Elaboration and Organization Strategies Used by Prospective Class Teachers While Studying Social Studies Education Textbooks

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Abstract

Problem Statement: Students spend a considerable amount of their time studying from textbooks, which play an important role in their learning activities. The strategies students use to learn work as guides, requiring them to mentally process, make sense of and internalize information offered to them during the instructional process. Of these, elaboration and organization strategies enable students to establish internal and external links among different pieces of information. Knowing the elaboration and organization strategies used by prospective class teachers when teaching from social studies education textbooks would benefit curriculum designers as well as all education stakeholders.

Purpose of the Study: The purpose of this study is to describe how prospective class teachers use elaboration and organization strategies as they study their social studies education textbook.

Methods: Data was collected through analysing 235 social studies education textbooks used by prospective class teachers. As the data source was a textbook, document and content analysis techniques were employed.

Findings and Results: The prospective class teachers in this study used the following elaboration strategies while studying the social studies education textbook: 90.3% took notes, 81.7% summarized information in their own words, 45.5% used grouping, and 3% formed questions. A moderate relationship existed between the categories of note-taking and summarizing. As for organization strategies, 43.8% created outlines, 33.2% made matrices, charts and tables, 21.2% used concept maps, and 9.8%...
used information mapping. No prospective class teacher seemed to be using hierarchical structures. Outlining and concept mapping were found to be moderately related to making matrices, charts and tables.

Conclusions and Recommendations: Prospective class teachers in this study most commonly used the elaboration strategy of note-taking and least commonly used question forming. As for organization strategies, outlining was the most common and information mapping, the least. No prospective class teacher used hierarchical structures. These results suggest that prospective class teachers make little use of elaboration and organization strategies when studying from their social studies education textbooks, and may need learning strategy training. The results also suggest that the elaboration and organization strategies that prospective class teachers rarely or never use should be modeled in social studies education textbooks.

Keywords: Learning strategies, textbook, social studies education, prospective class teacher

One pedagogical field competence needed by prospective class teachers is social studies training, which is provided through the Social Studies Education course. As textbooks help prospective class teachers gain the pedagogical competences needed for social studies education, they comprise a valuable dimension in teacher training. In addition to textbooks, learning strategies also guide the learning activities of prospective class teachers. These can be defined as a set of one or more operations that facilitate the performance of an individual during a learning task (Riding & Rayner, 1998 cited in Hewitt, 2008). The aim of any given strategy is to influence the affective state of learners or their ways of acquiring, selecting, organizing and integrating new information (Weinstein & Mayer, 1986). Learning strategies have been classified in different ways by experts in the field (Weinstein & Mayer, 1986; Mayer, 1988; Hartley, 1998; Gagne & Driscoll, 1988; O’Malley & Chamot, 1990; Warr & Downing, 2000; Senemoglu, 2010). For instance, Weinstein and Mayer (1986) divide them into five groups: revision, elaboration, organization, monitoring and affective strategies. The present study uses Weinstein and Mayer’s (1986) taxonomy, focusing on elaboration and organization strategies as the main theme.

Elaboration strategies, such as interpreting, summarizing, making analogies and effective note-taking, help students store new knowledge in their long-term memory by making internal links between things to be learned. At the same time, these strategies help students integrate new learning with existing knowledge (Pintrich, Smith, Garcia & McKeachie 1991). In general, elaboration strategies serve to make connections between the existing knowledge in our long-term memory and the new information that is considered worth remembering (Cornford, 2002). In doing so, learners form a symbolic structure that adds meaning to the new information they are learning (Röhwer, 1970 cited in Weinstein, 1977). Because each action taken within elaboration strategies aims to link new and unfamiliar material with students’
existing knowledge and experience (Weinstein & Underwood, 1985), these strategies are critical to deep learning (Lewalter, 2003).

Another valuable learning strategy is organization. Organization strategies, such as outlining and concept mapping, are high level strategies and help build connections between opinions (Stefanou & Salisbury-Glennon, 2002). This involves a process whereby students make connections between new and old knowledge and organize them (Olgren, 1998 cited in Filcher & Miller, 2000). Therefore, organization strategies require the transformation of knowledge into a different form, as well as the development of certain schematic systems that make connections between fragments or elements of knowledge. The links formed when analyzing similarities and differences may not only be important to the formation of opinions, but also to how we retain knowledge in our long-term memory (Cornford, 2002). This may show whether understanding has reached a deeper level.

