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Unveiling vocabulary teaching and learning beliefs of teachers and learners in an EFL context

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Abstract

Vocabulary is often considered as a key predictor of second language ability, and how teachers and learners' beliefs and conceptualizations about vocabulary affect their teaching and learning has recently gained unprecedented momentum in the field of second language education. However, despite their importance, there is a paucity of research that has combined data from teachers and learners to illuminate their beliefs and conceptualizations. The main aim of this quantitative study is to combine data from English language teachers and learners to explore their beliefs and conceptualizations about vocabulary learning and knowledge. The study voluntarily recruited 113 learners and 91 teachers from a major Saudi university to fill out an online questionnaire. The findings revealed that both teachers and learners generally valued vocabulary on a par with grammar, listening, speaking, reading, and writing, and that both groups showed a general understanding of the basic components of word knowledge; however, their beliefs differed significantly. The results also indicated that despite showing an awareness of the role of textbooks and the incidental approach to vocabulary learning, there were significant differences in teachers and learners' beliefs. The study concluded with a range of suggested implications, as well as suggestions for further studies on how to address the present lacunae in the field.

Keywords: Beliefs, Conceptualizations, Knowledge aspects, Vocabulary learning

Introduction

There is a general awareness of the influence of teachers and learners' cognition on their behavior and practices in the process of teaching and learning (Borg, 2013). Insights into teachers and students' cognitions are commonly assumed to inform learning and teaching, as uncovering cognitions helps others to understand what teachers and learners do (Nishimuro & Borg, 2013). In light of the growing recognition of the critical role of cognition, research on teachers and learners' cognition has been growing progressively and swiftly in the past two decades. In the area of second language (L2) research, much of the interest in cognition so far has been primarily devoted to grammar teaching (e.g., Farrell & Bennis, 2013; Nishimuro & Borg, 2013; Phipps & Borg, 2009; Uysal & Bardakci,

2014). However, relatively fewer studies have focused on vocabulary (e.g., Gao & Ma, 2011; Mardali & Siyyari, 2019; Niu & Andrews, 2012; Sánchez-Gutiérrez et al., 2022), despite general agreement among language educators and scholars that vocabulary is a foundational instrument for L2 language development and use (Pellicer-Sánchez, 2016).

The value of vocabulary is frequently emphasized in L2 field in the sense that native language speakers are fundamentally distinguished by their lexical competence (Laufer, 1998). In spite of the significance of vocabulary knowledge, which is seen as a crucial feature of L2 proficiency, the taxing nature of lexical items along with the knowledge of a tremendous number of words required for fluent language mastery constitute a significant challenge for most L2 learners (Schmitt, 2010). Nation (2013) asserts that many thousands lexical items have to be learned in order to achieve successful comprehension of a diverse array of written and spoken texts. Besides, to truly know a word, L2 learners must master various receptive and productive knowledge dimensions of each lexical item, which are not acquired in “a dichotomous known/not known manner. Rather, they are likely to be developmental in nature, although each of the aspects probably develops at different rate” (Schmitt, 2014, p. 916). This stresses the importance of developing a structured vocabulary program for English language courses in which explicit focus of attention is directed to vocabulary learning and knowledge (Schmitt, 2010).

Given the prominent role that teachers and learners of English as a Foreign Language (EFL) play in the process of language learning and teaching, the study of their beliefs regarding the role of vocabulary learning to L2 development, and an exploration of their understanding of the different dimensions that formulate word knowledge are of particular relevance and would help to build a well-developed vocabulary education. The value of unveiling the congruence between the beliefs of EFL teachers and learners toward vocabulary learning and knowledge lies in the fact that it helps us to gain a nuanced understanding of what influences vocabulary learning and instruction (Borg, 2003). It is therefore important to combine data from teachers and learners to investigate their beliefs and conceptualizations about certain important aspects of vocabulary instruction and learning, such as the various components of word knowledge, the role of L2 textbooks, and the incidental learning approach to vocabulary development.

