



Yar Yıldırım, V. (2021). The opinions of effective teachers about their preferred teaching methods and techniques. *International Online Journal of Education and Teaching (IOJET)*, X(X). 76-93.

Received : 15.10.2020
Revised version received : 11.11.2020
Accepted : 15.11.2020

THE OPINIONS OF EFFECTIVE TEACHERS ABOUT THEIR PREFERRED TEACHING METHODS AND TECHNIQUES

Research article

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EFFECTIVE TEACHERS' PREFERENCE OF TEACHING METHODS AND TECHNIQUES

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Abstract

The study aimed to scrutinize the teaching methods and techniques that effective teachers prefer to utilize most. The study was designed as a qualitative phenomenological study. The participants of the study consisted of 25 teachers who were selected using a mixed sampling method, composed of snowball sampling, criterion and maximum variation. The data were collected via a semi structured interview form. In the data analysis, the content analysis and descriptive analysis methods were used jointly. The results revealed that the effective teachers made use of 22 different methods and techniques, out of which active learning approaches were the most commonly adopted ones. The participant teachers also stated that they were constantly searching for new methods and techniques, and that they were open to trying new ones when and where necessary.

Keywords: Effective teacher, teaching methods, teaching techniques, teachers' preferences

1. Introduction

An educational system consists of formal structures. Within these structures, teachers are the agents who realize the aims of education. All the structures that constitute the system are designed serve the educational activities performed by teachers and are integrated with what teachers do. Thus, teachers are the critical components of the system. The effectiveness of the teacher in the educational process is the key to making the whole system effective.

The primary duty of teachers is to fulfill their role as managers of the instructional process (Ekinci, 2010). Teachers are also the main actors in the teaching-learning processes (Sisman, 2011). If the teachers' realization of educational objectives by fulfilling the requirements of their roles is considered as their 'effectiveness' (Hoy and Miskel, 2010), the need for effective teachers becomes clear.

An effective teacher, in a sense, is a doctor who feels the pulse of the classroom, a referee who applies the rules, and a conductor who creates coherence and harmony (Jones and Jones, 1982, as cited in Aydin, 2000:16). They are able to bring joy to a lesson, are able to use different tools, materials and methods, explain subjects clearly and prepare a learning environment for students (Rosenshine and Furst, 1973, as cited in Acikgoz, 1996). They make an effort to improve students' learning (Liston, Borko and Whitcomb, 2008); show close interest in their students (Langer, 2000); are interested in educational activities (Rowan, Chiang and Miller, 1997); place importance on teaching (Cawelti, 2004); are able to use different teaching methods and strategies (Darling-Hammond, 2001); take the responsibility for their students' failures (Dean, 2000); and are reliable individual (Kutnick and Jules, 1993). At the heart of effective teaching is the concept of change. There is a constant need for a change and new approaches to be developed (Balci, 2007). There is no system of education whose quality exceeds the quality of its teachers (TED, 2015). On this basis, there is a need for effective teachers working within the system.

The issue of effective teachers has been an important part of global discussions about education (OECD, 2005). McNair and Galanouli (2002) addressed the competencies that teachers should have in the information age in three areas: individual, subject, and teaching competencies. The variables of the teaching competency were listed as the abilities to plan the lesson using educational technologies, preparation, teaching and assessment. From this perspective, it is clear that each teacher should be also an effective teacher, because planning their teaching and observing students and their learning processes are recognized as the most important behaviours that effective teachers have (Bozkus and Tastan, 2016). In this regard, the most important characteristic of effective teachers is the ability to be objective, while the least important characteristic of effective teachers is considered to be asking students to deliver presentations. The given fact underlines that teachers should not lay their burden on students (Cakmak, 2009).

One research study (Yildirim and Oner, 2016) revealed that, according to effective teachers, knowing which techniques to use is the main path to success. The results of the study led to the following formula for ensuring the effectiveness of teachers: An effective teacher = affection (for the profession, for people, for other teachers, for their family) + altruism + knowledge (method, research) + upbringing (before entering the profession). An effective teacher is slightly different from a good teacher. A good teacher may not be always effective, but an effective teacher can be always a good teacher (Bayrak, 2003). The most important qualities of an effective teacher also include the ability to use different teaching methods and strategies (Clemson and Craft 1981; Kutnick and Jules, 1993; Stronge, 2007).

The literature on effective teaching reveals that the concept of ‘method’ has a prominent role. Method can be defined as any practice that can enable learning (Taspinar, 2010), an activity performed to teach behaviours (Sunbul, 2010), and the plan of the activities performed by teachers and students. The teaching method also identifies the techniques, tools, equipment, and materials that are used (Celikkaya, 2008). The main duty of the teacher is to enable learning in the learning environment that they have created, one that includes all the relevant variables (Erden, 1995; Senemoglu, 2007). The most important components of curriculum are the learning and teaching activities it includes, and achieving success using these activities depends on the method selected (Demirel, 2007).

Research studies on the methods and techniques used by teachers show that the most common methods have included the lecture, brainstorming and problem-solving (Demirkan and Saracoglu, 2016; Kayabasi, 2012; Karamustafaoglu and Kandaz 2006; Marbach-Ad, Seal and Sokolove, 2001; Yesilyurt, 2013). On the other hand, cooperative learning, projects, and concept maps were among the least frequently used methods (Yesilyurt, 2013).

When choosing methods and techniques, teachers considered their own personalities, any costs, their students, the subject content, time factors and physical materials (Kucukahmet, 1983). Teachers have also stated that lecture method was the most common method, given that their classroom were overcrowded, and that other methods and techniques were too time-consuming (Demirkan and Saracoglu, 2016).

