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Original scientific paper
UDC: 371.3.311.3
DOI: 10.5937/IstrPed2301067O

EXAMINING THE EFFECTIVENESS OF SYSTEMATIC EDUCATION APPLIED IN TURKISH LESSON

Abstract: The aim of this research is to examine the effect of systematic education on the teaching of the text called "The Story of a Book", which is expressed within the scope of the "Our Values" theme in the 4th grade Turkish lesson. The model of the research is mixed method in which pre-test, post-test single-group quasi-experimental design and interview form are used together. The study group of the research consisted of 21 students in Konya province. The study was carried out in the experimental group of 21 people for 6 lesson hours according to the systematic education. "Turkish Achievement Test" and an interview form developed by the researcher were used as data collection tools. The test was applied to the experimental group as a pre-test before the program prepared according to the systematic education was applied, and as a post-test after it was applied. After 4 weeks, it was given to the experimental group again as a permanence test. In the analysis of the data, t test, mean and standard deviation were used. As a result of the study, it was observed that there was a significant difference between achievements in knowledge, practice and total score levels in the systematic education group. However, it was determined that there was no statistically significant difference between their achievements at the level of comprehension. Based on these data, it can be said that systematic education is significantly effective in increasing the students' level of knowledge, practice and total achievement and permanence of the cognitive domain. According to the results of the interview form, it was concluded that the students had a lot of fun in the lessons and they were happy to continue the lessons in this way.

Keywords: Systematic Education, Cognitive Field, Achievement, Turkish Studies.

INTRODUCTION

Language is a communication tool that individuals use to express their feelings and thoughts in order to socialize. Individuals with language proficiency can both express themselves comfortably and make sense of the expression of the other person. In order to gain language dominance, language skills must be acquired correctly. In this sense, the acquisition of listening, speaking, reading and writing skills ensures that the language is used correctly, emotions and thoughts are conveyed properly, and communication becomes more effective (Kasa Ayten & Ercan, 2021: 833).

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Primary school is the first education step in which language skills are formally acquired. Before starting formal education, the individual begins to acquire all language skills from the family and environment. However, in this formal process, the acquisition of comprehension skills (such as listening and reading), as well as expression skills (such as speaking and writing) will take a lifetime and become more intense. In order for the individual to be comfortable in the education life after primary school, this language skill acquisition should be solved in primary school. (Ozdemir, 2014: 4). For this reason, Turkish lesson is of great importance for individuals to acquire language skills effectively from the first steps of formal education. Turkish lessons are included in all stages of education starting from the 1st grade of primary school. And the curriculum of the course, as in other courses, is carried out based on the curriculum prepared by the Ministry of National Education Board of Education and Discipline.

Among the general objectives stated in the Turkish Language Curriculum are the students' acquisition of listening, reading, speaking and writing language skills that will be useful throughout their lives, as well as enabling them to communicate effectively with their environment by using these skills. The specific objectives of this course can be listed as follows; development of listening/watching, speaking, reading and writing skills; ensuring that they use Turkish consciously, correctly and carefully in accordance with the rules of speaking and writing; to reach language pleasure and consciousness by enriching their vocabulary based on what they read, listen/watch; enabling them to develop their feelings, thoughts and imaginations. At the same time, purposes such as ensuring that they express their feelings and thoughts and their views or thesis on a subject in an effective and understandable way, verbally and in writing (MONE -Ministry of National Education- 2019: 8).

According to the statements in the curriculum prepared in this direction, in order for the course to reach its general and specific objectives, the objectives and the content must be blended with the quality of education. In addition, it should be carried out with sound evaluation, feedback and corrections. As a matter of fact, according to the curriculum of the Ministry of National Education, active participation of students in the learning and teaching process should be ensured and students should be encouraged to take responsibility for their own learning. Activities and studies that enable students to associate what they have learned with the sociocultural and environmental situations in which they live should be included (MONE, 2019: 9). For this purpose, Turkish lesson was taught and evaluated according to the 'Systematic Education' method in the research.

The 'Systematic Education' (Programmed Instruction, Systematic Learning) model, which was proposed by Sonmez in 1982 and the lesson plans were prepared and implemented accordingly, and evaluated and developed by looking at the results of each application. The model was created by synthesizing the village institutes model, mastery learning approach, information processing process, computer aided education, possibility philosophy and teaching practices. With systematic education, it is aimed to enable the individual to realize himself, to be a problem solver, to reveal creative thoughts, to find, understand, use and produce new ones from knowledge, skill, emotion, intuition (Sonmez, 2004: 54).

