The Evaluation of Theses Prepared on Project-Based Learning in Turkey: A Content Analysis Study¹

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ABSTRACT

The aim of this study is to undertake a content analysis of theses prepared on project-based learning between 2003 and 2013, and to uncover their trends. The theses that tackled project-based learning were scanned within the Council of Higher Education database by searching the keywords "project-based and project-supported". The 99 theses listed were subjected to content analysis using publication classification form. These theses were reviewed in terms of "the year of publication, type, university of origin, purpose of study and results, working group, sample size and research model". The result of this research suggests that the studies on project-based learning were mostly conducted over primary school students and the preferred sample size were between 17 to 146 individuals and the most used research model was experimental. Also, almost half of the studies were conducted within institutes of educational sciences, and most studies were in the form of a master's thesis. The most common purpose of these studies was found to be academic achievement goals. So in this context, it would be useful to include project-based learning and other learning fields together.

Key Words: Project-based learning, Master's thesis, Content analysis

¹ This study was presented as an oral presentation at the Ninth National Education Management Conference.

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INTRODUCTION

Previously, teaching methods constantly changed together with the accumulating knowledge. Nowadays, it is not just about teaching knowledge, but also teaching how to learn and how to obtain information that are among the main principles of education (Zorbaz & Çeçen, 2009). Recent studies in the field of education reveal that the students are at the center of knowledge and that they have a better learning experience when they can actively reach information (Saracaloğlu, Akamca, & Yeşildere, 2006). In addition, the emphasis on individual differences in the field of education in Turkey is gaining more and more importance. In 2004, with the importance of such individual differences increasing, a new education program with the emphasis on constructive learning was put to practice in Turkey. According to Aydın (2012), the constructivist approach was based on the process that the students construct in their minds while learning and how important it is to use teaching methods which are suitable for the constructivist approach. One such teaching method is project-based learning. Project-based learning is a learning approach which is dependent on imagination, developing designs, constructing and planning for the learner; whereas, for the teacher, it puts the learner at the center and brings real life conditions to the classroom by training students within the confines of projects, enabling them to build interdisciplinary relations (Kalaycı, 2008). In other words, project-based learning is an educational approach that may consist of many strategies and methods, which allows students themselves to reach and use the information, to undertake his/her own research, to transfer this information to his/her own interests, to use scientific process skills, to properly classify information from various sources and submit them, and to be able to express oneself (Cıbık, 2009). Similarly, project-based learning is also described as a problem-solving activity with a scenario or problem based on the interdisciplinary approaches related to all courses about real life applications and conditions of students either individually or as a group (Ültanır, 2003).

The purpose of project-based learning is to ensure a creative learning experience for the learners. In this approach, the learners are active to carry out their projects and teachers are just guiding agents for the learners. In project-based learning, teamwork is preferred over individual work, and thus coordination is ensured for the learners either within their own study group or their friends within other groups and a positive relationship between the learning individuals within and outside the school is encouraged (Yılmaz, 2006). In projectbased learning, learning is achieved while the learners research a certain subject, apply what they learn and report what they obtain during their research. Learners find the opportunity to try new things in either real life or close to real life conditions through physical and mental activities. Also the students who are forgotten in the back row in conventional classrooms and those who have difficulty interacting with their teachers are given roles in accordance with their skills and so they do not get bored in such classes and play an active role in directing the process, which in turn makes the learning experience more fluid, fun and dynamic (Yıldız, 2012). The subjects chosen for project-based learning are related to real life practices. In this context, as the projects have close ties to real life, and students are encouraged to reach the knowledge by themselves, learning activities in this method are unique, important and valuable (Özden, Aydın, Erdem, & Ekmekçi, 2009). In light of these explanations, it is possible to say that project-based learning approach can bring many benefits to teaching activities. However, there are also disadvantages to project-based learning. Korkmaz and Kaptan (2001) listed the advantages of project-based learning as:

Develops and enhances students' learning skills.

- Provides lifelong learning.
- Provides participation in activities based on teamwork and collaboration.
- Recommends multiple ways for the reflection of knowledge and participation of students.
- Allows the use of different dimensions of intelligence.
- Provides useful information regarding the performance of the student for his/her family, teachers and school management.
- Students can combine their real life products and performances.
- Develops problem-solving skills and problem-based learning skills.
- Students can find the opportunity to apply their knowledge and skills gained through projects on different topics.
- Students can gain a variety of skills.

As you can see, there are many advantages to project-based learning. The following are seen as some of the disadvantages (Korkmaz & Kaptan, 2001):

- May increase the teachers' workload and responsibilities.
- May increase the time allocated for learning.
- If the boundaries of the study are not clearly defined, extreme deviation and disintegration from the main subject could be observed.

