

Determining the Significance Level of Vocabulary Teaching Tools and Activities in Teaching Turkish as a Foreign Language through Analytical Hierarchy Process

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Abstract

As vocabulary is an important component of language teaching and there exist certain problems in students' vocabulary skills, traditional and modern teaching methods used in Turkish as a foreign language teaching are discussed in the article. The frequency of use and the success rates were taken into consideration in the determination of the methods. In this context, a survey was developed and administered within Analytic Hierarchy Process (AHP) for teachers of Turkish to foreigners in order to determine the significance level of vocabulary teaching methods in Turkish as a foreign language. The survey consisted of comparative questions for determining the significance levels of vocabulary acquisition methods used in teaching Turkish as a foreign language. The data collected in this research were analyzed in Microsoft Excel program and the results were presented as statistical tables. According to the findings, the significance level of communicative teaching methods conducted through visual and auditory tools and activities were determined to be the first in vocabulary acquisition in teaching Turkish as a foreign language. Videos and movies were seen to be the first in the order of significance level within vocabulary teaching through visual and audio tools. Role-play activities were determined to be the first in the order of significance of level. Interactive course CDs and smart boards became the most effective tools in teaching vocabulary in terms of educational technologies. Course-books and workbooks were identified as the most preferred tools in printed publications. According to the results of the study, the tools applied by students that address multi-senses were seen to be the most preferred techniques in vocabulary acquisition in teaching Turkish as a foreign language. The results of this research will contribute to updating the methods to be used in teaching / learning Turkish as a foreign language vocabulary. In addition, they will help to improve the course-books and other materials to be developed.

Key words: *Teaching Turkish to Foreigners, vocabulary teaching methods, Analytic Hierarchy Process.*

Introduction

Language is a method of expression and communication that forms the consciousness of people and reflects their characters (Vardar, 2001:12). It serves as a bridge which establishes communication and ensures relationship between people. "Language is a magical being which is versatile beyond our thoughts, whose other qualities emerge when looking at it from different angles and some of whose secrets we failed to solve even today" (Aksan, 2007:11).

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Language reflects the cultures of communities. Cultural accumulation of society is transmitted from generation to generation through language (Goçer, 2001:4). Characteristics, lifestyles, world and philosophical views, beliefs, traditions, and the developments in terms of science, art and technique of a society are reflected in language (Aksan, 2007:13). Dress codes, customs, and victuals of a community fall into the usage area of language. This occurs in their everyday speech as well as in the products of their language (poems, legends, fables, lullabies, etc.).

Language teaching and learning is impacted by globalization. Living together with different ethnicities requires from people to learn to communicate with each other. This makes it necessary to learn and to teach other languages along with the mother tongue, as well as to teach them to foreigners.

Today, the aspect of language overlooking the communication is classified under two categories as mother language and foreign language (second language). The vocabulary, grammatical structure and literary products of a language may already be developed. But the development level of a language is not limited to its development as a mother tongue, but to its application as a foreign language as well. Correspondingly, academic studies and practical applications are needed for teaching a language as a native and as a foreign language. 'Languages' that are developed in science, technology, art, sports and international communication in the world appear to need their own methodology of teaching as a foreign language (Candaş Karababa, 2009:268).

World languages are classified according to their origin and structure. According to their origin; they are classified as Ural- Altaic, Indo-European, Hami-Semitic, Sino-Tibetan, Caucasian and Bantu languages. According to their structure; three groups are named: agglutinative, inflected and monosyllabic. Turkish language is included in the Altai branch of the Ural- Altaic language family in terms of origin and is among agglutinative languages in terms of structure. To teach Turkish as a foreign language effectively, it is important to take into consideration its peculiarities compared to other languages. If some European languages such as English, French and German have a long history of being taught as foreign languages and, correspondingly, have a deeply researched and well developed methods of teaching, other languages often use the methods of their teaching as native languages or outdated (especially, Grammar-Translation) methods of teaching foreign languages. It is important to update and optimize teaching these languages.

The general characteristics of Turkic language family that distinguish it from other languages are listed as follows (Ercilasun, 2013:17-22). There is no gender distinction: words do not vary according to masculinity and femininity. Affixes are added only at the end of the word. Words are inflected or a new word can be derived by adding derivational affixes and inflections at the end of the words. These affixes are also added to the words of foreign origin (kalem+ler, kitap+lık, gel-(i)yor, ...). There are vowel-consonant harmonies. Sounds are compliant in terms of hardness-softness, thinness-thickness and flatness-roundness. The words of foreign origin do not conform to this rule and are consistent with sounds based on the last syllable. The typical sentence structure is 'subject, object and predicate'. Sentences may also be constructed by changing word order. But these sentences are inverted sentences and are rarely used.

Methods to be used in teaching and learning Turkish as a foreign language were attempted to be determined with the opening of Turkey to the world after the 1980s. Different methods used in teaching vocabulary in Turkish as a foreign language were determined in this context. The objective of this research is to determine the significance levels of vocabulary teaching methods in Turkish as a foreign language nowadays by taking the structural features of Turkish into account.

