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A case study of the impact of a teacher education course on two Iranian EFL teachers' beliefs and practices about grammar teaching

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Abstract

Despite the substantial growth of research on teachers' beliefs and practices in the past decades, little research has examined the impact of teacher education on in-service teachers' grammar beliefs and practices. The present study aimed to fill part of this gap in relation to two Iranian novice EFL teachers. Data were collected before and after a grammar-oriented teacher education course from semi-structured interviews and classroom observations. The findings showed that the course influenced the teachers' beliefs to move from a more teacher-fronted approach toward an approach that marked attention to the importance of learners' socioemotional states. Moreover, the teachers' practices after the course featured more attention to the collaborative and pragmatic aspects of grammar instruction. Based on the findings, we provide several implications for teacher education, which highlight the role of sociocultural and personal dimensions in programs that are structured around grammar instruction.

Keywords: Grammar instruction, Teacher cognition, Teacher beliefs, Teacher practices, Professional development

Introduction

Over the past decades, grammar instruction has witnessed the prevalence of multiple theoretical and empirical changes. Given its long-lasting status in the second language acquisition (SLA) literature, teaching grammar has been accompanied by methods and approaches that characterize it differentially in response to the theoretical changes (Richards & Renandya, 2002). Along with the growth of knowledge in this area, research has examined how teachers view and practice grammar (e.g., Borg, 2011; Phipps & Borg, 2009). The line of inquiry on teachers' grammar beliefs and practices highlights that teacher education (TE) influences the teachers differentially, and mixed findings have been reported regarding how teachers respond to the programs.

Relatedly, Graus and Coppen (2018) argue that mixed findings of the impact of TE on teachers may be due to the insufficient exploration of the in-depth influence of TE programs on teachers' cognitions, especially in relation to practical aspects. Additionally, the extant literature has primarily examined teachers' grammar beliefs and practices in pre-service programs and little is known about how in-service teachers make

sense of grammar TE programs. As in-service teachers are in persistent connection with grammar instruction as part of their career, it is significant to examine how TE influences their grammar cognitions and practices, aspects that can profoundly shape their associated professionalism (Borg, 2011). Moreover, such an examination is significant as exploring how TE influences teachers can help teacher educators develop more effective programs. However, there is little research on in-service teachers' grammar beliefs and practices despite the widely-discussed importance of teacher education for developing teachers' awareness of grammar instruction (see Borg, 2011; Phipps & Borg, 2009). The present study aimed to address this gap by exploring the impacts of a TE course on two Iranian novice EFL teachers' grammar beliefs and practices.

Literature review

This section first details the nature of grammar and the approaches toward grammar instruction. It then provides theoretical and empirical aspects of teacher beliefs about grammar (instruction). Teacher education and teachers' (grammar) beliefs and practices are then presented, as followed by stating the purpose of the study.

Grammar instruction

Teaching grammar has been one of the most challenging and controversial issues in the history of language teaching. In the beginning of the twentieth century, teaching grammar was considered as the core of language teaching and the importance of other sub-skills was downplayed and degraded (Richards & Renandya, 2002). The justification was that if one knows the governing rules of a language, one could easily use them for communication. In the early 1970s, this view was seriously challenged. Richards and Renandya (2002) stated that grammar teaching has "regained its rightful place in the language curriculum. People now agree that grammar is too important to be ignored, and that without a good knowledge of grammar, learners' language development will be severely constrained" (p. 145).

Teaching grammar has been the subject of a great number of research studies for several decades. The main strands of theory and research in this area have been four pairs of meaning- versus form-focused instruction, focus on form (FonF) versus focus on forms (FonFs), implicit versus explicit instruction, and inductive versus deductive instruction (Graus & Coppen, 2016). Williams (2005) elaborates on the dichotomy that differentiates instruction as predominantly targeted at meaning or form. Meaning-focused instruction gives primacy to the communication of meaning and deemphasizes teaching grammatical and linguistic items extensively as they little benefit the learner's interlanguage system. Graus and Coppen (2016) argue that it is highly unlikely to find a program that is solely meaning-focused, and every program has an amount of form-focused instruction. Moreover, Long and Robinson (1998) defined two terms of FonF and FonFs, which are conceptualized based on the extent to which they integrate meaning-focused and form-focused instruction.

Explicit versus implicit form-focused instruction (FFI) is the third construct pair that has gained considerable attention. Explicit FFI is a preplanned effort to attract the learner's attention to the form rather than the meaning and usually utilizes controlled practice of the target form. On the other hand, implicit FFI underscores the importance of

input (exposure) and includes “learning that takes place without either intentionality or awareness” (Ellis, 2008, p. 965). Deductive and inductive approaches are also two classically-used terms in grammar teaching. In deductive grammar teaching, first a grammatical rule is presented and then the students are provided with a controlled practice of the rule. Inductive grammar instruction presents examples of a structure abundantly in the input and the learners heuristically explore the structure (Ellis, 2006).

The three-dimensional framework of Larsen-Freeman (2014) has introduced a comprehensive model of teaching grammar that is different from traditional frameworks. The framework, known as the pie chart, is an effort to “achieve a better fit between grammar and communication” (Larsen-Freeman, 2014, p. 252). This framework involves syntax, semantics, and pragmatics. It is held that the pie chart takes into account structure or the form of the utterance, semantics or the meaning, and the pragmatics conditions governing the use, each of which is a wedge of the pie.

