

# Metaphoric Perceptions of Teachers and Pre-Service Teachers about 4+4+4 Education System<sup>1</sup>

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•Received 20 January 2016 •Revised 21 March 2016 •Accepted 14 April 2016

This study aims to determine the perceptions of teachers and pre-service teachers about 4+4+4 education system via the metaphors they have developed. In this study, the opinions of teachers and pre-service teachers are described with qualitative approach. The participants of the study are 137 primary school 1st grade teachers, working in Mugla in 2012-2013 academic year, and 116 4th grade students, studying at Primary School Teaching Department in the Faculty of Education in Mugla Sitki Kocman University. In the data collection process, teachers and pre-service teachers were required to complete this sentence: "When the characteristics of 4+4+4 are considered, 4+4+4 education system is like ....., because ....." In the analysis of the data, content analysis technique, one of the qualitative analysis methods, was applied. The perceptions of teachers were separated into 9 categories according to the metaphors teachers and pre-service teachers created about 4+4+4 education system and both the statements mostly used by teachers and pre-service teachers are provided for these categories. These categories are "a continuously changing structure; a system all of whose parts have deficiencies; an application without any preparation and infrastructure work; uncertainty and complication; an application whose future is dark; a useless and inappropriate system; a forcing and imposing application; a graded and systematical structure (positive); meaningless (cannot resemble anything).

*Keywords:* 4+4+4 education system, metaphor, teacher, pre-service teacher.

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doi: 10.12973/ijese.2016.502a

<sup>1</sup>This study was presented as oral proceeding in I. Eurasian Educational Research Congress, organized by Istanbul University and EJER in 24-26 April, 2014.

## INTRODUCTION

When expressing an emotion or opinion, individuals need to concretize the abstract concepts in order for the other people to comprehend them. Natural and logical patterns, piled up from the interaction of individuals with real world, have vital importance in the explanation of abstract structures (Kövecses2002). Therefore, individuals are in need of some instruments by which they can state abstract concepts more easily and make these concepts more comprehensible. Metaphors have become instruments people frequently apply in clarifying and comprehending abstract and complex emotions and opinions. Metaphors also have become structures which individuals remarkably use and come across in their social and educational lives. Because metaphors are main linguistic instruments people have discovered so as to understand, explain, establish and organize the world. Metaphors can help people to realize how they established their own realities and how they perceive the world (Lakoffand Johnson 2005).

“Metaphor”, a Greek word originates from the words of “meta” which means “change” and “pherein” meaning “carry” (Levine 2005). The concept of metaphor has been described differently by researchers who have conducted studies on this field. According to Holman (1985) creating metaphors is identifying by attributing an object's qualities to another object, predicated on imagination. According to Arnett (1999), metaphor is an instrument of perception. In this sense, metaphor is an expression form of how abstract concepts are perceived by people. According to Miles and Huberman (1994), metaphor can be identified as a figure of speech type or a literary instrument which provides comparing two things in terms of similarities by ignoring the differences between them. In addition to this, according to Kovecses (2002), metaphor, expressing a semantic structure with another one, is described as using together two semantic structures having similarities in meaning. Metaphor is created by these two structures, one of which is direct and the other one is indirect (Steen 2007).Based on the common points of these definitions, metaphors can be defined as instruments which can be used in explaining and comprehending abstract and complex concepts by drawing analogies in some points of these concepts with more concrete and comprehensible concepts.

Metaphors have been a focal point in both social sciences and organization analysis in recent years (Celikten 2006) and they have many advantages. Individuals tend to express the truth and realities either intentionally or unintentionally by forming patterns with their lives and experiences. (Lakoff and Johnson 2003). In other words, metaphors can be considered as instruments that are successful in revealing the correct information. Furthermore, Inbar (1996) has stated that metaphors are one of the most powerful instruments that can represent the individuals' believes which they have created with their own reasons. Another advantage of metaphors is that they search out how the concepts, needed to be analyzed, are perceived by people (Cerit 2008). In addition to all of these, metaphors have been used as a rather significant data collection technique in scientific research process. In the field of education, metaphors have been used in the explaining and comprehending process of some concepts. In this regard, there are many studies conducted in the national and international literature. It has been observed that the studies done in recent years generally aim at determining the opinions of participants about the concepts of teacher, teaching and learning, curriculum and curriculum development. Some of these studies are (Aykac and Celik 2014; Thomas and Beauchamp 2011; Tasdemir and Tasdemir2011; Aydın and Pehlivan 2010; Boyacı 2009; Botha 2009; Cerit 2008; Saban 2009).

