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Teacher Opinions on Free Time Lesson: scale development and validation

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Abstract:
The aim of this study is to establish opinions of primary school teachers towards the implementation of free time lesson at primary schools. Initially, a free time lesson survey was developed to obtain data from primary school teachers, in order to reach this aim. Data analysis revealed that primary school teachers agreed to the essentiality of free time lesson related applications in primary schools, and that these applications could develop students in a positive way. While teachers were indecisive towards questions stating some obstacles and negativities could develop in the free time lesson applications, they agreed that conditions essential to start free time lesson applications existed.
Keywords: Free time lesson, primary school teacher opinions, validity, reliability, survey development.

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Opiniões de professores na aula de tempo livre: desenvolvimento e validação de escalas

Resumo
O objetivo deste estudo é estabelecer opiniões de professores do ensino primário para a implementação da aula de tempo livre nas escolas primárias. Inicialmente, foi desenvolvido uma pesquisa de tempo livre para obter dados de professores do ensino básico, a fim de atingir este objetivo. A análise dos dados revelou que os professores do ensino primário concordaram com a essencialidade das aplicações relacionadas com as lições em tempo livre nas escolas primárias e que estas aplicações poderiam desenvolver os alunos de uma forma positiva. Enquanto os professores estavam indecisos em relação às questões que indicavam alguns obstáculos e as negatividades poderiam se desenvolver nas aplicações das aulas de tempo livre, eles concordaram que as condições essenciais para iniciar as aplicações das aulas de tempo livre existiam.
Palavras-chave: aula de tempo livre, opiniões de professores primários, validade, confiabilidade, desenvolvimento de pesquisas.

Opiniones de profesores en la clase de tiempo libre: desarrollo y validación de escalas

Resumen
El objetivo de este estudio es establecer opiniones de profesores de enseñanza primaria para la implementación de la clase de tiempo libre en las escuelas primarias. Inicialmente, se desarrolló una investigación de tiempo libre para obtener datos de profesores de enseñanza básica, a fin de alcanzar este objetivo. El análisis de los datos reveló que los profesores de enseñanza primaria concordaron con la esencialidad de las aplicaciones relacionadas con las lecciones a tiempo libre en las escuelas primarias y que estas aplicaciones podrían desarrollar a los alumnos de forma positiva. Mientras los profesores estaban indecisos en relación a las cuestiones que indicaban algunos obstáculos y las negatividades podrían desarrollarse en las aplicaciones de las clases de tiempo libre, ellos concordaron que las condiciones esenciales para iniciar las aplicaciones de las clases de tiempo libre existían.
Palabras clave: Clases de tiempo libre, Opiniones de profesores primarios, Validez, Confiabilidad, Desarrollo de investigaciones.

Introduction

With the developing and changing world order and technological developments, present day children are constantly interacting with the fruits of technology, such as television, phones, tablets, and internet. Circumstances being as such, teacher centered educational conditions at schools, devoid of technology, are fall short of attracting students to lessons. Therefore, "extramural learning activities", pointed out by many contemporary researchers in their studies (Tsai, 2006; Siegel, 2007; Öztürk, 2010; Karppinen, 2012) are very important.

Extramural learning activities are defined as planned and programmed, regular activities within the knowledge of the school administration and under the guidance of the teacher, carried out in or outside the school, in compliance with the aims of education, prepared in accordance with the interests and wishes of students, aiming at personality development (Binbaşıoğlu, 2000). It is established by researchers that extramural education is a combination of environmental education, extramural activities, and personal and social development (Higgins et. al., 1997).