Project-based learning is an effective tool that allows students to express themselves, quite often in front of large groups and to enable them to make visual presentation applications (Ada, Baysal, & Kadıoğlu, 2009). This method must be carried out step-by-step in a planned order so as to receive the expected learning outcomes of students with project-based learning approach. It is only possible for the students to gain from this method by systematically carrying out their work pursuant to these steps. These basic steps will ensure that the individual can determine the required knowledge and materials in order to achieve the goal of learning and can select those relevant to the subject, and also to implement them0 to the cause and to present the final product in the framework of a control mechanism based on the process (Attci & Polat, 2010). These steps have been defined by Serttürk (2008) as:

- Formation of the groups
- Determination of the work to be done or the subjects (issues) to be discussed
- Determination of the working schedule
- Setting of purposes / goals
- Collection of information / literature review
- Preparation of the Content Plan
- Organization of the information
- Reporting of the project
- Project presentation
- Evaluation of the project

Project-based learning is considered to be an effective approach for the development of skills of students to access information and make use of it (Dağ & Durdu, 2011). Projectbased learning is also important in that it allows students to form interdisciplinary relations and work in cooperation with their peers (Atici & Polat, 2010). For these purposes, projectbased learning has seen more interest in Turkey in recent years, in parallel to its rising worldwide popularity and has been a research subject in all areas of education from preschool to academic fields (Baran, 2007; Canoğlu, 2007; İmer, 2008). In this respect, it is important to collectively study the research made on project-based learning and to discuss their results, in order for such research to shine a light on future studies. Pursuant to these explanations, it was aimed to present a general view of Master's theses prepared in Turkey about project-based learning and thus, to review theses prepared on this topic in order to reveal the trends and to provide an overview of the literature. Pursuant to this general purpose, the master's and doctoral theses found in the database of The Council of Higher Education have been evaluated in terms of their university of origin, institute, published date, type, study group, research model and purpose and results.

METHOD

Meta-evaluation approach has been used for the study. As a secondary evaluation, meta-evaluation is the process of "collecting descriptive and judgmental information regarding the usefulness, applicability, ethical and technical competence of the evaluation" (Stufflebeam, 1974, p. 3). This approach has an important function for the informing of the relevant spheres about the process and the results of the evaluation and the effective use of the results (Cooksky & Caraceli, 2005, p. 31).

Study Group

In order to determine the theses that were selected in scope of the study, a scan was conducted of The Council of Higher Education the database, first on 26.01.2014 with the keywords "project based, project supported". As new theses are constantly being, the database was scanned again on 09.02.2014 and the data collection of the study was finalized. A total of 126 post-graduate and doctoral theses were tracked as a result of the screenings. Of these theses, 27 were not able to be obtained due to the lack of permission received from their authors. Thus, the study was limited to the remaining 99 theses.

Collection and Analysis of the Data

The publication classification form, which was developed by the researchers, was used in order to collect the data. This form was prepared to cover all the theses based on project-based learning, and includes the following information for each thesis reviewed: "title, author, publication date, university/institute of origin, publication type, research model, sample size, study group, purpose of study and results. In this current study, content analysis was the employed method for the theses reviews of the subject of project-based learning. Content analysis is an approach that allows the objective and systematic review of oral, written and other kinds of materials (Tavşancıl & Aslan, 2001. Content analysis can also be described as summarizing and showing the basic content and messages of the data at hand (Cohen, Manion, & Morrison, 2007).

The data obtained by coding the theses within the scope of study to the publication classification form have been analyzed using statistical software SPSS 15.0 which is capable of basic tabulation processes. Descriptive statistics like frequency and percentage have been used for the calculation analyses, and the data obtained have been presented in tables.

FINDINGS

In this part of the study, findings obtained from the theses about project-based learning are in tabular format, including the year of study, university/institute of origin, type, research model, sample size, study group, purpose and the results.

Distribution of Theses Based on Publication Year and Type

The distribution of the theses within the scope of the study, based on the publication year and types are presented in Table 1.

Year/type Total Post-graduate Doctoral Total

Table 1. Distribution of theses based on publication year and type

When Table 1 is examined, it can be seen that the most number of theses written between the years 2003 and 2013 corresponds to year 2008 (f=24), and the least number of theses have been written in years 2003 (f=1) and 2004 (f=1). Generally speaking, 78 of the theses prepared about project-based learning are post-graduate theses, and 21 of them are doctoral theses. The most number of post-graduate theses have been written in 2008 (f=20), and the most number of doctoral theses have been written in years 2008 (f=4) and 2011 (f=4).

Distribution of Theses Based on University or Institute Origin

The distribution of theses within the scope of the study, based on the university and institute of origin have been given in Table 2.