Both elaboration and organization strategies are used to construct and reconstruct knowledge. Therefore, knowledge is organized within meaningful internal or external images (Schlag, Florax & Ploetzner, 2007). Both elaboration and organization strategies enable users to make internal and external links between different pieces of information (Weinstein & Mayer, 1986).

The literature mentions the following as elaboration strategies: paraphrasing, summarizing, note-taking, making analogies, asking and answering questions about the materials, forming logical relationships within a text, inferencing, creating mental images or statements, supporting memory, using new information in a sentence, interpreting, matching, finding similarities, making comparisons, writing questions, determining how new information will be used, transferring and analyzing, brainstorming and finding a daily example of a rule or principle (Weinstein, 1977; Weinstein & Mayer, 1983; Weinstein & Mayer, 1986; Pintrich, Smith, Garcia & McKeachie, 1991; Styles, Beltman & Radloff, 2001; Dembo, 2001; Stefanou & Salisbury-Glennon, 2002; Cornford, 2002; Güven, 2008; Şimşek & Balaban, 2010).

Organization strategies, on the other hand, involve note-taking, summarizing, making spatial representations, ordering words within context, reordering complex informations, making charts, drafting, finding main ideas, grouping similar examples, collating, making flowcharts, creating tables, classifying information, regrouping, combining pieces, mapping concepts, listing, distinguishing stages, making hierarchies and mental maps, finding similarities, representing information in new ways (through graphics, tables and diagrams), practicing new knowledge, linking new and old knowledge, using comparison methods, teaching new information to others and inferencing (Weinstein & Mayer, 1983; Weinstein & Mayer, 1986; Weinstein, Ridley, Dahl & Weber, 1988-1989; Pintrich, Smith, Garcia & McKeachie, 1991; Styles, Beltman & Radloff, 2001; Cornford, 2002; Güven, 2008; Şimşek & Balaban, 2010). Considering these long lists of options, the most effective elaboration strategies that students can use while studying their textbooks may be summarizing, note-taking, asking questions and grouping. As for organization
strategies, students may be able to use outlining, creating matrices and tables, concept mapping, and making information maps and hierarchical structures.

University, high school and secondary school students spend a major part of their time studying from their textbooks. The task of reading includes distinguishing main ideas and supporting details and linking these to other knowledge in order to facilitate remembering and coding (Weinstein & Mayer, 1983). Textbooks, which have been assessed against certain criteria and are recommended as the main resource for teachers and learners in a certain school and course, are important educational materials with which students can practice elaboration and organization strategies (Oğuzkan, 1993).

Comparing the textbooks used in Turkish schools with their counterparts in other countries, it would be safe to claim that they are lagging behind in many respects. This may be attributed to the lack of adequate scientific knowledge and technical experience in writing textbooks; censorship of books owing to political reasons; the income-based approach of publishers, authors and teachers; and the failure of textbooks’ contents and design to help students grasp the subjects (Aslan, 2010). Indeed, the study by Güven (2010) revealed in some aspects shortcomings of textbooks.

The failure of textbooks may also be related to unsatisfied student expectations. Students expect textbooks to include elements, such as learning strategies, that will help them learn. Studies on the relationship between learning strategies and success have shown that the use of these strategies increases and predicts success (Mayer, 1980; Ames & Archer, 1988; Somuncuoğlu & Yıldırım, 1999; Filcher & Miller, 2000; Lewalter, 2003; Yıldız-Duban, 2006; Bidjerano & Dai, 2007; Çakıcı, Arıçak & Ilgaz, 2011). Moreover, achieving efficiency and success in education also requires individuals to choose, sustain, change and renew their own learning strategies (Saracoğlu & Karasakalçoğlu, 2011). This suggests that the inclusion of a set of prespecified learning strategies in textbooks may be important. There are very few studies on the relationship between learning strategies and textbooks, including social studies textbooks (Tay, 2005). Considering the role of textbooks in helping students learn, it may be argued that social studies textbooks should also be written with reference to specific learning strategies.

It is believed that understanding the elaboration and organization strategies used by students in the Social Studies Education course offered at the department of classroom teaching will benefit social studies training. The first benefit would be redesigning social studies education textbooks by including the strategies that students readily use, and the second might be to dedicate sections of the book to directly teach the study 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.