In 2012-2013 academic year, a radical change whose name was called 4+4+4 education system took place in the education system of Turkey. 4+4+4 education system, which brought quite important changes that might affect teachers, students

and parents, have been one of the most discussed matters about education process in recent years. According to this regulation, it was decided that compulsory education would become 12 years and in the form of 4+4+4 which can be interrupted, instead of the current 8 uninterrupted years education in the form of 5+3 (Güven 2012).

However, this new application has been a matter of debate about the problems except for its advantages. Some of the most important problems are these: As the students were too young to read and write, they had a lot of difficulties in learning how to read and write, since the system began to be applied quickly and without planning, appropriate curriculum and books were not prepared, teachers do not have enough information about the new system and its application, the physical conditions of schools were not appropriate for the system and the system was prepared without taking teachers' opinions into account. 4+4+4 education system, which has been carried into practice without enough preparation, is thought to have negatively affected the students, teachers and also the parents. Teachers have had problems in adapting the new 4+4+4 education system. As the primary school teachers were training students for 5 years in the old education system, some of them have become redundant since the 5 years of primary education changed into 4 years. In addition to this, students have had significant problems in learning how to read and write because the schooling age was reduced to 60 months, which means a 5-year-old child could start school, they had failures at such a young age and as a result of this they had lack of confidence in themselves and reluctance for their schools. Also, the children who are at their 60, 72 or 80 months were trained all together in the same classes, which resulted in physical, cognitive and psychological differences between the students. On the other hand, the problems students encountered have surely affected the parents. The parents who did not want their students to start the school at such a young age needed to go to hospitals and take receive report from doctors meaning that their child could not go to school. By this way, it can be said that the new education system have affected the main participants of education, who are teachers, students and parents.

As 4+4+4 education system is a new application, it has a great significance on how both the teachers, who are the implementers of education systems, and pre-service teachers, who will become the implementers of them in the near future, perceive and comprehend this system. Only if perceived correctly by the current implementers and future implementers, the education system will bring to a success conclusion. This study is therefore thought to contribute to the field as there have been no similar studies about the new system and as it tries to determine the perceptions of teachers and pre-service teachers about a new education system.

With regard to these, the aim of this study is to determine the perceptions of teachers and pre-service teachers about 4+4+4 education system by the metaphors they used. In the direction of this primary aim, the answers to the questions below are searched:

1. *By using which metaphors and reasons teachers express their perceptions about 4+4+4 education system?*
2. *By using which metaphors and reasons pre-service teachers express their perceptions about 4+4+4 education system?*
3. *What are similarities and differences between the metaphors teachers and pre-service teachers developed?*

## **METHOD**

### **Research Design**

In this study, the opinions of teachers and pre-service teachers are described with qualitative approach. Qualitative approach is defined as a research in which

qualitative data collection methods such as survey, interview and document analysis are applied and a qualitative process, which is oriented in presenting the perceptions and events in natural environment, realistically and holistically, is followed (Yıldırım & Şimşek 2011).

## Participants

Convenience sampling was used to select participants. This type of sampling is frequently preferred by the researchers, because participants can be easily reached and they are willing to participate in the study (Teddlie and Yu 2007). The participants were 137 primary school 1st grade teachers, working in the city center, counties and towns in Muğla, and 116 4th grade students, studying at Primary School Teaching Department in the Faculty of Education in Muğla Sıtkı Kocman University in 2012-2013 academic year.

## Research Instrument and Procedure

In the data collection process, teachers and pre-service teachers were required to complete this sentence: "When the characteristics of 4+4+4 are considered, 4+4+4 education system is like ....., because ....." The participants were required to resemble the education system to a metaphor and write their reason about the metaphor they had created. Because, as Forceville (2002) indicated, in order for a fact to be regarded as a metaphor, it needs to have a subject, a source and features (reasons) that are thought to refer from the source to the subject. The participants wrote their opinions on ready-prepared forms. The forms, collected from teachers and pre-service teachers have constituted the main data source of this research.

