strategies can also be described in further studies. Moreover, similar studies can be conducted using textbooks for different subject areas, in order to examine the relationships between them.

The present study determined the extent to which prospective classroom teachers used rehearsal learning-strategies. The results may be useful for designers of textbooks; e.g. the second most used rehearsal strategies by the prospective teachers were making a note alongside the text. In order to use this strategy, learners require sufficient page margins. According to Akkoyunlu, Altun and Yılmaz-Soylu (2008), “instructional designers may develop and maintain the efficiency of appropriate learning strategies by using appropriate teaching strategies. Therefore, what is important for designers is to establish the relationship between “teaching strategies” and “learning strategies”. Thus, instructional designers may consider the results of the present study and develop new textbook designs; especially those findings could be used in teaching social studies education textbooks. At the same time, one current problem with the textbooks in the country is that they fail to aid student comprehension with their contents and design (Aslan, 2010). Indeed, Guven’s (2010) study on textbooks concluded that textbooks had certain deficiencies which support the conclusion of the present study. To sum up, considering rehearsal strategies in textbooks may alleviate design deficiencies and help to develop the curriculums.

References

- Akkoyunlu, B., Altun, A. & Yılmaz-Soylu, M. (2008). *Öğretim tasarımı*. Ankara: Maya Akademi.
- Arends, R.I. (1997). *Classroom instruction and management*. New York: The McGraw-Hill Companies.
- Aslan, E. (2010). The first course books of Turkish Republic. *Education and Science*, 35 (158), 215-231.
- Bagheri, M.S., Yamini, M. & Riazi, A. (2009). Motivational and learning strategies of Iranian EFL learners exposed to an e-learning program. *The Journal of Teaching Language Skills (JTLS)*, 1 (1): 1-35.
- Bilgin, N. (2006). *Sosyal bilimlerde içerik analizi / teknikler ve örnek çalışmalar*. İstanbul: Siyasal Kitapevi.
- Bowen, G.A. (2009). Document Analysis as a Qualitative Research Method. *Qualitative Research Journal*, 9 (2), 27-40. DOI 10.3316/QRJ0902027.
- Cano, F. (2006). An in-depth analysis of the learning and study strategies inventory (LASSI). *Educational and Psychological Measurement*, 66: 1023-1038.
- Cornford, I.R. (2002). Learning to learn strategies as a basis for effective lifelong learning. *International Journal of Lifelong Education*, 21 (4): 357-368.
- Creswell, J.W. & Miller, D.L. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, 39: 124-130.
- Creswell, J.W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. New Jersey: Pearson Education.