This study attempted to describe how prospective class teachers use elaboration and organization strategies in their social studies education course books. In line with this general purpose, the following research questions were studied:
1. Do prospective class teachers use the elaboration strategies of summarizing, note-taking, forming questions and grouping when studying their social studies education textbooks?

2. Is there a meaningful relationship between the elaboration strategies used by prospective class teachers when studying their social studies education textbooks?

3. Do prospective class teachers use the organization strategies of outlining, making matrices charts and tables, concept-mapping, information-mapping and making hierarchical structures when studying their social studies education textbooks?

4. Is there a meaningful relationship between the organization strategies used by prospective class teachers when studying their social studies education textbooks?

Method

Research Design

In line with its purpose, the study used the qualitative research method of a case study in order to describe the elaboration and organization strategies used by prospective class teachers when studying their social studies education 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; Kuş, 2003; Yıldırım & Şimşek, 2011). Case studies aim to understand the social phenomenon of a single or small group in their natural environment and to yield a detailed description (Bloor & Wood, 2006). Document analysis was used to collect data from the participants’ social studies education textbooks. Thus, this study is a descriptive case study. This study intends to offer a detailed description of the elaboration and organization strategies used by prospective class teachers while studying their social studies education textbooks.

Sample

In the present study, data was collected from the 235 textbooks used by third-year students who attended the Social Studies Education course at Ahi Evran University, Department of Classroom Teaching, during the 2010-2011 and 2011-2012 academic years. The study employed convenience sampling, which aims to include appropriate and willing participants in the study (Creswell, 2005). Thus, the study was conducted at the researcher’s university with volunteering prospective class teachers. Of the participants, 70 (29.8%) were male and 165 (70.2%) were female. Of these, 116 (49.4%) were third-year students during the 2010-2011 academic year, and 119 (50.6%) were third-year students during the 2011-2012 academic year.
Datagathering Procedure

The research examined the elaboration and organization strategies stated in the learning strategies classification of Weinstein and Mayer (1986). For this purpose, document analysis was used to identify the elaboration and organization strategies used by prospective class teachers when studying their social studies education textbooks. According to Forster (1995), document analysis consists of five stages: accessing the documents, checking their originality, understanding them, analyzing the data and using the data (cited in Yıldırım & Şimşek, 2011). The present study employed all of these stages during content analysis. In order to increase the transferability of results, the study also included detailed descriptions of the data collection process, characteristics of the data source, how they were chosen, the data analysis process and the constraints of the study (Cresswell and Miller, 2000). The various stages of the study are explained below.

In the first stage, the purpose of the study was established, as mentioned above. The second stage involved the selection of the study sample. According to Bogdan and Biklen (1992) and Goetz and 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 & Şimşek, 2011). The sample of the present research consisted of 235 social studies education textbooks. 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 elaboration and organization strategies. At the end of the term, the students were asked to bring their textbooks to use for a section of the final exam. At the end of the exam, the students were informed about the study and the textbooks of voluntary participants were collected. In the end, textbooks were collected from 116 out of 133 students who were taking the social studies education course in the 2010-2011 academic year, and 119 out of 125 students in 2011-2012.

In the third stage, categories were defined using the closed approach, which means grouping record units based on an existing category system in a certain field (Bilgin, 2006). Hence, the behaviors included in elaboration and organization strategies were determined by surveying the literature. As a result, the elaboration (4) and organization (5) strategies that students may use in their textbooks were grouped under nine headings. The categories defined were submitted for review to four academics from Ahi Evran (2), Atatürk and Muğla Sıtkı Koçman Universities and were evaluated as "appropriate", "appropriate subject to revision" and "not appropriate". Expert views were then compared to the defined categories, the level of consensus and dissensus was determined, and the reliability of categories was calculated via the Miles and Huberman formula (1994) (Reliability = consensus/consensus+dissensus). The resulting coefficient of concordance was 0.83, which indicates a high reliability for the categories. After these stages, the categories were established as summarizing; note-taking; forming questions; grouping;
outlining; making matrices, charts and tables; concept-mapping; information-mapping and hierarchical structures.

These categories were used in order to understand the documents and analyze the data. This stage thus involved a quantitative analysis of the frequency of categories and an analysis of the relationships between these categories. First, each document was examined thoroughly in terms of the nine categories of elaboration and organization strategies, in order to determine their frequencies. The data were tabulated and sample quotations were chosen in order to support the interpretations of the researcher and reveal how students used elaboration and organization strategies. These quotations were coded as follows: 104-F-4 for the student documents from 2010-2011 and 162-M-3 for those of 2011-2012. The coding represents the order in which the document was analyzed, the gender of the student and the academic year to which the student belonged, respectively. The expression “4” represents 2010-2011 and “3” represents 2011-2012.