University / Institute (%)	Gazi	Marmara	Selçuk	Hacettepe	Çukurova	Dokuz Eylül	Balıkesir	Karaelmas	Others
Educational Sciences (45.40)	13.10	11.0	4.03	3.03	-	5.10	-	-	9.03
Life sciences (25.30)	-	-	1.03	3.03	-	-	4.10	-	14.03
Social sciences (29.30)	-	2.10	5.04	1.04	5.10	-	-	4.10	15.04
Total	13.10	13.10	10.10	7.10	5.10	5.10	4.10	4.10	38.10

Table 2. Distribution of theses based on origin of university and institute

In Table 2, the number and percentage of theses is shown based on the university and institute of origin. In order to make it more understandable, the first eight universities with the most number of theses prepared have been presented with their names, and the rest of the universities with fewer works have been categorized together as "others". The most number of theses were prepared at Gazi (13.10%) and Marmara (13.10%) universities. This was followed respectively by Selçuk (10.10%) and Hacettepe (7.10%) universities. When the theses are reviewed in terms of the institutes of origin, it can be seen that most have been prepared within Educational Sciences institutes (45.40%), followed by Social Sciences

Institutes (29.30%), and Life Sciences Institutes (25.30%). Again when we compare the number of theses, Gazi University, with its Educational Science Institute, leads with 13.10%, Balıkesir University with its Life Sciences Institute follow with 4.10%, and Selçuk University with its Social Sciences Institute comes third with 5.04%.

Distribution of Theses Based on Study Group and Sample Size

The distribution of theses within the scope of this study, based on study groups and sample size are shown in Table 3.

Study groups	Sample size	Number (f)	%	
Pre-school students	112	2	2.02	
Primary education students	17-146	56	56.57	
Secondary education students	15-188	13	13.13	
University students	28-72	18	18.18	
Teachers	4-72	2	2.02	
Other	13-552	8	8.08	

Table 3. Distribution of theses based on study group and sample size

When the results are examined, it can be seen that most of the studies were conducted on students (89.9%). In these theses, the most number of students preferred as study groups have been selected from primary education students (56.57%). Primary school students are followed respectively by higher education students (18.18%), Secondary education students (13.13%), and pre-school students (2.20%). The results show that teachers were rarely chosen as study groups for such studies (2.02%).

Distribution of Theses in Terms of Research Model

The distribution of theses within the scope of this study, based on their respective research models are shown in Table 4.

Research model	Number (f)	%
Experimental	61	61.61
General screening	4	4.44
Relational screening	1	1.11
Mixed-method (Qualitative + Quantitative)	28	28.28
Special Case Study	2	2.22
Action Research	3	3.33

Table 4. Distribution of theses in terms of research model

When the results of Table 4 are examined, it can be seen that researchers mostly used the experimental model (61.61%) for their studies. This is followed respectively by mixed-method (28.28%) and general screening method (4.44%). The least preferred method was found to be relational screening (1.11%).

Distribution of Theses Based on Purpose of Research and Outcome Effectiveness

Findings regarding the purpose of research and the effectiveness of the outcome of the research for the theses in scope of this study are shown in Table 5.

			Research results effectiveness				
Impact of the research*	f	%	Effective		Ineffective		
			f	%	f	%	
Impact on academic success	64	31.37	56	87.50	8	12.50	
Impact on stance	62	30.39	44	70.96	18	29.06	
Impact on behavior	17	8.33	15	88.23	2	11.77	
Lasting impact on education	15	7.35	13	86.60	2	13.40	
Impact on scientific process skills	14	6.86	12	75.00	4	25.00	
Impact on creative thinking	10	4.90	8	80.0	2	20.00	

Table 5. Distribution of theses based on purpose of research and outcome effectiveness

*Multiple impacts was considered for each thesis

When the results in Table 5 are examined, we can assume that the most popular purpose of research has been finding the impact of project-based learning on academic success (31.37%). This is followed by finding the impact on stance (30.39%), and finding the impact on behavior (8.33%). The least preferred purpose of research on project-based learning has been finding the impact on creative thinking (4.9%). If we look at the research activities to identify the impact of project-based learning on academic success, results suggest that it has been effective 87.5% and ineffective 12.5%, its impact on stance effective 70.96% and ineffective 29.06%, and its impact on behavior has been found to be effective 88.23% and ineffective 11.77%. Research results on its lasting impact on education suggests that it was found to be effective in 86.60% of studies and ineffective in 13.4%, whereas its impact on scientific process skills has been found effective in 75% of studies and ineffective in 25%. Finally, its impact on creative thinking has been found effective in 80% of studies and ineffective in 25% of them.