Words are the building blocks of language. A foreign language cannot be learnt and taught without words. Therefore, vocabulary teaching and methods have an important place in foreign language teaching. Vocabulary structures of languages are different due to their phonetic (sound) and morphological (form) structures. The meaning of the words in some languages can change according to the emphasis on those particular words.

Foreign Language Vocabulary Teaching

The ways how vocabulary has been taught have always depended on the teaching methods and approaches. In Grammar-Translation Method (GTM) the main tool of vocabulary presentation and semantization used to be translation. A list of isolated words was translated from the target language into the native ones and then memorized through written translation and making up sentences activities. The morphological forms of words and their spelling was emphasized. (Austin, 2003). Although since the 1970s this method has been widely recognized as outdated and not enabling the students to use the target language practically, it is still in use in some countries (Mart, 2013; Rahman, 2012).

In Direct Method the emphasis of vocabulary teaching is on its pronunciation and application in oral speech. Translation was completely excluded from language teaching. Word meaning was often presented in inductive way through pictures, gestures and context. Words had to be presented in sentences, not isolated (Larsen-Freeman, 2003). This way of treating vocabulary is more practical, however, it did not help language learners as much as expected, the vocabulary that the learners had was only basic, so new methods and approaches were sought for.

The Audiolingual Method was scientifically based on Behaviorism, a psychological theory that believed in stimulus – response – positive reinforcement in vocabulary acquisition. Authentic and (mostly) semi-authentic audio recordings were used to present and practice (imitate) new vocabulary. Substitution, transformation (paraphrasing), gap-filling drills, naming and describing pictures were the main typed of vocabulary activities in use (Larsen-Freeman, 2003). The application of technology promoted a lot the correct pronunciation, words were used in typical for them sentences, which helped improve vocabulary acquisition. However, the rote memorization of dialogue and sentence patters could not enrich learners' vocabulary too much.

The introduction of Communicative Methods / Approach (Communicative Language Teaching, the Silent Way, TPR, and Suggestopedia) emphasized the communicative goals of vocabulary teaching. Vocabulary in them has been taught as a sub-skill of listening, speaking, reading and writing skills. Vocabulary has been presented orally and in written via a variety of means (synonyms, antonyms, definitions, typical context). The Natural Approach (Krashen, 1988) emphasizes the comprehensible input (listening and reading) as an effective resource for productive language teaching. A variety of pre-listening and pre-reading activities dealing with vocabulary classification, word-building, brainstorming, etc. has been in use since. While-listening and while-reading activities such as defining the meaning according to the linguistic and situational context, multiple choice, finding the words and their derivatives in the text have been employed (Richards, 2006). Besides the top-down approach (vocabulary pre-teaching before its communicative application), the bottom-up approach evolved (meaning elicitation in the process of listening / reading) (Lightbown & Spada, 2011). Speaking / writing around a certain topic, cooperative learning, and project work have enabled to practice the vocabulary under study and memorize it well while performing communicative tasks.

Teaching the Vocabulary of Turkish as a Foreign Language

Very little research published in English concerns teaching Turkish vocabulary. Kuruoğlu et al. (1996) state that most materials for Turkish as a foreign language teaching apply outdated methods of teaching. According to Tosun (2013, p.1377), 74.3% of students and 75% of teachers agree that vocabulary in existing textbooks is presented in context. Insufficient revision in order to provide firm vocabulary skills is offered in them. The activities are limited to matching and gap-filling (ibid, p. 1378). Some books apply translation. Vocabulary load per unit is too much (ibid, p. 1379). Guclu, Arslan and Ustunyer (2017) have shown a positive impact of the application of Suggestopedia on vocabulary learning. İşcan (2017) has shown that using films is efficient for Turkish vocabulary learning.

Demirel (2007) enumerates the following activities that are useful for Turkish as a foreign language vocabulary acquisition:

1. Real objects or examples are presented.
2. The meaning of the word, which is taught, is explained by gestures and mimics.
3. Visual tools are used: a) Magazines, newspaper pictures, wall paintings, flash cards, posters, banners are used. b) Shapes, sketches, pictures or line drawings are drawn on the wood. c) Film strips, figures, slides or overhead transparencies are used.
4. Explanation is made in the target language. For this; a) The meaning of new words is explained using previously taught words. b) The synonyms and antonyms of the words are presented. c) The words transferred to mother language from the foreign language are presented. For instance; radio. d) With the help of the affixes, the meaning of the new word is related to what was learned before.
5. Dictionary provisions are found.
6. Students are asked to guess the meaning of the words, or extract them from a text they have read or heard.
7. If none of the above listed options are appropriate, the meanings in the students' native language can be presented.

Method

Research Design

Analytic Hierarchy Process, which is one of the multi-criteria and in which both objective and subjective data can be assessed, was modeled in the research in addition to the descriptive statistics. It is difficult to achieve definite and accurate results in social sciences. Respondents have a tendency to behave subjectively while collecting data. The margin of error can be minimized when assessing both objective and subjective data with Analytic Hierarchy Process which is one of the multi-criteria decision-making methods. The assessment of subjective criteria does not become as reliable with other statistical methods as with AHP (Tüzemen & Ozdagoglu, 2007).

