



THE METAPHORICAL PERCEPTIONS OF STUDENTS ON A TEACHER-TRAINING COURSE TOWARDS THE CONCEPTS OF 'TEACHER' AND 'TEACHER TRAINING'

Zehra Taşpınar Şener¹ⁱ,

Ahsen Seda Bulut²,

Hasan Ünal³

^{1,3}Yıldız Technical University, Faculty of Education, Turkey

²Ahi Evran University, Vocational High School,

Department of Primary Mathematics Education, Turkey

Abstract:

Problem Statement: Two different teacher training programs have been implemented in Turkey over recent years. In addition to attending faculties of teacher training (on traditional educational degree programs), graduates from different faculties have the right to become teachers by way of the 'pedagogical formation certification programs'. Given such a situation, it has become a question of great interest to what extent the teacher candidates participating on such a program perceive the concepts of 'teacher' and 'teacher training'. Metaphors are frequently used to elicit the ideas of teachers and teacher trainees with respect to certain elements that constitute the education system.

Purpose study: This research was conducted to elicit by means of metaphor the perceptions of teacher candidates participating on 'pedagogical formation certification program' towards the concepts of 'teacher' and 'pedagogical formation'.

Method: The participants in this research consisted of 280 mathematics teacher candidates who were undertaking pedagogical formation certificate program at four different universities. Having employed open-ended questions, the data collected was then exposed to a process of data content analysis.

Findings and results: At the end of the research, the metaphors created by teacher candidates for the concept of 'teacher' were then grouped under four main themes: a constructivist teacher, a teacher that is regarded like a family (member), a behaviorist teacher and a negative attitude towards the teacher'. As for the metaphors used by the

ⁱ Correspondence: email zehrataspınarr@gmail.com, as_kilic@windowslive.com, hunal@yildiz.edu.tr

teacher candidates for the concept of 'teacher training', these were evaluated under four main themes headings; 'what is perceived as a compulsion', 'what is perceived as unnecessary', 'what is perceived as a mistaken application' and 'what is perceived as necessity'.

Discussion, conclusions and recommendations: Finally, while the metaphorical perceptions of participant teacher candidates towards the metaphor of 'teacher' displayed similarities to a great degree, a number of negative metaphors were also encountered. It was established that approximately one half of the metaphors generated with regard to teacher training encompassed negative meanings. The metaphors generated by teacher candidates were partially elicited with regard to the quality of the pedagogical formation certificate programs.

Keywords: educational systems, teacher, teacher candidates, teacher training

1. Introduction

Just as teachers undoubtedly constitute the most important elements in the educational system, they also play a significant role in the development of a society (Chughati & Perveen, 2013). For this reason, the training of well-qualified teachers has become a common target for all countries wishing to develop a high-quality educational system. (Korean Ministry of Education, 1997, 2004; NCTM, 2000).

There exists no fixed way of evaluating whether a person is a good teacher -as in the words of Darling-Hammond (2006) not-without placing an invisible observer next to the teacher- this renders the issue of defining what exactly constitutes the positive elements of teacher training as problematic. With the aim of realizing a better quality of teacher training, there has been an attempt to take the teacher training systems of countries that are considered successful in the field of education as examples. With this goal in mind, it is possible to encounter numerous studies in academic literature in the field of education that compare teacher training programs in different countries. (Epp and Epp, 2000; IALEI, 2008; UNESCO, 2008; Uygun, Erge and Öztürk, 2011). On examining these studies, one concludes that teacher training programs usually consist of distinct stages involving the selection of teacher candidates, a process of teacher training and a period during which those candidates that are trained are assigned as teachers; most countries are also seen to organize these stages according to their own internal educational policies.