In addition to frequency analysis, the content analysis technique for contingency was also used in analyzing the data. Contingency analysis is considered to be a more meaningful form of analysis by researchers who do not wish to be limited to basic frequency analysis. It aims to determine the associations between items, rather than their frequencies, and the relationships between various message units (Bilgin, 2006). Data obtained through frequency analysis was represented via Kendall’s tau-b correlation coefficient, a non-parametric analysis technique, as the data was discontinuous and classified. The results are presented in tables.

The final stage of content analysis consisted of evaluation, inferencing and interpretation (Bilgin, 2006), which involved using the data in document analysis. These are explained in the discussion, conclusion and recommendations sections of the study.

Results

In line with the purpose of the study, prospective class teachers’ use of elaboration strategies was determined and represented in Table 1.

Table 1
Prospective Class Teachers’ Use Of Elaboration Strategies While Studying Their Social Studies Education Textbook

<table>
<thead>
<tr>
<th>Learning Strategy Used</th>
<th>Yes</th>
<th>%</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note-Taking</td>
<td>212</td>
<td>90.3</td>
<td>23</td>
<td>9.8</td>
</tr>
<tr>
<td>Summarizing</td>
<td>192</td>
<td>81.7</td>
<td>43</td>
<td>18.3</td>
</tr>
<tr>
<td>Grouping</td>
<td>107</td>
<td>45.5</td>
<td>128</td>
<td>54.5</td>
</tr>
<tr>
<td>Forming Questions</td>
<td>7</td>
<td>3</td>
<td>228</td>
<td>97.0</td>
</tr>
</tbody>
</table>
Table 1 shows that 90.3% of the students used the elaboration strategy of note-taking in their social studies education textbooks and 9.8% did not. Also, 81.7% of the students used the elaboration strategy of summarizing in their social studies education textbooks and 18.3% did not. Grouping, on the other hand, was not used by 54.5% of the prospective class teachers and used by 45.5%. While 97% of the prospective class teachers did not use the strategy of forming questions, only 3% did. Below are the examples of using elaboration strategies:

In the first example, student 212-M-3 wrote the following note about 5E in a blank space in the textbook: ‘Only inclusion, only change or only expansion can be done in elaboration in 5E. Or two of them can be done. But in 7E there must be all of them and they are done respectively’.

In the second example, student 119-F-3 wrote the following note: Ausubel’in sunuş yoluyla öğretme yaklaşımı dört temel özelliğe sahiptir. Bu özellikler şunlardır:
1. Öğretmenin ve öğrenci arasında yoğun bir etkileşimi gerektirir.
2. Sunuş yoluyla öğretme bol örnek vermeşi gerektirir.
In the second example, student 119-F-3 took some notes related to the four basic features of expository teaching approach and wrote them next to the text, which reads—

Ausubel’s expository teaching approach has four basic features. Below are these features:

1. It requires an intensive interaction between the teacher and the student.
2. Expository teaching approach requires giving a lot of examples.
3. Expository teaching approach follows a hierarchical order from the general to the specific. Deductive reasoning is used.
4. Teaching proceeds step by step. The lesson begins with advance organizers. In each stage of learning, vertical and horizontal links are created between previously and newly learned things.

Below are the things that the student noted next to the text:
- intensive interaction
- a lot of examples
- deduction
- teaching step by step

In the third example, student 27-F-4 created the new word “DIL”, which means “tongue, language” in Turkish, using the Turkish corresponding country names for England, Luxemburg and Denmark. Here, “D” stands for “Danimarka (Denmark)”, “I” stands for “İngiltere (England)” and finally “L” stands for “Lüksemburg (Luxemburg)”. When she put the initials of the given Turkish country names together she produced “DIL”, which is extremely easy to remember as “DIL” also means language. The text reads as follows:

Other than America, it is also possible to see Social Studies course in Turkey, Japan, South Korea, Canada and Australia. Some countries adopted a single discipline perspective and teach history, geography and civics courses separately instead of Social Studies course. England is the leading country among these countries. In England, history and geography, which are normally under Social Studies course, are taught separately starting from the early years of primary school. This perspective of England can also be seen in Luxemburg and Denmark (Sözer, 1997: Öztürk and Dilek, 2005; Öztürk and Oltuğlu, 2005; Sağlam, 1999).
In the fourth example, student 97-F-4 wrote the following questions related to the chapter “An Overview on Teaching Social Studies” in a blank space on the page:

1. What is Science? How did it begin?
2. Why did the nature sciences begin before social sciences?
3. Why did Social sciences exist under different names?
4. In which century was the “Social Sciences” phrase first used and why was it subbranched?
5. How is Social studies defined and out of which principles did it develop?