AHP is a simple method for controlling the changes in decision-making process and measuring group decisions easily and it allows this method to be used in many areas (Eraslan & Algun, 2005). It is possible to use AHP in many areas such as economics, management, politics, technology, social competition, health, law regulation, medicine, environment, public and education. AHP is widely used in problems that were based on mutual assessment and difficult to decide (Göksu, 2013).

AHP is applied with the aim of finding a solution to an existing problem. The finest details tackled with the problem and a diligent identification is made in AHP. A hierarchical structure is invented. Criteria and sub-criteria associated with these criteria are created. Results that affect criteria or sub-criteria positively or negatively also generate alternatives (Saaty, 1995). AHP plays an important role in the determination of significance levels through the interaction of criteria and alternatives that emerge in complex problems with each other (Timor, 2011).

Population and Sample/Participants

The population of the research was teachers and academicians who teach Turkish as a foreign language outside Turkey and whose mother tongue is Turkish. 72 teachers who have taught Turkish to foreigners in 21 countries participated in the research. Teachers and lecturers who teach Turkish as a foreign language to students at all levels of secondary education or higher education in Afghanistan, Albania, Azerbaijan, Bosnia and Herzegovina, Georgia, Iraq, Sweden, Cameroon, Kazakhstan, Kenya, Kyrgyzstan, Kosovo, Egypt, Mongolia, Russia, Syria, Tajikistan, Turkey, Turkmenistan and Ukraine, constituted the sampling group of the research. Purposive sampling, one of the improbable sampling methods, was used as the sampling method.

Course-books, dissertations and articles written on teaching Turkish as a foreign language, were examined within the context of this research. The following 'criteria' (tools for vocabulary presentation and practice) and alternatives within each 'criterion' (tool/activity) were selected within the context of AHP by taking opinions of experienced teachers teaching Turkish as a foreign language.

1. Vocabulary acquisition with the help of visual tools:
 - a. Shapes drawn on the board, pictures, sketches
 - b. Sticky Reminder Cards
 - c. Real Objects, Models
 - d. Exhibition-Panel works
 - e. Posters
 - f. Cartoons
2. Vocabulary acquisition with the help of visual and audio tools:
 - a. Videos-Films
 - b. Television
 - c. Radio
 - d. Music
3. Vocabulary acquisition with the help of activities
 - a. Travel-Observation
 - b. Educational Games
 - c. Puzzles-Riddles

- d. Rhymes-Nursery Rhymes
 - e. Group Games
 - f. Drama
 - g. Acting
 - h. Display-Gesture and Facial expressions
 - i. Competitions
4. Vocabulary acquisition method through educational technologies
- a. Computer
 - b. Internet
 - c. Projector-Multimedia
 - d. Interactive Course CDs
 - e. Electronic Dictionaries
 - f. Smart Boards
 - g. Smart Phones-Tablets
5. Vocabulary acquisition method through printed publications
- a. Course-books – Workbooks
 - b. Dictionaries – Guides
 - c. Handbooks
 - d. Newspapers-Magazines

These criteria were associated with vocabulary teaching tools/activities used in teaching Turkish as a foreign language. Techniques in question were included as alternatives of the research. Data was collected by using the survey created in this context.

Data Collection Tools

A survey, developed related to the topic, was used as a data collection tool within the scope of AHP. Surveys were collected by contacting the teachers or the institutions in which they work one by one over the internet or by telephone. A portion of survey data was obtained by applying surveys face to face in the countries where teachers work.

The teachers taking part in the research had to compare the top-down two columns criteria side by side in the context of the AHP. The criteria given on the left and right side of the questionnaire are graded as least important (3), less important (5), important (7), and most important (9). Participants were asked to make the degree of importance among the criteria they were compared according to this rating scale.

Various software, such as Super Decision, Expert Choice, etc. can be used in the analysis of AHP data. However, overall statistical values related to the research were calculated by using Microsoft Excel program in the calculations included in this research.

Elements in the decision-making process in AHP are important for collecting data in an accurate way. In this regard, the system forming AHP is created with a certain hierarchical stage (Koçak, 2008). These steps include: problem description, classification of alternatives, determination of beginner level, determination of acceptable alternatives, determination of criteria, determination of decision hierarchy, dual comparison of alternatives, dual comparison of criteria, calculating priorities of alternatives, sensitivity analysis, selecting top priority alternatives (Hacıköylü, 2006:20).