Since the foundation of the Turkish Republic, various institutions established with the aim of meeting the need of training teachers, have undergone developments

and reforms in view of the changes rendered necessary by that particular era. In 1981, the Council of Higher Education (YOK in Turkish) was established and all teacher-training institutions were connected to this central authoritative institution (YOK, 2007). In Turkey, under normal circumstances, individuals who wished to become teachers then had to sit and pass university entrance exams so as to matriculate at educational faculties. Teacher candidates who had graduated from universities from programs that lasted for 4 or 5 years according to the department or exact duration of course that they attended, and then had to sit the national Public Personnel Selection Examination or KPSS to be appointed as teachers. From these exams, teaching candidates who attained a particular ranking could then be appointed as teachers.

However, if we look at the history of the process of teacher training, it can be seen that during certain periods, individuals that had graduated from outside faculties of education were also able to become teachers. In a decision made by the Council of Higher Education in 2010, it was announced that those who had graduated from other faculties would be able to become teachers on completion of a 'pedagogical formation certification program'. Through such a measure, graduates from other faculties, by participating on pedagogical formation courses that lasted for two half-year terms would gain the opportunity to become teachers. (Eraslan and Çakıcı, 2011; Yapıcı and Yapıcı, 2013).

While those who opposed the pedagogical formation certification programs argued that simply for the payment of a fixed fee, those who wished to become teachers could take courses so leading to a decline in the quality of education, those who defended the measure put forward the view that teacher training lessons were necessary for communication within the family and for (wider) human relations and so everybody should enjoy the right to take them. In accordance with this understanding, all graduates wishing to undertake teaching as a professional career would still be obliged to take the Public Personnel Selection Examination (KPSS), and the fact that the best candidates would still be chosen was an indication that there would be no decline in educational standards.

In such a situation, it is thought that the best analysis of this alternative model that has as its aim the training of teachers in Turkey might be conducted with the candidates who will become teachers themselves. What are the purposes and goals of those who participate in teacher training courses, but who had previously chosen to embark on different career and study options? Does the quality of the teacher training education that they received satisfy them or indeed motivate them to an adequate degree? All of these questions may provide an indication of the degree to which this alternative model of teacher training in Turkey serves its purpose. The short-cut when

looking for a way to answer these questions, is thought to exist outside the normal confines of the brain; namely to use metaphors (Stewart, 2013)

The metaphor is described as the supplying of meaning to complicated phenomena by giving a more meaningful and concrete equivalent to complicated phenomena within the human brain (creating a metaphor) (Saban et. al., 2006). According to Lakoff and Johnson (1980), metaphors may create new meanings by eliciting and drawing on past events, our experiences, daily lives or beliefs. From this perspective, the use of the metaphor within the sphere of education becomes unavoidable. In the field of education, it is argued that metaphors may be exploited in the development of educational programs in the encouragement of students to 'think to learn' and the fostering of creative thinking. (Şengül, Katrancı and Cantimer, 2014). In academic literature, together with a number of elements that make up the structure of the educational system, the number of metaphorical studies with regard to the concept of the teacher is particularly common.

Buchanan (2015) in his study conducted with teacher candidates in Australia separated the metaphors generated by teacher trainees with regard to the concept of 'teacher' into two categories: 'teacher-centred' and 'student-centred'. The metaphors derived from the study included positive qualities such as 'helpful' or 'encouraging', while negative metaphors incorporating elements of 'threat' and 'torment' were not encountered. Hamilton (2016) indicated that the metaphors by teacher candidates created with regard to the concepts of 'the teacher' and 'teaching' were influenced both by what the trainees had learned at university as well as their educational experiences from primary school up to university. Furthermore, it also was revealed that the concepts of teacher and teaching took shape for those participants who wished to become teachers during the course of their teaching placements that formed part of their practicum training.