So far, the bulk of the published literature has been devoted to teachers' beliefs about vocabulary instruction and how such beliefs impact their instructional practices. There have been scant attempts to combine data from both EFL teachers and students in order to explore their beliefs and understandings of other key aspects of vocabulary learning and knowledge, which still need to be enlightened further. To address this gap in the literature, the present study seeks to examine the beliefs and conceptualizations about vocabulary learning and knowledge of both EFL teachers and learners.

Literature review

In this section, the relevant theoretical concepts are reviewed. Firstly, the section opens with an overview of beliefs and the distinction between beliefs and other related concepts. It then discusses past similar research on the vocabulary beliefs of EFL teachers and learners.

Understanding beliefs

In the mid-1990s, directions in educational research shifted to focus on the cognition of teachers and learners due to the growing recognition of the importance of their mental lives to the success and failure of any educational system. Since then, the cognitive aspects of L2 teachers and learners have been the center of much research attention because of the major role that cognition plays in their educational behavior, classroom performance and practices (Borg, 2006). In the field of L2 research, researchers and scholars have generally agreed that studying teachers and learners' cognition will prop up instructional and learning practices and decisions (Gerami & Noordin, 2013), which in turn will foster better learning and teaching environments (Gao & Ma, 2011).

A search of the published literature on beliefs reveals the absence of a well-defined distinction between beliefs and a multitude of other terms. Central to the current study, a distinction is to be established between three crucial concepts: attitudes, perceptions, and beliefs. An attitude is broadly defined as an "evaluative reaction to some referent or attitude object on the basis of the individual's beliefs or opinions about the referent" (Gardner, 1985, p.9). Perception is viewed as "a partial, incomplete view of something that is nevertheless real, and capable of different interpretation when seen from different viewpoints" (Lincoln & Guba, 1985, p. 83). Beliefs, on the other hand, are described as "a set of convictions which influence learning behavior powerfully" (Riley, 1997, p.128).

In spite of the numerous efforts of several beliefs scholars, made to disentangle the concept of beliefs from a range of related notions such as opinions, perceptions, judgments, and conceptions, no consensus has been reached on a definition of beliefs. More recent research has generally used the concept of beliefs with reference to teaching to refer to "evaluative propositions which teachers hold consciously or unconsciously and which they accept as true while recognising that other teachers may hold alternative beliefs on the same issue" (Basturkmen, 2012, p. 282). In his widely cited definition, Borg (2003) suggests that beliefs are concerned with "the unobservable cognitive dimension of teaching—what teachers know, believe, and think" (p. 81). This research follows similar studies (e.g., Bergström et al., 2021; Chung & Fung, 2022) in using the concept of 'beliefs' to broadly refer to what the participants know and believe about vocabulary knowledge and learning.

Despite definitory controversies raging in the literature of the construct of beliefs, a wealth of research efforts (e.g., Farrell & Bennis, 2013; Nordlund, 2017; Phipps & Borg, 2009) have strived to reveal teachers and learners' mental constructs (e.g., beliefs, thinking, knowledge) with regard to language learning in general. The argument is that since teachers and learners have to take control of their learning and teaching (Benson, 2007), such investigations help them interpret their experiences and boost language teaching and learning autonomy (Bergström et al., 2021). Consistent results have emerged from past studies reporting a mutual interaction between beliefs and classroom performances (Phipps & Borg, 2009). These studies have also demonstrated that beliefs are dynamic and context situated (Gao & Ma, 2011) and that beliefs and instructional and learning practices are found to be congruent in some cases and incongruent in other cases (Niu & Andrews, 2012).