Table 2

<table>
<thead>
<tr>
<th>Summarizing</th>
<th>Grouping</th>
<th>Forming questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note-taking</td>
<td>.622</td>
<td>.157</td>
</tr>
<tr>
<td>Summarizing</td>
<td>-</td>
<td>.035</td>
</tr>
<tr>
<td>Grouping</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Forming questions</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

According to Table 2, there was a moderate relationship between the categories of note-taking and summarizing (r=.622). No meaningful relationship existed between other categories. This suggests that the prospective class teachers who used the strategy of note-taking also used the strategy of summarizing.
Table 3
Prospective Class Teachers’ Use of Organization Strategies in Their Social Studies Education Textbook

<table>
<thead>
<tr>
<th>Learning Strategy Used</th>
<th>Yes</th>
<th></th>
<th>No</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Outlining</td>
<td>103</td>
<td>43.8</td>
<td>132</td>
<td>56.2</td>
</tr>
<tr>
<td>Making matrices, charts and tables</td>
<td>78</td>
<td>33.2</td>
<td>157</td>
<td>66.8</td>
</tr>
<tr>
<td>Concept-mapping</td>
<td>50</td>
<td>21.2</td>
<td>185</td>
<td>78.7</td>
</tr>
<tr>
<td>Information-mapping</td>
<td>23</td>
<td>9.8</td>
<td>212</td>
<td>90.2</td>
</tr>
<tr>
<td>Forming hierarchical structures</td>
<td>-</td>
<td>-</td>
<td>235</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 3 shows that 56.2% of the students did not use the strategy of outlining in their social studies education textbooks, and 43.8% did. While 66.8% of the prospective class teachers did not make matrices, charts or tables, 33.2% did. Also, 78.7% of the prospective class teachers did not use concept-mapping in their social studies education books, while 21.2% did. Information-mapping was not used by 90.2% of the prospective class teachers, and only 9.8% used it as a strategy. Forming hierarchical structures was not used by any participants. Below are the examples of using organization strategies:

134-F-3

In the first example, “Efficient Citizenship, Domestication, Method and Time (past, present, future)” subtitles on different pages, but under the “Basic Principles in Teaching Social Studies” main title, the student 134-F-3 created an outline by numbering the subtitles 1, 2, 3, 4, respectively.
In contrast, student 44-F-4 made an outline by highlighting the “Settlement Components Policy” main title in pink and “Ratio-Scale, Balance, Integrity, Rhythm, Emphasis and Harmony” subtitles in green.

Student 162-M-3, as seen in the example above, created a chart for the information related to the three teaching strategies. Her notes are translated below:

<table>
<thead>
<tr>
<th>Expository teaching</th>
<th>Discovery teaching</th>
<th>Research/Investigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ausubel</td>
<td>Briner</td>
<td>Dewey</td>
</tr>
<tr>
<td>information</td>
<td>Comprehension (+)</td>
<td>Application (+)</td>
</tr>
<tr>
<td>deduction</td>
<td>Induction</td>
<td>both</td>
</tr>
<tr>
<td>Teacher</td>
<td>guide</td>
<td>common</td>
</tr>
<tr>
<td>in the center</td>
<td>active</td>
<td>active</td>
</tr>
<tr>
<td>Student</td>
<td>critical/creative</td>
<td>critical/creative/reflective</td>
</tr>
</tbody>
</table>
Student 156-M-3 made the above concept map of the general elements of social studies curriculum. His concept map is translated below:

General Objectives

Concept  Skill  Value

Learning Domain

Unit/Theme

Attainment

Evaluation

General Elements of the Curriculum
Student 8-F-4 first made the previous concept map of the general elements of social studies curriculum and then changed it into a information map by adding some explanations. For example, she added “presents the feature of making efficient citizens” to “general objectives”, “comes from social sciences” to the “statement of concept”, “comes from reflective review” to “skill”, “comes from citizenship transferring” and “it will be the same in 4th and 5th grade, the units will be changed” to _____?.

