

The Use of the High School 12th-Grade Geography Textbook by Students in Turkey

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Abstracts

Textbooks are one of the most used teaching materials for attaining educational goals in secondary education institutions. Textbooks still maintain their importance at the present time, when a lot of technological developments are taking place. It is important to evaluate textbooks, which also play an important part in geography education, from the perspective of students who have just completed their high school education. To this end, the purpose of this study is to determine to what extent the geography textbook is used by high school 12th graders in their classes. The study employs the mixed research model. A Likert-type survey composed of ten questions and five variables was prepared by obtaining expert opinion. The Cronbach's alpha coefficient of the survey was found to be 0.761. At the end of the survey, an open-ended question was addressed to the students. The study was conducted on the newly enrolled first-grade students of four verbal departments of Namık Kemal University Faculty of Arts and Sciences in the 2018-2019 academic year. The data obtained from the student survey are presented in tables along with frequency and percentage values.

The students' responses to the five-variable, ten-question Likert-type survey prepared by the researchers imply that students do not frequently use the geography textbook when they are in the 12th grade, especially in the process of preparing for the university entrance exam.

Keywords: geography education, geography textbook, student views, high school

1. Introduction

Human being has been transferring his knowledge to next generations through education from past to present. There are a lot of different definitions of education provided by different scientists. Its broadest definition suggests that education is the intentional process of making a desired change in an individual's life through his own experience (Öncül, 2000; Demirel, 2012; Güneş, 2015; Heaton, & Lawson, 1996). Kılıç (2006) defines education as regulated educational activities conducted at schools under teachers' supervision in accordance with particular plans, programs, and pre-determined objectives.

When education is taken as a system, the inputs of this system are students, staff, knowledge, investment, tools and materials, curricula, textbooks, and auxiliary materials. The target behaviors acquired by students, desired behaviors not included in the curriculum, undesired behaviors in the curriculum, products that can be made at school, and gains acquired from them are its outputs (Alıç, 1991, s. 154).

Textbooks, which are one of the basic educational materials, are important for students (Bednarz, 2004; Waugh, 2016). Several different definitions are provided for "textbooks" by the Ministry of National Education of Turkey and scientists. While The Dictionary of the Turkish Historical Society defines textbooks as "magazines composed of written or printed sheets" (TTK, 1981, p.497), the Ministry of National Education Head Council of Education and Morality Regulation on Textbooks defines textbook as "*books approved to be studied in formal and informal education institutions by the Council*" (MEB, 2015). To Doğanay calls, textbooks are basic resources of knowledge that have been prepared in accordance with the curriculum, objectives, principles, methods, and subjects of a course (Doğanay, 2002, p.219).

Despite major developments in education, production of knowledge, and communication technologies, textbooks maintain their essential role in the learning process (Aydın & Güngördü, 2015; Marsden, 2001) However, textbooks having different structures, contents, and volumes may not be used to the same degree in all courses. Sometimes

teachers and sometimes students may acquire knowledge by using different resources. According to Kurtkaya (2010, p.67), as textbooks may be inadequate for students who like searching and do research about geography subjects, curious students may turn to different resources to reach more detailed information.

The primary goal of curricula prepared for secondary education institutions is to prepare students for future and life. Textbooks and curriculums are the most common tool used for accomplishing this (Kocalar, Demirkaya, 2017; Bilgili, 2011). The objectives, expectations, and contents included in the Secondary Education Geography Curriculum are dispersed across four-year period. The Geography Curriculum and textbooks prepared based on this curriculum both teach life to students and prepare them for the university entrance exam, which will shape their future.

Conducting a study on the use of mathematics textbooks, Altun et al. (2004) stated that textbooks are an important factor in teaching and thus they should be examined and discussed in all aspects (Altun, Arslan, & Yazgan, 2004).

Though there are a great variety of tools and materials used in geography education, textbooks still maintain their leading role among them. Artvinli (2009) pointed out that textbooks maintain their importance and teachers are still carrying out a lot of activities through textbooks. In this regard, the present study intends to examine university first year students, secondary education final year perceptions about use of the geography textbook.