Teachers also emphasized that they avoid using methods that enabled active participation of students because they did not feel competent enough to use them (Marbach-Ad, Seal and Sokolove 2001; Onen, Saka, Erdem, Uzal and Gurdal, 2009). However, teachers should use strategies that will highlight students’ cognitive skills such as critical thinking and problem-based learning and that will lead students to be more reflective (Ishiyama, McClure, Hart and Amico, 1999).

Many teachers often did not consider themselves competent enough to use specific methods and techniques (Atasoy and Akdeniz, 2006; Erdem, Uzal and Ersoy, 2006; Sozbilir, Senocak, and Dilber, 2006) and they constantly needed training on this matter (Akcadag, 2010; Yesil, 2006). However, within any educational system some teachers are different from the others and have different characteristics. These individuals include the kinds of effective teachers whose features are described above. Effective teachers are capable of making a difference within the system while carrying out their duties. The differences they make also have an impact on the educational process itself; teachers who are effective teachers are recognized as such by their colleagues, administrators, and parents, and are in high demand.

The practices of effective teachers can also set an example for other teachers. The methods and techniques they use can be considered the most important practices, because, as highlighted in the literature above, methods and techniques are the key factors that make these teachers effective (Clemson and Craft, 1981; Darling-Hammond, 2001; Kutnick and Jules, 1993; Stronge, 2007). The main subject of this study was thus effective teachers' opinions about their own preferred methods and techniques. There are various studies on effective teachers in the literature. However, the number of studies of the methods and techniques used by effective teachers is limited. This study therefore aims to make a contribution to the literature in this specific area. Furthermore, conducting a research study on the methods and techniques used by effective teachers will also be of value for other teachers. On this basis, the study sought answers to the following research questions:

Main research question:

What teaching methods and techniques do effective teachers prefer to utilize most?

Sub-research questions:

- What are the opinions of effective teachers about pre-service and in-service trainings on methods and techniques?
- What are the opinions of effective teachers about their interaction with their colleagues regarding the methods and techniques they prefer to use?
- What types of interactions do effective teachers establish with students, parents and school administrators regarding the methods and techniques they utilize most?

2. Method

The research model, study group, development of the data collection tool, data collection and data analysis of the study can be stated as follows:

2.1. Research Model

This research study was designed as a qualitative phenomenological study to analyze the opinions and suggestions of effective teachers about their preferred methods and techniques. Phenomenology focuses on phenomena that we are aware of but do not have an in-depth and detailed understanding. This pattern aims to investigate phenomena that is not completely unfamiliar but also not fully understood. (Yildirim and Simsek, 2008; p.72).

2.2. Study Group

The participants of the study consisted of 25 teachers working in the Kahramanmaraş, Tokat and Kayseri provinces. The mixed sampling method was used to select the teachers in the study group. The mixed sampling method can be useful for the selection of the cases loaded with information (Charmaz, 2011, as cited in Baltaci, 2018). For this purpose, the research study

employed different sampling methods including snowball sampling, criterion, and maximum variation sampling. Snowball sampling aims to reach individuals who can provide rich data by tracking these individuals (Creswell, 2013). Teachers who were assumed to be effective and to have the potential to provide fruitful opinions were approached. Afterwards, based on the suggestions of the teachers who were approached and interviewed, a new group of teachers was contacted. Another sampling method used in this research study was maximum variation sampling. The main aim of this sampling method is to increase the diversity within an interviewed group. Therefore, a number of variables such as department, gender, and the school that the teacher was working at were taken into consideration. Another sampling method employed by the study was criterion sampling. Criterion sampling involves all cases that meet a set of criteria that have been identified in advance (Baltaci, 2018). In this study, the criteria for effective teachers were also set beforehand. The criteria identified included seniority, references from other teachers and administrators, and a certificate of achievement from an official institution. In constituting the study group, teachers who had been given a reference by effective teachers and administrators were given priority in the interviews. To this end, interviews were conducted with 33 teachers. Eight of these teachers were excluded from the study because they could not fulfil the predetermined criterion regarding the certificate of achievement. Relevant information on teachers who were interviewed for the research study is presented in Table 1.

Table 1. *Information about teachers included in the study group*

Sn	Seniority	Gender	Department	School	Level of education
1	34	Male	Primary school	Primary school	Undergraduate degree
2	25	Female	Primary school	Primary school	Undergraduate degree
3	18	Male	History	High school	Undergraduate degree
4	17	Female	Primary school	Primary school	Undergraduate degree
5	12	Male	Turkish language	Secondary school	Master's degree
6	32	Male	Primary school	Primary school	Undergraduate degree
7	10	Female	English language	Secondary school	Undergraduate degree
8	11	Male	Primary school	Primary school	Master's degree
9	13	Male	English language	Secondary school	Undergraduate degree
10	11	Female	Informatics technology	Secondary school	Undergraduate degree
11	10	Male	Turkish language	Secondary school	Master's degree
12	15	Male	Primary school	Primary school	Undergraduate degree
13	14	Male	English language	Secondary school	Undergraduate degree
14	10	Female	Turkish language	Secondary school	Undergraduate degree
15	14	Female	Literature	High school	Master's degree
16	11	Male	Biology	High school	Undergraduate degree
17	17	Male	Mathematics	Secondary school	Master's degree
18	21	Female	Social studies	Secondary school	Master's degree
19	19	Male	Mathematics	High school	Phd
20	16	Female	Kindergarten	Kindergarten	Undergraduate degree

21	13	Male	Science	Secondary school	Master's degree
22	14	Female	Primary school	Primary school	Master's degree
23	11	Female	Religious culture and moral knowledge	Secondary school	Master's degree
24	17	Male	Physical education	Secondary school	Undergraduate degree
25	13	Female	Music	Secondary school	Undergraduate degree

Table 1 shows that the study group consisted of 25 teachers. All the teacher had 10 or more years of experience. The study group included 11 female and 14 male teachers. By department, the study group consisted of primary school teachers (n=7), a music teacher (n=1), a history teacher (n=1), a Turkish language teacher (n=3), English language teachers (n=3), an information technologies teacher (n=1), a literature teacher (n=1), a biology teacher (n=1), mathematics teachers (n=2), a social sciences teacher (n=1), a kindergarten teacher (n=1), a science teacher (n=1), a physical education teacher (n=1), and a religious culture and moral knowledge teacher (n=1). The participants who were interviewed included one teacher working in a kindergarten, seven teachers working in a primary school, 13 teachers working in a secondary school, and four teachers working in a high school. The participants included one teacher with a PhD, nine teachers with a master's degree and 15 teachers with an undergraduate degree.