According to Karademir (2013), one of the extramural education and learning activities is "Free Time Activities". The notion of Free Time is defined by the International Free Time Review Group as a series of activities that the individual can undertake at his/her free will, such as recreation, entertainment, developing knowledge or skills, joining social life voluntarily, after he/she has fulfilled occupational, family, and social duties (Şen, 2013). Dündar and Karaca (2011) stated that free time activities took place in the curriculum of many countries a long time ago. Bozpolat (2016) stated that free time activities got into the curriculum of primary schools in Turkey during 2010-2011. According to research, free time activities enable students to feel more active, enterprising, safe, and with a lower anxiety level psychologically (Büküşoğlu and Bayturan, 2005). In addition, free time education provides students with characteristics such as, thinking, being virtuous, love, excitement, and wisdom (Gökçe, 2008). According to Torkildsen (2005) freedom of students, awareness of using their free time effectively, planning and plan making skills have increased with the free time lesson (FTL) at schools (Gültekin et al., 2013).

As it is stated in the definitions of extramural education and free time activities, planning is of great importance in ensuring that the free time lesson, which takes place in the curriculum, is productive. At this point it is important to make a plan suitable to the behavior which is desired to be developed, the attitude or the person who will display this behavior, and implementing this planned behavior in life. This planning section brings the "Planned Behavior Theory" (PBT) into the agenda.

Planned Behavior Theory, of which the original name is "The Theory of Planned Behavior", was suggested by Fishbein and Ajzen in 1975, as a result of the development of the Considered Action Theory (Haager et al., 2007). It was later re-designed in 1991 by Ajzen (Yılmaz-Doğan, 2016).

According to PBT, social behaviors of people arise under the control of specific factors, they arise from specific factors, and appear in a planned way. For a behavior to arise, initially the *"Aim towards Behavior"* should be formed. According to Erten (2002),

aim towards behavior is the composition of attitude towards behavior, subjective norm, and perceived behavior model levels.

The aim should be established. The abovementioned three dimensions become important as this aim is being established. One of these, a personal dimension, is the attitude towards the behavior encompassing positive and negative evaluations of the individual while mobilizing a behavior (Küçük, 2011). The second one is the subjective norm, named also as the perceived social pressure and showing how much the individual values the ideas of the reference groups in his/her environment, and how much he/she complies with them while displaying the expected behavior (Kocagöz and Dursun, 2010). Finally, the third one is the perceived behavior control displaying how easy or difficult the individual finds a behavior before he/she makes it (Ajzen, 1991).

This research advocates that students implementing the behaviors and tasks planned by the teachers beforehand within the scope of the "free time activities lesson", contributes to the "control of perceived behaviors" level of PBT, and that they acquire this habit and reflect it in their life styles in the future. With reference to this belief, pointing out that FTL is important in primary schools, it was aimed to establish the opinions of primary school teachers on the topic. With the help of conclusions obtained from this research, the importance of extramural education without books, which exists in developed countries, will be emphasized once again. Research conclusions will help to underline that it is possible for students to get education by doing and living, and that it is possible to learn not just by sitting in chairs but in movement, and not just within the classroom but in external environments as well. An awareness of FTL will develop among teachers through this research, and it will be established whether a lesson such as FTL is necessary in the present educational system or not, based on teacher opinion. Therefore, findings obtained from this research are important for students, teachers and Ministry of National Education (MNE).

In this research, carried out with the aim of "establishing opinions of primary school teachers towards the implementation of free time lesson in primary schools", an opinion scale for teacher opinions towards the implementation of FTL was developed, and opinions of primary teachers on the implementation of FTL were established.

1. Methodology

1.1. Research Model

This research was prepared with the survey model of quantitative research methods. In the survey models, the present situations and conditions are presented in the best way possible. Situations are usually created within the natural environment. In researches of this type, arrangement of variables experimentally or physically, or controlling the happening or not happening of incidents are out of question (Kaptan, 1998). According to Karasar (2007), survey models are research models carried out on a group of samples taken from the universe, with the aim of obtaining general knowledge on the big universe. In an approach of this type, variables belonging to the unit and situation, the matter, individual, group, subject etc. of interest, are attempted at describing separately.