Beliefs about vocabulary learning

In the L2 field, the role that vocabulary plays in L2 competence is nowadays beyond dispute; vocabulary is generally regarded as an essential component in language mastery (Webb & Nation, 2017). However, vocabulary researchers and scholars have long been concerned about the most effective ways of enlarging learners' vocabulary knowledge (Pellicer-Sánchez, 2016). Studies on vocabulary learning and teaching have followed two main approaches to vocabulary learning—intentional and incidental—and these differ in terms of the absence or presence of the intention to learn (Webb & Nation, 2017). Incidental vocabulary learning occurs as a by-product of another meaning-focused task, such as reading, listening or viewing, when learners' attention is solely directed on understanding the task (Webb et al., 2023). A large body of incidental vocabulary research has established that words can be acquired incidentally through different types of contexts (Dang et al., 2022; Puimège & Peters, 2019), and that engagement with the language outside the classroom can lead to incidental vocabulary development (Peters, 2018). Intentional learning approach, on the other hand, refers to a type of learning that involves a deliberate intention to learn words and commit them to the learner's memory (Schmitt, 2010). It is argued that due to the limited class time allotted for vocabulary learning, the intentional approach alone is not practical to account for the large number of words (between 3000 and 9000) required for the comprehension of various types of texts (Dang et al., 2022). It is thus commonly advocated that both approaches need to be employed in order to build a sizable vocabulary knowledge and consolidate the learning of different vocabulary facets (Nation, 2013).

Vocabulary knowledge is a multidimensional construct that involves knowledge of several related aspects that need to be mastered for proficient language use (Schmitt, 2010). To categorize vocabulary knowledge, Nation (2013) has developed a comprehensive framework of vocabulary knowledge which sufficiently illuminates the complexity of word knowledge (Pellicer-Sánchez, 2016). In his framework, Nation has classified the knowledge components involved in knowing a word, including dimensions of meaning (for example, form-meaning connections, concept and referent relationships, associations), form (for example, spoken/written forms, word parts), and use (for example, collocations, constraints of use, grammatical functions). Because textbooks are the primary sources of vocabulary learning in most EFL classes, a number of corpus-based research has looked at the representations of these dimensions of vocabulary knowledge in several international and local EFL textbooks (e.g., Alshumrani & Al-Ahmadi, 2022; Brown, 2011; Sun & Dang, 2020). These studies have found that the examined EFL textbooks have primarily directed their attention to the aspect of form-meaning.

Given the complex nature of word knowledge and the tremendous size of vocabulary, one line of L2 cognition research has investigated teachers and learners' beliefs about vocabulary teaching and learning and how such beliefs shape and influence their efforts to teach and learn vocabulary (e.g., Gao & Ma, 2011; Mardali & Siyyari, 2019; Niu & Andrews, 2012; Sánchez-Gutiérrez et al., 2022). The findings that emerged from most of these studies have shown an effect of beliefs on pedagogical practices. They have also indicated that beliefs can differ across various educational contexts. So far, limited efforts have been made to examine EFL teachers and learners' beliefs and conceptualizations regarding other key aspects of vocabulary, such as the incidental learning, textbooks,

and vocabulary knowledge aspects. Bergström et al. (2021) interviewed 14 Swedish EFL teacher participants to explore their understanding of vocabulary learning and the different knowledge aspects involved in knowing a word. It was reported that although their teachers were aware of the multi-faceted nature of vocabulary knowledge, they did not see vocabulary learning as a learning objective in its own right. Chung and Fung (2022) examined the beliefs and conceptualizations about word learning and knowledge of 556 secondary students in Hong Kong using an open-ended rating questionnaire. The findings of their study revealed that 75% of their subjects perceived vocabulary development as equally important as the learning of listening, speaking, reading, writing and grammar. It was also reported that although the students generally believed that all word knowledge facets were important, meaning was rated as the most important one.

Overall, the existing studies that examined teachers and learners' beliefs have particularly focused on the role of vocabulary in L2 learning, while beliefs and conceptualizations regarding other essential aspects of vocabulary learning, such as incidental learning, textbooks, and vocabulary knowledge, have been underexplored. Only two studies to date have devoted attention to teachers and learners' conceptualizations about such aspects. These studies have suggested that conceptualizations and beliefs may vary across different learning and teaching contexts, highlighting the need for further studies to combine data from both teachers and learners to explore their beliefs and understanding related to vocabulary learning and knowledge. The current study, therefore, is an attempt to provide further insights into the understanding and beliefs of EFL teachers and learners related to vocabulary learning and knowledge.