## Data Analysis

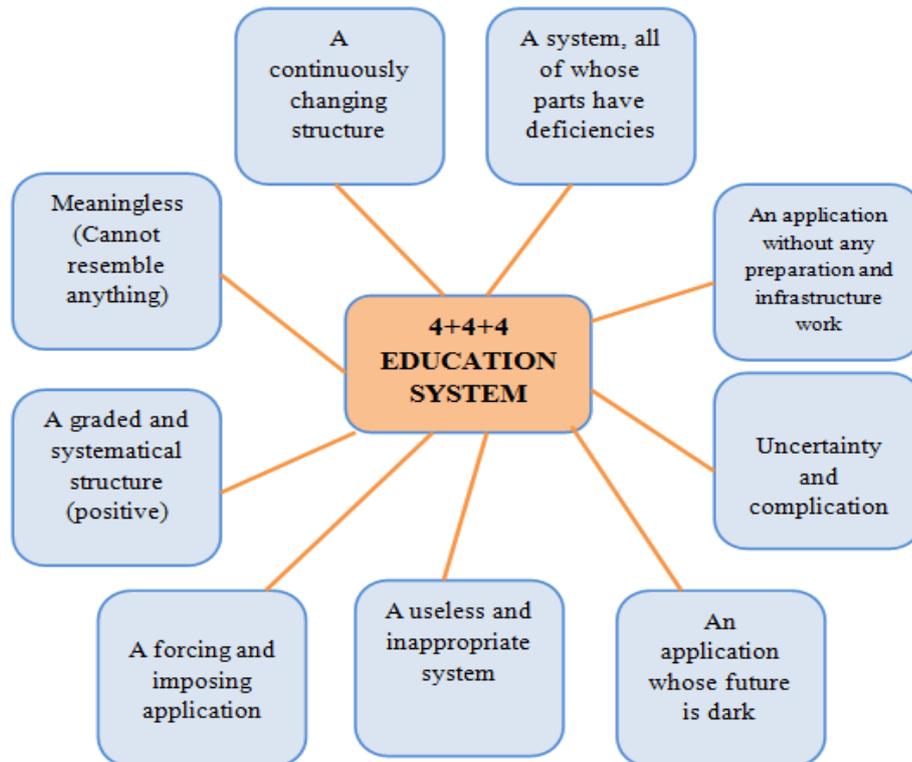
In analyzing and interpreting the data, content analysis technique one of the qualitative analysis methods, was applied. The main purpose in content analysis is to reach connections that can clarify the collected data. By this aim, first the collected data is conceptualized, then these concepts are organized logically and according to these, the conditions clarifying the data are themed (Yıldırım and Şimşek 2011).

The analysis and interpretation process of the metaphors, developed by teachers and pre-service teachers, were practiced in 5 stages (Saban 2009): They were arranged as (1) codification and elimination stage, (2) compilation a sample metaphor stage, (3) category development stage, (4) validation and reliability provision stage, (5) data transfer to MS Excel Program for quantitative data analysis stage. In data analysis stage, written data were digitized.

In data analysis stage, data codification was applied by three different encoders. The researchers compared the themes, and the reliability was calculated with the formula of  $[\text{Agreement} / (\text{Disagreement} + \text{Agreement})] * 100$  (Miles & Huberman, 1994) and for the themes related to 4+4+4 education system the reliability was found to be 92%. The data obtained from the study were evaluated by grouping them as positive or negative with regard to the similarities and differences and they were grouped in 9 categories. After the grouped data were digitized, they were represented in the forms of percentage and frequency in tables. Having participated in the study voluntarily, the teachers and pre-service teachers' opinions and expressions about the metaphors they had created were written without any change and they were interpreted by the researchers. When the metaphors and their reasons were given, in order to avoid revealing the participants' identities, the teachers were coded as T and pre-service teachers were coded as PT, then their number of participation was written and lastly their gender was coded in brackets; F for females and M for males.

**RESULTS**

The categories constituted from the metaphors created by teachers and pre-service teachers are given in Figure 1.