2.3. Data Collection Tool and the Process

A semi-structured interview form was developed by the researcher to be used as the data collection tool. Before the form was prepared, the literature on the concept of effective teaching and relevant methods and techniques was reviewed. The interview form consisted of two sections. The first section included demographic information about the teachers participating in the study, and the second section included questions related to the methods and techniques preferred by the teachers. The opinions of three teachers and five academics in the field of educational sciences were received after the questions had been prepared. As a result of their feedback, one question was excluded due to the similarity between two questions. In the following phase, a pilot test was carried out with five teachers. This demonstrated that one of the questions was not functioning and it was therefore excluded from the interview form. The stages of development of the interview questions are given in Figure 1.

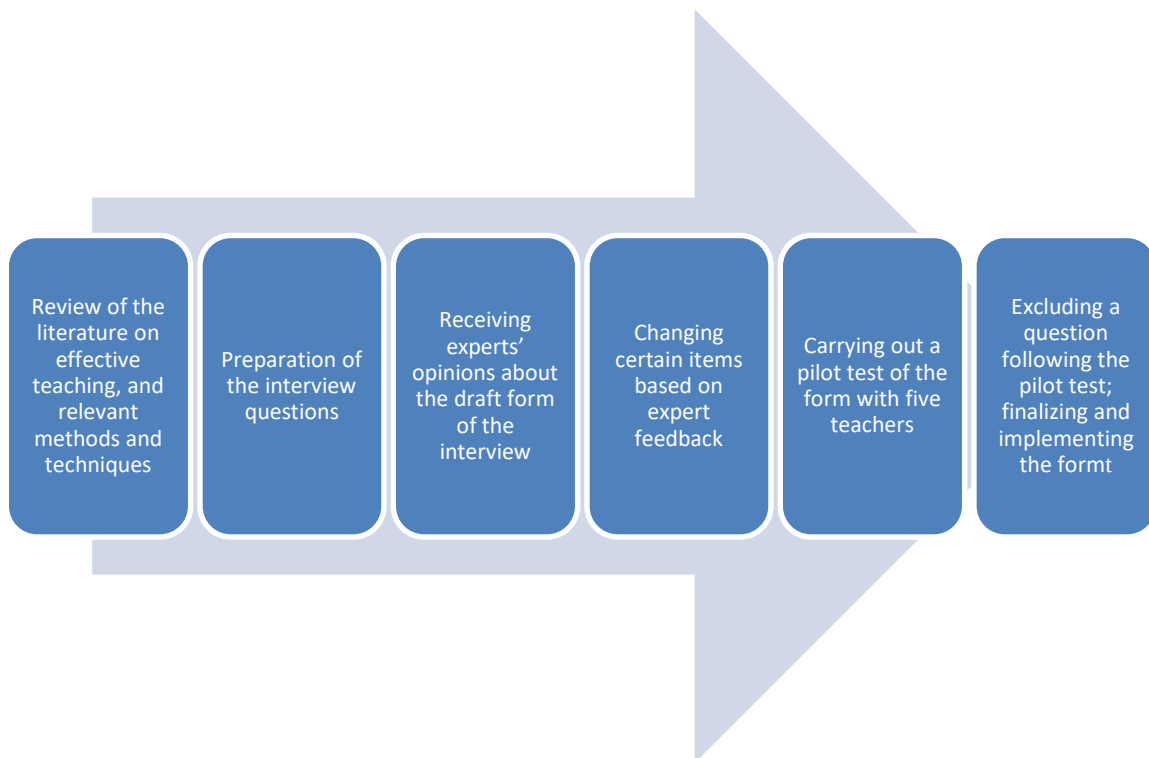


Figure 1. Development of the interview questions

Before using the finalised interview form, the necessary permissions were received from the relevant administrative units. An environment was set up to enable participants to feel comfortable and give honest answers to the questions in the forms. The interviews took place between November and December 2019. A voice recorder was not used during the interviews due to the concerns of teachers about social media. The total duration of the interviews was approximately 40 hours. As a result of the transcription of the interviews, an 85-page document was obtained.

2.4. Data Analysis

In the analysis of the data, the content analysis and descriptive analysis methods were used together. For the content analysis, teachers were given numbers according to the order in which they had been interviewed (T1, T2, ...). Afterwards, the data were coded and combined under specific themes. During the data analysis process, the opinions ordered according to the frequency of their repetition (f), from most frequent to least frequent.

The opinions of the experts were obtained about the reliability of the research and its scope. The following activities were carried out to ensure the internal reliability of the research. First, all stages of the research process (literature review, preparation of the interview form, implementation, and analysis) were explained in detail. Second, the raw data were given to another researcher who is an expert in the field to make concurrent observations and this researcher was asked to create themes and coded opinions. The concurrent observer was an academic working in the field of educational sciences. At this juncture, the internal reliability formula suggested by Miles and Huberman (1994) was used: $\text{Reliability} = [\text{Consensus} / (\text{Consensus} + \text{Disagreement})] \times 100$. This revealed that the content created by the researcher and the concurrent observer were very similar to each other. According to the calculations, the consistency ratio between the researcher and the concurrent observer was found to be .84. Miles and Huberman (1994) considered any reliability value higher than 80% between the coders to be acceptable. The results obtained were validated as a result of the exchange of

information about specific themes between the researcher and the concurrent observer. Third, the results of the research were shared with the participants to receive their opinions. Finally, the results of the study were compared with the results of other research studies conducted within the same field (Yildirim and Simsek, 2011).