Teacher beliefs about grammar instruction

Research on various areas of language education, especially grammar, has substantially grown (e.g., Alqurashi, 2022; González & Mateus, 2022; Hassan et al., 2022; Tiranant et al., 2022; Wijnands et al., 2022). Drawing on the psychological literature of cognition, Borg (2011) suggested that beliefs are “propositions individuals consider to be true and which are often tacit, have a strong evaluative and affective component, provide a basis for action, and are resistant to change” (p. 370). Teacher beliefs are influential factors in their decision-making and practices (Borg, 2003, 2019; Kubanyiova, 2012), but they are not always translated into practice (Basturkmen, 2012). For example, Phipps and Borg (2009) studied the grammar teaching beliefs and practices of three teachers in Turkey. They observed and interviewed the teachers for 18 months and differentiated between peripheral and core beliefs. In spite of some inconsistencies between the beliefs and practices, the teachers’ practices reflected their deeper core beliefs about learning. The researchers stated that language teachers’ beliefs have a substantial effect on their pedagogical decisions, can affect the way teachers learn in teacher education programs, and can be resistant to change.

Moreover, research on corrective feedback has shown that teachers’ grammar beliefs and practices are central to the types of feedback teachers and learners prefer and the associated educational-emotional implications for them (e.g., Ha & Murray, 2020; Ha & Nguyen, 2021; Ha et al., 2021). For example, Ha and Murray (2020) explored six Vietnamese teachers’ beliefs and practices via interviews and classroom observations. The findings of the study revealed that while the teachers considered pronunciation errors as the most targeted feature for correction, their practices showed that they treated both pronunciation and grammar as correction targets.

Borg (2003) argues that teachers’ beliefs about teaching and learning could be powerfully influenced by their experience, act as a filter through which teachers interpret new information, outweigh the effect of TE, and interact bidirectionally with experience. He mentions that situational constraints may contribute to this tension between beliefs and practices (also see Tran et al., 2021). Basturkmen (2012), in a review study on the correspondence between teachers’ beliefs and practices, concludes that context and constraints mediate the relationship between teachers’ beliefs and practices. She reviewed

a number of case studies in which the teachers stated that there were many external factors that made it difficult for them to actualize their beliefs. Theory and research on teachers' grammar beliefs and practices have also been reflected in scholarship related to the impact of TE programs on the teachers.

Teacher education and teacher beliefs and practices

The majority of research on teachers' beliefs about grammar pertains to the effect of teacher education on teacher beliefs in pre-service contexts. Moreover, Peacock (2001), Urmston (2003), and Borg (2005) reported that the beliefs of teachers remain stable after TE courses. For example, Peacock (2001) studied the beliefs of 147 trainee ESL teachers in a 3-year program in which he hoped to spot the mistaken beliefs of pre-service teachers and eliminate them. He mentioned that mistaken beliefs could negatively affect teachers' teaching and the learning of their future students. The study results indicated that the program could not result in significant change in the teachers' beliefs. One of the mistaken beliefs that too many third-year trainees still believed was that language learning was learning a set of vocabularies and grammatical rules.

Urmston (2003), in a longitudinal study in Hong Kong, explored the extent to which beliefs and knowledge of pre-service English teachers during BA would change. The findings revealed that the teachers' beliefs and knowledge are mostly shaped by their studentship experiences, "but are changed relatively less by the training that they receive in their BA course" (p. 112). Moreover, in a case study in England, Borg (2005) reported that the participant, Penny, before entering a CELTA course, held strong beliefs about teaching English which mostly resulted from her own studentship experiences. During the 4-week period of the course, the researcher documented the elaboration and deepening understanding of some of her beliefs, and her other beliefs were remarkably resistant to change.

On the other hand, MacDonald et al. (2001), Mattheoudakis (2007), Clarke (2008), and Busch (2010) have reported evidence of change in student teachers' beliefs during TE programs. Mattheoudakis (2007), in a study in Greece, documented the beliefs of 66 students before entering a 3-year TE program and tried to track their belief changes during the TE program. He argued that observing change in beliefs needs time and it is necessary that such studies take longer periods of time. The findings of the study indicated that the students' beliefs gradually changed year by year, and the course increased the declarative and procedural knowledge of the students. The results also revealed that the students' engagement in teaching did not have the expected influence on their beliefs.

Researchers have also investigated the impact of TE on the beliefs and practices of in-service teachers in different areas including corrective feedback, listening, and self-efficacy (e.g., Borg, 2011; Ha & Murray, 2021; Nazari, 2020; Sansom, 2020; Zonoubi et al., 2017). For example, Ha and Murray (2021) examined the effect of a TE program on the corrective feedback beliefs of 10 high school teachers in Vietnam. The TE program included a workshop, followed by experimental and reflective activities. The study findings revealed that the teachers modified and reshaped some of their beliefs about corrective feedback. Moreover, Borg (2011) examined the impact of an intensive 8-week in-service TE program on the beliefs of six language teachers in the UK. Impact in this study was operationalized as a range of developmental processes rather than deep and

radical shifts in teachers' beliefs. The findings revealed that the course had a considerable impact on the beliefs of the teachers. Some of the participants made progress from limited awareness to being strongly aware of their beliefs and the ability to articulate the key beliefs underpinning their work.