Criteria associated with a hierarchical structure and problem is created after determining the status of a problem in AHP. If there are any factors concerning the criteria, they are given place in the hierarchy as sub-criteria. Data is attempted to be obtained by creating alternatives related with hierarchy criteria. These stages are given below as follows:

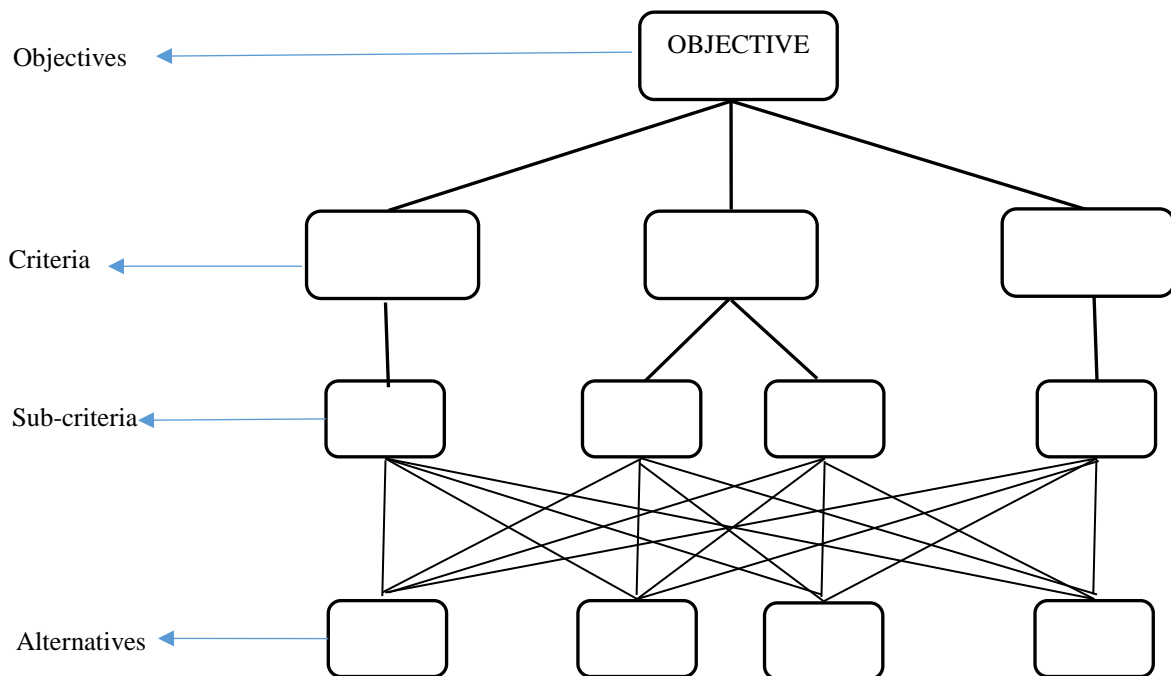


Figure 1. Hierarchical structure of AHP.

AHP makes modeling in a systematic structure by carrying out binary comparisons of problems in complex structure and simplifying them (Özden, 2008). AHP is a method that helps to determine significance levels by comparing two elements with each other. Comparison, made between two elements, reveals the advantageous aspect of this method (Ünal, 2010). Criteria, sub-criteria and alternatives make paired comparison among each other in the hierarchical structure formed by AHP. The significance levels can be determined by these comparisons. The correct data can be reached in this regard.

Table 1. Comparative matrix of criteria.

CRITERIA	A	B	C	D
A	1	3	5	7
B	1/3	1	9	5
C	1/5	1/9	1	3
D	1/7	1/5	1/3	1

Table 2. Explanation of comparative matrixes of criteria.

CRITERIA	A	B	C	D
A	The result of comparison between A and A equals to 1 (AA).	The result of comparison between A and B equals to 3(AB).	The result of comparison between A and C equals to 5 (AC).	The result of comparison between A and D equals to 7 (AA).
B	The result of comparison between B and A equals to 1/AB (BA).	The result of comparison between B and B equals to 1 (BB).	The result of comparison between B and C equals to 9 (BC).	The result of comparison between B and D equals to 5(BD).
C	The result of comparison between C and A equals to 1/AC (CA).	The result of comparison between C and B equals to 1/BC (CB).	The result of comparison between C and C equals to 1 (CC).	The result of comparison between C and D equals to 3 (CD).
D	The result of comparison between D and A equals to 1/AD (DA).	The result of comparison between D and B equals to 1/BD (DB).	The result of comparison between D and C equals to 1/CD (DC).	The result of comparison between D and D equals to 1 (DD).

There is a comparison table of matrix consisting of 4 criteria in Table 1. The explanation of this table was included in Table 2. Some of them were described below in order to understand what those values in these tables came to mean:

(AA): All of the values on the diagonal are equal to 1. Both the criteria have equal level of importance.

(BC): The value of B is *certainly very important* for C (9) was found when B and C criteria were compared.

(DC): The significance level of D, in respect to C, will be 1/CD when D and C criteria were compared. The significance level of DC would become 1/3 since the significance level of CD was equal to 3.

Criteria in AHP create a hierarchy after determining sub-criteria and alternatives. It is necessary to determine significance level after the creation of hierarchy. The measurement can be made by assessing significance level with numbers from 1 to 9 (Saaty, 1995). The table showing the significance levels in AHP was given as follows:

Table 3. Numerical matrix values of paired comparisons (Göksu, 2013:46).

Significance Level	Definition	Explanation
1	Equally important	Both of the situations equally serve the purpose.
2	Intermediate Values	
3	Moderately Important	One of the situations serves the purpose a bit more than the other.
4	Intermediate Values	
5	Important	One of the situations serves the purpose more than the other.
6	Intermediate Values	
7	Very Important	One of the situations serves the purpose far more than the other.
8	Intermediate Values	
9	Certainly Very Important	One of the situations serves the purpose certainly more than the other.
Opposite Values	Opposite of the values above	However important a situation is from the other, the other is as important as it's opposite.

