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## What is effective in forming our beliefs: Experience or education?

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### Abstract

As beliefs play a role in shaping teacher behavior, identification of teacher trainees' beliefs is essential to foreseeing their future practices. Beliefs serve as a stimulus for teachers to construct their teaching methodology. Therefore, the current study aims to investigate 1st and 4th year teacher trainees' beliefs about language learning and teaching. The data is collected from 170 1st and 4th year teacher trainees in the ELT department of a Turkish university via a questionnaire. The results revealed that there are statistically significant differences between first and fourth grade trainees in their beliefs about language learning and teaching, indicating that prior learning experiences and education are influential in forming beliefs. However, no significant differences were found in terms of gender and school of graduation.

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*Keywords:* beliefs; teacher cognition; teacher knowledge; teacher trainees; language learning and teaching

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### 1. Introduction

Teacher knowledge and teacher cognition and their impact on teaching have been of interest to many educators and researchers (Borg, 1999; Borg, 2003a; Borg, 2003b; Desforges, 1995; Kagan, 1990; Manning & Payne, 1993; Verloop, Van Driel, & Meijer, 2001). Kagan (1990) defines teacher cognition as “pre- or in-service teachers’ self-reflections; beliefs and knowledge about teaching, students, and content; and awareness of problem-solving strategies endemic to classroom teaching” (p. 419). A teacher’s cognition is unobservable and it involves ones knowledge, beliefs, and thinking (Borg, 2003a). Teachers’ cognition starts developing when they are exposed to the learning-teaching process as learners

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and has an impact on their teaching career later (Reynolds, 1992, as cited in Borg, 2003a). At the beginning of their education, trainees have already developed beliefs about teaching and learning (Pajares, 1992) and these beliefs are usually inflexible (Kagan, 1992). Kagan (1992) claims that trainees use methodological knowledge presented in teacher education to confirm their beliefs that they established before entering the program and thus, these beliefs affect the amount of knowledge received during education and its interpretation. As this claim seriously challenges the teacher education program, it also questions the effect of education in the formation of teacher cognition. Donaghue (2003) as well, stresses the difficulty of assimilation of a string of activities for trainees unless they have the same beliefs with the trainer.

For teacher education to have an impact on trainees' future profession, it is essential to uncover their personal beliefs. It is difficult to see some development if trainees' cognition remains uncovered (Donaghue, 2003). Thus, it has been argued that teacher training programs should take trainees' initial beliefs into consideration to make positive changes on their dysfunctional beliefs (Kettle & Sellars, 1996).

Teacher trainees' earlier beliefs constitute the basis in the formation of their cognition as a teacher. Therefore, learners' cognition should be uncovered first. There are four issues that shape learner cognition. According to Ellis (2004) these "1) are the relationship between learners' beliefs about language learning and their beliefs about learning in general, 2) the extent to which beliefs are culturally determined, 3) the relationship between learner cognitions and success in learning L2 and 4) the extent to which learners' beliefs change over time" (p. 543).

Belief is a part of teacher cognition and it is "a proposition which may be consciously or unconsciously held, is evaluative in that it is accepted as true by the individual, and is therefore imbued with emotive commitment; further it serves as a guide to thought and behavior" (Borg, 2001, p.186).

Knowledge and beliefs as constituents of teacher cognition have been found to be difficult to separate (Zheng, 2009; Verloop et al., 2001) and that is hard to identify whether the teachers make their decisions upon their knowledge or what they believe. Beliefs are said to be established at the earlier stages of life and they tend to remain unchanged (Ball & McDiarmid, 1989; Nisbett & Ross, 1980). Therefore, the kind of learning experiences the teachers had in the past are the key factor in forming their teacher beliefs. According to Johnson (1994) teacher trainees' decisions during teaching practice were shaped by their own language learning experiences as learners. Borg (2003) further claims that these beliefs continue to be effective during teachers' teaching profession. That is, a teacher trainee who learned L2 with greater emphasis on grammar rather than communication has a tendency to shape his/her beliefs in this direction and may continue to emphasize grammar more than other language areas and/or skills.