1.2 Sampling of the Research

The sampling of this research is made up of a total of 400 teachers working at private and state primary schools of the Northern Cyprus Ministry of National Education during the 2017-2018 academic year. The sampling was established through the purposeful sampling method. Purposeful sampling can be defined as the thorough examination of situations thought to provide rich data (Yıldırım and Şimşek, 2013). The teachers chosen in accordance with the purposed sampling are easily accessible people, suitable to "easily accessible situation sampling".

1.3. Data Collection Tools

During scale development, initially 15 primary school teachers were given a short information on "application of Free Time Lesson (FTL)" and they were asked to write an essay on this topic. While the teachers were in the essay writing stage, the authors of this study carried out literature review on FTL, and examined the qualitative researches in this field.

-Afterwards, the essays written by the teachers were analyzed after the essay analysis and literature review, 57 items were written on FTL.

When scale items were developed and the scale was prepared, it was submitted to three language experts for linguistic review and their opinions were registered. After the modifications based on the opinions of the linguists, a pilot application of the teacher opinion scale on FTL was implemented. The pilot application was carried out on 216 teachers working at 5 primary schools, following Kline's suggestion (1994), going over the 'at least twice the item number' rule, in accordance with factor analysis and item analysis processes.

5 option likert was used in the scale in order to measure teacher opinions, going from "completely disagree" to "completely agree". 1 point was assigned to the "completely disagree" statement, and points went up towards positive statements in order to calculate the total points of each participant. Thus, the most positive statement, "completely agree" received 5 points.

Standard deviation, arithmetical average, and item-total correlation was calculated separately for each item, based on the data obtained from the pilot application. As a result of these processes, those scale items having item-total value over 0.30, an average of 2.34 – 4.22, and a standard deviation of 0.89 – 1.37 were chosen to form the original scale, while the 11 items that were outside these values were discarded. As a result of these analyses, Cronbach *a* reliability value was found at 0.96. This value can be said to be quite reliable, according to Field (2009).

Factor analysis was carried out to test the scales structural validity. According to Kahn (2006), factor analysis seems to be the strongest method by researchers. KMO and Bartlett Sphericity tests were applied for the suitability of the scale to factor analysis. Looking at the result that KMO is above 0.90, as stated by Namlu and Odabaşı (2007), and considering the evaluation that data are perfectly relevant to factor analysis, based on the result shown in Table 2, relevancy to analysis is at perfect value. The resear-

ch also used Bartlett's test of sphericity (BTS) which tests the hypothesis "correlation matrix=unit matrix" The rejection of the hypothesis shows that correlation between the variables is different from 1 and the factor analysis appropriate for the variables (Hutcheson and Sofroniou, 1999). Approximately X^2 value for BTS was found 14424.449 ($p<.001$) for the study (see Table 1).

Table-1 KMO and Bartlett's Test

Kaiser-Meyer-Olkin	Measure of Sampling Adequacy.	.900
Bartlett's Test of Sphericity	Approx. Chi-Square	14424.449
	Df	1035
	Sig.	.000