- Celikkaya, T. (2010). Pre-service social science studies students' use of learning strategies. *Journal of Kırşehir Education Faculty*, 11(3): 65-84.
- Dahl, T.I., Bals, M. & Turi, A.L. (2005). Are students' beliefs about knowledge and learning associated with their reported use of learning strategies? *British Journal of Educational Psychology*, 75: 257–273.
- Dembo, M.H. (2001). Learning to teach is not enough: Future teachers also need to learn how to learn. *Teacher Education Quarterly*, 28(4): 23–35.
- Eggen, P. & Kauchak, D. (1992). *Educational psychology: Classroom connections*. New York: Macmillan College Publishing Company.
- Entwistle, N. & McCune, V. (2004). The conceptual bases of study strategy inventories. *Educational Psychology Review*, 16 (4): 325-345.
- Filcher, C. & Miller, G. (2000). Learning strategies for distance education students. *Journal of Agricultural Education*, 41 (1): 60-68.
- Flowers, L.A. (2003). Test-retest reliability of the learning and study strategies inventory (LASSI): New evidence. *Reading Research and Instruction*, 43 (1): 31-46.
- Gagne, R.M. & Driscoll, M.P. (1988). *Essentials of learning for instruction*. New Jersey: Prentice Hall.
- Gargallo, B., Suarez-Rodriguez, J.M. & Perez-Perez, C. (2009). The CEVEAPEU questionnaire. An instrument to assess the learning strategies of university students. *RELIEVE*, 15 (2): 1-26.
- Güven, M. (2008). Development of learning strategies scale: Study of validation and reliability. *World Applied Sciences Journal*, 4 (1): 31-36
- Güven, S. (2010). The evaluation of primary education life sciences course books and workbooks according to the teachers' views. *Education and Science*, 35 (156), 84-95.
- Harris, J. (1991). *Text annotation and underlining as metacognitive strategies to improve comprehension and retention of expository text*. Paper presented at the meeting of the National Reading Conference, November, Miami, FL.
- Hartley, J. (1998). *Learning and studying: A research perspective*. London: Routledge
- Karakıs, Ö. & Celenk, S. (2007). The usage level of general learning strategies of students' having different learning styles "A.I.B.U. sample". *AİBÜ Eğitim Fakültesi Dergisi*, 7 (1): 26-46.
- Kuçukahmet, L. (2004). *Konu alanı ders kitabı inceleme kılavuzu*. Ankara: Nobel Yayın Dağıtım.
- Lewalter, D. (2003). Cognitive strategies for learning from static and dynamic visuals. *Learning and Instruction*, 13: 177–189.
- Mayer, R.E. (1988). Learning strategies: An overview. In: Weinstein CE, Goetz ET & Alexander PE (eds.) *Learning and study strategies: Issues in assessment instruction, and evaluation*. New York: Academic Press.
- Melancon, J.G. (2002). Reliability, structure, and correlates of learning and study strategies inventory scores. *Educational and Psychological Measurement*, 66: 1020-1027.
- Miles, M.B. & Huberman, A.M. (1994). *An expanded sourcebook: Qualitative data analysis*. Thousand Oaks London: Sage Publications.
- Nordell, S.E. (2009). Learning how to learn: A model for teaching students learning strategies. *Bioscience: Journal of College Biology Teaching*, 35(1): 35-42.
- O'Malley, J.J. & Chamot, A.U. (1990). *Learning strategies in second language acquisition*. Cambridge, England: Cambridge University Press.

- Ozkal, N. & Cetingoz, D. (2006). Academic achievement, gender, attitude and learning strategies. *Educational Administration: Theory and Practice*, 12 (46): 259-275.
- Ozturk, C., Yigit, Ö.E. & Karaduman, H. (2012). Image of social studies at Google. *TOJET*, 11 (3): 162-173.
- Pintrich PR, Smith DAF, Garcia T & McKeachie WJ (1991). *A manual for the use of the motivated strategies for learning questionnaire (MSLQ)*. Office of Educational Research and Improvement (ED), Washington, DC., Report no: NCRIPAL-91-B-004
- Pokay, P. & Blumenfeld, P.C. (1990). Predicting achievement early and late in the semester: The role of motivation and use of learning strategies. *Journal of Educational Psychology*, 82 (1): 41-50.
- Prevatt, F., Petscher, Y., Proctor, B.E., Hurst, A. & Adams, K. (2006). There vised learning and study strategies inventory: an evaluation of competing models. *Educational and Psychological Measurement*, 66: 448-458.
- Radić-Šestić, M., Radovanović, V., Milanović-Dobrota, B., Slavkovic, S. & Langović-Milićević, A. (2013). General and special education teachers' relations within teamwork in inclusive education: socio-demographic characteristics. *South African Journal of Education*, 33(3), 1-15.
- Riding, R. & Rayner, S. (1998). *Cognitive styles and learning strategies: Understanding style differences in learning and behavior*. London: David Fulton Publishers.
- Schlag, S., Florax, M. & Ploetzner, R. (2007). The use of learning strategies in learning from text and pictures. *Proceedings of the 2007 conference on supporting learning flow through integrative technologies*. (pp. 331-338). IOS Press Amsterdam, the Netherlands,
- Schutz, P.A. & Lanehart, S.L. (1994). Long-term educational goals, sub goals, learning strategies use and the academic performance of college students. *Learning and Individual Differences*, 6 (4): 399-412.
- Senemoglu, N. (2010). *Gelişim öğrenme ve öğretim*. Ankara: Pegem Yayınevi.
- Shrager, L. & Mayer, R.E. (1989). Note-taking fosters generative learning strategies in novices. *Journal of Educational Psychology*, 81 (2): 263-264.
- Sizoo, S.L., Agrusa, J.F. & Iskat, W. (2005). Measuring and developing the learning strategies of adult career and vocational education students. *Education*, 125 (4): 527-538.
- Stefanou, C.R. & Salisbury-Glennon, J.D. (2002). Developing motivation and cognitive learning strategies through an under graduate learning community. *Learning Environments Research*, 5: 77-97.
- Stroud, K.C. (2006). Development of the school motivation and learning strategies inventory. PhD Theses dissertation. Texas: A & M University.
- Styles, I., Beltman, S. & Radloff, A. (2001). I only wish I had known it sooner. Education students' changing conceptions of learning strategies. *Australian Journal of Teacher Education*, 26 (2): 1-13.
- Simsek, A. (2006). Bilişsel stratejilerin öğretimi. In: Simsek, A (Ed.) *İçerik türlerine dayalı öğretim*. Ankara: Nobel Yayın Dağıtım.
- Simsek, A. & Balaban, J. (2010). Learning strategies of successful and unsuccessful university students. *Contemporary Educational Technology*, 1(1): 36-45.
- Taşdemir, M. (2010). A case study on the relations between the use of comprehension strategies and achievement in using textbooks. *Journal of Turkish Educational Sciences*, 8 (4): 913-947.
- Tay, B. (2005). Learning strategies in social studies text books. *Journal of Kırşehir Education Faculty*, 6(1): 209-225.