Theoretical framework

Research into teachers' beliefs has asserted that beliefs exist within a complex and multi-faceted system, and that there are two subsystems of beliefs—core and peripheral (Niu & Andrews, 2012; Pajares, 1992). Core beliefs, on the one hand, are described as being “experientially ingrained”, and they have a greater impact on human behavior than peripheral beliefs (Phipps & Borg, 2009, p. 388). That is, teachers' life experiences positively or negatively impact their beliefs about teaching and learning (Borg, 2003). On the other hand, peripheral beliefs, which are viewed as being “theoretically embraced”, are moderated by a variety of contextual factors such as curriculum and time constraints, and thus they may not have an influence on instructional practices (Phipps & Borg, 2009, p. 388). Insights into these two subsystems of beliefs are assumed to enhance our understanding of the link between held beliefs and classroom practices and behaviors, and hence allow a better understanding of the process of learning and teaching (Phipps & Borg, 2009).

It is commonly accepted among many L2 educationalists that teachers and students' core and peripheral beliefs have cultural and personal aspects (Flores & Day, 2006; Gabillon, 2012); however, these two aspects have been emphasized differently in the literature. Some scholars have maintained that since individuals' understanding of their situation is unique, the vast majority of their beliefs are personal (Borg, 2003). Similarly, Williams and Burden (1997) considered most individuals' beliefs to be personal entities such as understanding and knowing, which are the result of one's personal life experiences, and which vary from one person to another. Although the personal aspect of

teachers and learners' beliefs has been given prominence over the cultural dimension in the research on this topic, the impact of cultural factors on teachers and learners' beliefs about L2 teaching and learning has particularly been emphasized. Cultural beliefs, being more resistant to change than personal beliefs, are shaped "early in life and culturally bound" (Gabillon, 2012, p. 192). In this regard, Milner (2005) has observed the influence on their beliefs and practices of the interactions and experiences that teachers have had with different individuals and contexts.

Aims and research questions of the study

The present study chiefly aims to address the current lacunae in the field by providing a nuanced understanding of how the participants conceptualize vocabulary learning and knowledge. In particular, it aims to combine data from teachers and learners regarding their beliefs about the importance of vocabulary in L2 development. Additionally, it explores their beliefs about the role of the incidental learning activities and the EFL textbooks implemented in their educational settings in fostering different aspects of word knowledge learning, and it examines their understanding of the multi-faceted nature of vocabulary knowledge. The following research questions guided this inquiry:

1. What are the EFL teachers and learners' beliefs about the value of vocabulary learning?
2. What are the EFL teachers and learners' beliefs about the role of the implemented L2 textbooks and the incidental learning approach to vocabulary development?
3. How is vocabulary knowledge conceptualized by both EFL teachers and learners?
4. How do EFL teachers and learners differ in their conceptualizations related to vocabulary learning and knowledge?

Methodology

This study used a quantitative research design that is descriptive in nature to gather basic information for a complete understanding of the investigated phenomenon. As such, this study explored the beliefs and conceptualizations of EFL teachers and learners about vocabulary learning and knowledge through a questionnaire.

The setting and participants

The study was carried out in a Saudi EFL context. In this context, English is a compulsory subject for students enrolled in the first year of their undergraduate studies. The English language curriculum comprises three modular courses over three trimesters/quarters in one academic year. The intensive English language courses had different sections, delivered by experienced and qualified English language teachers who used a series of English course books by a prominent international publisher (National Geographic Learning) as the core instructional materials. The series was particularly designed to cater for young adult English language learners, and it gradually increased in complexity in each new quarter, ending at the B1 level. A textbook-bound and teacher-centered approach is usually followed in this educational context and instructors are not allowed to deviate from the syllabus created by the course coordinator.

The study recruited 117 EFL first-year undergraduate male volunteers. The student participants were studying an intensive English course at a major university, where they received 15 h of instruction each week and their level of English proficiency was B1. All the learners had to pass three intensive English courses offered in the first year in order to be accepted onto their chosen diploma program (e.g., sterilization, accounting, IT, marketing, insurance). English would be the language of instruction in all the courses in subsequent academic studies at this university. Prior to joining the university, they had received formal English instruction as a core school subject for at least nine years, from year four in elementary school to the last grade in high school. The student participants were recent secondary school graduates and their ages ranged from 18 to 20 years.