**Figure 1.** Categories Formed by the Metaphors Teachers and Pre-Service Teachers Created

As can be seen in Figure 1, there are 9 categories formed by the metaphors teachers and pre-service teachers created about 4+4+4 education system. These categories are “a continuously changing structure; a system all of whose parts have deficiencies; an application without any preparation and infrastructure work; uncertainty and complication; an application whose future is dark; a useless and inappropriate system; a forcing and imposing application; a graded and systematical structure (positive); meaningless(cannot resemble anything).”

The distribution of the categories of metaphors teachers used about 4+4+4 education system is given in Table 1.

When Table 1 is investigated, it can be observed that teachers mostly associated 4+4+4 education system with the metaphor of “an application without any preparation and infrastructure work” (18.2%). At the same time, teachers substantially perceived 4+4+4 education system as “a continuously changing structure” (16.8%) and “a system all of whose parts have deficiencies” (16.8%). Moreover, a small part of the teachers described the education system as “a forcing and imposing application” (5.8%), whereas at the least proportion, they regarded 4+4+4 education system as “a graded and systematical structure (positive)” (3.6%).

The most outstanding metaphors teachers developed about 4+4+4 education system and the reasons they stated are given below.

**Table 1.** Distribution of the Metaphors Teachers Expressed Their Perceptions about 4+4+4 Education System

| Metaphor Group   | f   | %    |
|--|-----|------|
| A continuously changing structure                              | 23  | 16.8 |
| A system all of whose parts have deficiencies                  | 23  | 16.8 |
| An application without any preparation and infrastructure work | 25  | 18.2 |
| Uncertainty and complication                                   | 12  | 8.8  |
| An application whose future is dark                            | 19  | 14   |
| A useless and inappropriate system                             | 11  | 8    |
| A forcing and imposing application                             | 8   | 5.8  |
| A graded and systematical structure (positive)                 | 5   | 3.6  |
| Meaningless (cannot resemble anything).                        | 11  | 8    |
| <b>Total</b>   | 137 | 100  |

Most of the teachers stated that 4+4+4 education system was expeditiously implemented without doing enough infrastructure works and they developed metaphors such as a shanty, and premature baby. The metaphors teachers created about the metaphor group “an application without any preparation and infrastructure work” are given below.

*T42(F): 4+4+4 education system is like a shanty. Like the shanties which are done swiftly and without enough preparation, the education system was applied without any infrastructure work, plans or programs.*

*T75(M): 4+4+4 education system is like a premature baby, because like a baby who comes when preparations are not completed, 4+4+4 started without enough preparations.*

Besides, an important part of the teachers stated that the education system in Turkey had shown continuous changes for many years and also they expressed that almost all of them were radical changes. The metaphors and the reasons teachers remarked about 4+4+4 education system in the metaphor group of “a continuously changing structure” are given below.

*T16 (M): 4+4+4 education system is like jigsaw puzzle, because like the kids’ jigsaw, education system is always changing.*

*T 89 (F): 4+4+4 education system is like chameleon because the education system has been changing so fast that even the teachers cannot follow.*

Moreover, an important part of the teachers expressed that there were deficiencies and faults in each part of 4+4+4 education system by developing metaphors such as broken car, sandcastle, and camel. Teachers’ opinions are like these:

*T27(M): 4+4+4 education system is like a car with a broken engine because a car with a broken engine can never work. The problems in the education system are as big as a broken engine, that’s why the education system cannot work efficiently.*

*T 103 (F): 4+4+4 education system is like a sandcastle. Because the education system has many problems and seems as if it is going to be destroyed very easily when it faces even one more small problem.*

*T 131(M): 4+4+4 education system is like camel. Because the system has a lot of curvatures like the back of a camel even though the system appears to be very powerful and majestic like a camel.*

On the other hand, a small part of the teachers opined that 4+4+4 education

system was a forcing and imposed application by developing metaphors such as a hammer and surgery. Teachers' opinions are these:

*T74(M): 4+4+4 education system is like a hammer because it started to be applied without asking teachers' opinions the education system appears to have come out of a clear sky.*

*T104 (F): 4+4+4 education system is like a surgery. As a surgery is implemented on a person no matter he wants it or not, the education system began to be implemented without considering we want it or not.*

On the least proportion, teachers perceived 4+4+4 education system as positive and developed metaphors such as rainbow and stairs by emphasizing that the education system is a graded and systemically designed application. The metaphors and reasons teachers developed are given below.