Additionally, Sansom (2020) explored the effect of TE on the process of change in beliefs and practices of seven Chinese in-service language teachers. The findings indicated that the "outcome of teacher change from professional development is far from certain" (p. 9). The study revealed that teacher change seems to be different for each teacher in discrete contexts. In another study, Nazari (2020) explored the effect of in-service TE on four Iranian EFL teachers' beliefs and practices of metacognitive listening instruction. Data were collected from semi-structured interviews and classroom observations before and after the course. Data analyses showed that while "the teachers' precourse listening beliefs and practices echoed a product-oriented perspective, post-course analyses indicated that the teachers conceived of MLI [metacognitive listening instruction] as a pedagogically fruitful approach and employed it in their instruction" (p. 1).

The above body of knowledge shows that TE courses influence the teachers differently as a result of the multiple institutional, personal, and sociocultural particularities that mediate the process of teacher development. In addition, the literature on teacher cognitions and practices of language skills and sub-skills has grown, yet little has been done on the grammar beliefs and practices of in-service teachers, which is the focus of the present study.

The present study

Besides the point that the above literature reported variations in the study findings, Borg (2011) holds that inconsistencies in the findings of different studies stem partly, if not fully, from "variations in the nature of the language teacher education programs examined and, in the research approaches adopted in different studies" (p. 371). However, the scope of research on in-service teachers' grammar beliefs and practices is limited, and the present study aims to contribute to the body of knowledge on grammar beliefs and practices by addressing the following questions:

1. How does a teacher education course structured around grammar instruction influence in-service teachers' grammar beliefs?
2. How does the teacher education course influence the teachers' grammar practices?

Method

Context and participants

This study was conducted in Iran. The setting was a private language school. Private language schools of Iran have mushroomed over the past decades and follow their own preferred curricula, syllabi, and materials. Most of the schools employ materials published by international publishers and run their customized teacher preparation courses. The school for this study offered general English classes across different proficiency levels (elementary to advanced) as well as IELTS and TOEFL preparation classes. The school

recruited novice teachers mainly from those who had obtained their BA degree or those who were perceived to have a good command of English. Teacher recruitment was defined in terms of interviews with the candidates and those who met the criteria would become a school member.

The participants of this study were two novice teachers. After talking to the teachers and obtaining the approval of policymakers (i.e., school managers), the study was initiated. Shila and Parisa (pseudonyms) were 28 and 38 years old, respectively. Shila had 2 years of teaching experience and had a BA degree in computer engineering. Parisa had 1 year of teaching experience and had completed her MA in TEFL. Both of the teachers were primarily teachers of lower levels. They had been teaching to elementary-level students during their teaching practice and had no experience of teaching during the pre-service training. The teachers were selected conveniently and based on four criteria. First, in the Iranian context, private language schools are more collaborative in conducting research on the teachers, in comparison to state schools, which operate under the supervision of the ministry of education and adhere to stricter policies for running research studies, particularly in relation to classroom observations. Thus, we consulted Shila and Parisa who were private school teachers to participate in the study. Second, we needed to recruit novice teachers to explore how the course influences their grammar cognitions and practices, and Shila and Parisa served this purpose effectively. Third, these teachers showed more openness to engaging in the study among the school teachers who were consulted. Fourth, socioculturally speaking, the teachers argued (personal communication) that due to the difficulties they had experienced on learning grammar during their studentship, this sub-skill was associated with negative mindsets about how to teach it as well as their own self being profoundly sanctioned by the entrenched beliefs and cultures of learning about traditional perspectives surrounding grammar instruction. Thus, we aimed to explore whether the course could positively influence their cognitions about grammar. These characteristics and criteria rendered Shila and Parisa as useful cases for this study.

The teacher education course

After describing the nature of the study to the teachers, the TE course started. The course was enacted in WhatsApp as face-to-face meetings were not feasible for the teachers. The teachers were first added to a group and after the preliminary acquaintance and issues, the course was implemented. This involved weekly meetings in which two of the researchers (the first and second authors) participated in the discussions to move the talks forward (Johnson & Golombek, 2020). In this sense, the first researcher introduced the topic of each session before the class (to develop a preliminary understanding) and engaged the teachers in the discussions. Such an engagement involved obtaining the teachers' opinions and experiences of the topics, and whether they have experienced it in their classes as accompanied by their according approach. The course was implemented over 12 weeks, each weekly session lasting about two hours. This perspective of using the teachers' experiential knowledge was in line with the scholarship on running teacher education programs (see Johnson & Golombek, 2020), which, as we show later, facilitated effectively influencing teachers' beliefs and practices and their appropriation of the course in changing their cognitions and instructional decisions.

Before implementing the course, a syllabus (Table 1) was designed which drew on the literature of grammar teaching (e.g., Ellis, 2006; Larsen-Freeman, 2014; Richards & Renandya, 2002). The course was developed based on this literature and one PhD holder of TEFL who had the experience of researching grammar instruction was consulted to check its content. Each of the modules was covered in one session in which the teachers were either provided with initial information or were directly asked about the content of the session (when the topic was familiar). In each case, an interactive approach was employed to contextualize the discussions in which question and answer was the focus. At the end of each session, a summary of the discussions was provided to the teachers. Additionally, the teachers were provided with a related pamphlet (with concrete examples) after each session to help them develop a more solid knowledge base of the covered session. We observed ethical considerations in running the course by trying to put little burden on teachers' professional responsibilities, drawing on their own voice in course enactment, and little interfering in the teachers' classroom instruction to avoid the subsequent institutional problems that could occur.