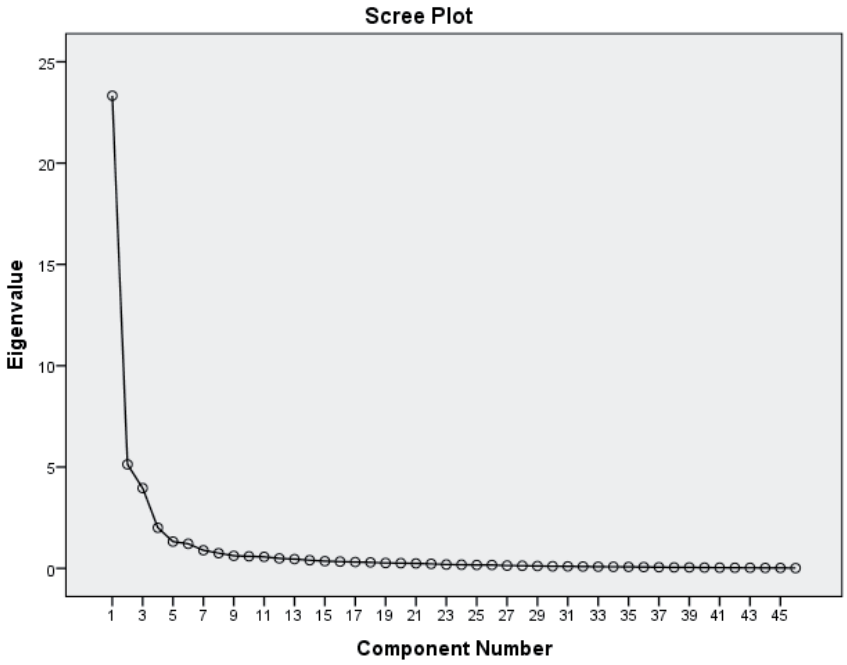
Principal Component Factor analysis and Varimax Rotation was used to establish the sub dimensions of the scale. As a result of Varimax Rotation Analysis, the criterion that factor load should be at least 0.30 and under a single factor (in case of the item getting high factor load under two different factors, the difference should be at least 0.10) was taken as the basis. In literature, .30 and .40 values are considered limit values for factor load (Johnson and McClure, 2004; Chen et al., 2005; Gürbüztürk and Şad, 2010).

Four factors were found in the opinions of teachers towards FTL. The total variance revealed by the four factors is 74.53%. Since it is difficult to reach very high values in social sciences, it is mentioned in various resources that anything above 40% - 60% are acceptable (Namlu and Odabaşı, 2007). The variant percentages of the four factors, obtained after the Varimax rotation was done are: for the first factor 36.00%, for the second 24.32%, for the third factor 7.36%, and for the fourth one 7.13% (Table 2).

Table-2 Results of factor analysis total variance explained

Component		Total	% of Variance	Cumulative %
Initial Eigenvalues				
	1	23.326	50.708	50.708
	2	5.134	11.161	61.869
	3	3.958	8.605	70.474
	4	2.005	4.358	74.832
Extraction Sums of Squared Loadings				
	1	23.326	50.708	50.708
	2	5.134	11.161	61.869
	3	3.958	8.605	70.474
	4	2.005	4.358	74.832
Rotation Sums of Squared Loadings				
	1	16.562	36.005	36.005
	2	11.190	24.326	60.330
	3	3.388	7.366	67.696
	4	3.282	7.136	74.832

Figure-1: Line Factor Graphic.



The factor analysis results are as shown in Figure 1. Since each space between two points means one factor, factors appear until the fourth point. Since the contribution of moving factors, after factor four, are low on variance, the gradient moves in the shape of a straight plateau. Therefore, the factor number of the scale can be interpreted as four.

1.4 Implementation of the Scale and Data Collection

Given its final shape, the scale was turned into a survey by adding demographic information section in the introduction and distributed to 400 teachers personally, by the researchers. Meetings were organized with in schools with those teachers and they were given a short presentation on FTL and the applications of FTL in the world. Teachers were given two weeks to complete the surveys, and at the end of two weeks, the surveys were collected by the researchers.

1.5 Analysis of Data

SPSS 24 program was used to analyze data for the research towards establishing teacher opinions on Free Time Lesson. Data collected from the surveys were processed into the data base prepared in the SPSS 24 program, and later average, standard deviation and Pearson correlation tests were applied on the data.

Table-3 Score intervals of the Likert-type scale

Score Range	Options
1.00 - 1.80	Strongly Disagree
1.81 - 2.60	Disagree
2.61 - 3.40	Neither Agree Nor Disagree
3.41 - 4.20	Agree
4.21 - 5.00	Strongly Agree

The scale assessment was used to determine teacher opinions towards Free Time Lesson. Questions asked on the Likert type survey were prepared with the five option Likert type survey, and items were assessed with the .80 ratio (Table 3).