The basic principles of the Systematic education model can be listed as follows (Sonmez, 2004: 58):

- 1- No theory can fully explain learning and teaching on its own.

2- All behaviors, namely cognitive, affective, psychomotor and intuitive features, cannot be taught to a person with a single theory, method or technique.

3- Not every person can learn the same behavior with the same strategy, theory, method, technique and tactic. Each person can use different ways to learn and teach the same behavior. Because the human is both a different and multidimensional being.

4- Man cannot learn with a single activity. Behaviors can be more permanent when many activities are used together.

5- When the level and quality of behavior change, different strategies, theories, methods, techniques and tactics, ways of reasoning should be employed.

6- Teaching can be based on the unit, not the course. Target behaviors of lessons such as Mathematics, Turkish, painting, music, physical education can be gained around this unit.

7- Students can gain the ability to find, understand, use and reproduce information.

A lesson in the learning-teaching process based on the Systematic education approach is planned in the process described below. This process consists of the following:

1. Attention
2. Motivation
3. Overview
4. Transition
5. Development Department (Lesson Development)
6. Summary
7. Re-motivation
8. Closure
9. Evaluation (Sonmez, 2004: 87).

Systematic education is a synthesis. It is an approach in which many theories, strategies, methods and techniques are shown, structured and presented how to use them in the lessons. While preparing a lesson plan with Systematic education, the common principles of all learning strategies, theories, methods, techniques and tactics should be taken into consideration (Sonmez, 2004: 57).

RELEVANT RESEARCH

Since Systematic education was developed by Veysel Sonmez, the studies carried out were also domestic. Some of these studies are:

Alacapinar (2007) conducted an experimental research to determine whether there is a significant difference between the achievements of the groups using traditional, computerized and systematic education. As a result of this research, the total achievement average of the Systematic education group was found to be significantly different from the other groups' average achievement.

In their study, Duman and Semerci (2010) aimed to determine the effect of 'Systematic education' on the democratic attitudes of teacher candidates. In the study, they determined that a permanence was ensured in the development of democratic attitudes with systematic education and that this model should be used for a long time period.

In their study, Kapicioglu and Sonmez (2011) aimed to reveal the effectiveness of the 3rd grade Life Science course in primary education, which was taught according to the systematic education approach. As a result of the research, they determined that the gain scores of the experimental group students in which systematic education was performed were significantly higher than the gain scores of the control group students in which the MONE program was applied, and that these behaviors were permanent.

Aslan (2012) aimed to determine the effect of systematic education on academic success and attitude in combined classrooms. As a result of the research, there is a significant difference between the pretest and posttest success point averages of the experimental group in which systematic education was applied. On the other hand, it was determined that there was no significant difference in the control group to which the current curriculum was applied.

Ontas (2014) aimed to determine the effect of the 6th grade Social Studies course, which was taught according to systematic education and constructivist approach, on the achievement levels of students. In the study, the lesson plan prepared according to systematic education was applied to the experimental group and the lesson plan prepared according to the constructivist approach was applied to the control group. According to the results of the research, there is no statistically significant difference between the means of attainment of knowledge and comprehension levels of both groups. On the other hand, it was determined that there was a significant difference in favor of the experimental group between the application level achievement averages of the groups.

Aslan and Kazu (2015) aimed to determine the effect of systematic education on academic success and attitude in multi-class schools. According to the results of the research, there is no significant difference between the academic achievement averages of the experimental group in which systematic education was applied. On the other hand, there was no significant difference between the academic achievement mean scores of the control group to which the current curriculum was applied. In addition, no significant difference was observed between the attitude score averages of the groups.

Aydogmus (2015) aimed to determine the effect of systematic education used in primary school fourth grade English lesson on student achievement. According to the results of the research, a significant difference was found between the mean scores of the experimental groups before and after the application. In addition, it was determined that there was a significant difference in favor of the experimental group between the mean scores of the experimental and control groups, which were applied and not applied systematic education.