The primary purpose of this study is to determine newly enrolled first-grade university students' levels of using geography textbooks during their secondary education period and the effect of such levels on their success in the university entrance exam.

2. Method

2.1 Population and Sample

The population of the study consists of students of Namık Kemal University Faculty of Arts and Sciences. Karasar (2013) defines population as a set of elements to which the results of a study are intended to be generalized. The sample of the study includes the first-grade students of Geography, History, Literature, and Sociology departments of the said faculty who received the geography course in their final year in high school. Yeşil (2014) defines sample as a small group selected from a specific population within the framework of specific rules. In quantitative research, it is believed that if this sample is chosen carefully using the correct procedure, it is then possible to generalize the results to the whole of the research population (Dawson, 2002, 47). In the present study, a survey was administered to 170 students. 145 students' responses were considered convenient for evaluation. Of those students, 97 were females, and 48 were males. The participating students were chosen through maximum variation. Büyük öztürk (2012) states that maximum variation sampling involves forming a sample that is composed of situations homogenous within themselves in relation to the problem. It was tried to reach the entire group of students chosen, but the students not attending the class when the researchers administered the survey were excluded. The research is limited to first year students of Geography, History, Literature and Sociology Departments of Tekirdag Namik Kemal University.

2.2 Research Model

The study employed the descriptive survey model and applied the relational survey method to determine university students' attitudes towards the use of geography textbooks in secondary education in terms of various variables. The above-mentioned model was adopted because survey models are convenient models for research that aims to describe a past or present situation as it was/is (Karasar, 2013, p.77). The relational survey model, which is a general survey model, was deemed convenient for the present study.

2.3 Data Collection

The present study made a considerable use of the survey prepared by Altun on mathematics (Altun, Arslan and Yazgan, 2004). The survey's reliability was ensured through Cronbach's alpha (0.761). Cronbach alpha, frequently referred to as the alpha coefficient of reliability (Cohen, Manion & Morrison, 2007). Validity was ensured by obtaining experts opinion. These experts conduct academic studies on geography education. The study used, as a survey, a scale composed of five questions for finding out the students' personal information and characteristics, 10 questions prepared in 5-point Likert type for identifying the use of the 12th-grade geography textbook, and one semi-structured question in the end. Five questions about personal information in the first section were for identifying the participating students' gender, department, type of high school they graduated from, the province where such high school was located, and their area of graduation. The 10-question second section involved questions aimed at determining the use of the 12th-grade geography textbook by the students, their frequency of use, the students' perspective on it, the value they attached to it, its contribution to higher education, and the problems experienced on these matters from the students' perspective. With one semi-structured question in the last section, an attempt was made to determine the participating students' wishes and views concerning the geography textbook, the geography curriculum, and the way the geography course is taught.

2.4 Data Analysis

The data collected through survey were analyzed via SPSS 22. The students' responses to each question asked for determining their views about the use of the 12th-grade geography textbook were transformed into tables on the basis of frequency and percentage. Whether or not there were significant differences between the students' views about the use of the 12th-grade geography textbook in terms of gender, department, type of high school they graduated from, the province where such high school was located, and their area of graduation (e.g. verbal section, numerical section) was tried to be understood through interpretation of the findings.

3. Findings

This study investigated the level of use of the 12th-grade geography textbook in geography classes in secondary education by the first-grade university students enrolled in the 2018-2019 academic year. The study also analyzed the use of the 12th-grade geography textbook in the process of preparing for the university entrance exam and its impact on the students' success. The survey measurements of the present study are given below.

Table 1. The gender rates of the participating students

	Departments at university								Total		
	Geography	<i>Pct (%)</i>	Turkish Language and Literature	<i>Pct (%)</i>	History	<i>Pct (%)</i>	Sociology	<i>Pct (%)</i>	Total	<i>Pct (%)</i>	
Gender	Female	20	13.8	33	22.8	8	5.5	36	24.9	97	66.9
	Male	15	10.3	7	4.8	14	9.7	12	8.2	48	33.1
	Total	35	24.1	40	27.6	22	15.2	48	33.1	145	100

As shown in Table.01, 66.9% of the participating students are female, and 33.1% are male. The rate of the females is high because girls are concentrated in the Turkish Language and Literature and Sociology departments. The percentage distribution of the participating students is as follows: 24.1%: Geography; 27.6%: Turkish Language and Literature; 15.6%: History; and 33.1%: Sociology.