2. Findings and Interpretations

The test results revealed that factor loads were 0863 at the highest, and 0.534 at the lowest Table 4). The questionnaire can be summed under four components according to the results of the analysis. The contents of items collected in the factors and their suitability to the theoretical structure were taken into consideration while naming these four sub dimensions. Thus, the sub dimensions were named as "Positive situations that FTL will provide" (24 items), "Requirements for the implementation of FTL" (14 items), "Obstacles that can be encountered in the implementation of FTL" (4 items), and "Negative aspects of FTL for teachers" (4 items).

The four factor survey applied to teachers and data obtained from this survey are presented in Table 4. Factor loads of each factor item are shown in the table one by one. Based on this, factor loads are 0.863 the highest, and 0.534 the lowest. Looking at the average values that teachers assigned to questions about factors, it is observed that teachers agreed with almost all of the questions regarding the positive contributions of FTL activities on students. In this factor, teachers mostly agreed on the opinion that students will acquire the habit of assessing "free time" notion through FTL.

As regards the questions on the need for certain arrangements in order to implement FTL activities, again, looking at average values, teachers mostly agreed with it. According to teachers the most important preparations for FTL activities are; establishing contact with social associations, creating resources for excursions, preparing activity corners to be used for FTL activities, and creating a budget to buy essential materials.

As it can be seen in the total values of factor 3 items, teachers do not agree that there will be obstacles during the implementation of FTL.

Table-4 Load values of the clauses, according to the factors after the rotation process

Rotated Component Matrix

Factor Name and Clauses	Rotated Factor Load Values	Mean	Sd
Factor-1 Positive situations that FTL will provide			
s1) FTL simplifies student learning by entertaining	.829	4.16	1.20
s10) FTL helps develop imaginative power	.821	4.16	1.03
s11) FTL provides learning by doing-living	.857	4.12	1.12
s12) FTL enables the teacher to develop together with the students	.823	4.09	1.19
s13) FTL increases student-teacher-parent interaction	.800	4.03	1.21
s14) FTL provides a habit of appreciating "free time" notion	.712	4.26	1.10
s15) FTL contributes to the students being able to plan time management	.738	3.83	1.11
s16) FTL helps the development of four basic language skills	.724	3.86	1.10
s17) FTL activities contributes to indirectly reinforce topics learned in compulsory lessons	.651	3.95	1.12
s18) FTL develops the habit of obeying rules in social activities as well	.756	4.09	.94
s19) FTL enables gaining awareness for the environment	.732	3.94	1.06
s2) FTL makes it easy to learn various activities based on interest and skills	.851	4.22	1.17
s20) FTL enables acquiring health and hygiene rules	.792	3.99	1.07
s21) FTL teaches cooperation	.811	4.06	1.16
s22) FTL increases loyalty to school	.809	4.06	1.18
s23) FTL contributes to academic success	.784	4.00	1.23
s24) FTL brings out student skills	.730	4.06	1.06
s3) FTL helps students to express themselves	.816	4.19	1.20
s4) FTL helps students socialize in a positive manner	.858	4.14	1.13
s5) FTL enables resting	.798	3.94	1.12
s6) FTL helps students relax	.822	4.16	1.13
s7) FTL helps students to become aware of their own feelings and skills	.864	4.18	1.13
s8) FTL provides affective development	.862	4.05	1.12
s9) FTL helps develop self esteem	.797	4.17	1.10
Factor-2 Requirements for implementing FTL			
s33) FTL curriculum should be prepared	.681	3.94	1.13
s34) In-service training for FTL is essential	.811	4.03	1.07
s35) Activity corners should be prepared for FTL	.790	4.12	.96
s36) A sport center is essential for FTL	.780	3.90	1.09
s37) Physical environment design is necessary for FTL	.843	4.09	1.07
s38) A science laboratory should be prepared for FTL	.844	4.00	1.08
s39) Materials such as table top games should be prepared for FTL	.830	4.06	.99
s40) Sufficient materials are needed for FTL	.829	4.10	.95
s41) There should be locker rooms in case they are needed for FTL	.834	4.03	1.05
s42) There should be a library for FTL	.817	4.10	1.04
s43) Funds are needed to buy sufficient materials for FTL	.834	4.11	1.06
s44) There should be resources for excursions for FTL	.842	4.12	1.01
s45) A resource guidebook should be prepared for FTL	.846	4.07	.89
s46) Importance should be given to establish contact with social associations for FTL	.793	4.14	.93
Factor-3 Obstacles that can be encountered in the implementation of FTL			
s25) No suitable environment for FTL	.833	2.41	1.13
s26) There can be no parent support for FTL	.822	2.37	1.20
s27) FTL is perceived as an idle class	.882	2.33	1.22
s28) It can only be implemented during spring months	.889	2.46	1.24
Factor-4 Negative aspects of FTL from teachers' perspective			
s29) FTL is left to the responsibility of branch teachers	.715	2.34	1.19
s30) FTL adds extra work load on teachers as class hours	.845	2.70	1.25
s31) FTL adds extra responsibilities on teachers	.828	2.93	1.34
s32) FTL makes it more difficult to control naughty students	.728	2.85	1.37