- Tay, B. (2007). The effects of learning strategies on the accomplishment of the students in teaching life and social sciences courses. *National Education- Journal of Education and Social Sciences*, 35 (173): 87-102.
- Tay, B. (2013). Elaboration and organization strategies used by prospective class teachers while studying social studies education textbooks. *Egitim Arastirmalari-Eurasian Journal of Educational Research*, 51: 229-252.
- Tay, B. & Yangın, B. (2008). Learning strategies which 4th grade primary school students using in social studies. *Journal of Kırşehir Education Faculty*, 9(3): 73-88.
- Taylor-Sims, M.A. (2011). Differences in motivation and cognitive learning strategy use from high school to college and impact on first-semester college grade point average. PhD Theses. Alabama: Auburn University.
- Topses, G. (2009). *Gelişim ve öğrenme*. Ankara: Nobel Yayın Dağıtım.
- Unal, M (2015). An investigation on revealing the learning modalities of undergraduate students. *Educational Research and Reviews*. Vol.10(15), pp. 2076-2083 , August 2015
DOI: 10.5897/ERR2015.2342.
- Warr, P. & Downing, J. (2000). Learning strategies, learning anxiety and knowledge acquisition. *The British Journal of Psychology*, 91 (3): 311-333.
- Weinstein, C.E. (1977). *Cognitive elaboration learning strategies*. Advanced Research Projects Agency (DOD), Washington, DC., (pp: 1-19), Report no: DAHC19-76-0026.
- Weinstein, C.E. & Mayer, R.E. (1983). The teaching of learning strategies. *Innovation Abstracts*, 5 (32): 1-4.
- Weinstein, C.E. & Mayer, R.E. (1986). The teaching of learning strategies. In: Wittrock M (Ed.) *Handbook of research on teaching*. New York: Springer-Verlag
- Weinstein, C.E. & Underwood, V.L. (1985). Learning strategies: The how of learning. In: Segal JW, Chipman SF & Glaser R (Eds.) *Volume 1 of Thinking and Learning Skills*. London, Lawrence Erlbaum Associates, Pub.
- Wernke, S., Wagener, U., Anschuetz, A. & Moschner, B. (2011). Assessing cognitive and metacognitive learning strategies in school children: Construct validity and arising questions. *The International Journal of Research and Review*, 6 (2): 19-38.
- Wiersma, W. & Jurs, S. (2005). *Research methods in education*. New York: Pearson Education.
- Yıldırım, A. & Simsek, H. (2011). *Sosyal bilimlerde nitel araştırma yöntemleri*. Ankara: Seçkin Yayıncılık.