As with our earlier experiences, the teacher education process also has an influence on the development of teacher trainees' cognition. However, it is claimed that this so called impact is variable and that different studies report different degrees of the influence of education. In a study by Almarza (1996, as cited in Borg, 2003) it has been reported that trainees displayed some behavioral change. Yet, cognitively this change varied among them, concluding that the teacher education program was not effective to change trainees' initial beliefs significantly. Borg (2003) argues that behavioral change does not require cognitive change nor does cognitive change affect behavioral change.

Another study conducted by Peacock (2001) argued that trainees beliefs on grammar and vocabulary were changed only a little during their three-year teacher education. He concluded that the results of this research are not in line with the common argument that trainees' beliefs are shaped by education. On the other hand, Cabaroğlu and Roberts (2000) reported that their findings contradict with the claim that trainees' beliefs are inflexible and that all but one of the trainees developed functional beliefs during their teacher education. Similarly, Sendan and Roberts (1998), claimed that initial training caused changes in trainees' thinking.

Our classroom behaviors, as teachers, are shaped by what we believe to be true (Inozu, 2011). It is claimed that pre-service teachers' beliefs formed earlier as L2 learners tend to affect their learning in teacher education as well as the teaching practice (Kennedy, 1991, as cited in Tanase & Wang, 2010). As the aim of teacher education is to develop appropriate and theoretically grounded functional teaching beliefs and behaviors, identification of trainees' initial beliefs play an important role in the design of the teaching curriculum, content of courses, and the design of teaching practice. Social psychological and sociocultural perspectives to the study of beliefs argue that learners' past and present experiences should be investigated in the formation of beliefs (Gabillon, 2005). Thus, what kind of beliefs the learners had prior to teacher education and what kind of beliefs they developed as a result of teacher education have equal importance to scrutinize the effectiveness of education in changing dysfunctional beliefs and establishing functional beliefs.

Although there have been a vast amount of belief studies, it has been argued that there is limited research on EFL teacher trainees (Altan, 2006; Peacock, 2001). Therefore current study aims at investigating pre-service ELT teachers' beliefs about language learning and teaching and to identify any belief change during the course of education.

## **2. Methodology**

The study is conducted at a Turkish university with two groups of pre-service teachers who are at the beginning and at the end of their teacher education. The research aims to find answers to the following questions:

1. What are the beliefs of freshman students in the ELT department?
2. What are the beliefs of senior students in the ELT department?
3. Are there any differences between first and fourth grade students' beliefs?
4. Are there any changes, in beliefs in terms of gender?
5. Are there any changes in beliefs in terms of the school of graduation?

### *2.1. Participants*

A total of 170 ELT trainees (87 freshmen, 83 seniors) participated in the study. Twenty-four percent of the participants (40) were male and 77% (128) were female. 40% of the trainees were graduates of Anatolian high schools, 23% super high schools, 22% Anatolian teacher high schools, and 12 % were regular state schools. 3% of the trainees indicated that they graduated from other types of schools most being abroad. The reason why these groups were selected is because of their knowledge on teacher education. In the first grade of the ELT departments trainees are not yet introduced to pedagogical content knowledge and are unaware of certain concepts of language teaching. Fourth grades on the other hand have almost completed their training and are aware of methodological and pedagogical knowledge related to L2 teaching.

### *2.2. Instrument*

A 30-item questionnaire is prepared by the researcher as a result of third year trainees' comments on their experiences as L2 learners on an open-ended survey during the 2010-2011 academic year. The responses to the open-ended questionnaire mostly indicated grammar and vocabulary based teaching. Therefore, the items in the questionnaire constitute statements related to traditional approaches to teaching L2. The instrument has items related to grammar and vocabulary teaching as well as the teaching of four skills (reading, writing, listening, and speaking) and it is prepared as a five-point Likert scale.