DISCUSSION, RESULTS, AND RECOMMENDATIONS

In this current study, 99 post-graduate theses (master's and doctoral) about projectbased learning as listed on the Council of Higher Education database were reviewed. When classified based on type of thesis, it can be seen that most are master's theses. Ayaz and Söylemez (2015) and Kaşarcı (2013) in their meta-analysis studies on project-based learning approach, have found that there are more master's theses on the subject compared to the number of doctoral theses. The reason for that could be the sheer number of master's graduates compared to doctoral graduates. Theses on project-based learning have been increasing since 2004, and more than half have been written between 2007 and 2009. The reason for this increase is thought to be the reform made in primary education programs with the constructivist approach theory introduced in 2004. This program was put into practice in Turkey during the 2005-2006 academic year. Since then, researchers started to show more interest in project-based learning and the number of research papers on the subject has started to rise.

Post-graduate theses on project-based learning have been prepared within 29 different universities. Almost half of the theses have been prepared within Educational Science Institutes. The most number of theses on project-based learning have been prepared in Gazi University, Marmara University, and Selçuk University, respectively. The study groups of these theses were mostly primary education students, and this is followed respectively by higher education and secondary education students. Findings of studies made on different study groups correspond to the findings of this current study (Kaşarcı,

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2013; Ayaz & Söylemez, 2015). According to Saracaloğlu et al. (2006), in some of the studies undertaken in Turkey about project-based learning, it has been found that in high schools and teacher-training institutes, project-based learning activities were not given the necessary attention that they deserve, and that students' project development skills were not on par with desired levels (Akdeniz & Keser, 2000; Akdeniz & Devecioğlu, 2001). Also, it has been suggested by various researchers that project-based learning approach is quite appropriate to apply in primary education level. (Saracaloğlu et al., 2006; Yıldırım, 2011).

When classified based on their research models, it has been seen that most theses were prepared using the experimental model, followed respectively by mixed-method and general screening model. The least preferred method has been the relational screening model. In the studies conducted (Baran, 2007; Aladağ, 2008; Serttürk, 2008; Ada et al., 2009; Yalçın, Turgut, & Büyükkasap, 2009), experimental method has been popular due to the fact that most research papers have been written for the academic success, stance, lasting impact etc. variables of project-based learning. When compared in terms of their purpose, it can be seen that most studies on project-based learning have been made on academic success, stance and behavior variables. The number of studies that compare the impacts of several variables of project-based learning and different educational approaches, either together or separate (Öztürk, 2004; Tabuk, 2009; Eke, 20109 Güven, 2011; Polat, 2011), is also noteworthy.

In the past decade, research studies in Turkey focused mostly on the impact of various learning methods on academic success and stances of the students (Saracaloğlu et al., 2006; Bayram & Seloni, 2014). In the post-graduate theses included in this current study, the impact of project-based study results has been researched. It has been seen that project-based learning have proven effective according in 87.5% of the studies measuring academic success, and 70.96% of studies measuring the impact on stance. Kaşarcı (2013), in his master's thesis, examined the impact of project-based learning on academic success and stance of students using the meta-analysis method. In this current research, which included 53 studies on academic success and 32 studies on stance, it has been revealed that project-based learning, either generally or specifically on subject matter, academic level or implementation times, has significantly increased the levels of academic success and stance of students. The finding that project-based learning is effective on both academic success and stance also corresponds with many different studies conducted on the subject matter (Aladağ, 2008; Çıbık, 2009; Yalçın et al., 2009; Çeliker & Balım, 2012).

One of the most important factors of any educational activity is its permanence. Measured lasting impact (permanence) of project-based learning over the education was found to be effective in 86.6% of the studies included in this current research; however, in 13.4% of the studies, it was found to be ineffective. According to Çiftçi (2006), as with other student-centered learning methods, project-based learning methods also put the student at the center of learning activities, enabling them to learn for themselves, which in turn makes the learning experience a long-lasting one. It was found that all studies included in this current research which compare project-based learning to other conventional learning methods in terms of permanence, found that project-based learning to always be more effective than the alternatives. Ayaz and Söylemez (2015) conducted a meta-analysis study to specify the effectiveness of project-based learning methods over the academic success of students taking science classes, which included 42 studies, and found that project-based learning positively effects the success of students in their science classes when compared to

conventional learning methods. This finding is parallel to the findings obtained in this current study. Some studies seemed to focus on the scientific process skills, critical thinking, motivation, creativity, problem-solving skills and similar variables; however, it was found that the number of such studies to be very few.