Design and data collection

The study was conducted using a qualitative approach (Creswell, 2014). As we aimed to explore how the course influences the teachers' grammar beliefs and practices, a qualitative approach suited the study as it provides "valuable insights into how people construct meaning" in light of contextual particularities (Neuman, 2006, p. 308). In this regard, data were collected before and after the course.

Before the course

Data were collected from semi-structured interviews and classroom observations to explore the teachers' grammar cognitions and practices before the course. The interviews were run face-to-face and lasted on average 35 min per teacher. This interview aimed to examine the teachers' understanding of grammar and its instruction. The questions were partly informed by Phipps and Borg (2009) and involved queries about the teachers' studentship experiences, how to teach grammar, the source of their beliefs,

Table 1 The syllabus of the course

Session	Module content
1	Benefits of teaching grammar
2	Challenges in teaching grammar
3	Approaches to the teaching of grammar (inductive, deductive, interactive)
4	Activities in teaching grammar
5	The role of proficiency level in teaching grammar
6	How our beliefs influence our grammar teaching
7	Stages of teaching grammar and how to manage a grammar lesson (material adaptability)
8	Spoken and written grammar
9	The role of interaction in grammar teaching
10	Larsen-Freeman's pie chart
11	PPP or focus on form (input enhancement, input flooding)
12	Assessment and corrective feedback in teaching grammar

how they teach grammar, the factors influencing grammar teaching, their experience of attending grammar-focused TE courses, and how grammar should be learned (taught or acquired naturally). The interview questions (before and after the course) were also checked by a qualitative researcher to ensure their relevance and accuracy. The interviews were run in Persian (L1) and were audio-recorded for further analysis.

To explore how the teachers practice grammar, three sessions of their classes were observed by the second researcher. The observations were done non-participatively and the observer noted down the details of the teachers' practices. The approach in noting the field notes was inductive as it was possible for the teachers to practice grammar in a way that evades helpful pre-selected observational schemes. Each session of the classes lasted 1.5 h. Moreover, after each session, the observer shared the field notes with the teachers to have an understanding of their own practice. The field notes also fed the online discussions of the course as we directly or indirectly prompted relevant notions to contribute to the teachers' knowledge growth (Graus & Coppen, 2016).

The teachers' classes involved focusing on the textbooks that had been assigned by the school. The textbooks involved conversation, grammar activities, contextualized vocabulary, and reading comprehension, which constituted the teachers' instructional practices. In the observed sessions, the teachers also had their normal instruction including assessing the students' learning, teaching the textbooks, running individual and paired activities, and wrapping the class up by assignments. Particularly in relation to grammar, as we show below, the teachers used different types of instruction before and after the TE course. Their instruction, for example, involved using their own experiences in familiarizing the students with the grammatical structures before the course. After the course, they, for example, attempted to pay more focal attention to the pragmatic uses of the structures in the form of group work.

After the course

After the course, the same procedures of data collection were done. However, both the interviews and observations were done after 2 weeks to better examine the impacts of the course. Regarding the observations, three sessions of the teachers were observed to document their grammar practices. The procedure of the observations was the same and they were shared with the teachers. As to interviews, the teachers were asked about their grammar teaching beliefs and practices, specifically whether/how the course had influenced them. The interview was conducted in Persian and lasted on average 40 min.

Data analysis

The data from both sources were analyzed through thematic analysis (Braun & Clarke, 2006). Regarding the interviews, the data were transcribed verbatim and read several times to develop the initial codes. This stage also involved a constant-comparison between pre- and post-course data to extract the relevant themes. Then, the data were comparatively analyzed and the similarities/differences were noted down, which led to the themes reported below. For example, when the teachers referred to their own conceptualization/definition of grammar, it was comparatively sought across pre- and post-course data to see how it has changed. As with the classroom observations, the field notes were inductively analyzed and the practices were tabulated both before and after

the course per session and teacher, as reported below. This process was done session by session in which a code was assigned to the teachers' practices so that they could be easily tracked across the pre- and post-course data. To enhance the credibility of the analyses, the researchers examined the data separately and then resolved the emerging incongruities. After they coded the data, the researchers shared their codes and categories, and the main themes in relation to the beliefs and practices were finalized.

Findings

In what follows, the beliefs and practices of the teachers before and after the course are presented, respectively.

Grammar beliefs

The analysis of interviews before and after the TE course revealed three themes as to the teachers' beliefs of grammar instruction: Learner engagement in grammar teaching, individual differences among students, and enhanced awareness of alternatives in grammar instruction.

Learner engagement in grammar teaching

Before the TE course, the teachers held a more teacher-fronted conception of grammar instruction. In this regard, they believed that presenting the students with grammatical structures provides them with essentials of grammar learning and develops their interlanguage. For example, Shila stated that *"grammar teaching to me is introducing the points in the class and providing students with opportunities to practice the point. If they have enough practice, they will necessarily master it and they will be able to use it in their normal speech"*. Here, Shila views grammar instruction as presenting the points to the students (her reference to "introducing the points") and the associated practicing activities. She shoulders the primary responsibility to the learners by making mention of "if they have enough practice", which shows her teacher-fronted perceptions of grammar learning and instruction.

