An Investigation into the Prospective EFL Teachers' Conceptions Regarding Teaching and Learning and Metaphorical Conceptualizations for Teacher Roles

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Abstract

This study's goal was to scrutinize the relationship between prospective English language teachers' conceptions concerning teaching and learning process and metaphorical perceptions regarding their roles as language teachers. A correlational survey model was adapted in the study. The participants of the study involve 120 prospective EFL teachers at a foundation university in the 2021-2022 academic year. Data were gathered by administering the 'Teaching and Learning Conceptions" and "Teacher Metaphor' scales. As for the analysis the data, a series of statistical analysis through SPSS was done. At first, descriptive statistics and correlation analysis were presented and then multiple regression analysis were done. The findings showed that, prospective EFL teachers mostly prefer a constructivist approach and define their role as "guide" and "goal-oriented" teachers, while teachers who follow a traditional approach were seen as "disciplinarian-protective" teachers.
Keywords: Metaphorical conceptualization; Teaching-learning conceptions; Pre-service teachers; Teachers' roles.

İngilizce Öğretmeni Adaylarının Öğretme ve Öğrenme Anlayışları ile Öğretmen Rollerinin Metaforik Kavramsallaştırmaları Arasındaki İlişkinin İncelenmesi

Öz

Bu çalışmanın amacı, İngilizce öğretmeni adaylarının öğretme ve öğrenme sürecine ilişkin görüşleri ile dil öğretmeni olarak rollerine ilişkin metaforik algıları arasındaki ilişkiyi araştırmaktır. Araştırmada ilişkisel tarama modeli benimsenmiştir. Çalışmanın katılımcıları 2021-2022 eğitim-öğretim yılında bir vakıf üniversitesinde öğrenim gören 120 İngilizce öğretmen adaylarını içermektedir. Veriler 'Öğretme ve Öğrenme Anlayışları' ve 'Öğretmen Metaforu' ölçekleri uygulanarak toplanmıştır. Verilerin analizi için SPSS aracılığıyla bir dizi istatistiksel analiz yapılmıştır. Bulgular, EFL öğretmen adaylarının çoğunlukla yapılandırmacı bir yaklaşımı tercih ettiğini ve rollerini "rehber" ve "hedef odaklı" öğretmenler olarak tanımladığını, geleneksel bir yaklaşımı benimseyen öğretmenlerin ise "disiplin koruyucu-koruyucu" öğretmenler olarak görüldüğünü göstermiştir.

Anahtar Sözcükler: Metaforik kavramsallaştırma; Öğretme-öğrenme anlayışları; Öğretmen adayları; Öğretmen rolleri.

Introduction

Chan and Elliot (2004) explicate the conceptions about the teaching and learning process as "the beliefs held by teachers about their preferred ways of teaching and learning" (p. 819) indicating teachers' preferences or choices about how to teach and learn. Therefore, teaching and learning conceptions that teachers have might be considered one of the most significant factors affecting their decisions respecting teaching and learning processes (Aypay, 2011) and classroom instruction (Tilemma, 1998) In that sense, the strategies that the teachers use to manage the possible problems might emerge in the process of teaching and learning are influenced by the teachers' conceptions and beliefs and (OECD, 2009). Therefore, researching and knowing teachers' teaching and learning conceptions will provide more insight into their classroom practices and educational capabilities (Bryan, 2003).

It is a fact that that teacher beliefs are largely formed before enrollment in teacher education programs and to change these beliefs is not easy (Pajares, 1992). Likewise, Dejene et al (2018) state that when prospective teachers

come to teacher education programs, all of them already had certain beliefs and conceptions regarding a successful teacher. In addition, as Baş and Şentürk (2019) assert, the educational theory the teachers hold affects their relationship with students, their stands in the teaching process, activities in classroom, and attitudes towards the teaching and learning process.

Additionally, investigating teachers' and teachers candidates' belief systems is seen as substantial in terms of improving their education process and readiness for professional life (Pajares, 1992). Moreover, the prospective teachers' beliefs and conceptions regarding teaching and learning exert influence on their way of learning, understanding pedagogical knowledge and instructional tasks, decision-making process, and practices they do in the classroom (Uzuntiryaki and Boz, 2007). In that sense, according to Kaleli (2020), teacher candidates should know their teaching and learning conceptions before starting their professional life.