With the implementation of a constructivist approach to education in Turkey in 2004, many studies have been undertaken on project-based learning. When the literature was examined, two studies were found which review Turkish research conducted on projectbased learning as a whole (Kaşarcı, 2013; Ayaz & Söylemez, 2015). These two studies do not present a general review, but are meta-analytic studies, and thus only studies including a pre-test and post-test control group model were included in them. Research papers on different models were excluded from these studies. Research by Kaşarcı (2013) was limited to studies measuring the impact of project-based learning on the academic success and stance of students; whereas Ayaz and Söylemez (2015) limited their research to studies which measured the impact of project-based learning on the academic success of student science classes. In this respect, it is important to collectively study the research made on projectbased learning and to discuss the results in order for such research to shed light on future studies. There are very few studies which included pre-school students, teachers, managers and parents as study groups. More studies with these study groups should be considered in the future. Any cooperation with universities which have the most post-graduate theses on project-based learning will serve to increase the quality of future research on this subject area. It may also be useful to conduct research on project-based learning together with other methods of education.

REFERENCES

- Ada, S., Baysal, Z. N., & Kadıoğlu, H. (2009). The effect of the project-based learning on attitude of students to social sciences study and implementation of visual presentation. *Ahi Evran University, Journal of Education Faculty, 10*(3), 89-96.
- Akdeniz, A. R., & Devecioğlu, Y. (2001, September). Evaluation of project studies carried out in secondary-school sciences class. Paper presented at the Sciences Symposium, Maltepe University, Istanbul.
- Akdeniz, A. R., & Keser, Ö. F. (2000, September). *An approach to improve project-preparing skills of deputy sciences teachers.* Paper presented at the IV. Sciences Education Congress, Hacettepe University, Ankara.
- Aladağ, S. (2008). The effect of the project-based learning approach on academic success of the students in primary-school mathematics. *Turkey Social Research Journal*, 12(2), 157-170.
- Atıcı, B., & Polat, H. (2010). The effect of the project-based learning approach on academic success and vision of the students in web design learning. *Turkish Journal of Computer* and Mathematics Education, 1(2), 122-132.
- Ayaz, M. F., & Söylemez, M. (2015). The effect of the project-based learning approach on academic success of the students of sciences: A meta-analysis study. *Education and Sciences Journal*, 40(178), 255-283.
- Aydın, S. (2012). The effect of the project-based conditions on the self-regulation level and selfefficacy of deputy biology teachers (Unpublished Doctoral Dissertation). Gazi University Educational Sciences Institute, Ankara.

- Baran, M. (2007). A survey on the effect of the project-based learning on success of electrostatic and their attitude to physic of second class students of physic teaching (Unpublished Master's Thesis). Dicle University Sciences Institute, Diyarbakır.
- Bayram, H., & Seloni, Ş. R. (2014). The effect of the project-based learning approach on success of science, conceptual understanding and attitude of students in primary school 5th grade. *Educational Sciences Journal*, 39, 71-84.
- Canoğlu, M. (2007). The effect of the project-based learning approach on intuitionistic mathematics skills of the students at 6 age attending pre-school education institution (Unpublished Master's Thesis). Abant İzzet Baysal University Social Sciences Institute, Bolu.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education*. London: Routledge/Falmer.
- Cooksky, L., & Caraceli, V. (2005). Quality, context, and use: Issues in achieving the goals of Meta evaluation. *American Journal of Evaluation*, *26*(1), 31-42.
- Çeliker, H. D., & Balım, A. G. (2012). Solar System and Beyond: The effect of the projectbased learning implementations on success of the students in the space conundrum unit. *Journal of Theoretical Education Science*, 5(3), 254-277.
- Çıbık, A. (2009). The effect of the project-based learning approach on the attitude of students towards sciences class. *Primary Education-Online*, *8*(1), 36-47.
- Çiftçi, S. (2006). The effect of the project-based learning on the risk taking level, problem solving skills, access to the permanence and attitude of the students in social science education (Unpublished Doctoral Dissertation). Selçuk University Social Sciences Institute, Konya.
- Dağ, F., & Durdu, L. (2011, September). *The opinions of teacher candidates about project-based learning process.* Paper presented at the 5th International Computer & Instructional Technologies Symposium, Firat University, Elazığ, Turkey.
- Eke, C. (2009). The effect of the project-supported activities based on cooperative learning method on attitude to sciences and success of the student (Unpublished Master's Thesis). Gazi University Educational Sciences Institute, Ankara.
- Güven, E. (2011). *The effect of the project-based learning supported by prediction-observationstatement on different variables and students' opinions about management* (Unpublished Doctoral Dissertation). Gazi University Educational Sciences Institute, Ankara.
- İmer, N. (2008). The effect of the project-based learning approach on academic success and attitude of students in education of sciences and technology in primary school (Unpublished Master's Thesis). Gazi University Educational Sciences Institute, Ankara.
- Kalaycı, N. (2008). An implementation of the project-based learning in High Education, an analysis relevant to students' carrying out the Project. *Education and Science Journal*, 33(147), 85-105.
- Kaşarcı, İ. (2013). *The effect of the project-based learning approach on academic success and attitude of students: A meta-analysis study* (Unpublished Master's Thesis). Eskisehir Osmangazi University, Educational Sciences Institute, Eskişehir.
- Korkmaz, H., & Kaptan, F. (2001). Project-based learning approach in sciences education. *Journal of Hacettepe University Education Faculty*, 20, 193-200.
- Özden, M., Aydın, M., Erdem, A., & Ekmekçi, S. (2009). Evaluation of teachers about Project based sciences learning. *Electronic Journal of Social Sciences*, 8(30), 92-102.
- Öztürk, E. (2004). The reflections of project-based learning and portfolio evaluation approach to education and testing (Unpublished Master's Thesis). Kafkas University Educational Sciences Institute, Kars.