Relatedly, the teachers argued that memorizing the structures is much likely to lead to effectively using grammatical constructions. For example, Parisa emphasized the critical role of teachers in effectively designing grammar activities and implementing them. She believed that excessive student engagement might agitate the class and problematize monitoring activity implementation. In the following extract, she refers to the difficulties of controlling the learners when the class is noisy (her reference to "many errors might go unnoticed"). She also mentions her preference in students' being silent while she presents the grammatical structure, which is followed by their active participation during the practice stage:

When all the students are active while I am teaching new grammar materials, the control of the class becomes difficult and many errors might go unnoticed which can lead to learning erroneous structures by the students. Honestly, I prefer my students to be silent in the presentation part of the class. But right after the first part, I ask the students to practice the target structures because practicing determines the depth of learning.

After the course, the teachers became more open to student engagement in teaching grammar. The key to such a change was the negative effect of mere teacher talk on students' engagement and emotions, mingled with insights from the course as to the benefits of interactive grammar instruction: *"Thanks to the course, now I think that one shouldn't put so much pressure on her students to produce grammatically correct sentences right after they were taught"* (Shila). Here, Shila emphasized that transiting from presentation to production of grammatical structures happens over time and students' emotions should be regarded to navigate such transitioning effectively. Parisa referred to a similar point: *"A lot of teacher talk bores the students. Inductive learning means that mastering a language doesn't happen overnight, and one has to engage the students in the process to achieve mastery in the long-run"*. Parisa argued that grammar learning is a process and interaction plays an important role in shaping students' learning as part of the process of engaging in grammar activities. She mentioned the effective role of reduced teacher talk and its contributions for adopting an inductive approach to learning grammar, which is accompanied by learners' further engagement, lack of boredom, and subsequent mastery over grammatical structures.

Individual differences among students

The second theme in the teachers' grammar beliefs pertained to the significance of individual differences among students as a factor shaping effective grammar instruction. Before the course, individual differences did not feature in the teachers' grammar beliefs. For example, in the following extract, Shila starts with a holistic and teacher-dominated perception that relates to error correction by referring to "when I am sure". She is intolerant of errors and casts doubts on her own instruction by mentioning "I haven't been successful in presenting it" when she faces errors, and that this incident might be due to differences in learners' socioemotional-educational factors does not feature in her beliefs, as compared to after the course (see below). In light of such beliefs, she decides to adhere to immediate error correction in response to the arising problems.

When I am sure that we have covered the point, I can't ignore the error. Sometimes it happens that I have taught the point about 10 minutes before but again someone uses it incorrectly. These types of errors make me think that I haven't been successful in presenting it. So, I stop the student immediately and explain it again.

After the course, Parisa believed that there are other factors that would contribute to the way teachers need to react to errors including differences among the students. She mentioned the costs of treating errors which could be shattering for students' emotions depending on their characteristics, especially their confidence: *"I understand that students are different and corrections that might be a simple conversation to some can be a threat to others' confidence. The course helped me take errors/mistakes easier than I used to, and consider the costs that error correction can impose"*. Here, Parisa acknowledges individual differences and emotions as a determining factor in error correction in that students are differentially influenced by error correction. She also makes mention of her learning from the course in that it helped her pay more attention to the consequences of error correction and its impacts on the students.

Shila made a similar case in error correction and argued that: *“I think that it is important to pay attention to the student you correct. I used to little consider this issue and the content was more important to me, but now I consider who should correct more and how”*. Here, Shila emphasizes the point that learners’ individual characteristics play a functional role in correcting them. She proceeds with highlighting her little attention to individual differences in the past and the primacy of content, yet she underlines that she now pays more attention to the student being corrected and the instructional approach in such a correction.

Enhanced awareness of alternatives in grammar instruction

The analysis of the teachers’ definitions of grammar (instruction) and its components revealed change in their beliefs after the course. In this sense, the teachers’ definition before the course was more single-sided in terms of the nature of grammar instruction. For example, Shila defined grammar as: *“Grammar is to teach the students the rules of English so that they can learn the language better”*. Parisa provided a similar definition as: *“Grammar is the whole range of structures of English and other languages that students should learn to write and speak well”*. Regarding grammar instruction, the teachers primarily pointed to a teacher-fronted perspective. For example, Parisa defined grammar instruction as: *“Teaching grammar involves telling the students the rules and practicing them in examples. I sometimes teach grammar inductively, but when I tell and practice the structures, I think that my instruction is better”*. Shila also defined grammar instruction as: *“Teaching grammar is important because the students should master the grammar to speak and write well. So, I ensure that the students have completely learned the point by providing many examples and practicing the rules”*.

After the course, the teachers held part of their beliefs, yet they mentioned that the TE provided them with alternatives in grammar instruction. In this regard, their definitions became more multi-faceted. For example, Shila defined grammar as: *“Grammar is not always the same in writing and speaking as each of these requires its own expertise in using grammar. Grammar is also more than the rules. The way to use the grammar to express meaning is more important”*. Here, Shila makes mention of differences in spoken and written grammar and the importance of using tailored activities and knowledge base of grammar instruction per skill. She underlines the pragmatic aspects of grammar by referring to *“grammar is also more than the rules”* to highlight the non-linear nature of grammar in interpersonal connections. She clearly emphasizes the meaning-exchanging and interpersonal nature of grammar in the last line to highlight its primacy over mastering a set of rules irrespective of contextual particularities.