In the study conducted by Cerit (2008) involving primary school, students, teachers and administrators, metaphors towards the teacher incorporated those that indicated some sense of leadership or guidance, that is as a provider or distributor of knowledge, metaphors that described them as a mother or father figure as well as a highly-respected guide. In a number of other studies in which the metaphorical perspectives regarding the concept of teacher were defined, the teacher was again identified as a guide or as a (moral) advisor, one who showed the way. (Achinstein & Barrett, 2004; Baker, 1991; Ben-Peretz, Martinez, Souleda, Huber, 2001; Mendelson & Kron, 2003; Saban, 2003; Wasley, 1991). The emergence of this perception of the teacher as a guide or guidance counselor that features among the ideal teacher profiles within the constructivist approach may be accepted as an indicator of the fact that the

education system has been able to attain a state of harmony with current (societal) developments. Guerrero and Villamil (2002) indicated that English teachers perceived the teacher as being a leader within a collaborative environment, an individual who provided knowledge, a person who confronted difficulties, a cultivator, an innovator, a provider of equipment and apparatus, an artist, a mechanic and a gymnastics teacher. It emerged in Saban, Koçbeker and Saban's study (2006) that defined the metaphorical perceptions of teacher candidates who wished to become class teachers with regard to the concept of 'teacher' that 64% of participants described the teacher in terms of 'traditional' roles, namely: *"the person who presents information to students"*, *"the one that helps to shape the student"* and *"the one who treats/takes care of the student"*. In a similar, in Aydın and Pehlivan's study indicated that the majority of teaching candidates regarded the teacher as the *"person who constitutes the source of knowledge"*.

Clarcken (1997) defined the common metaphors with relation to the roles of the teacher and incorporating related responsibilities and relationships as: father or mother, gardener, oyster shell, prophet or doctor.

When one considers studies conducted on the subject as a whole, it can be seen that in addition to stating whether the perception of the metaphor with regard to the concept of 'teacher' could be considered to be positive or negative, analysis has also been conducted as to the type of philosophy by which these perceptions have been influenced (constructivist, behaviorist or socio-cognitive). In general, within these studies, teacher profiles in accordance with the constructivist educational approach that perceive the teacher as a guide who shares qualities appropriate for the educational environment at hand or present the teacher as a 'moulder' or 'shaper' or 'provider of information' in keeping with the behaviorist system have tended to dominate. For all that, studies conducted by Saban, Koçbeker and Saban (2006) have revealed that the metaphorical perceptions with regard to the concept of 'teacher' differed according to the branch of participants. In such a context, for the learning of mathematics, that plays an important role in the students' real life and successes (Van de Walle, Karp and Williams, 2007), the perceptions of mathematics teachers assume importance in influencing the performance of students.

As regards students' participation on pedagogical formation certificate programs, within academic literature, a limited number of studies are encountered; these focus generally on the teaching profession as a whole (Eraslan and Çakıcı, 2011; Özkan, 2012). Nevertheless, the numbers of studies that aim to identify the metaphorical perceptions of this new sample group are rather limited (Dündar & Karaca, 2013; Taşpınar Şener, Ünal & Aydın, 2015)

Together with the identification of a real need to be addressed within current academic literature, there was an attempt to answer the following questions for the purpose of this research.

- Under which conceptual categories can the metaphors with regard to the concept of 'teacher' held by students be grouped?
- Under which conceptual categories can the metaphors with regard to the concept of 'teacher training' held by students be grouped?

2. Method

2.1 Research Design

In this study, the answers of 280 people mathematics teaching candidates attending pedagogical formation courses at four different universities in response to two open-ended questions were separated into conceptual categories using qualitative method analysis.

2.2 Research sample

The study group consisted of 280 mathematics teacher candidates enrolled on the teacher training certification program at 4 different state universities during the 2014-15 spring term and selected using random sampling. The teacher candidates who participated in the study consisted of 111 trainees from Yıldız Technical University, 53 from Gazi University, 21 from Mimar Sinan University and 88 from Amasya University, with the gender breakdown of the participants being 73 male and 207 female subjects from a total of 280 individuals.