Senturk (2015) aimed to evaluate the effectiveness of the systematic education method applied in the second grade Life Studies course in primary school. According to the findings of the research, it has been determined that the systematic education method applied in the primary school second grade life studies course increases the academic success of the students and provides permanent learning. In their study, Korkmaz Toklucu and Tay (2016) tried to describe whether there is a statistically significant difference between the success and permanence levels of the "Where We Live" unit in the Social Studies course of the 4th grade students studying according to the cooperative learning method, systematic education and constructivist learning approach. According to the findings of the research, it has been determined that cooperative learning,

systematic education and constructivist learning approaches increase student success positively, but they do not have significant superiorities or deficiencies in increasing student success among themselves.

Ozer (2017) aimed to examine the effect of the systematic education method applied in the teaching process of the Vocational Foreign Language course "Speaking on the Phone" unit on student achievement. According to the findings of the study, a statistically significant difference was found in favor of the experimental group in terms of knowledge, practice and total achievement score averages of the groups. However, it was determined that there was no significant difference between the groups in terms of comprehension level.

In the study of Zeybek (2017), it was aimed to determine whether there is a significant relationship between the level of target behaviors that students want to gain and the systematic education method applied. According to the data obtained from the research, the knowledge, comprehension, application levels and total achievement and permanence point averages of the group to which the systematic education method was applied were found to be significantly higher than the average points of the group in which the previous method was applied.

Ozalemdar and Sesli (2018) aimed to determine the effect of systematic education applied in biology on the achievement of creative thinking. According to the research findings, it has been determined that systematic education is effective in increasing some dimensions of creative thinking. When the researches are evaluated, it is seen that the number of studies related to the subject in the country is quite low, and there is no study related to the Turkish lesson.

PROBLEM SENTENCE

Does Systematic education have a significant effect on helping students acquire target behaviors in the text "The Story of a Book", which is within the scope of the 7th theme of the primary school 4th grade Turkish lesson, "Our Values"? What are the views of teachers and students on this subject?

SUB-PROBLEMS

1. Does the systematic education have a significant effect on the students' knowledge level achievement in the text called "The Story of a Book"?
2. Does systematic education have a significant effect on the achievement of students' level of comprehension on the subject of the text "The Story of a Book"?
3. Does systematic education have a significant effect on the students' achievements of the level of practice in the text called "The Story of a Book"?
4. Does systematic education have a significant effect on the total achievement levels of the students in the text called "The Story of a Book"?
5. Does systematic education have a significant effect on students' permanence levels in the text called "The Story of a Book"?
6. What are the student views on teaching and learning with the method?

AIM OF THE STUDY

With this research, it was aimed to investigate whether systematic education has a significant effect on the students' cognitive field's knowledge, comprehension, application level, and achievement scores at the total score level in the subject of "The Story of a Book" in the Primary School 4th grade Turkish lesson.

RESTRICTIONS

1. The study was limited to the students studying in the 4th class of a private primary school in Konya province, in the 2014-2015 academic year,
2. The application is limited to 6 lesson hours in total,
3. The 4th grade Turkish lesson is limited to the subject of 'The Story of a Book' within the scope of the 'Our Values' theme.

METHOD

Mixed design, in which quantitative and qualitative research designs are used together, was used in this study. In the research, a design consisting of a combination of pretest-posttest quasi-experimental design without control group and qualitative data was applied. According to Balci (2010), the mixed design is the researcher's mixed use of both quantitative and qualitative research approaches at one stage of the research or during two or more stages of the research process.

In this research design, the pretest is given to the group or groups before the experimental process begins. After the experimental process is finished, the same test is given as the post-test. The final test can be given in a day or two, but if it is not a problem, this period should not be extended. The group may be one or more, but they are not in control of each other. The same experimental treatment should be applied to each group (Sonmez & Alacapinar, 2014: 58).

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SUB-PROBLEMS

1. Does the systematic education have a significant effect on the students' knowledge level achievement in the text called "The Story of a Book"?
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3. Does systematic education have a significant effect on the students' achievements of the level of practice in the text called "The Story of a Book"?
4. Does systematic education have a significant effect on the total achievement levels of the students in the text called "The Story of a Book"?

5. Does systematic education have a significant effect on students' permanence levels in the text called "The Story of a Book"?
6. What are the student views on teaching and learning with the method?

STUDY GROUP

Since the experimental design was used in the research, the universe and sample were not determined. The study group consisted of 21 students in the 4th grade of a private primary school in the province of Konya in the 2014-2015 academic year.