Table 2. Types of high school the students graduated from

	Frequency	<i>Pct (%)</i>
Anatolian high school	90	62.1
Anatolian vocational high school	21	14.5
Anatolian religious high school	17	11.7
Other	17	11.7
Total	145	100.0

Table 3. The students' areas of graduation

	Frequency	<i>Pct (%)</i>
Verbal	27	18.6
Numerical	7	4.8
Turkish-math	86	59.3
Foreign language	6	4.1
Other	19	13.1
Total	145	100.0

Table 2 shows the types of schools the participating students graduated from. As shown in table, 62.1% of the participating students graduated from Anatolian high schools, 14.5% from Anatolian vocational high schools, and 11.7% from Anatolian religious high schools. 11.7% of the students graduated from other school types such as open high schools, basic high schools, and private high schools. As can be seen in table, more than half of the students graduated from Anatolian high schools.

As to the areas of graduation of the participating students shown in Table 3, more than half of the students (59.3%) graduated from the Turkish-Math area. It was followed by the verbal area (18.6%). Then came the numerical area (4.8%) and the foreign languages area (4.1%). Other areas (e.g. open high school, basic high school, private high school, abroad) has a share of 13.1%. The concentration in the Turkish-Math area may be because most of the participants graduated from Anatolian high schools.

Table 4. Frequency and percentage table of the provinces where the high schools of the participating students are located

Province	f	Pct (%)	Province	f	Pct (%)
Adana	2	1.4	Izmir	2	1.4
Ağrı	1	0.7	Kırklareli	2	1.4
Amasya	1	0.7	Kocaeli	4	2.8
Ankara	2	1.4	Konya	2	1.4
Antalya	1	0.7	Malatya	1	0.7
Aydın	1	0.7	Manisa	2	1.4
Balıkesir	3	2.1	Kahramanmaraş	1	0.7
Bursa	2	1.4	Ordu	2	1.4
Diyarbakır	1	0.7	Tekirdağ	19	13.1
Edirne	6	4.1	Tokat	2	1.4
Erzincan	1	0.7	Tunceli	1	0.7
Erzurum	2	1.4	Şanlıurfa	1	0.7
Gümüşhane	1	0.7	Van	5	3.4
Hatay	1	0.7	Şırnak	1	0.7
Isparta	1	0.7	Osmaniye	1	0.7
Mersin	4	2.8	Düzce	1	0.7
Istanbul	67	46.2	Abroad	1	0.7
			Total	145	100.0

As shown in Table.04, the first-grade students of Namık Kemal University Faculty of Arts and Sciences Geography, History, Sociology, and Turkish Language and Literature departments graduated from high schools in 33 different provinces of Turkey. Among these provinces, Istanbul comes first with a percentage of 46.2%.

As shown in Table.04, the participants do not have a homogenous distribution across Turkey. While almost half of the participants come from Istanbul, 13.1% come from the province where the university is located. There is one participant from sixteen provinces. Tekirdağ is followed by the provinces of Edirne, Van, and Kocaeli in terms of the number of participants.

Following the questions in the first section covering demographic information, the data from the second section were loaded onto SPSS 22.0. The obtained results are evaluated through tables of frequency and percentage.

Table 5. To what extent do you know your 12th-grade high school geography textbook?