2.3 Research instrument and procedure

The data for the research study was collected in the spring term of the 2014-15 academic year using an open-ended questionnaire. The open-ended questionnaire was created by the first researcher, while the final version of the questionnaire was realized after elicitation of the opinions of the other researchers of the study and another expert in the field not involved in the study and the carrying out of necessary revisions. The above-mentioned open-ended questionnaire consisted of two sections. The first section was prepared with the aim of obtaining certain demographic data regarding the participants. The second section aimed to identify the perceptions of the participants regarding the key concepts of 'teacher' and 'training and was created with two questions featuring prompts such as "mathematics is like..., because" and "training is like..., because..." to elicit open-ended answers

The data collected for the purpose of the research, was collected according to the order in which the teacher trainees entered the training lessons. For this reason, at first, information was provided to students concerning the purpose of the research and the concept of the metaphor and those teacher trainees who wished to take part in the research on a voluntary basis were requested to complete the open-ended questionnaire.

2.4 Data analysis

The metaphors produced by the participants were analyzed using a metaphor content analysis method. For encoding purposes, numbers were assigned to each participant (F1, F2 etc.), and the metaphors they created and reasons for the metaphor were saved in an Excel file. In cases where there were discrepancies between the metaphor and the reason for its use, or in situations where there was no reason cited for the metaphor, such metaphors were disqualified from the scope of the research. Under such circumstances, from the metaphors generated by 280 teaching candidates, 270 participants created acceptable metaphors for the concept of 'teacher', while 255 participants created metaphors for the concept of 'teacher training'; these were separated into categories created for the purposes of the research.

In creating the categories, firstly, the Excel file was examined by both the first and second researcher and codes were generated. The categories that had been generated in previous studies concerning metaphors that had appeared in academic literature were examined, and the categories under which the codes obtained from these studies were to be grouped were defined according to the shared convictions of the researchers involved together with the elicitation of the opinions of an expert from the field. After these categories were defined, every metaphor and the reason for its creation were assigned by two researchers working independently to the specific categories. The reliability of the assigning of the metaphors to particular categories, taking into account the similarities and differences in these decisions were calculated using the formula devised by Miles and Huberman (1994) (Reliability = Agreement-Consensus/Agreement consensus + Difference in Agreement). In the first instance, there was a harmony of 84% for the 'teacher' and 87% for the teacher training category respectively. However, a revision process was undertaken and this led to an agreement of 94% for the category of teacher and 93% for teacher training.

While conducting the encoding, it was established that the same words used as metaphors had also at times also been used within the reasons for them. For this reason, codifications were constructions taking into consideration the reasons with which metaphors had been created.

3. Findings

It is given below (Table 1) that distribution of the metaphors used by participants for the concept of 'teacher' according to main themes and sub-themes.

Table 1: Distribution of the metaphors used by teacher trainees for the concept of 'teacher' according to main themes and sub themes

Teacher	f	%	Examples
The constructivist teacher			
A guide	65	24	He/she is like water, he/she contributes to the growth of the tree and its blossoming. He/she is like a guide, he shows the way. He/she is like a mean of communication; he/she ensures that we understand more clearly. He/she is like a lifestyle coach; he/she guides us in our lives.
Innovator	10	3.7	He/she is like the sun; his/her energy never finishes.
Sub total	75	27.7	
A teacher seen like a family (member)			
A source of life	12	4.4	He/she is like water, the students are like plants, the teacher is the water of the soul that brings life to that plant He/she is like paint. He/she renders life colorful He/she is like the sea; when one looks at him/her, he/she provides calm and happiness.
Compassionate forgiving peaceful	52	19.25	He/she is like an angel; he/she is patient and cheerful He/she is like a parent; he/she imparts life and exerts effort/labor He/she is like a parent; he/she is warm and full of love. He/she is like a mother, he/she protects with love.
Others	4	1.4	He/she is like a family (member) because the place where the student spends most of his/her time is school.
Sub total	68	25	
Behaviourist teacher			
A 'moulder' or 'shaper'.	48	17.7	He/she is like a sculptor, if he/she exerts a real effort, wonderful works of art may emerge. He/she is like a gardener; he/she feeds the students that are brought to him/her and helps them grow. He/she is like a jeweler; in the same way, he/she processes precious stones, a teacher processes us and helps to enlarge us.
A provider of knowledge	40	14.8	He/she is like a well-composed book, he/she provides us with necessary knowledge He/she is like a source of knowledge; we can learn many things from him/her.