Timor (2011) summarized the stages of calculating significance levels as follows:

Stage 1: Comparison matrixes of criteria in the following table were written for the normalization process. The totals of columns were written beneath them.

Stage 2: Normalized matrix calculation can be made by dividing the totals originated in the above table into comparison matrixes in the same column.

Stage 3: Priorities vector (arithmetic mean) was found and the arithmetic mean of the criteria column was taken.

Consistency or consistency ratio are required in comparisons with AHP. Consistency ratio is expected to be less than 0.1. Comparisons, whose consistency ratios are greater than 0.1, are required to be checked again (Timor, 2011).

Consistency ratio can be found by dividing consistency index into random index. Random index values are determined in accordance with the number of elements in hierarchical structures.

Table 4. Random index table.

Matrix Dimension (n)	1	2	3	4	5	6	7	8	9	10
Random Index (RI)	0.00	0.00	0.52	0.89	1.11	1.25	1.35	1.40	1.45	1.49

Concepts and formulas needed to be known about consistency are as follows (Tüzemen & Ozdağoğlu, 2007:215-232):

- Consistency Ratio: CR
- Consistency Index: CI
- Random Consistency Index: RI
- Relative matrix weight: λ_{max}
- Consistency index formula:

$$\text{Consistency index (CI)} = x = \frac{\lambda_{max} - n}{n - 1}$$

Consistency index is found and consistency ratio can be found by determining the index value from random index table. Consistency ratio is calculated by using the formula below.

$$\text{Consistency Rate} = \frac{\text{Consistency Index}}{\text{Random Index}}$$

The following operations are performed in order to calculate the consistency ratio (Tüzemen & Ozdağoğlu, 2007:215-232):

Stage 1: Arithmetic means (significance levels) in each column are multiplied and added with the first comparison matrixes.

$$(0,22)*1 + (0,25)*3 + (0,25)*(1/5) + (0,03)*7 = 1,23$$

$$(0,22)*(1/3) + (0,25)*1 + (0,25)*3 + (0,03)*9 = 1,34$$

$$(0,22)*5 + (0,25)*(1/3) + (0,25)*1 + (0,03)*5 = 1,58$$

$$(0,22)*(1/7) + (0,25)*(1/9) + (0,25)*(1/5) + (0,03)*1 = 0,14$$

Stage 2: Matrix values obtained above are divided by significance levels (arithmetic means).

$$1,23 / 0,22 = 5,59$$

$$1,34 / 0,25 = 5,36$$

$$1,58 / 0,25 = 6,38$$

$$0,14 / 0,03 = 4,66$$

Stage 3: The above data is needed to be divided by number of data in order to calculate relative weight of the matrix (λ_{max}).

$$\lambda_{max} = (5,59 + 5,36 + 6,38 + 4,66) / 4 = 5,50$$

Stage 4: Consistency index (CI) will be found by using the data above.

$$\text{Consistency Index (CI)} = \frac{\lambda_{max} - n}{n - 1}$$

$$CI = (5,50 - 4) / 3 = 0,5$$

Stage 5: Consistency index and random index are needed to be known in order to calculate consistency ratio.

$$\text{Consistency Rate} = \frac{\text{Consistency Index}}{\text{Random Index}}$$
$$CR = \frac{CI}{RI}$$

$$CR = (0,5) / (0,89) = 0,56$$

The research is considered normal if consistency levels are between 0.1 values (0 to 10). It should be checked again if this value range is originated different than values.

Findings and Comments

Paired comparison matrixes were obtained, their weights were calculated and consistency tests were performed by using geometric mean of responses given to survey questions. The countries in which the research participants work and how many people from how many countries participated in the research were determined in Table 5.

Table 5. Distribution of teachers according to the place of their work

Countries (Other Countries where they have working experience)	Number of Teachers
Afghanistan (Kyrgyzstan, Tajikistan, Iraq)	1
Albania (Iraq)	1
Azerbaijan	9
Azerbaijan (Iraq)	1
Bosnia and Herzegovina	1
Georgia	12
Iraq	7
Iraq (Afghanistan, Georgia)	1



Iraq (Georgia)	1
Iraq (Tajikistan)	1
Kyrgyzstan (Turkey, Iraq)	1
Kazakhstan (Georgia)	1
Kenya (Iraq, Georgia)	1
Kosovo (Iraq)	1
Egypt	9
Mongolia (Georgia)	1
Syria (Iraq)	1
Tajikistan (Bosnia and Herzegovina)	1
Tajikistan (Georgia, Azerbaijan)	1
Turkey	1
Turkey (Sweden)	1
Turkey (Azerbaijan)	1
Turkey (Iraq)	6
Turkey (Cameroon, Iraq)	1
Turkey (Mongolia, Iraq)	1
Turkey (Turkmenistan, Iraq)	1
Turkey (Yemen, Iraq)	1
Turkmenistan (Georgia)	1
Turkmenistan (Georgia, Iraq)	1
Turkmenistan (Iraq)	2
Turkmenistan (Russia)	1
Turkmenistan (Tajikistan, Iraq)	1
Ukraine	1
Total	72

It is important for the validity of the research that samplings were taken from countries that have both distant and similar languages with Turkish in terms of structure. Methods, used by teachers in vocabulary acquisition, may vary, depending on the native language of the students (in the context of comparative linguistics). This allowed research participants to evaluate the significance levels of techniques used in vocabulary acquisition more consciously.