	I don't know it at all.		I partly know it.		I know it somewhat.		I know it well.		I know it very well.		Total		
	f	Pct (%)	f	Pct (%)	f	Pct (%)	f	Pct (%)	f	Pct (%)	f	Pct (%)	
Gender													
	Female	14	9.7	23	15.9	36	24.8	21	14.5	3	2.1	97	66.9
	Male	10	6.9	12	8.3	13	9.0	11	7.6	2	1.4	48	33.1
	Total	24	16.6	35	24.1	49	33.8	32	22.1	5	3.4	145	100

As shown in Table.05, the students know the 12th-grade geography textbook at a moderate level. While the rate of those not knowing it at all and those partly knowing it is around 40%, the rate of those knowing it well and those knowing it very well is around 25%. That is, 83.4% of the students stated that they know the 12th-grade geography textbook at a level not lower than “partial”.

Table 6. The ways the geography textbook was used in the geography classes

Gender	The teacher did not make us use it. I used it myself.	The teacher used it, and I used it myself as well.	The teacher used it, but I did not use it.	The teacher used another resource to teach the lesson and recommended us (students) to use it as well.	I used the textbook, but I also made use of other resources.	Total
	f Pct (%)	f Pct (%)	f Pct (%)	f Pct (%)	f Pct (%)	f Pct (%)
Female	8 5.5	31 21.4	12 8.3	20 13.8	26 17.9	97 66.9
Male	3 2.1	19 13.1	9 6.2	10 6.9	7 4.8	48 33.1
Total	11 7.6	50 34.5	21 14.5	30 20.7	33 22.8	145 100

The students' responses to the second question in which the ways the 12th-grade geography textbook was used are shown in Table.06. The data in the table indicate that both the students and the teachers frequently used the textbook and that they also used auxiliary materials besides the textbook. 34.5% of the students stated that both they and the teachers used the textbook. 22.8% stated, “I used the textbook, but I also made use of other resources”. This is important as it implies that the geography textbook was not adequate by itself for some students, and they needed some

extra resources. 7.6% of the teachers did not use the 12th-grade geography textbook in their classes. This may be because they turned to some other resources which they considered more useful for their classes. However, their percentage is quite low. Table 7 shows responses to the next question, which is a continuation of and explains this.

Table 7. How frequently do you use the geography textbook considering the total duration of a geography class (percentage of the use of the geography textbook in the whole class time)?

		Not more than 5%		From 5% to 25%		From 25% to 50%		From 50% to 75%		From 75% to 100%		Total	
		f	Pct (%)	f	Pct (%)	f	Pct (%)	f	Pct (%)	f	Pct (%)	f	Pct (%)
		Gender	Female	29	20.0	25	17.2	32	22.1	7	4.8	4	2.8
	Male	16	11.0	12	8.3	10	6.9	8	5.5	2	1.4	48	33.1
	Total	45	31.0	37	25.5	42	29.0	15	10.3	6	4.1	145	100

The students' frequencies of using the geography textbook considering the total duration of a geography class are given in Table.7. The rates on this matter indicate that over 55% of the students used the textbook at a percentage lower than 25%. The rate of the students using the geography textbook at a percentage over 50% is lower than 15%. Accordingly, it is clear that though the textbook is used as a reference and basic textbook, there is a need for 12th-grade geography textbooks that can fulfill the students' and teachers' needs at a higher level.

Table 8. At what level did your teachers use the geography textbooks when teaching the courses during your high school life (9th, 10th, 11th, and 12th grades)?

		Not more than 5%		From 5% to 25%		From 25% to 50%		From 50% to 75%		From 75% to 100%		Total	
		f	Pct (%)	f	Pct (%)	f	Pct (%)	f	Pct (%)	f	Pct (%)	f	Pct (%)
		Gender	Female	17	11.7	32	22.1	24	16.6	17	11.7	7	4.8
	Male	9	6.2	12	8.3	11	7.6	11	7.6	5	3.4	48	33.1
	Total	26	17.9	44	30.3	35	24.1	28	19.3	12	8.3	145	100

Table 8 shows the teachers' rates of using the geography textbooks from the students' perspective. These rates are close to the rates obtained for the use of the textbooks by the students. The rate of the teachers using the textbook at a rate lower than 25% is over 48%. The rate of those using the geography textbook at a rate over 50% is 25%, which is slightly higher than the rate for the students. Considering the high school period as a whole, the rate of using the 12th-grade geography textbook is lower than other grades. The rates of the responses to the question which can be said to be accounting for this are shown in Table 9. 48.3% of the students stated that they used the 9th-grade geography textbook more than the 12th-grade geography textbook. Only 24.1% used the 12th-grade geography textbook at a higher rate.