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			He/she is like the sun; he/she enlightens all around with his/her knowledge.
Sub total	88	33	
Negative attitudes towards the teacher			
An unloved person	4	1.4	He/she is like a soldier, he/she has an unchangeable mould, there are rules that are never to be broken and that are always valid. He/she is like a dangerous substance, if one plays with his/her properties, it will have negative consequences
A tough angel	16	5.9	He/she is like a slave, he/she works himself/herself from morning to evening He/she is like a candle; he/she enlightens all around him/her but drains himself/herself.
Sub total	20	7.4	
Others			
A teacher who changes according to a whim/chance	14	5.18	He/she is like the rain; he/she may be merciful or trouble. When climbing the stairs, he/she is like a bannister rail that we hold for support. If he/she rots away, he/she may cause us to fall, but if/she he is safe he/she will assist us in comfortably reaching our target.
Valuable	3	1.1	He/she is like gold, he/she is very valuable
Other	2	0.7	He/she is like a soldier; he/she needs to be alert and agile.
Sub total	19	7.03	
Total	270	100	

According to Table 1, the metaphors generated by participants with regard to the concept of 'teacher' were collected under four main themes. In such a way, the metaphors that were defined by the participants were separated into two sub-categories and the metaphors submitted were perceived as being in keeping with the constructivist principle as regards the role of the teacher. The first of these categories was that of the teacher being a 'guide' that was created from the metaphors that reflected the qualities of the teacher as being one who shed a light on the road that the student set out on and the idea of the teacher as being one who acted as a guide. The other category was made up of metaphors (n=10) that were linked to concepts in which the teacher was seen to possess superior qualities such as possessing a never-ending energy. These metaphors were connected to the quality that a teacher was seen as one who continually renewed himself and so were named 'innovator'.

Under the theme of 'a teacher is like a family (member)' were collected metaphors that were created and based on the concept of the teacher as being someone who conveyed feelings that made participants feel as if they were part of a family.

When looking at the subcategories under this theme, namely metaphors that reflected the way that the teacher was a person who protected his students like a parent, and who showed compassion and patient were grouped under the category of 'compassionate, forgiving, peaceful'. Finally, those metaphors that reflected the fact that the teacher occupies an important position in a person's life were grouped under the category of 'a source of life'.

Under the theme of the behaviorist teacher, were collected metaphors that reflected the characteristics of the teacher that has adopted behaviorist philosophies. Under the sub-category of a 'moulder or shaper' were included metaphors that created the perception that rather than the teacher allowing the talents of the student to emerge, the teacher shaped them according to his own desires. Under the sub-category of 'provider of knowledge' were collected metaphors that envisaged the teacher as the individual that takes upon himself the role of conveying existing knowledge to the student

As regards the metaphors that convey negative meanings with regard to the concept of the teacher, under the theme 'negative attitudes towards the teacher' were collected under the sub-categories that 'an unloved person' that means one who oppresses people, who is disliked by others person and the 'tough angel' sub-category that implies that the teaching profession is a difficult and exhausting one.

In addition to all these themes, those metaphors that did not easily enter any category were collected under the theme heading 'others'. Under these circumstances, the metaphors issued by participants that did not attach any absolute meaning or significance to the concept of the teacher, were placed under the 'luck' category. In this regard, the concept of the teacher can be regarded as a phenomenon that changes from individual to individual.