Teaching-learning conceptions the teachers and pre-service teachers hold are generally classified as "constructivist" and "traditional" conceptions. With the emergence of new approaches to education and educational practices, there has been an alteration from the traditional way of teaching and learning understanding which focuses on the knowledge transmission, to the constructivist approach for the process of teaching and learning which underlies the knowledge transformation (Gray, 1997). The concept of teaching is generally conceptualized within the framework of these two understandings. While traditional conception is defined as a teacher-centered approach, as it focuses more on the transfer of information or content, the constructivist approach is characterized as a learner-centered approach, as it focuses on the learner's discovery and construction of knowledge.

The key difference between the traditional and constructivist approaches is the roles attributed to the teacher and the student (Kember, 1997). In other words, the roles of teachers and learners, and the interaction between teacher and student or student and student in a constructivist classroom are not the same in a traditional classroom. As Gray (1997) stresses, in the traditional view of the teaching and learning process, the instructor is seen as the one who transfers the knowledge to the student, who is mostly a passive listener, while in the constructivist approach; the students have to actively participate in their own learning processes in order to reach new perspectives. In that sense, Duffy and Cunningham (1996) underline that the concept of learning includes active

participation, not passive acquisition. According to the constructivist under-
standing, knowledge is formed as a result of interactions between student-stu-
dent and student-teacher (Cheng, Chan, Tang and Cheng, 2009). Whereas the
traditional teaching view refers to the employing teacher-centered teaching
and learning strategies and techniques as knowledge acquisition occurs
through a one-way process of transfer from the teacher to the learner with
restricted interactions, the focus of the constructivist approach is on the use of
learner-centered teaching strategies. Constructivist teaching strategies involve
a reflective and interactive process that takes place under the guidance of the
teacher, focusing on the motivation of the student toward learning (Cheng et
al., 2009).

To explore the beliefs of teachers, prospective teachers, or students re-
garding the roles of teachers, metaphors, as a research tool, have been used
since they can be powerful indicators depicting the teachers' or prospective
teachers' conceptions and attitudes regarding the profession of teaching. Met-
aphors are a powerful abstract means that a person can use to define or clarify
a very abstract, complicated, sophisticated, and theoretical notion, phenome-
non, or event (Yob, 2003). Therefore, as Kesen (2010) asserts, metaphors are
a crucial research tool to investigate the conception of education that involves
many elements including instructor, student, the process of learning and teach-
ing, and context. As stated before, prospective teachers enrolling to teacher
education programs mostly have fixed conceptualizations, attitudes and be-
liefs regarding learning and teacher roles based on their previous experiences
(Dejene, Bishaw and Dagnaw 2018; Kesen, 2010; Pajares, 1992). In this re-
gard, "metaphors can help construct or reconstruct images of these categories
and make sense of what happens in educational endeavors" (Schon, 1983).

There are several studies on how the concept of "teacher" is perceived
by the students, pre-service teachers, administrators and the shareholders in
the literature (Cerit, 2008; Çakmak, 2021; Çelikten, 2006; Oğuz, 2009; Peretz,
Mendelson and Kron, 2003; Sökmen, Kılıç and Yıldırım, 2020; Yalçın-Arslan
and Cinkara, 2016). Most of these studies, which adopted a qualitative re-
search method, were conducted without reaching a large number of people.
However, Çam-Aktaş and Tunca (2018) developed a valid and reliable
"Teacher Metaphor Scale" to collect data from a larger population. In the
study conducted with 658 university students from different departments, the
most frequently repeated metaphors determined as a result of studies in the