Table 9. Which choice below is true for you considering your levels of using the 9th-grade and 12th-grade geography textbooks in your classes?

		The uses were the same in the high school 9 th -grade and 12 th -grade.		The use in the 9 th -grade was more than in the 12 th -grade.		The use in the 12 th -grade was more than in the 9 th -grade.		Total	
		f	Pct (%)	f	Pct (%)	f	Pct (%)	f	Pct (%)
		Gender	Female	23	15.9	51	35.2	23	15.9
	Male	17	11.7	19	13.1	12	8.3	48	33.1
	Total	40	27.6	70	48.3	35	24.1	145	100

As shown in Table 9, the highest use rate was in the 9th-grade. The students emphasized that the use rate was equal at a percentage around 25% in all grades except for the 9th-grade.

Table 10. Which choice below is true considering your teacher's levels of using the geography textbook in geography classes in the 9th to 12th grades?

		The uses were the same in the high school 9 th -grade and 12 th -grade.		The use in the 9 th -grade was more than in the 12 th -grade.		The use in the 12 th -grade was more than in the 9 th -grade.		Total	
		f	Pct (%)	f	Pct (%)	f	Pct (%)	f	Pct (%)
		Gender	Female	25	17.2	51	35.2	21	14.5
	Male	20	13.8	18	12.4	10	6.9	48	33.1
	Total	45	31.0	69	47.6	31	21.4	145	100

As shown in Table 10, from the students' perspective, the teachers used the geography textbook in the 9th grade at the highest rate. According to the students, the teachers used the geography textbook at the percentage of 31% in the 10th-grade and 11th-grade and used it at the percentage of 21% in the 12th-grade.

Table 11. How was your 12th-grade geography textbook in terms of handling the subjects?

		Very bad		Not good		Moderate		Good		Very good		Total	
		f	Pct	f	Pct	f	Pct	f	Pct	f	Pct	f	Pct
Gender	Female	2	1.4	18	12.4	48	33.1	27	18.6	2	1.4	97	66.9
	Male	3	2.1	5	3.4	20	13.8	18	12.4	2	1.4	48	33.1
Total		5	3.4	23	15.9	68	46.9	45	31.0	4	2.8	145	100

As shown in table, nearly 50% of the students think the 12th-grade geography textbook was moderate in terms of handling the subjects. Only 3% said it was “very bad” and only 3% said it was “very good”. These rates are really low. 31% of the students think the geography textbook was good in terms of handling the subjects. This rate implies that there is a need to enhance the quality of the textbook.

Table 12. Do you agree that the 12th-grade geography textbook was relevant to the students’ level in terms of content?

		I strongly disagree		I slightly agree		I moderately agree		I agree a lot		I strongly agree		Total	
		f	Pct	f	Pct	f	Pct	f	Pct	f	Pct	f	Pct
Gender	Female	7	4.8	28	19.3	46	31.7	12	8.3	4	2.8	97	66.9
	Male	4	2.8	7	4.8	24	16.6	12	8.3	1	0.7	48	33.1
Total		11	7.6	35	24.1	70	48.3	24	16.6	5	3.4	145	100

48.3% of the students moderately agree with the statement that the 12th-grade geography textbook is relevant to the students’ level in terms of content. The extreme views like “I strongly agree” and “I strongly disagree” occurred at levels around 3% and 7%. This implies that the 12th-grade geography textbook is relatively relevant to the students’ level. However, the sum of the rates of the “I agree a lot” and “I strongly agree” is only 20%, which prevents making the judgment that the textbook is absolutely relevant to the students’ level. Thus, more attention should be paid to the student level when preparing the new 12th-grade geography textbook.

Table 13. How did the decrease in the number of the geography questions asked in the university entrance exam affect your use of the 12th-grade geography textbook?