Regarding grammar instruction, the teachers’ beliefs extended toward the multiplicity of socioemotional-educational factors that shape instruction. For example, Shila mentioned that *“the grammar point, my own mood, the students’ emotions and states, and the time of the class are important in how to teach the grammatical point”*. Parisa mentioned a similar point as: *“Teaching grammar is not just mechanically teaching the structures to the students. We should integrate it with other activities like group work, in listening, etc. to make it interesting. If the students don’t like it, they will not learn it”*. In these two extracts, the teachers refer to the importance of the nature of grammatical structures, the role of socioemotional factors, and integrating grammar with other skills to teach

the structures. The common thread among these beliefs is that by acknowledging and adopting such specificities, learning grammar would become more enjoyable for learners, which positively contributes to learning it over time.

An immediately highlighted point was that the TE provided the teachers with a toolkit of alternatives to choose from when the instruction does not propel effectively; Parisa said: *“I think that now I have several alternatives like teaching grammar in speaking, games, interactive instruction, stories, etc. to teach grammar when one way does not work”*. Shila also noted: *“I have learned that I can change the practice when one does not work. To be honest, I used to panic when the practice failed and I continued it desperately”*. In the first extract, Parisa refers to the wide range of instructional alternatives she has in her repertoire to teach grammar based on contextual demands. Shila refers to a similar point when a grammatical practice does not yield the desired outcomes. More specifically, she refers to the negative emotions she used to experience in problematic circumstances when her adopted practices did not work and that she is now at more ease with dealing with such situations.

In sum, the course enabled the teachers to develop beliefs that were oriented toward heeding a more central role for students in grammar instruction. This finding parallels the earlier observations regarding the substantial role of students in the process of teaching grammar (e.g., Borg, 2011; Graus & Coppen, 2018; Phipps & Borg, 2009) and the impact of TE on changing teachers’ beliefs in becoming more adaptable to students and their learning trajectories (e.g., Nazari, 2020; Sansom, 2020).

Grammar practices

As mentioned earlier, three sessions of the teachers’ classes were observed before and three sessions after the TE course. Inductive analysis of the instructional practices showed a number of categories and sub-categories before and after the course, as indicated in Table 2. In the following, sample lessons of the teachers are presented before and after the course, one from Shila and one from Parisa. These practices show that the

Table 2 The teachers’ grammar practices

	Before the course		After the course	
	Shila	Parisa	Shila	Parisa
Session 1	Writing the structure on the board and teaching it	Writing the structure on the board and teaching it	Session 1	Highlighting the structure in a text and engaging the learners via peer work
Session 2	Teaching the structure via examples	Using a text in which the structure has been used	Session 2	Starting with the contexts to use the structure and using group work to teach it
Session 3	Using a personal experience to teach the structure	Teaching the structure via examples	Session 3	Using the lesson conversation to prepare the students and teaching the rule
				Using group work to practice the structure in a highlighted text
				Using an interactive approach to teaching the rule
				Starting with the contexts to use the structure and using group work to teach it

teachers used more grammar practices that oriented toward interactive and pragmatic aspects of grammar structures after the course.

In the third session before the course, Shila started the grammar part with an occurrence she had experienced earlier that day. The structure was past continuous. Shila started her narrative by telling the learners: "Well, I want to tell you about what happened to me today". Her narrative was related to observing a poor child trying to sell chewing gums in the subway system. She continuously used past continuous to explain her talk with a person next to her on the train. She emphatically repeated the structure so that the learners notice the context. After the narrative, she noted the students of the grammar of the lesson and explained the structure. She made frequent references to her narrative to establish a link between the narrative and the structure. She then wrote sample examples from the narrative and sentences on the board in which the structure was used and asked the learners to repeat them. Next, she asked questions from the students to check their understanding and told them about the assignments for the next session.

In the first session after the course, Parisa divided the students into groups of three to four students. The structure was future simple. Parisa gave then handouts that involved the structure as highlighted. She then told the students to read the text once and tell her their understanding of the content of the text. Each group explained a portion of the content and complemented the other groups' explanations. She then asked the students to jointly work on the highlighted parts by experimenting with the reason for using the structure and negotiating their associated ideas. After several minutes, Parisa drew the students' attention to the board and underlined the use of "will" and the base form of verb in a number of examples. She used the explanations to heuristically extract the rule from the students by writing their ideas on the other side of the board. Finally, she wrote the structure and asked the students to write sample examples for the next session.

Collectively, these findings align with previous studies that underline the positive effect of TE on teachers' practices in paying attention to higher-order aspects of teaching (e.g., Ha & Murray, 2021; Nazari, 2020; Zonoubi et al., 2017) in that the teachers moved beyond micro-level structural dimensions of grammar teaching toward situating grammar within its pragma-linguistic characteristics (Larsen-Freeman, 2014; Richards & Renandya, 2002).