- Polat, H. (2011). The effect of management and monitoring knowledge systems on success and attitude of student in project-based learning (Unpublished Master's Thesis). Firat University Social Sciences Institute, Elazığ.
- Saracaloğlu, S., Akamca, G. Ö., & Yeşildere, S. (2006). The ground of project-based learning in primary education. *Journal of Turkish Educational Sciences*, 4(3), 241-260.
- Serttürk, M. (2008). The effect of the project-based learning approach on success of sciences and attitude of primary-education 7. Class students (Unpublished Master's Thesis). Sakarya University Social Sciences Institute, Sakarya.
- Stufflebeam, D. L. (1974). *Meta-evaluation. Occasional Paper Series, Paper No. 3.* Kalamazoo, MI: Western Michigan University Evaluation Center.
- Tabuk, M. (2009). *The effect of multiple intelligence approach on success of learning mathematics in project-based learning* (Unpublished Doctoral Dissertation). Marmara University Educational Sciences Institute, Istanbul.
- Tavşancıl, E., & Aslan, E. (2001). *Content Analysis and Application Examples*. Istanbul: Epsilon Publication.
- Ültanır, G. (2003). *New Theories and Technics in Planning and Evaluating Education*. Ankara: Nobel Publication and distribution.
- Yalçın, S. A., Turgut, Ü., & Büyükkasap, E. (2009). Examining the effect of the project-based learning method on academic success of students in electric issue, their attitude to physic and their sciences process skills. *International Online Journal of Educational Sciences*, 1(1), 81-105.
- Yıldırım, H. (2011). *The effect of the problem-based learning and project-based learning on success and attitude of students* (Unpublished Master's Thesis). Selçuk University Educational Sciences Institute, Konya.
- Yıldız, Z. (2012). *The effect of the project-based learning approach on creative thinking, problem solving and academic success of students* (Unpublished Master's Thesis). Gazi University, Educational Sciences Institute, Ankara.
- Yılmaz, O. (2006). *The effect of the project-based learning on academic success, creativity and attitude of primary-school 7th grade students in social sciences class* (Unpublished Master's Thesis). Karaelmas University, Educational Sciences Institute, Zonguldak.
- Zorbaz, K. Z., & Çeçen, M. A. (2009). Project-based teaching and its usage in Turkish instruction. *Ankara University, Journal of Faculty of Educational Sciences*, 42(1), 87-104.

Türkiye'de Proje Tabanlı Öğrenme Alanında Hazırlanan Tezlerin Değerlendirilmesi: Bir İçerik Analizi Çalışması⁵