literature were included by the researchers. Their scale includes 19 items with 3 sub dimensions which are Guiding, Goal-oriented and Disciplinarian-protective. According to Çam-Aktaş and Tunca, the first sub-dimension, the guiding teacher dimension, coincides with the 21st century skills which expects individuals learn to learn by questioning the information they need. In this context, the role and responsibility of teachers, who are the implementers of the programs, is to guide the individual while discovering and accessing the information he needs. Therefore, the metaphors such as "compass", "lighthouse", "parent", "map" and "leader" are used to describe teachers. Also, this sub-dimension is largely compatible with the results of the studies in the literature (Kart, 2016; Kalyoncu, 2012; Oğuz, 2009; Şengül, Katrancı and Cantimer, 2014; Sayar, 2014 as cited in Çam-Aktaş and Tunca, 2018, p.49). The second sub-dimension is the goal-oriented teacher. According to Çam-Aktaş and Tunca, while carrying out the learning-teaching process, teacher gets to know his students in order to achieve the determined goals, realizes their interests and needs, and accordingly plans his lessons and prepares materials by taking into account the individual differences of his students. In addition, by using appropriate measurement and evaluation methods and techniques, it determines the learning level of its students and takes the necessary precautions for their subsequent learning experiences. In that context, "train", "driver", "bus", "postman" and "ship" are the methaphors used in depicting a teacher. The third sub-dimension of the scale is disciplinarian-protective teacher. Based on the characteristics of the participants and considering the educational philosophies and their experiences, this sub dimension was expected by the researchers (Çam-Aktaş and Tunca, 2018). In that respect, more authoritarian and protective roles are attributed to the teachers such as "guardian", "watchman" and "judge".

Therefore, this study intends to realize the relationship between teaching and learning conceptions of prospective EFL teachers and the metaphorical conceptualization concerning their roles as language teachers. Under the light of the goal of the current study, the research questions below were addressed:

1. Is there a significant relationship between prospective EFL teachers' conceptions about teaching and learning process and metaphorical perceptions regarding their roles?
2. To what extent do prospective EFL teachers' conceptions about

teaching and learning process predict their metaphorical perceptions regarding their roles?

Research Model

The present study was performed according to a correlational survey study of descriptive nature. Correlational research is preferred to discover the relationships between different variables, usually obtained from the same individuals at about the same time, to better understand the more complex factors. In addition, correlational research provides the necessary clues to conduct higher-level research on a relationship (Büyüköztürk, Kılıç-Çakmak, Akgün, Karadeniz and Demirel, 2013, p. 185). The goal of the study is to explore the relationship between prospective EFL teachers' metaphorical conceptualizations of their roles as language teachers and teaching-learning conceptions through data collected from prospective EFL teachers. Moreover, the extent to which prospective EFL teachers' teaching and learning conceptions predict metaphorical perceptions regarding their roles was also examined in the study. The publication ethics of the study was taken from the Scientific Research and Publication Ethics Committee of a foundation university dated 02.03.2022 and numbered 2022-005.

Participants

In total, 120 prospective EFL teachers who study at the ELT Department of the Faculty of education at a foundation university in Turkey participated voluntarily in the study. The demographic information of the EFL teacher candidates was presented in Table 1.

Table 1. Demographic Information of Prospective EFL Teachers

Descriptors	Sub-descriptors	F
Gender	Female	101
	Male	19
Grade	1st	45
	2nd	24
	3rd	27
	4th	24

As seen in Table 1, 101 of the teacher candidates were females and 19 were males. Also, 45 of them were 1st grade (freshmen), 24 of them were 2nd (sophomores), 27 of them were 3rd grade and 24 were 4th grade (seniors) ELT students. All the ELT teacher candidates voluntarily accepted to involve in this study.

Data Collection Tools

On account of collecting the data of the research, two scales were administered to the participants. "Teacher Metaphor Scale" was employed to discover teacher candidates' metaphorical conceptualizations of their roles as language teachers, while the "Teaching and Learning Conceptions" scale was administered to measure whether they held constructivist and traditional conceptions regarding teaching and learning process.