		Not affected at all		Little		Moderate		A lot		Completely		Total	
		f	Pct	f	Pct	f	Pct	f	Pct	f	Pct	f	Pct
Gender	Female	37	25.5	9	6.2	26	17.9	13	9.0	12	8.3	97	66.9
	Male	11	7.6	8	5.5	13	9.0	10	6.9	6	4.1	48	33.1
Total		48	33.1	17	11.7	39	26.9	23	15.9	18	12.4	145	100

In response to the question asking how the decrease in the number of the geography questions asked in the 2018 YKS (examination for passing to higher education institutions) and AYT (test for competency in the subject area) affected the students’ levels of using the textbook, about 47% of the students stated that it did not affect their use of the textbook at all or just affected it little, while around 27% said that it affected their use moderately. This points to a partial effect of the decrease in the number of the geography questions in YKS and AYT on the students’ levels of using the textbook.

Table 14. How did the 12th-grade geography textbook contribute to your success in the university entrance exam?

		Not contributed at all		Little		Moderate		A lot		Completely		Total	
		f	Pct	f	Pct	f	Pct	f	Pct	f	Pct	f	Pct
Gender	Female	39	26.9	29	20.0	23	15.9	5	3.4	1	0.7	97	66.9
	Male	12	8.3	13	9.0	17	11.7	5	3.4	1	0.7	48	33.1
Total		51	35.2	42	29.0	40	27.6	10	6.9	2	1.4	145	100

Around 64% of the students stated that the 12th-grade geography textbook did not contribute to their success in the university exam or contributed to it little. As the textbook was not used in the classes much, which is clear in their responses to the other questions, the students mostly think that it had no contribution to their success in the university entrance exam. Only around 8% of the students think that the textbook contributed to their success a lot or completely. Hence, it can be said that the students consider the 12th-grade textbook as a necessary tool for only class success, but not deem it convenient for the university exams.

In the open-ended question, the students were asked to write whatever they wanted to tell about the 12th-grade textbook and curriculum as well as the way the course was taught. A couple of the students’ responses are given below (Figure 1).