Table 4.
Relationships Between the Organization Strategies Used by Prospective Class Teachers in Their Social Studies Education Textbooks

<table>
<thead>
<tr>
<th></th>
<th>Making matrices, charts and tables</th>
<th>Concept-mapping</th>
<th>Information-mapping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outlining</td>
<td>.543</td>
<td>.211</td>
<td>-.031</td>
</tr>
<tr>
<td>Making matrices, charts and tables</td>
<td>-</td>
<td>.649</td>
<td>-.171</td>
</tr>
<tr>
<td>Concept-mapping</td>
<td></td>
<td>-</td>
<td>-.101</td>
</tr>
<tr>
<td>Information-mapping</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4 reveals a moderate relationship between outlining and making matrices, charts and tables ($r = .543$), and concept-mapping and making matrices, charts and tables ($r = .649$). Significant relationships were not found between other categories. Thus, it seems that the prospective class teachers who use the strategy of making matrices, charts and tables also use the strategies of outlining and concept-mapping.

**Discussion and Conclusion**

Approximately 90% of the prospective class teachers use note-taking when they study their social studies education course books. Miller (1997) also concluded that 87% of open university students took notes from video cassettes. Styles, Beltman and Radloff (2001) state that, from a task strategies perspective, the most common strategy is using complementary activities such as participating in classes or doing assignments, followed by the complex elaboration strategy of note-taking. These findings corroborate the present study’s finding that note-taking is the most common strategy used by prospective class teachers. Similarly, Kobayashi (2005) found in his meta-analysis that when note-takers’ performance was compared to non-note-takers, in relation to certain variables, note-taking led to positive outcomes. Peper and Mayer (1978) also stated note-taking has a positive impact on learning outcomes. Further, Shrago and Mayer (1989) found that university students who take notes as they watch course videos are better at retaining and transferring information, in comparison to those who do not take notes. The literature therefore seems to corroborate the finding that note-taking is the most common strategy used by prospective class teachers.

Mayer (1980) states that the two most common elaboration strategies are comparative and integrative elaboration. When the sample notes taken by prospective class teachers were examined, the researcher found that 212-M-3 wrote the heading “NOTE” in the margin followed by important information from relevant pages. The one hundred nineteenth page of the textbook explains the details in 5E and the coming pages explain the expansion, inclusion and change in 7E. Comparing and integrating this information, the prospective class teacher made his own notes.

The second most common strategy that the prospective class teachers used in this study was summarizing, which was used by 81.7% of the participants. This finding is also in agreement with previous studies. For example, Taşçı (2011) found that university biology students most commonly use summarizing and note-taking strategies. Tüfekcioğlu (2010) examined writing skills and concluded that 85.7% of the 6th graders he studied made summaries, and that those who used this strategy had higher essay writing achievement than those who did not. Weinstein, Ridley, Dahl and Weber (1988-1989) argued that high school and university students are able to retain content area knowledge for an adequate amount of time to achieve on exams, but are rather poor at transferring it into their long-term memory. In order to do so, students should make meaningful links between their old and new knowledge. In other words, new information needs to take on a personal aspect.
Learning with such connections requires students to use certain kinds of elaboration strategies, one of which is summarizing.

Wittrock (2010) also believed that summarizing positively affects learning outcomes. Hooper, Sales and Rysavy (1994) found that university students are better at writing summaries than making analogies. An additional finding is that a moderate relationship exists between note-taking and summarizing, while no significant relation can be found between other elaboration strategies.

Mayer (1980) stated that comparative elaboration results when a student effectively grasps the relationship between two concepts. Integrative elaboration, on the other hand, occurs when a student grasps the relationship between previously learned concepts and a new one. These techniques are very different from associative elaboration and require more than a mere reminiscent statement or image. Grouping and questioning strategies are examples of integrative elaboration. While 45.5% of the prospective class teachers in the present study used grouping strategies, forming questions was only used by 3%. The relatively more complicated nature of these two strategies might be the reason almost half of the participants did not use grouping and almost none used forming questions. Nordell (2009) studied learning strategy training and concluded that only 11.2% of their university students made concept maps and prepared their own quizzes. He too attributed the rarity of these activities to their time-consuming and skill-requiring nature.