The study also included 91 male and female English language instructors who came from a variety of backgrounds; 35.9% of the teachers were female and 64.1% were male. The majority (90.1%) of the teachers were non-native speakers and 9.9% were native speakers. One quarter (25%) held MAs and 65% held PhD degrees in majors related to English language teaching. All the teachers were affiliated with the same major university as the student participants. The length of their teaching experiences ranged from 5 to 30 years. The study purposively targeted teachers from this key university. They were considered representative of EFL instructors at many different major universities in this EFL context as they were likely to hold different beliefs and understandings about the investigated issues owing to variations in educational backgrounds, trainings, and work experiences. Thus, it was expected that this group of teachers would provide varied insights to enrich the interpretations.

Data instruments and analysis

The online closed-ended survey questionnaire employed in this study to gather data was based on similar studies (i.e., Bergström et al., 2021; Chung & Fung, 2022). The questionnaire contained 17 items, some of which (2, 4, 11, and 15) were taken directly from Chung and Fung's (2022) study, while the rest were developed following a review of related research studies. Two versions of the five-point Likert scale (strongly disagree, disagree, neutral, agree, strongly agree) questionnaire were designed via Google forms; one for the learner participants and another for the teacher participants. The items in both versions were the same except for a slight re-wording of some items to reflect the participant type. For example, the pronoun *I* in item 3 'I can learn new words by watching videos, movies, listening to music, reading books, playing video games' in the students' version was replaced with the term 'my students' in the teachers' version. The link to the questionnaire was shared with the student and teacher participants via Blackboard.

Both versions of the questionnaire consisted of four parts. The first part, which contained six items, sought to explore the participants' beliefs about the importance of vocabulary. The second part with three items aimed to explore their beliefs regarding the role of textbooks in developing word learning and fostering the different dimensions of word knowledge. The third part comprised three items, and it asked about the respondents' understanding of the role of incidental learning approach to vocabulary acquisition. The final section of the questionnaire contained five items and it sought to explore the participants' understanding of the different word knowledge

dimensions involved in knowing a word. In the teachers' questionnaire version, a fifth section was added to gather demographic data about the participants (i.e., gender, years of teaching experience, level of education). Prior to participation in the study, comprehensive information about the nature of the study and clear instructions in Arabic and English on how to complete the survey were provided to the participants. To ensure full understanding of the questionnaire items, Arabic translations of the items were provided, whose accuracy had been confirmed by an Arabic-English bilingual speaker.

The data were analyzed through SPSS version 29.0. Descriptive statistics were calculated to generate a general picture of the beliefs held by the respondents. The frequencies and the percentages of the responses to the five different possible options for each questionnaire item were calculated and tabulated. For ease of analysis, a summary with abbreviated forms of longer items in the questionnaire are presented in four sub-sections below. Inferential statistical analyses were also conducted on the obtained data to determine whether the teacher and learner participants significantly differed in their elicited beliefs.

Findings

The importance of vocabulary learning

The study's main aim is to illuminate the beliefs of EFL teachers and learners about the importance of vocabulary learning; these were examined by the first six items of the questionnaire. The data from these items are displayed in Table 1, and they revealed that both teachers and learners perceived vocabulary as an essential language component that plays a significant role in EFL proficiency. This is evident in the high proportion of strongly agree and agree responses. For instance, more than half of both teachers (61.5%) and learners (52.2%) believed that having a large vocabulary would facilitate the development of other language skills. In addition, more than two thirds of the teachers (80.2%) and learners (72.5%) perceived vocabulary knowledge as being as important as the other language skills of reading, listening, writing, and speaking in EFL learning. In contrast, 73.7% of teachers and 61.9% of learners strongly disagreed and disagreed that the four language skills should be given primacy over vocabulary in EFL classes.