*T12 (F): 4+4+4 education system is like rainbow. Just like the colors in the rainbow, in 4+4+4 education system students who are at different levels are educated in the same classes. I think that these differences will surely enliven our education system.*

*T128 (F): 4+4+4 education system is like stairs because the new education system has a progress step by step. In my opinion, this system will provide students develop gradually.*

When teachers' opinions are evaluated, they mostly highlighted the negative sides of 4+4+4 education by expressing that the system has a great deal of deficiencies.

The distribution of the categories of metaphors pre-service teachers used about 4+4+4 education system is given in Table 2.

**Table 2.** *Distribution of the Metaphors Pre-Service Teachers Expressed Their Perceptions about 4+4+4 Education System*

| <b>Metaphor Group</b>  | <b>f</b> | <b>%</b> |
|--|----------|----------|
| A continuously changing structure                              | 13       | 11.2     |
| A system all of whose parts have deficiencies                  | 12       | 10.4     |
| An application without any preparation and infrastructure work | 9        | 7.8      |
| Uncertainty and complication                                   | 9        | 7.8      |
| An application whose future is dark                            | 13       | 11.2     |
| A useless and inappropriate system                             | 6        | 5.1      |
| A forcing and imposing application                             | 4        | 3.4      |
| A graded and systematical structure (positive)                 | 35       | 30.1     |
| Meaningless (cannot resemble anything).                        | 15       | 13       |
| <b>Total</b>   | 116      | 100      |

When Table 2 is investigated, it can be indicated that pre-service teachers mostly associated 4+4+4 education system with the metaphor of "a graded and systematical structure (positive)" (30.1%). At the same time, pre-service teachers substantially perceived 4+4+4 education system as "meaningless (cannot resemble anything)" (15%). Moreover, a small part of the pre-service teachers described the education system as "a useless and inappropriate system" (6%). On the other hand, they

regarded 4+4+4 education system as “a forcing and imposing application” at the least proportion (4%).

The most outstanding metaphors pre-service teachers developed about 4+4+4 education system and the reasons they stated are given below.

Most of the pre-service teachers perceived the education system as positive and they developed metaphors such as stairs, rings of a chain, and rainbow. The metaphors and the reasons pre-service teachers remarked about 4+4+4 education system in the metaphor group of “a graded and systematical structure (positive)” are given below.

*PT50(M): 4+4+4 education system is like rainbow. In 4+4+4 education system is formed when different characteristics come together as a rainbow consists of many different colors.*

*PT73(M): 4+4+4 education system is like the rings of a chain because every chain of 4+4+4 education system comes together and constitutes a complement.*

*PT93(F): 4+4+4 education system is like stairs because in the new education system students have a chance to develop themselves step by step and gradually just like stairs.*

In the meanwhile, an important part of the pre-service teachers could not associate the 4+4+4 education system with anything since they could not comprehend the system precisely. Pre-service teachers' opinions are these:

*PT4(M): 4+4+4 education system is like nothing, because if I resembled the system to something, I would attribute meaning to it. However, I think that the system is meaningless.*

*PT62(F): 4+4+4 education system is like nothing, because I could not understand anything about the system since nothing is clear in the system.*

On the other hand, correlating it with the metaphors such as Nokia 3310 and tight-fitting dress, a remarkably small part of pre-service teachers stated that the new education system was not appropriate for Turkey's current condition and so it will provide no benefit for the country. Pre-service teachers' opinions are these:

*PT56(M): 4+4+4 education system is like Nokia 3310 because when compared with other mobile phones, it cannot provide enough benefits and not suitable for the current conditions. Just like this, 4+4+4 is useless and inappropriate application.*

*PT82(F): 4+4+4 education system is like a tight-fitting dress. Like a tight-fitting dress, the new education system is improper and nonfunctional*

Besides, at the least proportion, pre-service teachers indicated that 4+4+4 was an imposing system which was put into practice by force and they developed metaphors like enchained people and donkey. The metaphors and reasons pre-service teachers developed are given below.