4.1 Analysis of the Metaphors submitted by teaching candidates attending pedagogical formation certificate programs when describing teacher training

It was established that 225 individuals from the total number of teaching candidates who submitted answers to the open-ended question 'pedagogical formation is like..., because...' created meaningful metaphors. These metaphors were separated after taking into consideration the reasons they submitted for the use of that metaphor as ascertained from the section of the response they offered following the open prompt starting with the word 'because...'. The metaphors generated were assigned to the separate categories and placed under the following themes and sub-categories.

Table 2: Distribution of the metaphors according to the main and sub themes contained within the metaphors created by teaching candidates attending pedagogical formation certification courses with regard to the concept 'pedagogical formation'

Pedagogical Formation	f	%	Examples
Pedagogical Formation Perceived as a Compulsion			
Ordeal	23	9.31	It is like the opera, nobody wants to watch it but the state forces people to do. Like a nightmare, sometimes it squeezes my soul It is like an ordeal, it doesn't know when to end. It is like Chinese torture, a certain amount in a short time but even a certain amount can be considered as nonsense. It is like a torment, doing lessons until the middle of the night is not a humane action. It is like torture, it wears us out by evening.
An obligation	11	4.45	It is like the State Personnel Selection Examination, it is an obligation so as to be appointed as a teacher. It is like one step on a staircase, it is necessary to pass it climb the staircase. It is a kind of compulsion; teaching candidates need the document that they will receive at the end of the course.
Sub total	34	13.7	
Pedagogical Formation perceived as unnecessary			
Useless	24	9.7	It is like an unnecessary thing, it is something that has been envisaged with material aims, and I don't think it has any use. It is like a manual or handbook, it remains unread and teaching is learned by experience. It is unnecessary, the qualities of a teacher are connected to his/her personality
Temporary	6	2.4	It is like Platonic love, it is not worth the effort you invest, in the end you will do a lesson as you already know how to. It is like a dream; it only lasts a short time and is unmemorable.
Subtotal	30	12.1	
Pedagogical Formation as a false application			
A compressed time period	15	6	It is unnecessary as the profession of education is a profession of the heart; teaching cannot be 'learned' immediately It is like a flood, as you take a number of lessons in a short period.
Inappropriate conditions/inadequate	18	7.29	It is like a business; it is expensive. It is like a missed train, it needs to be taught at an earlier

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education			stage.
Sub total	33	13.3	
Pedagogical Formation perceived as a necessity			
The profession	85	34.4	It is like a manual or handbook, the students must be shown how to use it. It is like water given to a tree; in the same way as a tree will not mature if it is not provided with water, the teacher cannot grow if he/she does not receive this education. It is like a costume, a teacher who doesn't wear it, cannot carry out the role as it is expected of him
Necessary for Life	52	21	It is like the skeletal system, the body has no meaning without it. It is like a pen, without it, nothing may be written. It is like a guide; it shows us the way and helps us to constantly understand how we should behave.
Sub total	137	55.4	
OTHER	13		
FINAL TOTAL	247		

On examination of Table 2 the metaphors generated by participants with regard to 'teacher training' were grouped under four themes. Those metaphors that perceived teacher training in general to be a compulsion were collected under the sub-category of 'compulsion'. Those metaphors that regarded training as a 'torment' were grouped under the category of 'ordeal'. Those metaphors that reflected that pedagogical formation was a compulsion that has to be tolerated to receive a teaching certificate were collected under the theme of 'compulsion'.

Under the theme of 'unnecessary' were created the sub-categories of 'useless' for those metaphors that reflected the thinking that the training program did not have any worth, and 'temporary' for metaphors that indicated that participants thought that the training would be forgotten soon after the end of the course.

The metaphors that reflected problems experienced with the training program at the application stage were collected under the theme of 'false application'. In this regard, the metaphors generated by the participants reflected the fact that the time allocated for the course was limited (n=15) and that certain mistakes regarding its application had been committed (n=18).