Teachers were indecisive towards questions on FTL applications placing extra work load on teachers and creating negativities, as can be seen in the table.

The number of teacher opinions on each sub dimension on the necessity of FTL, the standard deviation, minimum and maximum values are presented in Table 5.

Table-5 Sub-dimension results of the SZD scale

	N	Min.	Max.	Mean	S. d
Total F_1 – positive aspects	400	1.04	5.00	4.07	.95
Total F_2 - essentials for implementing it	400	1.00	5.00	4.06	.89
Total F_3 – obstacles against implementing it	400	1.00	5.00	2.39	1.07
Total F_4 – negativities	400	1.50	5.00	2.71	1.11

As it is shown in Table 5, teachers agree that FTL activities in schools are essential. In addition, teachers agree on the existence of the necessary conditions for the implementation of FTL, as stated in the survey. Again, according to the responses of teachers, they do not agree with the obstacle situations for FTL. As for the questions under the factor that FTL carries negativities for teachers, they were indecisive. This state of teachers can be interpreted that, in general these obstacles and negativities are excuses, and that they believe it can be done if wanted.

When the factor load values of the scale clauses are analyzed, it can be seen that there are 24 clauses under "Positive circumstances FTL will provide" factor, and factor loads of the clauses alter between .651 and .864. There are 14 clauses under "Essentials for implementing FTL" factor, and factor loads of the clauses alter between .681 and .846. There are 4 clauses under "Obstacles that can be encountered in implementing FTL" factor, and factor loads of the clauses alter between .822 and .889. There are 4 clause under "Negative aspects of FTL from teachers' perspective" factor, and factor loads of the clauses alter between .715 and .845. Also in order to identify the relationship between the factors of the scale, the correlation between factors was looked at and the results are given table 6.

Table-6 Pearson Correlation between the factors belonging to the scale

Factors	**F_1**		**F_2**	**F_3**		**F_4**
F_1 – Positive aspects of FTL		-	.639**		-.121	-.129**
F_2 - Essentials for implementing FTL			-		-.023	-.111
F_3 – Obstacles against implementing FTL					-	.420**
F_4 – Negative aspects of FTL						-

** Correlation is significant at the .01 level (2-tailed)

As shown in Table 6, there is a medium level correlation in a positive way between the positive aspects that FTL applications will provide for students and the necessary conditions for FTL applications (r=.639, p=.000 and N=400). Considering the coefficient of determination (r^2=.408), we can say that 41% of the total variance in the positive aspects that FTL applications will provide for students, is due to the necessary conditions for FTL applications. Again, according to this table, there is a weak correlation in the negative way between the positive contribution of FTL applications on students and the

negativities they will bring for teachers (r=.219, p=.001 and N=400), and a medium level correlation in a positive way between the situations preventing FTL applications and the negativities they will bring for teachers (r=.420, p=.000 and N=400).