An examination of prospective class teachers’ grouping samples shows that 154-F-3 grouped the concepts of social studies definitions by using their initial letters and making her own additions, while 27-F-4 grouped the states that teach social studies as a single discipline by using their initial letters. Samples of question forming showed that 97-F-4 formed five questions from a given page.

The most common organization strategy used by prospective class teachers was outlining, but this strategy was used by less than half. The samples reveal that when outlining 44-F-4 made use of color coding instead of numbers, representing the headings in the book with colors of her own choice. As seen in the Findings section, student 44-F-4 highlighted the heading “principles of use for placement elements” in pink, and the subheadings beneath in green. She also highlighted the heading “2D Materials” on page 157 in pink, the subheadings beneath (pp. 157-164) in green, and the secondary subheadings under “Diagrams” (pp. 160-161) in orange. On the other hand, 8-K-4 numbered the 14 tools of alternative assessment between pages 236-276 from 1 to 14, thus making an numerical outline of the chapter. In addition to numbering, she also underlined each heading with a red pen.

The second most common organization strategy, making matrices, charts and tables, was only used by 1/3 of the participants. This was followed by concept and information-mapping, with an approximate use rate of 20% and 10%, respectively. No participants used hierarchical structures. Overall, the use of organization strategies was rather low, as reflected in several previous studies.

Senemoğlu (2010) writes that the use of organization strategies is determined by age, talent levels and the socio-cultural environment. Şimşek and Balaban (2010)
found that organization was the least preferred strategy by university students. Hooper, Sales and Rysavy (1994) also stated that university students are often not good at certain strategies, such as making analogies and mental images and changing the structure of the text. Talu (1997) and Özdemir (2004) concluded that organization strategies were high school students’ least preferred study methods.

As previously stated, organization strategies involve transforming information into a different form and developing schematic systems that connect parts or elements (Cornford, 2002). The two cognitive aims of organization strategies are to select the information to be sent to the working memory to then integrate with known information (Weinstein & Mayer, 1983). Thus, organization strategies are higher order strategies (Stefanou & Salisbury-Glennon, 2002) and require active effort (Pintrich, Smith, Garcia & McKeachie, 1991). As stated by Nordell (2009), prospective class teachers may make little use of organization strategies in their social studies education books, as these activities are time-consuming and require skills. Senemoğlu (2010) writes that the use of organization strategies is determined by age, talent levels and the socio-cultural environment.

**Recommendations**

The majority of prospective class teachers do not use certain elaboration and organization strategies. This may be because they do not know about these learning strategies or they do not know how to use them. For these reasons, prospective class teachers should be given learning strategy training and shown how to use these strategies in their textbooks as they read.

This study aimed to discover the elaboration and organization strategies already used by prospective class teachers while studying their social studies education textbooks without offering them any training on these strategies. This study found that these prospective class teachers would benefit from being taught the elaboration and organization strategies to use as they study their social studies education textbooks.

Similar studies may be conducted with other education textbooks and other groups of prospective class teachers in order to examine other possible commonalities.

This study revealed the elaboration and organization strategies used by prospective class teachers as well as the extent to which they used them. The findings may be beneficial for curriculum designers. New textbook designs may be possible for social studies education and other fields, which incorporate the elaboration and organization strategies that were used little, if at all, by prospective class teachers.

The elaboration and organization strategies used by the prospective class teachers in this study were determined by analysing their social studies education textbooks. The reasons why certain strategies were or were not used were not studied. Focus group interviews may be held with a similar group to examine their reasoning.
Conclusions

The study revealed that prospective class teachers most commonly use the elaboration strategy of note-taking as they study their textbooks. A moderate relationship existed between the categories of note-taking and summarizing. As for organization strategies, the most common strategy was outlining and the least common was information-mapping. Hierarchical structures were not used by any students. Further, a moderate relationship existed between the categories of making matrices, charts and tables and outlining, and making matrices, charts and tables and concept-mapping.

The findings have shown that prospective class teachers make little use of elaboration and organization strategies in their social studies education textbooks, and thereby need learning strategy training.

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Sınıf Öğretmeni Adaylarının Sosyal Bilgiler Öğretimi Ders Kitaplarında Kullandıkları Anlamlandırma ve Örgütleme Stratejileri

Atf:

(Özet)

Problem Durumu


Araştırmanın Amacı

Bu araştırmanın ana amacı sınıf öğretmeni adaylarının sosyal bilgiler öğretimi ders kitaplarında anlamlandırma ve örgütüme stratejilerini kullanma durumlarını belütemektir. Bu temel amaç doğru尔斯usunda aşağıdaki sorulara cevap aranmıştır:

1. Sınıf öğretmeni adayları sosyal bilgiler öğretimi ders kitaplarında anlamlandırma stratejilerinden kendi cümleleriyle özet çıkarna, not alma, soru oluşturma ve gruplama stratejilerini kullanmakta mıdır?