Teaching and Learning Conceptions Scale

The scale of Teaching and Learning Conception which Chan and Elliott (2004) developed was translated to Turkish by Aypay (2011). The scale involving 30 items are divided into 2 different sub-dimension that are "constructivist teaching and learning conception", consisting of 12 items and the "traditional teaching and learning conception" consisting of 18 items. A five-point likert type in which 1 mentions "Totally disagree" to 5 mentions "Totally agree" is used for rating the scale. In her study, Aypay (2011) applied the scale to 341 teacher candidates in Turkish. Confirmatory factor analysis (CFA) was carried out on the data collected from the study's participants for determining the validity of the scale. Also, the fit indices of the model based on CFA was analyzed and the Chi-square value was significant (x^2=1020.3, N=341, SD=404, *p=0.00*). DFA was used to calculate other goodness-of-fit indices: "RMSEA=0.067, NFI=0.72, CFI=0.80" (Aypay, 2011). For the scale's reliability, the Cronbach Alpha coefficient of the entire scale was found as .84. Also, for the constructivist teaching-learning understanding sub-dimension 0.88, and for the traditional teaching-learning understanding sub-dimension .83 were found (Aypay, 2011). Depending on the data of the present study, the Cronbach Alpha coefficient values were calculated and it was determined as .92 for the entire scale, .89 for the constructivist teaching-learning understanding sub-dimension, and .92 for the traditional teaching-learning understanding sub-dimension.

Teacher Metaphor Scale

The Teacher Metaphor Scale was developed by Çam-Aktaş and Tunca (2018). The scale includes 19 items in total and three sub-dimensions: "Guiding teacher" (11 items), "Goal-oriented" (5 items), and "Disciplinarian-protective teacher" (3 items). A five-point likert type in which 1 refers to "Totally disagree" and 5 refers to "Totally agree" was designed to score the scale. The highest score to be gathered from the scale is 95 whereas 19 is the lowest. As

the scores taken from the scale increase, the perception levels of participants referring the meanings they give to teachers will increase.

The internal consistency coefficient obtained from the responses of 658 participants to 19 items of the scale was determined as .97. The scale's three sub-dimensions' internal consistency coefficients; it is .97 for the "Guiding teacher", .90 for the "Goal-oriented teacher" and .90 for the "Disciplinarian protective teacher". Calculated internal consistency coefficients show that the scale' reliability is high. The recalculation of the Cronbach Alpha coefficient values was done based on the current study's data and was detected as .94 for the entire scale, .94 for the 1st, and .92 for the 2nd and .90 for 3rd sub-dimension.

Data Analysis

The data provided by the participants' responses to the scales were analyzed through SPSS. To determine the metaphorical conceptions and teaching and learning conceptions of the prospective teachers, the averages of the answers given by the participants to the scale were taken. Afterward, normality tests were performed and it was observed that the data obtained on teacher metaphors and teaching and learning conceptions were normally distributed. Therefore, firstly, a Pearson correlation analysis was performed to notice if there is a significant relationship between EFL teachers' metaphorical conceptualizations of their roles as language teachers and teaching-learning conceptions. Then, to analyze to what extent pre-service EFL teachers' teaching and learning conceptions predict metaphorical perceptions regarding language teachers, a multiple linear regression test was employed.

Findings

To answer to the first research question, the responses' averages of the prospective EFL teachers to the scales were analyzed in so as to deduce their teaching and learning conceptions and metaphorical conceptualizations. The data analyzed are displayed below in Table 2.

Table 2. The Relationship between prospective EFL Teachers' Metaphorical Conceptualizations and Teaching-Learning Conceptions.

	1	2	3	4	5
1. Guide	1	.65**	.37**	.46**	.23**
2. Goal-oriented		1	.68**	.41**	.36**
3. Disciplinarian/protective			1	.28**	.38**
4. Constructivist				1	.32**
5. Traditional					1

Considering the relationship between the prospective English language teachers' conceptions regarding the teaching-learning process and their metaphorical conceptualizations of a language teacher (Table 2), a moderately positive relationship was found between the levels of preferring a constructivist approach and the metaphors of the 'guiding' teacher (r=.46) and 'goal-oriented' teacher (r=.41). Also, there is a low level of positive correlation between constructivist understanding and 'disciplinarian-protective' teacher (r=.28).