3. Findings

The effective teachers stated the methods and techniques of their preference as in the Table 2 below.

Table 2. *Effective teachers' preferred methods and techniques*

N	Methods and Techniques Used by Teachers	F
1	Active learning (T2, T4, T5, T6, T7, T8, T11, T13, T14, T15, T17, T18, T20, T22, T24)	15
2	Brainstorming (T7, T8, T10, T14, T15, T17, T18, T19, T20, T22, T24, T25)	12
3	Drama (T4, T5, T7, T8, T14, T15, T17, T19, T20, T23, T24, T25)	12
4	Game-based learning (T8, T12, T13, T15, T16, T18, T21, T22, T24)	9
5	Learning-by-doing (T4, T7, T8, T15, T17, T19, T21, T23)	8
6	Question-answer (T1, T3, T7, T8, T11, T13, T17, T19)	8
7	Demonstration (T1, T6, T7, T8, T10, T15, T19, T24)	8
8	Lecture method (T1, T3, T5, T8, T14, T18, T25)	7
9	Problem-solving method (T1, T10, T12, T16, T21)	5
10	Cooperative learning (T6, T8, T14, T20, T21)	5
11	Creative writing (T7, T14, T17, T21, T22)	5
12	Peer learning (T5, T6, T8, T21, T24)	5
13	Talking circle (T1, T11, T13, T14, T24)	5
14	Teaching with songs (T4, T7, T16, T25)	4
15	Six thinking hats (T10, T17, T18)	4
16	Discussion (T6, T8, T18)	3
17	Buzz groups (T8, T9, T19)	3
18	Models (T8, T13, T20)	3
19	Station (T10, T19)	2
20	Active listening (T4, T17)	2
21	Deduction (T3, T8)	2
22	Induction (T3, T8)	2

(Opinions with a frequency lower than 2 are not included in the table.)

The teachers revealed that they were using 22 different methods and techniques. The review of these methods and techniques showed that the most common methods included active learning (f=15), brainstorming (f=12), drama (f=12), game-based learning (f=9), learning-by-doing (f=8), question-answer (f=8), and demonstration (f=8). The findings also showed that lecture method (f=7) was also used by the teachers. Furthermore, the teachers stated that they used methods and techniques other than those given in the table. A number of them stated that they were implementing different methods and techniques, and they were in search of new

methods and techniques; however, they did not know how to evaluate these methods (T6, T7, T11, T17). This suggests that effective teachers tried to use different methods and techniques. However, they stated that they were not able to evaluate the effectiveness of these attempts.

One common thought of three teachers was that they first of all tried to create an entertaining classroom environment (T2, T6, T22). All the teachers expressed this view were primary school teachers. Another group of teachers stated that they did not give up if any obstacles regarding their methods and techniques emerged during the learning process and said that they did what is needed (T1, T4, T12, T16). This shows the altruistic character of the teachers. One teacher stated that, “I integrate each method with real life” (T8). This statement shows that the lesson had a concrete, real basis. Two teachers who were interviewed said that they prepared the method they were using and they benefited from their previous experiences regarding the appropriateness of the method for the course (T3, T17); this indicates the importance of experience for teaching effectively and implementing methods. Two teachers also indicated that a method must work with the material used, which highlighted the importance of the material. The teachers also shared their beliefs that asking the right question at the right time increases the success (T3); the environment should be enriched to be suitable for the multiple types of intelligence (T2); the content of courses and the level of students determine the appropriate method (T1, T41); that although concerns related to achieving academic success drive us to teach using presentations, they were trying to develop a distinctive method (T11); game-based learning helps to make learning permanent (T12); and that cooperative learning is very effective for students who have social phobia (T14).

The opinions of the teachers revealed that their statements were consistent with the information they had provided, as seen in Table 2, and showed that teachers attached great importance to methods and techniques.

Effective Teachers Use of the Methods and Techniques They Prefer Most

Participant teachers’ reflections about the methods and techniques of their preference are given below:

When I used the question-answer method, I found that students were very involved with the lesson all the time. When I realized that the students were getting bored, I implemented the question-answer method in the form of a competition between the boys and girls, and I could see that they were motivated again. (T1)

I have found that teaching using songs is effective in teaching mathematics. (T2)

I have noticed that teaching concepts through brainstorming is very effective with 11th-grade students. (T3)

When practicing ‘carrying-over a number’ in mathematics, I ask students to write the number to be carried over directly above the digit representing the tens column. I have seen that it is easier to learn in this way. (T4)

I ask my students to teach what they have learned. They learn better when they are teaching their peers and at the same time other students who were not able to understand have a chance to improve their learning. (T5)

I decide on my methods and techniques by asking myself ‘How would I learn this?’ (T5)

I have seen that experimental studies are very effective. (T6)

When teaching a language, I created 'word boxes' and it helped students to learn the words by picking one word from the box every day. (T7)

In the road safety course, I used the simulation technique. We turned the classroom into set of streets. Students enjoyed it very much and the technique was had a big impact on their learning. (T8)

I help students to understand through word searches. (T8)

Creating their own stories increased students' motivation to learn. (T9)

Completing sentences was an effective method in language teaching. (T9)

Presenting a task before asking students to perform it increased the permanence of learning. (T10)

A single method or technique does not necessarily lead to success. On the other hand, using more than one method can lead to success. The successful results the students obtained from the scholarship exam correlated with my efforts to draw their attention to poetry, reading and theatre. (T11)