DATA COLLECTION TOOL

As a data collection tool, the "Story of a Book Achievement Test" consisting of 44 items under 24 questions and an interview form was used. This test has been prepared according to the achievements of the subject of "Story of a Book" in primary school 4th graders. According to Bloom's taxonomy, the achievements were separated according to the levels of knowledge, comprehension and application, and the questions suitable for these levels were classified. The score range of the test is 0-44. The pre-application of the test was applied to a total of 132 4th grade students in two different schools. The reliability of the test was found to be 0.87.

In the interview form, an open-ended question consisting of a single item was asked to the students and the students were asked to evaluate the systematic education applied.

DATA ANALYSIS

The scale was applied in this study, aims to investigate whether systematic education has a significant effect on the students' achievement scores at the level of knowledge, comprehension, application level, total and permanence in the primary school 4th grade Turkish lesson 'The Story of a Book'. And the time is set at 40 minutes. Mean, standard deviation and t test were used in the analysis of the data. Significance level was accepted as 0.05 in the study. SPSS 22.0 package program was used to analyze the data.

FINDINGS

The answers given by the students to the "Story of a Book Achievement Test" were tabulated in line with the sub-problems of the research and comments were made based on the table.

1. 'Does systematic education have a significant effect on the students' knowledge level attainment in the text of 'The Story of a Book'? Experimental group knowledge level achievements are given in Table 1:

Table 1. Gain scores of the subjects at the level of knowledge

Group	N	Pretest	Final Test	Gain Score	s	t	p
Test	21	17,571	19,524	1,953	3,7613	-2,379	,017

As seen in Table 1, the average gain score of the experimental group is 1.953. Paired Sample t Test, which is used in paired groups, was used to test whether there was a significant effect on the experimental group's gain score averages. The calculated t value was found as -2,379. It can be said that there is a significant difference at 20 degrees of freedom and 0.05 one-way significance level. Based on these data, it can be said that systematic education is significantly effective in gaining knowledge-level goals in the 4th grade Turkish.

2. 'Does systematic education have a significant effect on the students' comprehension level gain scores on the subject of the text 'The Story of a Book'? The experimental group comprehension level gain scores are given in Table 2.

Table 2. Gain scores of the subjects at the level of comprehension

Group	N	Pretest	Final Test	Gain Score	s	t	p
Test	21	6,238	6,476	0,238	2,3432	- 0,466	,087

As seen in Table 2, the gain score average of the experimental group's comprehension level is 0.238. Paired Sample t Test, which is used in paired groups, was used to test whether there was a significant effect on the experimental group's gain score averages. The calculated t value was found to be -0.466. According to these results, it cannot be said that there is a significant difference at 20 degrees of freedom and 0.05 one-way significance level. Based on these data, it can be concluded that systematic education does not have a significant effect on gaining the comprehension level goals in the 4th grade Turkish course.

3. Does systematic education have a significant effect on the students' application level gain scores on the text called "The Story of a Book"? Experimental group application level gain scores are given in Table 3.

Table 3. Gain scores of the subjects at the application level

Group	N	Pretest	Final Test	Gain Score	s	t	p
Test	21	2,905	3,476	0,571	1,6301	- 1,606	,029

As seen in Table 3, the application level gain score average of the experimental group is 0.571. Paired Sample t Test, which is used in paired groups, was used to test whether there was a significant effect on the experimental group's gain score averages. The calculated t value was found to be -1,606. According to these results, it can be said that there is a significant difference at 20 degrees of freedom and 0.05 one-way significance level. Based on these data, it can be concluded that systematic education is significantly effective in gaining the objectives at the application level in the 4th grade Turkish course.

4. 'Does systematic education have a significant effect on students' total gain scores in the text 'The Story of a Book'? The total gain scores of the experimental group are given in Table 4.

Table 4. Total gain scores of the subjects

Group	N	Pretest	Final Test	Gain Score	s	t	p
Test	21	26,714	29,476	2,761	4,7319	-2,675	,033

As seen in Table 4, the total gain score average of the experimental group is 2,761. Paired Sample t Test, which is used in paired groups, was used to test whether there was a significant effect on the experimental group's gain score averages. The calculated t value was found to be -2,675. According to these results, it can be said that there is a significant difference at 20 degrees of freedom and 0.05 one-way significance level. Based on these data, it can be concluded that systematic education is significantly effective in gaining the total objectives of the 4th grade Turkish course.