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Giriş

Proje tabanlı öğrenme, öğrenen açısından hayal etmeye, tasarı geliştirmeye, kurgulamaya, planlamaya dayalı bir öğrenme yaklaşımı; öğretici açısından ise öğreneni merkeze alan ve gerçek yaşam koşullarını sınıf ortamına getirerek öğrencileri projeler kapsamında çalıştırırken, öğrencilerin disiplinler arası ilişki kurmalarını sağlayan bir öğretim tekniğidir (Kalaycı, 2008). Diğer bir tanıma göre proje tabanlı öğrenme, birçok strateji ve yöntemi içerebilen öğrencinin kendi başına bilgiyi kullanmasını, bilgiye ulaşmasını, araştırma yapmasını, ilgili alanlara bilgiyi transfer edebilmesini, bilimsel süreç becerisini kullanmasını, elde ettiği bilgileri uygun bir şekilde bir araya getirebilip sunabilmesini, kendini ifade etmesini sağlayan bir yaklaşımdır (Çıbık, 2009). Proje tabanlı öğrenmede amaç, öğrenenlerin yaratıcı bir öğrenme deneyimi kazanmalarını sağlamaktır. Bu yaklaşımda, öğrenenler projelerini gerçekleştirmek amacıyla aktif durumda iken; öğretenler öğrenenleri yönlendirici birer rehber durumundadırlar. Bu amaçla proje tabanlı öğrenmede bireysel çalışmalar yerine küçük öğrenen gruplarıyla çalışmalar tercih edilerek, öğrenenlerin öğrenme sürecinde hem kendi grupları hem de diğer gruptaki arkadaşları ile koordinasyonlu bir biçimde çalışmalarını ve okul içinde ve dışında birbirleriyle olumlu ilişkiler kurmaları sağlanmaktadır (Yılmaz, 2006). Proje tabanlı öğrenmede öğrenenler bir konuyu araştırırken, öğrendiklerini uygularken ve elde ettikleri sonuçlarını rapor haline getirirken öğrenme gerçekleşmektedir. Öğrenenler fiziksel ve zihinsel etkinliklerle gerçek ya da gerçeğe yakın hayat koşullarında bir şeyin ilk elden nasıl yapılacağını deneme fırsatı bulurlar. Ayrıca geleneksel sınıflarda arka sıralarda unutulan ya da öğretmenlerin iletişim kurmakta sıkıntı yaşadıkları öğrenciler becerilerine göre roller üstlenmekte, derslerde sıkılmamakta, süreci yönlendirmede etkin rol oynamakta ve bu durum da öğretimi daha akıcı, eğlenceli ve dinamik hale getirmektedir (Yıldız, 2012).

Proje tabanlı öğrenme öğrencilerin bilgiyi kullanma ve bilgiye ulaşma becerilerinin gelişmesinde etkili bir öğrenme yaklaşımı olduğu düşünülmektedir (Dağ & Durdu, 2011). Proje tabanlı öğrenme yaklaşımı aynı zamanda öğrencilerin disiplinler arası sürece dayalı ve işbirlikçi çalışmalarına imkân sağlaması açısından da önemlidir (Atıcı & Polat, 2010). Bu sebeplerden dolayı proje tabanlı öğrenme çoğu ülkede olduğu gibi Türkiye'de de son yıllarda ilgi görmüş ve okul öncesinden yükseköğrenime kadar her öğretim alanında birçok araştırmaya konu olmuştur (Baran, 2007; Canoğlu, 2007; İmer, 2008). Bu açıdan Türkiye'de proje tabanlı öğrenme yaklaşımı ile ilgili yapılan araştırmaların bir bütün olarak incelenip sonuçlarının tartışılması, daha sonra yapılacak çalışmalara yol göstermesi açısından önemlidir. Bu açıklamalar doğrultusunda yapılan çalışmayla Türkiye'de proje tabanlı öğrenme alanında hazırlanan tezlerin genel bir görüntüsünü ortaya koyulabileceği düşünülerek, bu alanında hazırlanan lisansüstü tezleri kapsamlı bir şekilde incelemek,

⁵ Bu çalışma 9. Ulusal Eğitim Yönetimi Kongresi'nde (8-10 Mayıs 2014, Siirt Üniversitesi Eğitim Fakültesi - EYDDER) sözlü bildiri olarak sunulmuştur.

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eğilimlerini ortaya çıkarmak ve alan yazına genel bir görüş kazandırmak amaçlanmıştır. Bu genel amaç doğrultusunda YÖK akademik veri tabanında listelenen yüksek lisans ve doktora tezlerinin hazırlandıkları üniversite, enstitü, yayımlanma yılı, türü, çalışma grubu, araştırma modeli, amacı ve sonucuna göre dağılımları değerlendirilmiştir.

Yöntem

Araştırmada yöntem olarak meta değerlendirme yaklaşımı kullanılmıştır. İkincil bir değerlendirme olan meta değerlendirme, "değerlendirmenin yararlık, uygulanabilirlik, etik ve teknik yeterliği hakkında betimsel ve yargısal bilgileri toplama ve betimleme sürecidir (Stufflebeam, 2000). Çalışma kapsamına alınan tezleri belirlemek amacıyla YÖK akademik veri tabanında ilk olarak 26.01.2014 tarihinde "proje tabanlı, proje temelli ve proje destekli" anahtar kelimeleri temel alınarak tarama yapılmıştır. Sisteme her geçen gün yeni tezler eklendiğinden, son olarak 09.02.2014 tarihinde ilgili veri tabanı son kez taranmış ve veri toplama süreci sonlandırılmıştır. Yapılan taramalar sonucunda listelenen toplam 126 yüksek lisans ve doktora tezi tespit edilmiştir. Bu tezlerden 27'sine yazarların izni olmaması sebebiyle ulaşılamamıştır. Bu nedenle çalışma ulaşılabilen 99 tez ile sınırlandırılmıştır. Çalışmada verilerin toplanması için araştırmacılar tarafından geliştirilen yayın sınıflama formuna kodlanmasıyla elde edilen veriler temel tablolama işlemleri yeteneğine sahip olan SPSS 15.0 programı kullanılarak çözümlenmiştir.