We played a game in which we held the words that we wrote down with a straw to learn synonyms and antonyms; it accelerated students' learning. (T12)

A learning competition between the classrooms based on a specific subject produced good results. (T13)

Teaching through games was effective. (T14)

Real-life experiences also affect the learning process. When I was teaching about the negative impacts of smoking, the students had a very effective conversation with a COPD patient who got sick due to smoking. (T15)

Introducing the students to successful graduates from our school was effective. (T16)

The most effective method I have ever used is love and the most effective technique I ever have is respect. I love my students very much, and they also love me. I have realized that they are capable of learning whatever I teach them. (T17)

There was a 3D map in the schoolyard. Students learned about the topics in the Mapping course by playing games. (T18)

We turned the schoolyard into a mathematics playground, and this accelerated learning. (T19)

Students did experiments with their families and showed their results to other students. It was effective in helping them learn. (T20)

Teaching science subjects (physics, chemistry, biology) through experiencing life in nature was very productive. The research project in which students collected samples from their homes during their daily activities made the lesson very productive. (T21)

While teaching mathematics, I prepared a shopping list, and this helped students to learn the four operations. (T22)

In values education, my students acted out a role that had a value to it. For example, we did not just talk about Mevlana, my students actually became Mevlana. They wore his clothes. They conducted research. They read his couplets. For a while, they acted like Mevlana. I observed that it had an impact on their learning. (T23)

We set out a goodness and a confession box. The boxes helped students to concretize the concepts of goodness and badness in their minds. (T23)

Each student had a team. While they were playing their roles within the team, they were also understanding the learning outcomes of the course. (T24)

The tables with musicians' portraits and books about them that were placed in the workshop provided a different kind of motivation for students and also gave them role model (T25).

The methods and techniques used by the teachers showed that effective teachers implemented methods that allowed for the active participation of students, and they preferred distinctive methods such as conducting research, doing experiments, demonstration, using models, using materials, role-playing, using nature, using poetry and the theatre, role plays, and using the schoolyard for teaching. The accounts the effective teachers gave did not include any statements referring to the traditional teaching methods.

Effective Teachers' Opinions About Pre-Service and In-Service Trainings in relation to Teaching Methods and Techniques

Effective teachers' opinions about pre-service and in-service trainings concerning teaching methods and techniques are given in Table 3 below.

Table 3. *Effective teachers' opinions about the methods and techniques taught*

N	Theme	Teachers' opinions about the methods and techniques taught	f
1	Pre-Service	Pre-service training is inadequate (T1, T2, T3, T4, T7, T8, T9, T11, T12, T14, T15, T17, T18, T19, T22, T23, T24, T25).	18
2		The number of courses provided prior to entering the profession is inadequate (T2, T3, T4, T9, T10, T12, T15, T19, T18, T20, T21, T22, T23)	13
1	In-Service	In-service trainings provided on methods and techniques are not practice-based (T1, T2, T4, T8, T11, T14, T16, T18, T19, T22, T23, T24, T25).	13
2		In-service trainings provided on methods and techniques are inadequate (T1, T3, T5, T7, T10, T17, T18, T17, T18, T22).	10

The pre-service and in-service trainings on methods and techniques that effective teachers received were analysed under two headings. The first heading, which presented the opinions regarding pre-service trainings revealed that the teachers found the pre-service trainings on methods and techniques to be inadequate (f=17) and unproductive (f=13). The opinions of teachers included the following:

When we were university students, we considered the methods and techniques course as a barrier to overcome. We have overcome that barrier but then we had to face it again and it was a bigger problem. (T4)

The pre-service method and technique course were provided using lecture method. I have never implemented any of the methods or techniques, so I wasn't able to learn them. (T8)

The lecture hours of the pre-service course were very limited. (T22)

I received this course from an academic who had been teacher before, so I learned very well. (T18)

Another heading was for in-service training on methods and techniques that the teachers received. The opinions of the teachers were that the training was not practice-based (f=13) and was insufficient (f=10). The statements of teachers on this matter included:

The in-service training is not practice-based. An instructor comes in and reads the presentation. (T16)

The methods and training course provided for in-service training is not based on reality(T9).

The active learning seminars are effective (T2).

Effective teachers had negative opinions regarding both pre-service and in-service training about methods and techniques. Many of them spoke, however, about their own sense of having a *strong knowledge of their field and of practicing continuous self-development (T1, T2, T7, T8, T13, T17, T19, T22)*. This suggest that these are underlying factors that lead to effectiveness.

Effective Teachers' Opinions About Interactions with Their Colleagues Regarding Methods and Techniques

Effective teachers' opinions about interactions with their colleagues regarding methods and techniques are given in Table 4 below.

Table 4. *Effective teachers' opinions about their interactions with their colleagues*

N	Theme	Teachers' opinions about their interactions with their colleagues	f
1	Negative	not benefitting sufficiently (t9, t10, t11)	3
2		conflicts regarding methods (T8, T11)	2
3		learning mistake (T5, T11)	2
1	Positive	communicating via social media (T2, T8, T17, T21, T23, T11, T12, T14)	8
2		learning from colleagues (T1, T2, T3, T4, T6, T7).	6

The teachers shared both positive and negative opinions about their interactions with their colleagues regarding methods and techniques. The negative opinions included the idea that they did (T9, T10, T11), that they had conflicts with colleagues regarding methods (T8, T11) and that they learned mistakes from colleagues (T5, T11). They mean that they can learn information that is methodically wrong. On the other hand, positive opinions included the idea that they could communicate with colleagues via social media (T2, T8, T17, T21, T23, T11, T12, T14) and that they could learning from their colleagues (T1, T2, T3, T4, T6, T7). The analysis of their opinions revealed that effective teachers have low levels of direct interaction with their colleagues regarding issues of methods and techniques. However, they do interact with their colleagues more on social media.