Finally, the metaphors submitted by participants that perceived training programs as a necessity were collected under the heading of necessity. In this respect, a number of metaphors reflected the fact that for the profession training was seen as necessary (n=85). Those metaphors that suggested that training could offer direction to

our lives, help develop communication skills and engender empathy were included in the category entitled 'necessary for life'.

5. Discussion, Conclusion and Recommendations

5.1 Discussion

The aim of this study was to identify the perceptions of teaching candidates attending training programs with regard to the concepts of 'teacher' and 'pedagogical formation'. According to the results of the research, the metaphors submitted by participants with regard to the concept of 'teacher' were separated into 4 main themes. In this regard, it was identified that a quarter of the metaphors were collected under the theme of 'constructivist teachers'. The metaphors that were included under this theme were in the main included within the category of 'a guide'. When one considers metaphorical research studies conducted with teacher candidates, the characteristic of the teacher as a guide is found to come to the foreground. (Achinstejn ve Barrett, 2004; Ben-Peretz, Mendelson ve Kron, 2003; Hamilton, 2016; Martinez, Souleda, & Huber, 2001). Nevertheless, in an environment that has been organized according to the constructivist principle, it would be expected that different teacher personalities should also be featured prominently. The concept of the teacher, as seen in the example featured in the study by Nikitina and Furuoka (2008), in which he is regarded as a team member and communicator in constant process of communication and cooperation with students was not obtained from the findings of this study. To allow the effective creation of a learning-teaching process, environments must be created that allow for two-way teacher-student relationships. In this regard, a very small number of metaphors submitted by participants were collected within the 'innovator' category. In this respect, it was concluded that the metaphors provided that hinted at renewed meanings for the teacher and that perceived him as being someone who never tired and was constantly changing were in harmony with the 'innovator' identity that the teacher applies within the active learning process. Teachers, in trying to deliver success in a class to a large number of students with different talents, requirements and successes, need to possess extensive teaching repertoire. With this in mind, he will be able to renew and reinvent himself in accordance with the ever changing requirements of the present age (Taşpınar, 2003).

One quarter of the participants linked the concept of the teacher to the family. It emerged that in the majority of studies conducted at various times, there exists a number of metaphors that reflected qualities of the teacher such as the fact that he was regarded as 'patient', 'affectionate' and 'self-sacrificing'. (Cerit, 2008; Clarken, 1997).

The metaphor of the teacher as the 'moulding and shaping teacher' that was included within the theme of the behaviorist teacher should be accepted as an indication that the classic image of the mathematical behaviorist teacher still exerts an influence. (Saban, 2004). This approach is taken to mean that the teacher in accordance with his own desires or teaching program in his hand tries to 'shape' the student (in the same way as a sculptor attempts to shape a statue), without making any attempt to direct the student according to the student's own talents and instead endeavours to place him in a set mould. Such a teacher limits the student's autonomous thinking and prevents the evaluation of new information that does not correspond to the mould of thinking already set in place. (Özden, 2005). In some studies, metaphors that have taken the teacher to be the one that adopts a 'shaping' or 'moulding' role have (unexpectedly) assumed a dominant position (Clarken, 1997; Guerrero and Villamil, 2002; Saban, Koçbeker and Saban, 2006).

Another category that was included under the theme of the behaviorist teacher was that of the 'teacher that provides knowledge' When the beliefs of teacher candidates with regard to teacher profiles are taken into consideration (Wan De Walle, Karp & Williams, 2013), such a situation regarding such perceptions within an active learning environment, suggests that students remain distanced from the constructivist theory that assumes students create knowledge for themselves that has featured so prominently in other studies. (Martines, Sauleda& Huber, 2001; Guerrero and Villamil, 2002).