Bulgular

Araştırma kapsamına alınan proje tabanlı öğrenme alanında hazırlanan tezlerin hazırlanma yılı ve türüne göre dağılımları incelenmiştir. 2003-2013 yılları arasında toplamda en çok tezin 2008 yılında, en az tezin 2003 ve 2004 yıllarında hazırlandığı görülmektedir. Genel olarak proje tabanlı öğrenme yöntemi ile ilgili hazırlanan tezlerden 78'i yüksek lisans tezi, 21'i doktora tezi türündedir. En fazla yüksek lisans tezi 2008 yılında, en fazla doktora tezi ise 2006, 2008 ve 2011 yıllarında yapılmıştır. En fazla tez Gazi ve Marmara üniversitelerinde hazırlanmıştır. Tezler enstitülere göre incelendiğinde ise yaklaşık yarısının eğitim bilimleri enstitüsünde yapıldığı görülmektedir. İlgili tezlerin büyük çoğunluğunun öğrenciler üzerinde yapıldığı, en çok deneysel araştırma modelinin tercih edildiği göze çarpmaktadır.

Bu araştırmada, proje tabanlı öğrenme yaklaşımı ile ilgili olan, YÖK akademik veri tabanında listelenen 99 tez incelenmiştir. Hazırlanan tezler türlerine göre sınıflandırıldığında büyük çoğunluğunun yüksek lisans tezi olduğu ve yaklaşık yarısının eğitim bilimleri enstitüsünde yapıldığı belirlenmiştir. Proje tabanlı öğrenme ile ilgili en fazla tez sırasıyla Gazi Üniversitesi, Marmara Üniversitesi ve Selçuk Üniversitesi'nde yapılmıştır. Tezlerin çalışma grubunda genellikle ilköğretim öğrencilerinin yer aldığı ve araştırma modeli olarak en fazla deneysel modellerin tercih edildiği görülmüş ve bunun karma yöntem ve genel tarama yöntemi takip etmiştir. En az tercih edilen yöntem ise ilişkisel tarama yöntemidir. Yapılan bu çalışmaya dâhil edilen lisansüstü tezlerde proje tabanlı öğrenmenin araştırma sonuçlarına etkileri incelendiğinde; akademik başarıyı araştırma amacı ile ilgili çalışmaların % 87,5'inde, tutuma olan etkiyi araştırma amacı ile ilgili olan çalışmaların ise % 70,96'sında etkili olduğu görülmektedir. Bu araştırmaya dâhil edilen proje tabanlı öğrenme yöntemi ile geleneksel öğrenme yöntemi veya farklı yöntemleri karşılaştıran çalışmaların ise tamamında proje tabanlı öğrenme yönteminin diğer yöntemlerden daha etkili olduğu sonucuna ulaşılmıştır.

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Türkiye'de proje tabanlı öğrenme yaklaşımı ile ilgili yapılan araştırmaların genel bir değerlendirme yapılarak bir bütün şeklinde incelenmesi ve sonuçlarının tartışılması, daha sonra yapılacak çalışmalara yol göstermesi açısından önemlidir. Ayrıca çalışma grubunu okul öncesi öğrenciler, öğretmenler, idareciler ve velilerin oluşturduğu sınırlı sayıda çalışmaya ulaşılmıştır. Bu durumu göz önüne alan çalışmalar yapılabilir. Proje tabanlı öğrenme ile ilgili disiplinler arası çalışmalar hazırlanabilir ve lisansüstü tez sayısının fazla olduğu üniversiteler ile işbirliği yapılarak çalışmaların nitelikleri arttırabilir.

Anahtar Sözcükler: Proje tabanlı öğrenme, İçerik analizi, Lisansüstü tezler

Atıf için / Please cite as:

Çelik, H. C., İlhan, A., & Gündüz, S. (2016). The evaluation of theses prepared on projectbased learning in Turkey: A content analysis study [Türkiye'de proje tabanlı öğrenme alanında hazırlanan tezlerin değerlendirilmesi: Bir içerik analizi çalışması]. *Eğitim Bilimleri Araştırmaları Dergisi - Journal of Educational Sciences Research*, 6(2), 61-74. http://ebad-jesr.com/