In addition, a low-level positive relationship is found between the level of prospective language teachers' preference for constructivist understanding and their preference for traditional understanding (r=.32). When the level of metaphor preferences that describe the role of a language teacher is examined in the Table, it is observed that there is a high level of a positive relationship between the sub-dimensions. Moreover, there is a highly positive relationship between guiding teacher and goal-oriented teacher (r=.65) and between goal-oriented and disciplinarian-protective teacher metaphors (r=68). However, there is a low relationship between guiding and disciplinary-protective teacher metaphors (r=37).

Then, a multiple linear regression analysis was done to find out the extent to which prospective EFL teachers' teaching and learning conceptions predicted their metaphorical perceptions regarding language teachers. The findings of the regression analysis are presented in Table 3.

Table 3. Analysis of Variance Results in Predicting Metaphorical Conceptualizations

Model	Sum of Squares	Standard error	Mean Square	F	Sig.
Regression	12.008	.195	12.008	39.036	.000[b]
Residual	36.299	.052	.308		

As Table 3 is analyzed, it is seen that the model established to explain the prediction of prospective teachers' metaphorical conceptualizations in respect to constructivism and traditional teaching and learning conception is significant (F (.715)=39.036; *p<.01*). After that, the findings of the multiple linear regression analysis run to find out to what extent prospective language teachers' metaphorical conceptualizations of a language teacher are predicted by their traditional conceptions concerning the teaching and learning process are shown in Table 4.

Table 4. Regression Results Concerning to What Extent Prospective EFL Teachers' Traditional Teaching and Learning Conceptions Predict their Metaphorical Conceptualizations

Variables	B	Std. Error	B	t	p	Zero-order (r)	Partial (r)
(Constant)	2.1	0.39		5.28	.00*		
Guide	0.01	0.12	0.01	0.11	0.91	0.23	0.01
Goal-oriented	0.14	0.11	0.18	1.28	0.20	0.36	0.12
Disciplinary-protective	0.18	0.08	0.26	2.23	0.02	0.38	0.2

R=.40, R^2=.17, F=7.75, p=<.00

Table 4 reveals that the traditional teaching and learning conception of prospective English language teachers is a significant predictor of their metaphorical conceptualizations of language teachers (R=.40, R^2=.17, p<.01). The prospective language teachers' conceptions about traditional teaching and learning process explain 17% of their metaphorical conceptualizations. With respect to the standardized regression coefficient (β), the sequence of significance of the variables based on their effectiveness on the prospective EFL teachers' metaphorical conceptualizations is as follows; Disciplinarian -protective, Goal-oriented and Guiding teacher metaphors.

Another multiple regression analysis was done to detect the extent to which prospective EFL teachers' metaphorical conceptualizations of language teachers are predicted by their constructivist teaching and learning conceptions are given in Table 5.

Table 5. Regression Analysis Results Related to What Extent Prospective EFL Teachers' Constructivist Conceptions Predict their Metaphorical Conceptualizations

Variables	B	Std. Error	B	t	p	Zero-order (r)	Partial (r)
(Constant)	3.31	0.22		14.8	1.68		
Guide	0.22	0.07	0.34	3.19	.00	0.46	0.28
Goal-oriented	0.07	0.06	0.15	1.15	0.24	0.41	0.11
Disciplinary-protective	0.02	0.05	0.05	0.45	0.65	0.28	0.04

R=.48, R^2=.24, F=11.92, p=.00

Table 5 demonstrates that the constructivist view of teaching and learning conceptions of prospective English language teachers also are a significant predictor of their metaphorical conceptualizations of language teachers (R=.48, R^2=.24, p<.01). The prospective English language teachers' views regarding constructivist teaching and learning process explain 24% of their metaphorical conceptualizations. With respect to the standardized regression coefficient (β), the sequence of the significance of the predictor variable based

on their effectiveness on the prospective EFL teachers' metaphorical concep-tualizations is as follows; Guide, Goal-oriented, and Disciplinarian -protective teacher metaphors.