5. 'Does systematic education have a significant effect on students' permanence levels in the text 'The Story of a Book'? Experimental group post-test and retention data are given in Table 5.

Table 5. Final test and permanence data of the subjects

Group	N	Final Test	Permanence	Difference	s	t	p
Test	21	29,476	28,143	-1,333	1,2780	4,781	,041

As can be seen in Table 5, the average of permanence difference of the experimental group is -1,333. Paired Sample t Test, which is used in paired groups, was used to test whether there was a significant effect on the mean retention score of the experimental group. The calculated t value was found to be 4,781. According to these results, it can be said that there is a significant difference at 20 degrees of freedom and 0.05 one-way significance level. Based on these data, it can be concluded that systematic education has a significant effect on the permanence of the 4th grade Turkish course.

6. What are the student opinions on this subject?

Some of the answers given by the students to the open-ended question are given below (10 of the students were randomly selected)

1st Student:

I really liked this lesson. It was very fun and exciting. I am so glad we did this course.

2nd Student:

I love Mustafa Ok teacher and I love his lessons. I don't like this Turkish lesson and it always seemed unnecessary to me. But now it's one of my favorite classes. Because Teacher Mustafa showed me the fun side of Turkish. Thank you very much to Teacher Mustafa for choosing our class. But it would have been better if we had written compositions besides drama. However, our lesson was very good.

3rd Student:

This lesson was so much fun. The activities we did were good, but it would have been better if we did more activities. Thank you very much anyway.

4th Student:

My favorite part of the class was the drama. I had the most fun in that part. But I would like more activities like this to be done in the classroom. I love that kind of cartoon character events. I would like to see such activities in the course. Thank you.

5th Student:

It was a very good lesson. We learned and had fun. We had difficulties in some places, but we overcame them as a group. We are back in time in the text. I want every Turkish lesson to be like this. We are all very happy to have such information. It would have been better if Teacher Mustafa had done other activities.

6th Student:

The lesson was so much fun. We did many activities. It was even better to be with Teacher Mustafa. We learned new words and information. It was a lot of fun from start to finish.

7th Student:

The lesson was very well. We could have chosen our groups to make the lesson better. It should have been longer too. We could have done the lesson outdoors as well. Both our clarity of mind improves and we do better.

8th Student:

This lesson was very fun and exciting. This is because we learned different things. We would like to thank Teacher Mustafa for teaching this lesson and teaching us new things. I wish we had taught more and longer lessons. If we study more lessons, we can learn more. We would be happier.

9th Student:

Thank you very much. Because the lessons we studied were really fun. You informed us. That's why I like these lessons.

10th Student:

This lesson was pretty fun. But it could have been more fun. The puzzle activity and other activities were great fun. Thank you very much for all this.

As a result of the answers given by the students to the open-ended question about the systematic education applied, it can be concluded that almost all of the class liked the lesson very much. In addition, it can be concluded that he had a lot of fun in the lessons and learned new things. The students enjoyed the lesson, which was taught with various activities and games. They also stated that they want to teach other courses in this way.

CONCLUSION

In this study, it was investigated whether systematic education in the 4th grade Turkish lesson "The Story of a Book" has a significant effect on the knowledge, comprehension, application level of the cognitive field and the gain score points and permanence levels at the total score level. As a result of the study, it was seen that systematic education on the subject of 'The Story of a Book' did not have a significant effect on the level of comprehension of the students; In addition, it has been observed that there is a significant effect on knowledge, practice, total and permanence levels. Based on these data, it can be said that systematic education is significantly effective in increasing the students' gain scores at the level of knowledge, practice, total and permanence of the cognitive field in the 4th grade Turkish lesson 'The Story of a Book'. In addition, according to the answers given by the students to the open-ended questions, it was understood that the students liked the systematic education application in the Turkish lesson and they had a lot of fun in the lesson.

RECOMMENDATIONS

As a result of the findings of this research, the following recommendations can be made:

1. Studies should be carried out to use systematic education more in Turkish lessons in schools.
2. The systematic education should be used more in teaching the acquisitions that are suitable for the level of knowledge, comprehension and practice.
3. Teachers should be taught systematic education.
4. For other courses, new researches including systematic education should be done.