2. Sınıf öğretmeni adayları sosyal bilgiler öğretimi ders kitaplarında kullanıkları anlamlandırma stratejileri arasında anlamlı bir ilişki var mıdır?

3. Sınıf öğretmeni adayları sosyal bilgiler öğretimi ders kitaplarında örgütüme stratejilerinden anahat oluşturma, matris, çizelge ve tablo oluşturma, kavram haritası
oluşturma, bilgi haritası oluşturma ve hiyerarşik yapı oluşturma stratejilerini kullanmakta mıdır?

4. Sınıf öğretmenleri adaylarının sosyal bilgiler öğretmeni ders kitaplarında kullandıkları örgütleme stratejileri arasında anlamlı bir ilişki var mıdır?

 Araştırma sonrası Yöntemi


 Araştırma Sonuçları ve Önerileri

Yapılan bu çalışmada sınıf öğretmeni adaylarının sosyal bilgiler öğretmeni ders kitabı kullanıkları analamları ve örgütleme stratejileri belirlenmiştir. Belirlenen amaç doğrultusunda yapılan içerik analizi sonuçlarına göre sınıf öğretmeni adayları sosyal bilgiler öğretmeni ders kitaplarında analamları stratejilerinden en çok not almayı kullanırken, en az da soru oluşturmayı tercih etmişlerdir. Bununla birlikte not alma ile kendi cümleleriyle özet çıkarma kategorileri arasında orta düzeyde bir ilişki vardır. Örgütleme stratejilerinde ise anahat oluşturma % 43,8’si, matris, çizelge ve tablo oluşturma % 33,2’si, kavram haritası oluşturma % 21,2’si ve bilgi haritası oluşturma % 8,8’si kullanmakta, hiyerarşik yapı oluşturmaya hiçbir öğretmen adayı kullanamamaktadır. Matris, çizelge ve tablo oluşturma ile anahat oluşturma ve matris, çizelge ve tablo oluşturma ile kavram haritası oluşturma kategorileri arasında orta düzeyde bir ilişki vardır.

Bu sonuçlar, sınıf öğretmeni adaylarının sosyal bilgiler öğretmeni kitaplarında analamları ve örgütleme stratejilerini kullanma durumlarının düşük seviyede olduğunu ve buna yönelik olarak öğretmen adaylarının öğrenme stratejileri ile ilgili bir eğitime ihtiyaç duyduyguna göstermiştir.

Sınıf öğretmeni adaylarının büyük bir kısmı analamları ve örgütleme stratejilerinin bazlarını kullanamamaktadır. Bu durumun nedenlerinden biri...
öğretmen adaylarının söz konusu öğrenme stratejlilerini yanı bir gün hayyım ya da nasıl kullanlacağını bilmiyor ya da nasıl kullanlacağını şekline düşünülülebilir. Bu bağlamda öğretmen adaylarına öğrenme stratejlilerinin öğretimi gerçekleştirilip bu stratejlileri ders kitaplarında nasıl kullanacakları öğretilebilir.

Bu çalışmada öğretmen adaylarına anlamlandırma ve örgütleme stratejlileri ile ilgili herhangi bir eğitim verilmeden sosyal bilgiler öğretimi ders kitaplarında kullanılabileceğini tespit edildi. Bu bağlamda öğretmen adaylarına sosyal bilgiler öğretimi ders kitaplarında kullanılabileceğini anlamlandırma ve örgütleme stratejlileri öğreticilerin sonuçlar betimlenebilir.

Sonuç öğretmeni adaylarının sosyal bilgiler öğretimi ders kitaplarında kullanılabileceğini anlamlandırma ve örgütleme stratejlilerinin betimlendiği bu araştırma benzer çalışmalara diğer öğretim derslerinin kitapları üzerinde ve diğer öğretmen adaylarıyla da gerçekleştirilip birbirleri arasındaki ilişkiler araştırılabilir.


Anadilden Sözcüklar: Öğrenme stratejlileri, ders kitabı, sosyal bilgiler eğitimi, sınıf öğretmeni adayları