*PT2(M): 4+4+4 education system is like a donkey because a donkey has to obey its owner's instructions. The implementers of 4+4+4 education system, teachers have to obey what this forcing system has brought.*

*PT111(M): 4+4+4 education system is like enchained people because teachers and school administrations were made to apply 4+4+4 in forcibly and imposingly.*

When pre-service teachers' opinions are evaluated, it can inferably be concluded that most of them emphasized the advantages and positive sides of 4+4+4 education system with the metaphors they developed.

## DISCUSSION AND CONCLUSION

According to the results of this study, it is obvious that teachers and pre-service teachers perceived 4+4+4 education system differently. The metaphors teachers

developed about the education system took place in the metaphor groups of an application without any preparation and infrastructure work, a continuously changing structure, and a system all of whose parts have deficiencies. By this way, teachers mostly expressed that 4+4+4 education system changed impulsively and radically, and these changes occurred without making enough infrastructure and preparation works, and so the education system had a lot of deficiencies and problems.

Similarly, teachers perceived 4+4+4 education as positive at the least proportion and they regarded the education system as a graded and systemic approach. In other words, teachers considered that the disadvantages of 4+4+4 education system outweighed its advantages. On that sense, the negative attitude and perception of teachers, the only implementers of education system both shows that definitely there appears to be deficiencies and problems in the new education system. Therefore, it is inevitable that their perceptions and attitudes towards the education system affect their achievement in application because an application does not have change of achievement unless it is accepted and supported by teachers. Hence, it can absolutely be concluded that the achievement of educational applications is in direct proportion to teachers' effort and desire for application.

On the other hand, pre-service teachers mostly related 4+4+4 education system with the metaphor group of a graded and systematical structure and they emphasized that the new education system continues gradually and step by step, all the grades have the characteristics of a follow-up for each other and they complete each other. When considered from this point of view, it can be clearly stated that pre-service teachers mostly highlighted the positive points in 4+4+4 education system and they perceived the system as positive.

In this context, when the metaphors developed by teachers and pre-service teachers are compared, it can be clearly understood that the metaphors and reasons developed by teachers substantially contain negative perception expressions whereas the ones pre-service teachers created mostly include more positive statements. According to the results of this study, pre-service teachers believed that the deficiencies in 4+4+4 education system could be completed and developed and the current troubles could be overcome. On the other hand, teachers expressed that the problems and troubles in 4+4+4 education system would considerably go on and the future of the system seemed to be underwhelming. A reason of this difference between teachers and pre-service teachers might be the fact that teachers experienced the application process of 4+4+4 education system personally while pre-service teachers only had a chance to observe the application process and could not encounter the current problems directly. It was observed in the study that teachers mostly stated that they had difficulties in the application stage of 4+4+4 education system.

According to the results obtained from this study, most of the teachers, who were the first implementers of the new system, associated 4+4+4 education system with adverse metaphors. They thought that 4+4+4 education system came into application without making enough preparations, the education system had been changing continuously and rapidly and therefore there seemed to be many deficiencies in the education system. In other words, most of the participant teachers perceived 4+4+4 education system as a negative application. However, pre-service teachers who will become the implementers of the new education system in the near future perceive and comprehend the system as positive. The majority of them believed that the education system of Turkey was in a graded and systematical structure and it would be more successful in the future. It can obviously be concluded from the study that there is a significant difference between the perceptions of teachers and pre-service teachers about 4+4+4 education system.

Determining the current problems and deficiencies in the education system has a great importance from the points of both the productivity and effectiveness of 4+4+4 education system. In this sense, with regards to the results of this study, more studies should be done in order for the new education system to be applied effectively by considering the opinions of teachers, students, parents and other components of education. Moreover, so as to apply 4+4+4 education system effectively and productively, infrastructure and preparation works should be conducted, the physical structure, instruments and materials in the education system should be appropriate for the new system so that it could both support students' learning and contribute to teachers' instruction. Furthermore, the reasons why teachers substantially developed metaphors including negative expressions should be searched in detail and in direction to these reasons 4+4+4 education system should be improved.

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