REFERENCES:

- Alacapinar, F. G. (2007). Geleneksel, Bilgisayarli, Dizgeli Egitim ve Erisi. *Eurasian Journal of Educational Research*, 29, 13-24.
- Aslan, S. (2012). *Birlestirilmis sinifli okullarda dizgeli egitimin akademik basariya ve tutuma etkisi* (Yayimlanmamis Yuksek Lisans Tezi). Firat Universitesi Egitim Bilimleri Enstitusu, Elazig.
- Aslan S. ve Kazu, H. (2015). Birlestirilmis Sinifli Okullarda Dizgeli Egitimin Ogrencilerin Akademik Basarilarina ve Sosyal Bilgiler Dersine Yonelik Tutumlarına Etkisi, *Uluslararası Sosyal Arastirmalar Dergisi*, 8(41), 856-865
- Aydogmus, M. (2015) Ilkokul Dorduncu Sinif Ingilizce Dersinde Kullanilan Dizgeli Ogretimin Ogrenci Erisisine Etkisi. *Uluslararası Egitim Bilimleri Dergisi*, 2 (5), 24-35
- Balci, A. 2010. *Sosyal Bilimlerde Arastirma Yontem, Teknik ve Ilkeler* (8. Basim). Ankara: Pegema Yayinlari
- Duman, B. ve Semerci C. (2010). Dizgeli Ogretimin Ogretmen Adaylarının Demokratik Tutumlarına Etkisi, *e-Journal of New World Sciences Academy*, 4(2), 1-9.
- Kapicioglu, M. O. K. ve Sonmez, V. (2011). Dizgeli Ogretim Etkilliligi. *Education Sciences*, 6(3), 2075-2095.
- Kasa Ayten, B. ve Ercan, M. (2021). Ilkokul 4. sinif Turkce ders kitabinda yer alan yazma etkinliklerinin incelenmesi. *Ana Dili Egitimi Dergisi*, 9(3), 833-853.
- Korkmaz Toklucu, S. ve Tay, B. (2016). The effect of cooperative learning method and systematic teaching on students' achievement and retention of knowledge in social studies lesson. *Eurasian Journal of Educational Research*, 66, 315-334
- Ministry of National Education in Türkiye [MONE]. (2019). *Türkçe Dersi Öğretim Programı (Turkish Lesson Curriculum (Primary and Secondary Schools 1, 2,3, 4, 5, 6, 7 ve 8. classes)*. Ankara: MEB Yayinlari.
- <http://mufredat.meb.gov.tr/ProgramDetay.aspx?PID=663> Access Date: 13.05.2021
- Ontas, T. (2014). Ilkogretim Sosyal Bilgiler Dersinde Yapilandirmaci Yaklasim Ile Dizgeli Egitimin Ogrenci Erisisine Etkisi Arasindaki Fark. *AJELI-Anatolian Journal of Educational Leadership and Instruction*, 2(2), 43-51.
- Ozalemdar, L., ve Sesli, E. (2018). Biyolojide Uygulanan Dizgeli Egitimin Yaratıcı Dusunce Erisisine Etkisi. *Adiyaman University Journal of Educational Sciences*, 8(1), 21-48.
- Ozdemir, B. (2014) *Analitik degerlendirme ve yazma modelinin Turke ogretmeni adaylarının yazma becerilerine ve yazma tutumlarına etkisi* (Yayimlanmamis Doktora Tezi). Gazi Universitesi Egitim Bilimleri Enstitusu, Ankara.

- Ozer, S. (2017). Onlisans Duzeyinde Dizgeli Egitim Yonteminin Ogrenci Erisisine Etkisi. *Uluslararası Avrasya Sosyal Bilimler Dergisi*, 8(30), 1433-1450.
- Sonmez, V. (2004). *Dizgeli Egitim*. Ankara: Ani Yayıncılık.
- Sonmez, V., Alacapinar, F. G. (2014). *Bilimsel Arastırma Yontemleri* (3.baskı). Ankara: Ani Yayıncılık.
- Senturk, C. (2015). Hayat Bilgisi Dersinde Uygulanan Dizgeli Egitimin/Ogretimin Etkililiginin İncelenmesi. *Egitim ve Ogretim Arastirmalari Dergisi*, 4(4), 163-172.
- Zeybek, G. (2017). Bilgisayar Dersinde Dizgeli Ogretim Yonteminin Ogrenci Erisilerine Etkisi. *Ankara Universitesi Egitim Bilimleri Fakultesi Dergisi*, 50(1), 1-18.

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