Discussion

The analysis of the teachers' beliefs and practices indicated that they changed both in their beliefs and practices of grammar instruction after the course.

Grammar beliefs

Regarding their beliefs, the teachers experienced change in three major areas. One type of change pertained to engaging the learners in teaching grammar in that after the course the teachers came to provide more room for learner engagement and differences among them. This observation parallels with Phipps and Borg (2009) and Richards and Renandya (2002) in that teachers' beliefs in relation to the role of students in grammar changes over time as a function of exposure to TE. For our teachers, however, heeding further learner engagement in teaching grammar featured their further attention to the range of emotional-pedagogical aspects that a teacher-fronted approach overlooks.

Similar findings have been reported in Ha and Murray (2021) in the context of corrective feedback. This finding shows that, as Borg (2011) observes, TE can influence aspects of teachers' beliefs that directly affect learners, which here was in relation to learner emotions.

One reason for this type of change could be the teachers' own studentship experiences in that as they did not experience much engagement in grammar activities, they have extended past experiences to the current adopted practices. Scholarship on teacher cognition has also emphasized the substantial effect of studentship experiences on teachers' current cognitions and practices in that such experiences are resistant to change and are determining in the teachers' sense-making processes and instructional practices, which could also influence students' learning (see Borg, 2003; Kubanyiova, 2012). However, the TE course enabled them to reconsider their previous experiences and develop new frames of thinking about grammar, which is one of the major points Johnson and Golombek (2020) refer to in regard to the effect of TE to reshape teachers' previous experiences and mental schema, which happened to our teachers.

Moreover, another type of change was related to the teachers' ability to pay more attention to individual differences and to use alternatives when facing problems in teaching grammar. A related change was the teachers' developed understanding of grammar and grammar instruction. This finding is in partial congruity with Mattheoudakis (2007) who reported gradual change in teachers' beliefs over time. It seems that the range of topics covered in the course has enabled the teachers to adhere to their developed understanding in conceptualizing grammar and its instruction. Borg (2019) argues that such type of change in conceptual knowledge is one of the key characteristics of TE, which seems to have happened for our teachers. Moreover, the teachers' ability to use their learning from the course in choosing the best alternatives shows that the course has assisted with the teachers' increased knowledge base of instructional practices. This finding was also related to the teachers' immediate emotions in the class, which shows that the course has positively influenced the teachers' pedagogical and emotional well-being in teaching grammar, a point Borg (2019) emphasizes to be considered in research on teacher cognition.

The reason for these cognitive changes could be sought in what Kubanyiova (2012) refers to as generative change, or "placing an emphasis on the teachers' ability to continue to add to their new understanding by engaging in their own inquiry" (p. 8). From this perspective, as the teachers were engaged in sharing their experiential knowledge and practices as stemming from their classes, they could create a direct link between their pedagogical knowledge and conceptual knowledge from the course. This argument aligns with Kubanyiova's observation that "teacher change often requires a transformation of existing belief systems" (p. 8). Such a transformation happened for our teachers in terms of paying more focal attention to the role of individual differences and socio-affective states as well as adopting alternative practices to deliver the grammar lesson more effectively. This change was fused and fueled by the conceptual knowledge from the TE, which coupled the teachers' pedagogical understandings with theoretical concepts and ideas (see the syllabus of the course) that reshaped their grammar cognitions.

Collectively, the findings from the teachers' grammar beliefs show that the TE could positively influence the teachers' cognitions when they engaged in simultaneous

development of their theoretical knowledge by TE content and established connections to the pedagogy at the classroom level. Specifically, the teachers' beliefs about learner engagement, individual differences, and a grammar instruction toolkit reveal that these dimensions of the teachers' grammar instruction could be effectively developed by the TE.

Grammar practices

Change was also observed in the teachers' practices. Practical change was primarily related to using more group work and attending to the pragmatic aspects of the structures, as compared to before the course. Regarding using more group work, the teachers attempted to engage the learners more in the process, which aligns with change in their beliefs about learner engagement. Graus and Coppen (2016) also underline the importance of activities that open room for further joint collaboration of students in meaning-making, which was observed in the teachers' classes. The rigor of group work in this sense lies in the negotiation of meaning and its significant role in interlanguage development (Ellis, 2006; Richards & Renandya, 2002). Moreover, using more group work paralleled with change in the teachers' beliefs in relation to less adopting a teacher-fronted approach. Thus, it seems that the course helped the teachers provide more room for the learners to engage in grammar activities, a type of change that aligns with the ongoing recognition for the importance of meaning negotiation in SLA (Ellis, 2006; Graus & Coppen, 2016).

This type of change parallels the change process Kubanyiova (2012) refers to as worthwhile change, or "change which takes place in valued and worthwhile directions" (p. 8). Such a change occurred to our teachers in terms of adopting group-work activities that were in turn contributive to the learners' socio-affective well-being. This change was accompanied by coupling the teachers' integrated beliefs and practices in that they could open room for and practice activities that could both positively influence the teachers' personal satisfaction with the grammar lessons and the students' enhanced engagement and emotional well-being. Kubanyiova (2012) further refers to the importance of collaboration among teacher educators and teachers "as an important element in bringing about teacher change" (p. 7), which happened in this study and could be one of the reasons that brought about effective changes in the teachers' adopted grammar practices.