Trainees are asked to indicate their opinions on a scale from strongly agree (5) to strongly disagree (1). Thus, the trainees' agreement with the items would indicate that their beliefs have developed in favor of traditional language teaching and disagreement would indicate the opposite.

For the content and face validity of the questionnaire expert opinions from six teacher trainers at the ELT department is taken and necessary changes were made. Later the instrument is piloted on 30 freshman trainees who did not contributed to the main study later. After receiving feedback from the trainees on the comprehensibility of the items and the user-friendliness of the questionnaire it was applied on 170 participants. The reliability of the questionnaire is identified with Cronbach alpha coefficient and found to be .881, which is considered to be high.

### 2.3. Data analysis

Data gathered from the questionnaire is analyzed via SPSS 13. Means and standard deviations of the items were calculated. Frequency analysis was made to see the items believed most by trainees and t-test was used to compare 1<sup>st</sup> and 4<sup>th</sup> year trainees.

## 3. Results and discussion

The research results indicate that there are differences between what first and fourth grade trainees' believe. The questionnaire items were developed from trainees' answers to an open-ended questionnaire which asked them to report how they learnt English. The majority of responses reflected a traditional way of language teaching. The present research aimed at to what degree the trainees were affected by these earlier experiences and whether they have changed their beliefs during their course of study in the ELT department. Accordingly, it can be said that freshman trainees were under the influence of their experiences more whereas, senior trainees have changed most of their beliefs as a result of their education. In two statements related to the teaching of grammar, first and fourth grade trainees showed similarities. The majority of freshmen ( $\bar{x} = 4,51$ ) and seniors ( $\bar{x} = 4,07$ ) believed that the grammar rule should be practiced via (worksheet) exercises in order to learn it, indicating that they were considering worksheets as essential when compared to the use of games, activities, role-plays etc. to improve grammar. First year trainees also stated that the teacher should explain the grammar rules definitely and clearly ( $\bar{x} = 4,38$ ). Although not as high as first year's, fourth year trainees showed a tendency towards this direction as well ( $\bar{x} = 3,59$ ). In addition, first years also believed that the teacher should write the formula of a grammar rule (ex: present perfect tense = have+V3) while teaching ( $\bar{x} = 3,81$ ). Fourth grades disagreed with this item ( $\bar{x} = 2,52$ ).

Related to the learning of vocabulary both groups agreed that learning new words with relevant pictures and objects is a good way (freshman ( $\bar{x} = 4,57$ ); senior ( $\bar{x} = 4,53$ )). However, first and fourth graders did not agree with each other in terms of memorizing a word by repetition (freshman ( $\bar{x} = 3,82$ ); senior ( $\bar{x} = 2,78$ )). Freshmen were also in favor of vocabulary lists with their Turkish translations ( $\bar{x} = 3,32$ ).

For the reading skill, first years stated that ( $\bar{x} = 3,17$ ) they need to find the meanings of words from a dictionary. With the other items both groups showed similarities in their responses. They both rejected the translation of a text for comprehension and were in favor of pre-reading activities, the use of reading strategies, and authentic texts.

When developing the writing skill first years believed that a word cannot be considered writing ( $\bar{x} = 3,62$ ) and that writing should consist of at least a paragraph for us to call it a writing piece ( $\bar{x} = 3,29$ ) and they have to think in Turkish before they write something in English ( $\bar{x} = 3,26$ ). Although the means are not very high they are closer to I agree part of the scale. Fourth graders, on the other hand, disagreed with all of these beliefs.

Both first and fourth graders considered it important to gain a native-like pronunciation as part of the development of the speaking skill (freshman ( $\bar{X} = 3,91$ ); senior ( $\bar{X} = 3,90$ )), but only first graders believed that reading dialogues out loud as a speaking activity ( $\bar{X} = 3,45$ ). This result indicates that first years had probably limited meaningful and purposeful communication in their earlier language education and gives a clue about trainees' earlier learning experiences.