Effective Teachers' Interaction with Students, Parents and School Administrators Regarding Teaching Methods and Techniques

The teachers stated that their assessment type was the determiner of the teaching methods and techniques they used (T1, T4, T10, T18). They emphasized the importance of the students' level of readiness and their ability to learn.

With regard to interacting with parents about teaching methods and techniques, some of the teachers pointed out that they had no interaction with parents regarding methods and techniques (T1, T2, T3, T5, T15, T17, T22), and emphasized that parents remained uninterested in the issue. One teacher stated that, “Parents feel unnecessary pressure regarding methods and techniques which they are not well-informed about,” (T5), while another teacher said that, “To avoid conflict with parents about methods and techniques, I just say “okay” in order to handle the situation”. Two other teachers stated that parents thought that the methods and techniques they used were games and that they sometimes had arguments with them (T11, T14). This also underlined the irrelevance of the parents to the issue of methods and techniques.

Discussing methods and techniques is an issue of professional competency. From this aspect, the irrelevance of the parents to the issue can be considered as usual. However, the pressure placed on teachers by parents regarding an issue they are not well-informed about cannot be considered usual. Some of the effective teachers perceived to be a serious problem and they performed activities to increase parents’ awareness about methods and techniques (T6, T7, T8, T10, T13, T23, T24, T25). This shows that effective teachers had a proactive attitude. On this matter, one teacher stated, “I provided training to the parents on the implementation of various methods and techniques. By doing this, I aimed to educate parents to help their children with their homework. The training was effective” (T4). These statements show that effective teachers also lead the way in conducting innovative activities.

In terms of interacting with school administrators regarding methods and techniques, some of the teachers stated that they did not have any interaction with school administrators (T1, T2, T3, T5, T7, T9, T15, T18, T24), and stressed the irrelevance of school administrators to the issue. This was supported by the statements suggesting that school administrators may put pressure on the teachers to use traditional methods (T8, T11, T16).

Effective Teachers’ Some Other Opinions About Teaching Methods and Techniques

Effective teachers’ some other opinions about teaching methods and techniques are given in Table 5 below.

Table 5. *Effective teachers’ other opinions about the methods and techniques*

N	Teachers’ other opinions about the methods and techniques	f
1	Exam-oriented approach of the current education system (T3, T11, T17, T21, T25)	5
2	Students’ degree of readiness plays an important role (T1, T13, T17)	3
3	Academic achievement is not important (T2, T18)	2
4	Social activities receive more attention (T2, T11)	2
5	Teachers tended to implement the easiest method (T10, T17)	2

Some of the effective teachers stated that the students’ degree of readiness plays an important role in determining which methods and techniques to use (T1, T13, T17), which demonstrates the necessity of being able to implement a range of different activities.

Some of the effective teachers stated that the exam-oriented approach of the current education system restricted the use of some methods and techniques (T3, T11, T17, T21, T25). They stated that not enough attention was paid to academic achievement (T2, T18), and also said that social activities receive more attention (T2, T11). In making the above-mentioned statements, the effective teachers thus emphasized the negative impact of current perspectives

on the use of different methods. Two teachers also stated that teachers tended to implement the easiest method (T10, T17) and that this had become a habit.

4. Discussion, Conclusion and Recommendations

This study, which aimed to analyse the effective teachers' preference of teaching methods and techniques, revealed that effective teachers placed particular importance on a number of specific activities.

The teachers showed used 22 different methods and techniques in total. The study found that lecture method was also used by teachers but remained relatively underused. This situation contrasts with the literature review which showed that the lecture method was the most frequently used method (Demirkan and Saracoglu, 2016; Karamustafaoglu and Kandaz, 2006; Kayabasi, 2012; Marbach, Seal and Sokolove, 2001; Yesilyurt, 2013). This method can be considered as one approach adopted by effective teachers.

The study revealed that effective teachers were capable of using different methods and techniques. This also supports the findings of the literature review which showed that effective teachers are capable of using different methods and strategies (Stronge, 2007). The effective teachers who participated in the study stated that they were constantly looking for new methods and techniques to implement. A study conducted by Ozkan and Arslantas (2013) showed that teachers and school administrators tended to try out different methods and techniques. However, teachers did not do any research regarding the effectiveness of these activities. They suggested that this was due to a lack of time and lack of knowledge about the research.

According to the study, active learning was a very common method used by effective teachers. Their success might be associated with the use of this method, because, in the process of active learning, students are given the authority to make decisions, be responsible and monitor themselves (Acikgoz, 2007). The involvement of the individual in the process has a positive impact on learning processes (Dunn, 1999; Glass and Riding 1999; Grigerenko and Sternberg 1995; Kolb, 1981; Mayer and Massa 2003.).

The analysis of the opinions shared by the effective teachers showed that any impractical method is replaced very rapidly. This conclusion was presented as suggestion for further research by Aydede, Caglayan, Matyar and Gulnaz (2006). It was observed that effective teachers had strong knowledge of their field and they were constantly improving themselves in this respect. A strong knowledge of the field also facilitates the implementation of different methods and techniques (O'Loughlin, 1992).

The effective teachers had negative opinions about both pre-service and in-service training provided on methods and techniques. This finding is consistent with that of the research study conducted by Akcadag (2010) and Yesil (2006). However, the analysis of the opinions showed that teachers constantly attempted to eliminate any gaps in their knowledge.

The analysis of the accounts given by the teachers showed that the teachers used various methods and techniques that can be introduced to the literature. These methods and techniques included three-dimensional mapping, word boxes, good and evil and confession boxes for values education, role-playing, modelling, songs, poetry and theatre, learning through teaching, turning the schoolyard into a learning environment, innovative methods related to mathematics teaching, and real-life experiences. The stories did not include any statement related to traditional lecture method. It is thought that the results of this study will contribute to the field of curriculum and instruction in terms of positively affecting the subject of teaching principles and methods.