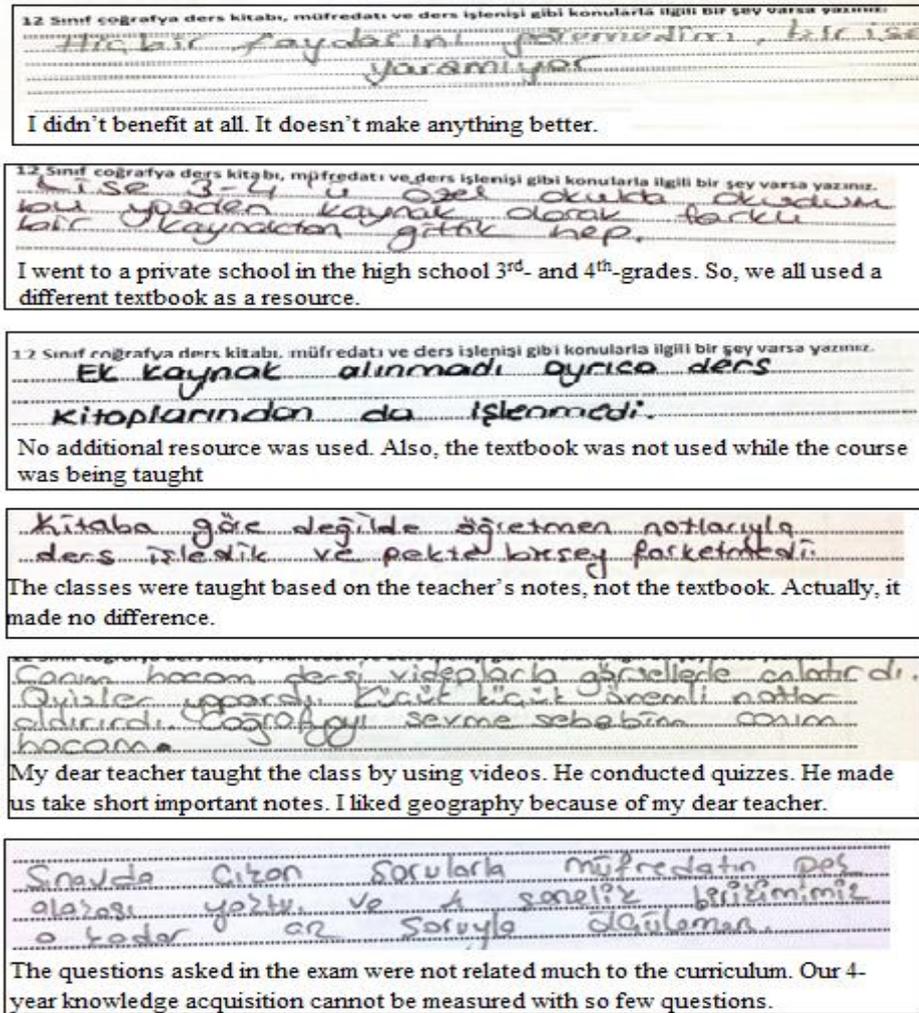


Figure 1. The students' views about the 12th-grade geography textbook

Different numbers of students answered that question from different departments. In total, 27 students wrote a response. The responses can be divided into two as positive comments and negative comments. The student statements show that some students consider the textbook useless or need additional resources even if they use the textbook. They also indicate that the way a teacher teaches a course and his/her dialogue with the students are of great importance. They are highly influential on the students' liking the geography course and make the students have a positive view of the geography textbook. On the other hand, negative comments imply that the textbook is inadequate for the university entrance exams, and students need to solve more questions to comprehend the subjects. The following student statement on the way geography classes are conducted is remarkable at this point: "There is a need not just to increase visual elements such as maps and graphs in the geography textbook. The geography classes should also be strengthened by visuals reflecting events such as videos".

4. Conclusion and Recommendations

This study, employing the survey method, measured the newly-enrolled first-grade university students' attitudes towards the 12th-grade geography textbook. The results obtained in this study, whose most participants are female, are presented below.

The most important points to consider in the preparation of textbooks are relevance to students' level, well-arranged subject index, and understandability. A textbook is deemed quality as long as it can be used by students (Altun, Arslan and Yazgan, 2004). The present study also confirmed this. The 12th-grade geography textbook should be prepared by keeping this in mind.

Another result of this study is that some teachers, though few in number, turned to their own notes or some other resources that they considered better instead of the 12th-grade geography textbook suggested by the Ministry of National Education to schools. In addition, the 9th-grade geography textbook is used more relative to the 12th-grade geography

textbook. This may be because the students encounter a course called geography first in the 9th grade; the 9th-grade geography curriculum is more intense in terms of content; and university entrance exams involve more questions from the subjects contained in the 9th-grade curriculum.

To a great extent, the students do not consider the way the 12th-grade geography textbook handles the subjects adequate. This reveals that the way subjects are handled should be improved in the textbook, and new textbooks should be prepared in accordance with students' levels of interest. This was confirmed by the students' responses to another question, and it was concluded that the textbook is not completely relevant to the students' level.

The fall in the number of the geography questions asked in the university entrance exams partially affected the students. It was also found out that the students do not use the 12th-grade geography textbook much when preparing for the university entrance exams. In addition, the students regard the 12th-grade geography textbook as a necessary tool for only class success, but do not consider it adequate for the university entrance exams.

These results imply that the 12th-grade geography textbook is not adequate to fulfill students' expectations. On the other hand, Balcı, (2014) carrying out a similar study, determined that textbooks are more effective than course notes in fulfilling graduate students' expectations.

Based on these results, it can be concluded that geography textbooks should be made compatible with the exam system. Moreover, even if teachers use extra resources other than the textbook, they should not neglect the basic textbook determined by the Ministry of National Education. Geography textbooks should be prepared by considering students' level and their levels of interest. There is a need to enhance the quality of the textbooks. The number of geography questions should be increased in the university entrance exams, thereby raising the prestige of geography in secondary education. Geography textbooks should be suitable for interaction with applications such as videos and animations.