Discussion and Conclusion

In the present study, the aim was to explore the prospective English teachers' conceptions regarding teaching and learning process and metaphor-ical perceptions regarding their roles with two research questions. First, the findings demonstrates that while prospective English teachers preferred the constructivist approach at a high level, they preferred the traditional approach at a moderate level. This result shows that although prospective English teach-ers' level of preference for constructivist understanding is high, they still tend to employ traditional understanding to a significant extent. The result is in line with some studies (Coskun and Grainger, 2014; Cheng et al., 2009). It is also known that the prospective teachers bring their previous learning experiences to teacher education programs, and these experiences affect their teaching and learning conceptions (Cheng et al., 2009). Nevertheless, considering the met-aphorical perceptions regarding their roles in the classroom, they mostly stated that they defined themselves as a 'guide', followed by the 'goal-oriented' met-aphor, which emphasizes the leading role of the teacher. However, at least preferred metaphor by pre-service teachers was the 'disciplinarian-protective' teacher who judges and controls the process of teaching and learning.

When the relationship between prospective English teachers' concep-tions regarding teaching and learning process and their teacher metaphor pref-erences were examined, a moderately positive relationship between the levels of preferring a constructivist view and the metaphors of 'guiding' teacher and 'goal-oriented' teacher was found. It might be claimed that the prospective language teacher adopting a constructivist attitude towards teaching and learn-ing define their roles as a guide who supports and encourage students' learning and a "goal-oriented" teacher who makes the student reach the specified goal by leading them. As Cheng et al. (2009) highlight that constructivist teaching strategies involve a reflective and interactive process that takes place under the guidance of the teacher, focusing on the motivation of the student towards learning. For all that, a moderate level of positive correlation between tradi-tional understanding and 'disciplinarian-protective' teachers was found. It shows that the roles of the teacher in a traditional classroom perceived by pro-spective English teachers are related to the view of the traditional teaching-learning approach, where the teacher transfers the knowledge to the student,

who is mostly a passive listener (Gray, 1997).

Finally, the multiple regression analysis which was done to find the extent to which prospective EFL teachers' teaching and learning conceptions predict their metaphorical perceptions regarding their roles supported the correlation findings. According to the results, while the constructivist approach predicts the metaphor 'guide' followed by 'goal-oriented' and 'disciplinarian-protective' teachers, the traditional approach predict vice versa. This is because constructivism is based on a learner-centered teaching in which the learners are active participants and learn how to learn by focusing on the construction of the knowledge by themselves. In that sense, in constructivism, the teacher's role is to guide them learn how to learn by providing a stimulating, interactive and attractive environment (Brooks and Brooks, 1999) rather than controlling or judging them. In addition, as Çam-Aktaş and Tunca (2018) highlight, individuals are expected to learn to learn by questioning the information they seek, which is a required skill in the 21st century. Therefore, the role of the teachers who adapt constructivist approach should be the facilitator and guide in the classroom. However, the ones with traditional approach seems to attribute more authoritarian and protective roles to teachers. In traditional teaching approaches, teacher is regarded as the only source of information and the learner is the passive agent who listens and receive the information given by the teacher (Cheng et al., 2009). As Schwerdt and Wuppermann (2011) claim, not giving feedback to learners, not taking their needs into consideration and accepting that they all learn at the same pace are the main drawbacks of traditional teaching approaches. Therefore, teachers are regarded as a watchmen or a judge who just watch and evaluate the product in the traditional or teacher-centered approaches.

In conclusion, this study highlights the significance of teaching and learning conceptions of prospective English teachers by relating them with metaphorical definitions of their roles. It is significant to amplify the quality of teacher education programs and prospective teachers' learning process (Cheng, Tang and Cheng, 2015; Cross, 2009). As Bryan (2003) suggests teacher educators can use the prospective teachers' beliefs and conceptions to make their learning and professional development process effective and efficient. Therefore, more studies should be considered to pinpoint the prospective English teachers' teaching and learning conceptions. In addition, along

with the changes in the understanding of education from traditional to constructivism in the 21st century, the competencies and roles of the teachers and the expectations from the learners have changed (Ministry of National Education, [MEB], 2017). Now, the learners with 21st century skills who can think critically and creatively, take initiative, take responsibility, have problem solving and decision making skills, and use IT are expected to be raised in education (OECD, 2018). To realize these skills, teachers who have constructivist teaching and learning conceptions are needed. Therefore, teacher education programs should be planned based on the principles of constructivism, learner-centered methods and 21st century skills.

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