The study revealed that effective teachers had a low level of direct interaction with their colleagues about issues related to methods and techniques; they had more interaction with their colleagues via social media. Furthermore, effective teachers almost made separate attempts to increase parents' awareness about the methods and techniques used. These efforts demonstrate their proactive attitude. The opinions of students have shown that successful teachers maintain an altruistic attitude while using methods and techniques. Some studies in the literature have also shown that teachers believed that the nature of the teaching profession requires a degree of altruistic behaviour (Ekiz and Kocyigit, 2013; Ozbek, Kahyaoglu and Ozge, 2007). In the process of teacher training and also teachers' in-service training, the results of this study can positively affect the prospective teachers and teachers in service in terms of attitude.

The opinions of the effective teachers revealed that they did not receive substantial support from school administrators regarding methods and techniques. The low level of support provided by school administrators, the uninterested attitude of parents, and the exam-oriented education system, posed a threat for the use on non-traditional methods and techniques, and it is important to address this situation.

Regarding methods and techniques, one teacher stated that, "The formula for using the most appropriate method is as follows: physical environment + student readiness + parents' approach + structure of the school administration + teachers' altruism, affection and conscience" (T13). This statement clearly illustrates that the decision which activities to use has multiple variables. Based on the findings of this study, the following recommendations can be made:

- Methods and techniques used by effective teachers could be compiled and published.
- Training on assessing and evaluating the methods and techniques used could be provided in order to enhance the teachers' ability to evaluate their success.
- The methods and techniques used by effective teachers could be reviewed by academics who are experts in this field, and relevant feedback could be provided.
- The obstacles that effective teachers face when implementing different methods and techniques could be examined.
- Research studies could be carried out focusing on the students of effective teachers.

References

- Acikgoz, K. U. (1996). *Effective learning and teaching*. Izmir: Kanyilmaz.
- Acikgoz, K. U. (2007). *Active learning*, Izmir: Bilis.
- Akcadag, T. (2010). The training needs of teachers concerning methods & techniques and assessment & evaluation in the primary school curriculum. *Bilig*, 53, 29-50.
- Atasoy, S., & Akdeniz, A. R. (2006). Evaluating the application process of worksheets developed in accordance with the constructivist teaching theory. *National Education Journal*, 170, 157-175.
- Aydede, M. N., Caglayan, C., Matyar, F., & Gulnaz, O. (2006). Evaluating the views of science and technology teachers on educational methods and techniques they use. *Cukurova University Faculty of Education Journal*, 2(32). 24-34.
- Aydin, A. (2000). *Classroom management*. Istanbul: Alfa.
- Balci, A. (2007). *Effective school and school development*. (4th Edition). Ankara: Pegem.
- Baltaci, A. (2018). A conceptual review of sampling methods and sample size problems in qualitative research. *Journal of Bitlis Eren University Institute of Social Sciences*, 7(1), 231-274.
- Bayrak, C. (2003). School as a system. In (O. Demirel, Z. Kaya Eds.) *Introduction to the Profession of Teaching* (3rd ed.). Ankara: Pegem.
- Bozkus, K., & Tastan, M. (2016). Teachers' views on the qualities of effective teaching. *journal of pegem education and teaching*, 6(4), 469-490, <http://dx.doi.org/10.14527/pegegog.2016.023>.
- Cakmak, M. (2009). Prospective Teachers' Views on the Characteristics of an Effective Teacher. *Education and Science*, 34(153), 74-82.
- Cawelti, G. (2004). *Handbook of research on improving student achievement* (3rd ed.). Arlington: Educational Research Service.
- Celikkaya, T. (2008). *The effect of constructive approach on success, attitude and permanency at the social sciences teaching (5th class example)*, Unpublished Doctoral Thesis, Ataturk University, Institute of Social Sciences, Erzurum.
- Clemson, P., & Craft, A. (1981). 'The Good or the effective teacher'. *British Journal of In-Service Education*, 7(2), 2-5. <https://doi.org/10.1080/0305763810070210>
- Creswell, J. W. (2013). *Research design: qualitative, quantitative and mixed methods approaches*. New York: Sage.
- Darling-Hammond, L. (2001). The challenge of staffing our schools. *Educational Leadership*, 58(8), 12-17.
- Dean, J. (2000). *Organizing learning in the primary school classroom* (2nd Edition). London: Routledge.
- Demirel, O. (1999). Scientific Approach in the Development of Teaching Programs in the Turkish System of Education and Recommendations for the 2000s. Reflections in Education: *National Symposium on the Turkish System of Education on the Verge of the 21st Century*. November 25-27. pp. 328 –335.
- Demirel, O. (2007). *Curriculum Development in Education, from Theory to Practice*. Ankara: Pegem.
- Demirkan, O., & Saracoglu (2016). Views of Anatolian high school teachers about teaching methods and techniques they use in class. *The Journal of International Lingual, Social and Educational Sciences*, 2(1), 1-11.
- Dunn, R. (1999). How do we teach them if we don't know how they learn? *Teaching Pre K*, 8, 29 (7), 50-52.
- Ekinci A. (2010). Roles of headmasters on the job-training of the pre-service teachers. *Journal of Dicle University Ziya Gokalp Faculty of Education*, 15, 63-77.