As a result, it can be said that 12th grade geography textbooks not use sufficient level by students. Therefore, it is necessary to increase the quality of the textbooks to use them more frequently by teachers and students.

References

- Alıç, M. (1991). *Turkish education system and its operation- contemporary developments in educational sciences*. Eskişehir: Anadolu University Open Education Faculty Publications.
- Altun, M., Arslan, Ç., & Yazgan, Y. (2004). A study on the use and frequency of high school mathematics textbooks. *Journal of Uludag University of Faculty of Education (JUUBE)*, XVII(2), 131-147. <https://doi.org/10.16992/ASOS.176>
- Artvinli, E. (2009). The level of the access to geographic skilld in the 9. year geography textbook according to geography curriculum. *Erzincan University Journal of Education Faculty*, 11-2,, 51-66.
- Aydın, F., & Güngördü, E. (2015). *Special teaching methods in geography education*. Ankara: Pegem.
- Balcı, A. (2014). A qualitative research conducted to establish students' expectations about class notes and course books used in the undergraduate program. *The Journal of Academic Social Science*, 2(2), 118-147.
- Bednarz, S. W. (2004). US World Geography Textbooks: Their Role in Education Reform, *International Research in Geographical & Environmental Education*, 13-3. <https://doi.org/10.1080/10382040408668517>
- Bilgili, M. (2011). The activities, assessment and evaluation works in the 9th and 10th grade geography textbooks and their effects. *Marmara Geographical Review*, 24, 201-217
- Büyüköztürk, Ş. (2012). *Scientific research method*. Ankara: Pegem.
- Cohen, L., Manion, L. & Morrison, K. (2007). *Research methods in education*. New York: Routledge. <https://doi.org/10.4324/9780203029053>
- Dawson, C. (2002). *Practical research methods*. Oxford: HowToBooks.
- Demirel, Ö. (2012). *Dictionary of education*. Ankara: Pegem Press.
- Doğanay, H. (2002). *Geography teaching methods*. İstanbul: Aktif Press.
- Güneş, H. (2015). *Glossary of educational sciences terms*. Ankara: Ütopya.
- Heaton, T., & Lawson, T. (1996). *Education And Training*. New York: Palgrave Macmillan. <https://doi.org/10.1007/978-1-349-13883-8>
- Karasar, N. (2013). *Scientific research method*. Ankara: Nobel Academic Publishing.
- Kılıç, D. (2006). The place of textbook in teaching. In Ö. Demirel, & K. Kıröglü (Eds.), *Subject field textbook review* (pp. 37-53). Ankara: Pegem Academy Publishing.

- Kocalar, A. O., & Demirkaya, H. (2017). Geography teachers' views on effective geography teaching. *Review of International Geographical Education Online (RIGEO)*, 7(3), 332-346.
- Kurtkaya, S. (2010). *Material use in secondary education geography education and necessity of geography classes* (Unpublished master's thesis). University of Marmara, İstanbul, Turkey.
- Marsden, W. (2001). *The School Textbook: Geography, History And Social Studies*, London: Routledge.
- MEB. (2015). Regulation on textbooks and educational tools. Ministry of National Education Board of Education. Retrieved September 20, 2015, from http://ttkb.meb.gov.tr/meb_iys_dosyalar/2015_10/15022312_yonetmelikdegisikligi_derskitaplari_14102015.pdf
- Öncül, R. (2000). *Educational and educational sciences dictionary*. Istanbul: Ministry of Education Publications.
- TTK. (1981). *Turkish dictionary*. Ankara: Turkish Historical Society Printing House.
- Waugh, D. (2016). Writing geography textbooks.(Ed. Chris Fisher & Tony Binns, *Issues in geography teaching*). London: Routledge. 93-107.
- Yeşil, R. (2014). Quantitative and qualitative research methods. In R. Y. Kınca (Ed), *Scientific research methods* (pp. 51-80). Ankara: Nobel Publications.

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