Another change in comparison to before the course was that the teachers attempted to highlight the pragmatic use of the grammatical structures. In this sense, the teachers not only taught the structures, but also made reference to where to use the structures by highlighting the social situations in which the structure could be used. Besides the point that this observation aligns with Larsen-Freeman (2014) regarding the importance of heeding pragmatic aspects of grammatical structures, it shows that the teachers have moved beyond a linear understanding of the rules toward a conception rooted in socio-cultural considerations of grammar. This finding is novel in the context of the impacts of TE on teachers' grammar beliefs and practices. However, this finding could be attributed to the fact that the teachers were novice and novices are more likely to experience substantial changes over time (Borg, 2011). This point could be a fecund ground for further research in how novices' beliefs and practices become influenced by the pragmatic aspects of grammar teaching.

These findings mean that the TE could positively influence the teachers' grammar practices by helping them concretely make sense of grammar by drawing on their learning from TE and extending such learning to the context of their classrooms. Specifically, using more collaborative activities and attending to pragmatic aspects of the grammatical rules shows that the TE could reshape teachers' grammar practices in preparing students for grammar learning as a sociocultural undertaking.

Conclusions

This study explored the impact of a professional development course on two Iranian novice EFL teachers' grammar beliefs and practices. The findings of the study indicated that the course influenced the teachers' beliefs in that they moved from a more teacher-fronted approach toward an approach that marked attention to the importance of learners' socio-affective states in teaching grammar. Moreover, the teachers' practices after the course featured more attention to the collaborative and pragmatic aspects of grammar instruction. These findings contribute to the body of knowledge on grammar teaching beliefs and practices, yet mark the role of TE in highlighting socioemotional issues in teachers' developing cognitions and instructional practices.

Implications and suggestions for further research

The findings of the study offer implications to policymakers, teacher educators, and teachers. First, considering the changing character of research on teacher cognition, more attention to the role of sociocultural-personal aspects in TE programs renders such programs more aligned with teachers' developing cognitions. The changing character is best reflected in Borg's (2019) definition of research on teacher cognition as: "Inquiry which seeks, with reference to their personal, professional, social, cultural and historical contexts, to understand teachers' minds and emotions and the role these play in the process of becoming, being and developing as a teacher" (p. 20). As this definition shows, more attention to the role of sociocultural-personal aspects is likely to depict teachers' sense-making in greater depth. As we observed, reference to the emotional and personal aspects was part of the teachers' beliefs after the course in this study. Thus, teacher educators can foster teachers who do not consider grammar as merely a set of rules to be transmitted to the learners. The process here involves the myriad of socio-emotional factors that mediate teaching and learning grammar. Such components can be highlighted and covered in TE programs to make such programs more responsive to teachers' and learners' needs.

Second, as the content of TE is likely to influence teachers' cognitions and practices (Borg, 2011; Graus & Coppen, 2018), it is important that teacher educators develop in teachers awareness of micro-level grammatical structures and macro-level pragma-linguistic dimensions. As we observed, elaboration on both of these aspects in the TE course brought about changes in the teachers' beliefs and practices that involved more learner engagement and attention to pragmatic aspects of grammatical structures. As attention to such aspects undergirds current conceptualizations of grammar instruction (e.g., Graus & Coppen, 2018; Larsen-Freeman, 2014), teacher educators need to highlight both lower- and higher-order dimensions of grammar teaching in their programs. Such a focus opens room for more attention to moving grammar beyond its

linear characterization and situating it within a pedagogy that foregrounds teachers' and learners' identities, agencies, and emotions as constitutive of their learning.

Third, as we observed, the teachers came to terms with developing a belief that emphasized the students' active role in grammar teaching. In this sense, the range of students' emotions and sense-makings were points that were highlighted by the teachers. These findings imply that teachers need to pay close attention to the role of emotions and student subjectivity in grammar instruction as these are directly linked to the extent to which students perceive grammar as a flexible competency that should be internalized. Moreover, further focus on the pragmatic and collaborative nature of writing is an aspect that can be effectively employed by teachers. In this sense, teachers can develop students' use and usage competencies (Larsen-Freeman, 2014) by focusing on both structural characteristics of grammar rules and their semantic and pragmatic features.

The present study had some limitations that need to be considered in future research. First, there were only two participants in this study. Further research with a greater number of teachers would provide a better understanding of how teachers navigate their cognitive and practical development. Second, delayed observation of the teachers' classes and interviewing them would clarify the role of time in the teachers' sustained beliefs and practices. It would also be beneficial to examine how comparative exposure of novice and experienced teachers to TE structured around grammar instruction contributed to their beliefs and practices. We hope that this study has been able to show how in-service TE influences novice teachers' grammar beliefs and practices in stepping toward highlighting the role of socioemotional-pragmatic aspects in teachers' development.

Abbreviations

EFL: English as a foreign language; SLA: Second language acquisition.

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Author contributions

MN designed the study and collected a part of the data with AB. MS analyzed the data with MN and cooperated in the writing of the final manuscript with MN. All authors read and approved the final manuscript.

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Availability of data and materials

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Declarations

Ethics approval and consent to participate

The participants of the present study approved for the data collection and the publication of the study and their identities remain confidential. There is no ethics committee in Iran to seek its approval.

Consent for publication

Not applicable.

Competing interests

The authors declare that they have no competing interests.

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