3. Conclusion And Recommendations

In this research, it was aimed to establish the opinions of teachers on the necessity of Free Time Lesson (FTL), which is applied in various countries in the world, taking place in the primary school curriculum, the negativities that could arise in case it is included in the curriculum, the necessary conditions for that, and the contributions it will bring to students-teachers. Literature review showed that no such survey was developed to obtain data from teachers. Therefore, the researchers initially prepared a "FTL Teacher Opinion" survey with the aim of obtaining teacher opinions on the applications of FTL. During the preparation of the survey, each step on survey developed was followed one by one, and finally a three dimensional survey was developed enveloping four different factors and comprising of 46 questions. This developed survey was applied to 400 primary school teachers. The following conclusions were reached in the direction of data obtained from the application of the survey.

According to the conclusions obtained it was found out that in the case of implementing FTL primary school teachers agreed with all the questions that students will learn through having fun, their imaginative powers will develop, learning by doing and living will be realized, interaction among students and between teachers and parents will increase, free time management and planning habits will develop among students, the concept of cooperation will be acquired, four basil language skills will develop, student skills will emerge and students can be given the chance to have activities based on their skills, the feeling of self-esteem will develop in the students, socializing will increase, and recreational opportunities will be presented to the students. Literature review shows that studies on FTL and on teacher opinions are parallel with the findings of this study. Bektaş and Dinçer (2011) and Wilson et al. (2009) found out in their studies that teachers are in agreement on the necessity of free time lesson. Taşdemir and Sargın (2015) found out that FTL has positive contributions on student development, while Aydın et al. (2012) and Gün (2013) reached the conclusion that FTL will contribute to students in socializing and recreation. Karakaya (2007) pointed out that socializing of children can be achieved through interacting with the environment. This shows the importance of FTL application for interacting with the environment. In a study on FTL Bozpolat (2016) reached the conclusions that FTL applications provide development according to interests and skills, contributes to learning through having fun, positively affects vocabulary development, and are important in the development of creativity and self-reliance.

Based on the conclusions, teachers stated agreement that programs should be prepared for implementing FTL applications, teachers should be trained, activity corners, sports spaces, physical space arrangements, laboratory, table top games, library, resources should be provided. Looking into literature, this conclusion bears similarities with

the finds of researchers who mentioned essential preparations for FTL applications (Gültekin et al., 2013; İnal, 2009; Karacaoğlu and Acar, 2010; Acat and Uzunkol, 2010; Bozak et al., 2012; Gömleksiz and Özdaş, 2013).

Looking at the research findings from another angle, it became clear that teachers do not agree that environmental shortcomings can be encountered in FTL applications, that lack of parent support will affect it negatively, that FTL will be considered as an idle class hour, and that it will be seasonally applied. They are also indecisive about FTL having negative effects on teachers. Quite contrary to these findings, Bozak et al. (2012) and Bozpolat (2016) found teacher opinions that insufficiency of physical environments will affect FTL applications negatively. Again, there are findings in literature showing opinions that insufficiency of environment, development of the perception of idle lesson, using FTL to complete other lessons are obstacles in FTL applications (Ay et al., 2016; Kazu and Arslan, 2013).

As it can be seen in the conclusions of the research, FTL applications, which are already being implemented abroad, and will be under teacher control, will have a number of positive effects on primary school age students. Therefore, teachers and other stakeholders should be informed on FTL applications, and programs encompassing FTL applications should be started. Schools should be provided with the essential physical environments and materials for FTL applications so that these programs yield success.

During further stages of this study, the FTL applications, of which the necessity was put down through the surveys applied to teachers, can be implemented with a small pilot group for a certain period of time. For the following stage, the pilot group students and a group which was not subjected to FTL can be assessed cognitively, affectively, and physically, and new data can be obtained on FTL applications.

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