- Ekiz, D., & Kocyigit, Z. (2013). Exploring primary school teachers' metaphors concerning "teacher". *Kastamonu Education Journal*, 21(2), 439-458.
- Erdem, A., Uzal, G., & Ersoy, Y. (2006). *Educational problems of science/physics teachers. Research report*, TFV Publication, Tekirdag, 1-49.
- Erden, M. (1995). *Development-learning-teaching of educational psychology*. Ankara: Arkadas.
- Fidan, N. (1986). *Learning and teaching in school*. Ankara: Kadioglu.
- Glass, A., & Riding, R., J. (1999). EEG Differences and Cognitive Style. *Biological Psychology*, 51, 23-41. [https://doi.org/10.1016/S0301-0511\(99\)00014-9](https://doi.org/10.1016/S0301-0511(99)00014-9)
- Grigorenko, E. L., & Sternberg, R. J. (1995). *Thinking Styles*, D.H. Saklofske and M. Zeidner (Ed.) International Handbook of Personality and Intelligence New York, Plenum. 205-230.
- Hoy, W. K., & Miskel, C.K. (2010). *Educational administration*. Translation Editor: Selahattin Turan. 7th Edition. Ankara: Nobel.
- Ishiyama, J.T., McClure, M., Hart, H., & Amico, J. (1999). Critical thinking disposition and locus of control as predictors of evaluations of teaching strategies. *College Student Journal*, 33 (2) 269-274.
- Karamustafaoglu, S., & Kandaz, U. (2006). Using teaching methods in the science activities and difficulties encountered in pre-school education. *Journal of Gazi Faculty of Education*, 26 (1), 65-81.
- Kayabasi, Y. (2012). Teaching Methods and Techniques Used by Teachers in the Educational Process and Their Reasons for Choosing Them. *Journal of Balikesir University Institute of Social Sciences*, 15 (27), 45-64.
- Kolb, D. A. (1981). *Learning styles and disciplinary differences*. In A. W. Chickering (ed.). *The Modern American College*, San Francisco: Jossey-Bass. Entwistle & Tait 1990.
- Kucukahmet, L. (1983). *Teaching principles and methods*. Ankara: Ankara University Faculty of Educational Sciences Publications No: 124.
- Kutnick, P., & Jules, V. (1993). "Pupils Perceptions of a Developmental Perspective from Trinidad and Tobago. *British Journal of Educational Psychology*, 63, 400-413. <https://doi.org/10.1111/j.2044-8279.1993.tb01067.x>
- Langer, J. A. (2000). Excellence in English in middle and high school: how teachers' professional lives support student achievement. *American Educational Research Journal*, 37 (2), 397-439. <https://doi.org/10.3102%2F00028312037002397>
- Liston, D., Borko, H., & Whitcomb, J. (2008). The teacher educator's role in enhancing teacher quality. *Journal of Teacher Education*, 59(2), 111-116. DOI: 10.1177/0022487108315581
- Marbach-Ad, G., Seal, O., & Sokolove, P. (2001). Student Attitudes and Recommendations on Active Learning. *Journal of College Science Teaching*, 30(7), 434- 438.
- Mayer, R. E., & Massa, L. J. (2003). Three facets of visual and verbal learners: cognitive ability, cognitive style and learning preference. *Journal of Educational Psychology*, 95, 833-846. <https://psycnet.apa.org/doi/10.1037/0022-0663.95.4.833>
- McNair, V., & Galanouli, D. (2002). Information and communications technology in teacher education: can a reflective portfolio enhance reflective practice?. *Journal of Information Technology for Teacher Education*, 11(2), 181-196. <https://doi.org/10.1080/14759390200200131>
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: an expanded sourcebook*. (2nd ed.). Thousand Oaks, CA: Sage.
- O'loughlin, M. (1992). Rethinking science education; beyond piagetian constructivism toward a sociocultural modal of teaching and learning. *Journal of Research in Science Education*, 29(8), 791-820. <https://doi.org/10.1002/tea.3660290805>

- OECD. (2005). *Teachers matter: attracting, developing and retaining effective teachers*. Paris: OECD Publishing.
- Onen, F., Saka, M., Erdem, A., Uzal, G., & Gurdal, A. (2009). The knowledges about the methods and technics of teaching relating to teachers who attended to the in service education: sample of Tekirdağ. *KEFAD*, (9) 1, 45-57.
- Ozkan, M., & Arslantas, H. I. (2013). A study of scaling with ranking judgment method on characteristic of effective teacher. *Journal of Trakya University Social Sciences*, 15(1), 311-330.
- Rowan, B., Chiang, F. S., & Miller, R. J. (1997). Using research on employees' performance to study the effects of teachers on students' achievement. *Sociology of Education*, 70, 256-284.
- Senemoglu, N. (2007). *Development, learning and teaching. from theory to practice*. Ankara: Gonul.
- Sisman, M. (2011). *Quest for excellence in education: effective schools*. Ankara: Pegem.
- Sozbilir, M., Senocak, E., & Dilber, R. (2006). Teaching methods and techniques used by science teachers in the class from the viewpoint of students. *National Education Journal*, 172, 276-286.
- Stronge, J. H. (2007). *Qualities of effective teachers* (2nd ed.). Alexandria: Association for Supervision and Curriculum Development.
- Sunbul, A. M. (2010). *Teaching principles and methods*. Konya: Academy of Education.
- Taspinar, M. (2010). *Teaching methods from theory to practice*. Ankara: Data.
- TED, (2015). *Profession of teaching from the viewpoint of teachers*. <http://www.turkegitimderneği.org.tr>. Date of Access: February 12th, 2020.
- Yesil, R. (2006). Teaching proficiencies of social studies teachers in class (the sample of Kirsehir). *KEFAD*, 7(2), 61-78.
- Yesilyurt, E. (2013). Teachers' aim in using teaching methods and problems they encounter. *Journal of Ataturk University Institute of Social Sciences*, 17 (1): 163-188.
- Yildirim, A., & Simsek, H. (2011). *Qualitative research methods in social sciences*. Ankara: Seckin.
- Yildirim, N., & Oner, S. (2016). A qualitative analysis on efficient / successful class teachers. *KEFAD*, 17(3), 135-155.