Table 6. Gender distribution of teachers

Gender	%	f
Male	87	63
Female	13	9
Total	100	72

87% of research participants were male and 13% - female teachers. Gender balance was not observed, but, as the choice of tools/activities used to teach vocabulary does not have a direct relationship with the gender of the teacher, this fact did not have an impact on results' credibility.

Table 7. Annual distribution of their teaching experiences

Experience (Year)	%	f
1-5	36	26
6-10	32	23
11-15	19	14
Over 15	13	9
Total	100	72

The first years of teaching are important in order to gain experience. The ratio of teachers whose teaching experience is not great (1-5 years) is 36%. Teachers' experience in teaching field has a positive impact on the mastery of teaching methods and effective selection of adequate tools and activities. In this context, the ratio of experienced teachers, being 64%, strengthened the reliability of the research results.

Table 8. Significance and consistency levels of vocabulary acquisition tools and activities

Vocabulary Acquisition in Turkish as a Foreign Language with the help of	Significance Levels	Consistency Levels
Visual Tools	0,10	6,00
Visual and Audio Tools	0,28	

Various Activities	0,28
Educational Technologies	0,24
Printed Publications	0,09

In Table 8, vocabulary acquisition with the help of *Visual and Audio Tools and Activities* were seen to have the highest significance levels with 28% in teaching Turkish as a foreign language. Visual and audio tools facilitate tangible learning by providing an interactive medium in education. Movies, videos, songs and television are visual and audio tools for both eyes and ears. Teaching materials that appeal to multiple senses ensure a more permanent learning (Gozutok, 2000). Teaching language through activities renders the students active. It makes students to learn by doing and experiencing. It offers contribution to the discovery, production, sharing of information as well as the development of logic. It implements fun learning by being used actively (Güneş, 2012). In this case, it is necessary to state that *vocabulary acquisition through audio-visual tools* and with the help of various activities occupy the most important place among vocabulary teaching techniques in Turkish as a foreign language. Vocabulary acquisition through educational technologies was ranked the third with 24% among the offered criteria. Really, audio-visual materials and technologies appeal to multiple senses of the students. On the other hand, activities and the application of technologies are techniques that make students learn by doing and experiencing. As it can be seen in Table 8, the significance levels of tools that appeal to only one sense (*vocabulary acquisition through printed publications and visual tools*) were seen to be quite low. The consistency ratios of vocabulary teaching tools/activities were realized as 6.00. It is possible to state that there is a significant relationship in the ranking of significance level, since the consistency ratio was below 10.00.

Vocabulary Acquisition through Visual Tools

As it can be seen in Table 9, the most important alternative in the criteria of *vocabulary acquisition through visual tools* was determined to be *real objects and models* with 34%. It was understood that it has a special place among other alternatives according to the findings obtained. Real objects and models are one of the powerful techniques for making learning interactive and tangible. Direct demonstration of an object is also one of the best ways of learning. Bringing the models of objects that are large enough not to be brought to the classroom environment facilitate the tangible and permanent learning. It can also contribute to learning by doing and experiencing, since objects or models to be brought to the classroom can also be prepared by students (MEB, 2014).

A way from the abstract to concrete is followed in vocabulary teaching and the use of real objects and models is quite appropriate in this regard. Real objects, such as fruits, dresses and some other items, can be shown in class as easily accessible real objects in vocabulary acquisition in foreign language teaching. Large objects, such household goods and vehicles, can be taught by bringing their models to the class (Arslan & Adem, 2010).

Table 9. Significance and consistency levels of vocabulary acquisition through visual tools

Vocabulary Acquisition through Visual Tools	Significance Levels	Consistency Levels
Drawing shapes, pictures and sketches on the board	0,08	
Sticky Reminder Cards	0,07	
Real Objects, Models	0,34	6,99
Vocabulary Teaching Flash Cards	0,11	
Exhibition - Panel works	0,17	
Posters	0,12	
Cartoons	0,12	

Exhibition and panel works were included as the second in terms of significance levels among the alternatives of vocabulary acquisition through visual tools. Displaying the students' works on panels will make them motivated. Since the objects displayed or shown in exhibitions or panels will continuously appeal to the eyes, they will help memorize the vocabulary after a certain period of time. In addition, the presence of real objects or their pictures in exhibition and panel works will help them to be learnt easily.

Results, at the same or close rates, were obtained among the following vocabulary acquisition tools: posters, cartoons and vocabulary teaching flash cards. These are tools that show resemblance to each other. Shapes, pictures, sketches drawn on the board and sticky reminder cards were determined to be the alternatives with the lowest significance level in vocabulary teaching. The common characteristics of these tools are that they appeal only to one (visual) sense.