It was also identified that 7% of participants had selected metaphors that expressed negative attitudes towards the concept of teacher. Metaphors, albeit rarely were encountered, that expressed the idea that teachers displayed negative behaviors towards society or that teaching was a difficult profession. Although in studies conducted negative metaphors are rarely encountered (Buchanan, 2015; Cerit, 2008), in a study carried out by Yıldırım, Ünal and Çelik (2011) in which metaphors were identified with regard to teachers, inspectors and administrators, such negative metaphors as 'a cheap workforce', 'monotonous', 'inconsistent', 'lazy', 'aggressive' and 'crushed' prevailed. When one examines the literature compiled on this topic in general, it may be mentioned that teachers from different branches of study or departments or in studies involving students, similar metaphors were generated.

If one examines the themes obtained with regard to pedagogical formation, it may be identified that almost half of the metaphors collected under the four main themes consisted of metaphors that included negative connotations. The number of participants that considered teacher training to be totally a case of compulsion or that it was unnecessary cannot be considered insignificant (n=64). Nevertheless, there are also

metaphors that indicate that it is felt that teacher training is necessary but that the way it had been applied is mistaken. Such a state of affairs may be an indication that even a one-year training program may not be considered something positive from the perspective of students. Conversely, certain participants stated through the metaphors they generated that this training was extremely necessary for their vocational and professional life. The fact that the responses of subjects that have been educated within the same system encompass such contrasting perspectives increases the need for research to be conducted into the underlying causes of such a situation. Such a contrast may not originate from the viewpoints of participants towards the teaching profession but rather may be understood from the answers provided with regard to the concept of 'teacher'. This is due to the fact that participants have in two separate sample groups (teachers and students) have created metaphors that demonstrate a clear similarity. Furthermore, the negative metaphors with regard to the teaching profession are very small in number. Nevertheless, the creation of such negative metaphors with regard to pedagogical formation, may offer some indication that teacher training is conducted under largely unfavourable conditions. Moreover, similar results were obtained from studies involving students conducted by Dündar and Karaca (2013). The conceptual categories obtained from the metaphors generated in studies by Dündar and Karaca were "a source of knowledge", "a second chance", "an obligation", "a dark road", "an instrument of torture", "a source of depression" and "training as a contradiction".

5.2 Conclusions

According to the results of this study, it cannot be said that the perspective towards the 'teacher' of the teacher candidates in the group featured in this research differed greatly from those of other teaching candidates elsewhere. However, it is determined half of teacher candidates have a negative perception about 'pedagogical formation'. Leaving aside these negative perceptions, half of the participants in this studies also employed metaphors that reflected that training was important for their lives and profession. Similarly, the cause for such extremely different perceptions among participants may be caused on account of the expectations held by teaching candidates towards the training on offer.

5.3 Recommendations

For those individuals learning to teach, the provision of opportunities that will allow them to reflect their ideas in the form of metaphor to one other members of their study group, may allow teaching candidates, through adaptation of their peers' ideas to gain new perspectives on the profession (Hamilton, 2016). For the purposes of this study, it

may be suggested that that opportunities for communication between teacher candidates at faculties of education and those candidates attending certification courses should be increased. In such a way, over the duration of four years, those from the education faculty who have received lessons with view to teaching may through way of social activities meet with students who have studied at university with very different professional aims, and this will allow teacher training students to engage in an exchange of ideas with students who have undertaken very different activities and pursuits. On account of such an exchange of ideas, those students who form part of a group of teacher training certification students may gain a very different perspective with view to the issue of teacher training. Even the inclusion of metaphors with regard to experienced teachers, may allow teacher trainees to look at issues from a wider perspective. Furthermore, the same study may be conducted considering the opinions of students at faculties of education and experienced teachers. In addition, by conducting interviews of a long duration with students it may be possible to reach a more profound and extensive insight into the reasons about why students chose the teaching profession and their perspectives with regard to the teaching profession.

The sample group for the purposes of this study consisted of teacher candidates whose departments are mathematics. The identification of the metaphorical perceptions of teacher candidates according to their various branches of study may serve to further highlight the true nature of the teaching training certification program. The increase of studies involving teaching candidates in different branches may offer clues as to the shape that a teacher training system ought to take in future.

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