Finally, for the development of the listening skill both groups agreed that knowing just vocabulary and/or grammar is not enough. They also believed that authentic listening texts should be used to develop listening skill.

When we compare both groups the results indicate that there is a significant difference between first ( $\bar{X} = 3,08$ ) and fourth grade ( $\bar{X} = 2,39$ ) trainees in terms of their beliefs towards foreign language learning and teaching (see table 1) when the whole questionnaire is considered. This difference doesn't change when we compare both groups in terms of different sub-groups (grammar, vocabulary, reading, writing, listening, and speaking) of the instrument.

Table 1. Comparison of first and fourth grade trainees

		N	Mean	SD	T	P																																																															
Whole instrument	1 <sup>st</sup> grade	87	3,08	,38	10,072	,000																																																															
	2 <sup>nd</sup> grade	83	2,39	,49			Grammar	1 <sup>st</sup> grade	87	3,49	,53	7,394	,000	2 <sup>nd</sup> grade	83	2,69	,73	Vocabulary	1 <sup>st</sup> grade	87	3,7	,65	7,655	,000	2 <sup>nd</sup> grade	83	2,9	,62	Reading	1 <sup>st</sup> grade	87	2,63	,70	7,587	,000	2 <sup>nd</sup> grade	83	1,86	,61	Writing	1 <sup>st</sup> grade	87	3,22	,66	7,611	,000	2 <sup>nd</sup> grade	83	2,39	,75	Speaking	1 <sup>st</sup> grade	87	2,89	,61	4,350	,000	2 <sup>nd</sup> grade	83	2,49	,59	Listening	1 <sup>st</sup> grade	87	2,49	,82	4,427	,000	2 <sup>nd</sup> grade
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$p < 0.01$

This result indicates that fourth grade trainees disagreed with traditional L2 teaching, which is an indication that they have developed functional beliefs throughout their education. On the other hand, first graders developed beliefs towards traditional language teaching more. The difference between these groups emphasizes the effect of teacher training program in the ELT department.

As answers to the fourth and fifth research questions results indicate no significant differences between genders and the school types the trainees graduated from. However, as the majority of the trainees in the department are females, it was not possible to gather data from both genders in equal numbers. There were only 40 males that contributed to the study. Therefore, gender differences can be looked at in other studies where the number of participants for each gender is kept similar.

#### 4. Conclusions and Implications

The results of the study indicate that both prior learning experiences and education is influential in forming beliefs and that effective education has a power to change nonfunctional beliefs formed earlier as learners. As Peacock (2001) argues, trainees' beliefs will affect the way they teach in their future profession; therefore, it has paramount importance to change "detrimental" beliefs with the functional ones during teacher education. However, as beliefs are not always reflected in classroom practices further research is necessary to supplement the findings with the help of interviews and observations of trainees during practicum. In addition, for the generalizability of the findings similar studies in the Turkish context needs to be conducted.

Current research sheds some light on Turkey's foreign language education system and has implications for policy makers. By looking at the findings it can be claimed that foreign language education in Turkey still relies on older and traditional approaches that use direct grammar teaching and rote memorization as it is reflected in first year trainees' answers. Despite the efforts of the Ministry of National Education and the shift from grammar-based approaches to communicative methodologies since the 1980s, Turkey has not been successful in implementing these newer approaches in the classrooms. This is partly due to the general education system in Turkey which is too much dependent on examinations. What's more, the classroom conditions and populations are still far from being ideal to implement such methodologies (Turkey holds the seventh place in most crowded classrooms list in the world (Güçlü, 2010)). The ministry's most recent attempts to change the exam-based education system are promising to implement appropriate language teaching methodologies. However, teachers might need to be supported by in-service training to help them change any possible nonfunctional beliefs that are developed as a result of the current system and old experiences. Unless necessary changes are made at the government and university levels, it seems to be hard to reach at the national goals set for language teaching in Turkey.

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