Measurement of consistency in vocabulary acquisition through visual tools as 6.99 confirms that there is an accurate significance rating among the alternatives.

Vocabulary Acquisition through Audio-visual Tools

The most significant alternative in vocabulary acquisition through audio-visual tools was determined to be videos and films with the rate of 48%. According to the findings, it would be possible to state that videos and films are intensively used in vocabulary acquisition in Turkish as a foreign language. An opportunity is provided for all students to reach for processes that are difficult to reach or obtain in the classroom environment through videos and films. Information, which takes long to learn, can be learned in a very short time with videos and films. It is difficult to forget the information learnt from videos and films that appeal to multiple senses like audio-visual tools. They attract attention to the course or topic with their remarkable features. They help social and physical conditions of the language learned to be recognized. Videos and films offer great possibilities for the recognition of concepts related to cultural elements of the foreign language learnt (Saraç, 2012).

Table 10. Significance and consistency levels of vocabulary acquisition through audio-visual tools

Vocabulary Acquisition through Audio-visual Tools	Significance Levels	Consistency Levels
Videos-films	0,48	
Television	0,29	7,39
Radio	0,09	
Music	0,14	

The method of secondary level of importance in vocabulary acquisition from audio-visual techniques was determined to be television with the rate of 29%. It appeals to multiple senses with its audio-visual features. Current and entertaining television programs are effective in teaching vocabulary in Turkish as a foreign language. Today, especially television programs, known as *Turkish Series*, made an important contribution to the learning of Turkish words by foreigners.

The usage frequency of radio and music was observed to be low since they are only audio tools. Their attractive features are quite weak. Their spheres of influence were attempted to be enhanced by performing visual presentations of music (clips) today. The usage areas of radio and its influence have decreased nowadays due to its low rate of attracting attention. The consistency levels of vocabulary acquisition through audio-visual tools were calculated as 7.39. According to this result, a positive ranking was in question among the alternatives.

Vocabulary Acquisition through Activities

A proper relationship of 5.01 was determined between consistency levels of vocabulary acquisition through activities. Vocabulary acquisition through activities is essential in foreign language teaching. If all other alternative are tools of comprehension and memorization, various activities help to master vocabulary productively. Naturally, the acting alternative was determined to be the most effective with 16%. The significance levels of show-gesture and facial expressions (13%), group games and competitions (12%), and travel-observation-educational games and drama (12%) were determined to be at similar rates. According to the results obtained in this research, it should be noted that vocabulary teaching is more effective when students are directly involved in communication.

Acting is individuals' shaping of their attitudes and behaviors according to a structure by assuming a different structure than they have. It ensures the social and cognitive learning of individuals in education by displaying a role outside his/her personality (Altunbay, 2012). Student learns by doing and experiencing through acting, as he/she actively participates in it. This helps individuals to fast develop strong vocabulary skills. Students' motivation increases since acting sets their multiple senses in motion. In acting, individuals display the information they learnt on the stage by holding dialogues.

Table 11. Significance and consistency levels of vocabulary acquisition through activities

Vocabulary Acquisition through Activities	Significance Levels	Consistency Levels
Travel-Observation	0,11	
Educational Games	0,11	
Competitions	0,12	
Puzzles, Riddles	0,07	
Rhymes, Nursery Rhymes	0,07	5,01
Group Games	0,12	
Drama	0,11	
Acting	0,16	
Show-Gesture and Facial Expressions	0,13	

Students like those language activities which are amusing and involve learning by doing and experiencing (Arslan & Gursoy, 2008). Vocabulary acquisition through puzzles-riddles and rhymes-nursery rhymes was seen to have the least significance. These methods use printed materials without dramatizing them, so they have decreased their spheres of influence. However, the influence areas of these techniques can be increased when implemented to the students in the form of group games or competitions.

Vocabulary Acquisition through Educational Technologies

The highest level of significant alternative was determined in the research with 21% among the criteria of vocabulary acquisition tools with the help of interactive course CDs and smart board educational technologies. These tools have an impact on vocabulary acquisition since they include activities that ensure students' participation. Interactive course CDs are technological tools that provide the opportunity to repeat, practice and learn through viewing and listening to the vocabulary learnt in the class with the help of a computer. The words that are not practiced enough in the classroom can be repeated outside the classroom environment through animations and videos loaded to the interactive course CDs. They help words to be transferred into visual and auditory senses and ensure permanent learning (Ögüt, et al., 2004). Some practical activities for vocabulary acquisition included in foreign language textbooks are supplemented with interactive course CDs.

Smart boards contribute to education with their features such as viewing operations carried out on computer by individuals, performing operations on the board, and saving those operations. They occupy an important place in vocabulary teaching by

realizing learning through doing and experiencing and setting multiple sensory organs in motion (Demirel & Altun, 2012). In addition, they help abstract concepts to be learnt through games.

Table 12. Significance and consistency levels of vocabulary acquisition with the help of educational technologies

Vocabulary Acquisition with the Help of Educational Technologies	Significance Levels	Consistency Level
Computer	0,11	
Internet	0,11	
Projector – Multimedia	0,13	
Interactive Course CDs	0,21	1,44
Electronic Dictionaries	0,12	
Smart Boards	0,21	
Smart Phones-Tablets	0,11	

According to the findings of the research, the alternative with secondary level of importance with 13% was vocabulary acquisition with the help of projector and multimedia. Vocabulary teaching is more effective in multimedia environments where visual and auditory aspects are quite high. Presentations, attracting the attention of the students, have a positive contribution to vocabulary acquisition.

Similar results were observed in teaching vocabulary with the help of computer, internet, smart phones-tablet (11%) and electronic dictionary (12%). These tools are up-to-date. It is possible to associate the low significance level compared to other alternatives by individual learning done with these tools. The consistency ratios of vocabulary acquisition with the help of educational technologies (1.44) indicates that there is a significant rating among the alternatives.

Vocabulary Acquisition through Printed Publications

According to the findings of the research, it was seen that course-books and activity books have the utmost significance level with 44% among the alternatives dealing with printed publications. This result is an indication that traditional vocabulary teaching carried out with course-books is still very powerful. Supporting course-books with pictures and cartoons and providing vocabulary in the context affect the learning positively. In addition, providing samples and exercises related to their areas of usage right next to words themselves have an important contribution to vocabulary teaching. Course-books and activity books in which activities can be found are the most important elements of education. Methods of teaching and materials to be used are determined in accordance with course-books. Target behaviors, which will be acquired by students, are observed in the order given in course-books or activity books (Yapıcı, 2004).

Course-books and activity books have an important place in teaching Turkish as a foreign language. There are many course-books and activity books published for teaching Turkish to foreigners today. Common structure, social and physical conditions of

the target student groups should also be taken into consideration during the preparations of these books. Teaching methods and materials to be used should be determined accordingly.

Table 13. Significance and consistency levels of vocabulary acquisition through Printed Publications

Vocabulary Acquisition through Printed Publications	Significance Levels	Consistency Level
Course-books-Workbooks	0,44	
Dictionaries – Guides	0,20	5,63
Handbooks	0,21	
Newspaper-Magazine	0,15	

Handbooks were determined to have the secondary importance as an alternative among printed publications in vocabulary teaching with 21%. Vocabulary acquisition through dictionaries-guides follows handbooks with 20%. The significance levels of these two tools are close to one another. The most significant feature distinguishing these two tools from course-books and activity books is their usage as reference books.

Vocabulary acquisition through newspapers-magazines is the lowest alternative with 15% among the printed publications. One of the most important reasons for this can be explained by its purpose (individual learning). A direct relationship of 5.63% was determined among the consistency levels of vocabulary acquisition method through printed publications.

Conclusions and Recommendations

The use of vocabulary tools and activities in the right time and place positively affects teaching and learning. In this research, the significance levels of vocabulary acquisition tools and activities in teaching Turkish as a foreign language were determined by analytic hierarchical process.

Based on the held research, several conclusions and recommendations were obtained:

- The tools and activities that are student-centered were found more appropriate for teaching Turkish as a foreign language. In addition, numerous technological tools (computer, television, etc.) began to be used with the development of technology in order to render accurate and strong vocabulary skills. Up-to-date and modern methods that can be used in teaching Turkish as a foreign language were determined in this regard.
- The significance levels of the tools and activities in which students are more involved were seen to have a high significance in vocabulary acquisition in Turkish as a foreign language.
- Tools and activities which appeal to multiple senses in vocabulary acquisition in teaching Turkish as a foreign language were found to be more effective.

- The significance levels of vocabulary acquisition through acting and real objects and models in which students are directly involved and which render learning by doing and experiencing become prominent as a result of the research.
- Vocabulary acquisition with the help of interactive course CDs, videos-films, television and smart boards, were found to make a positive impact on learning with their audio-visual features.
- It was seen that course-books and activity books have an important impact on vocabulary teaching. It was understood that course-books and activity books continue to be used as reference books in vocabulary teaching in Turkish as a foreign language.
- Vocabulary teaching and learning in Turkish as a foreign language should involve multiple senses.
- Turkish as a foreign language textbooks should be developed taking into consideration the student-centered approach and the tools helping to apply it.
- Activity-based supplementary course-books should be developed in order to support vocabulary teaching in Turkish as a foreign language.
- Technological materials should be prepared by using effective tools for vocabulary teaching in Turkish as a foreign language into account. Development of tools and activities frequently used today, such as educational games, electronic dictionaries and electronic software, should be encouraged.
- Research and development committees for vocabulary teaching in Turkish as a foreign language should be established. The committee should benefit from experienced teachers in foreign language teaching and technology design.
- Illustrated Turkish dictionaries should be developed in the context of effective vocabulary teaching tools in Turkish as a foreign language.
- Vocabulary teaching should be carried out by considering learning patterns, social and linguistic structures of the target group who are taught Turkish as a foreign language.
- Courses on vocabulary teaching in Turkish as a foreign language for terminology in the language should be offered after A2 level.
- Teachers, who would do this job professionally, should receive training for vocabulary teaching in Turkish as a foreign language.
- More books, theses and articles should be written on vocabulary teaching in Turkish as a foreign language.

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