With regard to the importance of vocabulary as compared to grammar, the data showed that more than half of the teachers (57.2%) and learners (62.8%) either strongly agreed or agreed that vocabulary was as just as important as grammar. In much the same vein, 81.3% of the teachers and 58.3% of the learners opposed the idea that grammar should be given precedence in EFL classes over vocabulary. The last statement in this section of the questionnaire assessed the participants' beliefs about the role of vocabulary in EFL proficiency. The results indicated that 94.5% of teachers and 78.7% of learners believed that vocabulary plays a key role in EFL proficiency. These findings seem to suggest that the participants hold positive beliefs about the importance of lexical items in EFL learning in comparison to listening, speaking, reading, writing and grammar.

Table 1 The frequency and (percentage) of the participant responses under the 1st six items of the questionnaire

Section 1 items	Strongly agree		Agree		Neutral		Disagree		Strongly disagree	
	T	L	T	L	T	L	T	L	T	L
(Item 1) Vocabulary helps develop L2 skills	37 (40.7%)	33 (29.2%)	19 (20.8%)	26 (23.0%)	17 (18.7%)	22 (19.5%)	8 (8.8%)	22 (19.5%)	10 (11.0%)	10 (8.8%)
(Item 2) Vocabulary is as important as other skills	38 (41.7%)	44 (38.9%)	35 (38.5%)	38 (33.6%)	9 (9.9%)	22 (19.5%)	7 (7.7%)	8 (7.1%)	2 (2.2%)	1 (0.9%)
(Item 3) The four skills should take precedence in language classes over vocabulary	6 (6.5%)	9 (8.0%)	5 (5.5%)	15 (13.3%)	13 (14.3%)	19 (16.8%)	35 (38.5%)	53 (46.9%)	32 (35.2%)	17 (15.0%)
(Item 4) Vocabulary is as important as grammar	19 (20.9%)	24 (21.2%)	33 (36.3%)	47 (41.6%)	19 (20.9%)	30 (26.5%)	16 (17.6%)	12 (10.6%)	4 (4.4%)	0
(Item 5) Grammar should take precedence in language classes over vocabulary	2 (2.1%)	4 (3.5%)	5 (5.5%)	15 (13.3%)	10 (11.0%)	28 (24.8%)	60 (65.9%)	51 (45.1%)	14 (15.4%)	15 (13.3%)
(Item 6) No key role for vocabulary in L2	1 (1.1%)	6 (5.3%)	1 (1.1%)	11 (9.7%)	3 (3.3%)	7 (6.2%)	27 (29.7%)	44 (38.9%)	59 (64.8%)	45 (39.8%)

T teacher participants, L learner participants

The role of EFL textbooks to vocabulary development

The second section of the questionnaire explored the participants' beliefs regarding the role of English language textbooks in their current educational setting. It examined whether the participants thought that they enhanced vocabulary learning and the different vocabulary knowledge aspects by providing a variety of activities and opportunities to learn and practice different words and different word knowledge aspects. Table 2 shows that the participants held positive beliefs about the role that the English textbooks played in vocabulary learning as a main source of vocabulary input. More than two thirds of the teachers (80.1%) and learners (74.30%) believed that the language textbooks helped to develop lexical competence.

Similarly, the table above indicates that 65.9% of the teachers and 72.5% of the learners believed that the vocabulary activities presented in the textbooks afforded sufficient opportunities to practice the newly learned words. In contrast, a very high proportion of the teachers (88%) and learners (71.6%) expressed strong disagreement and disagreement with item nine concerning the role of vocabulary activities in facilitating the learning of different word knowledge aspects. The data presented in this section indicated that although both teachers and learners held positive beliefs about the role of English textbooks in developing lexical items by providing sufficient vocabulary activities to practice the acquired words, they did not consider that the vocabulary activities presented in the textbooks supported the development of different word knowledge aspects.

Incidental learning approach

The third part of the questionnaire encompassed three questions relating to the participants' beliefs about the incidental learning approach and the influence of other sources of input outside the classroom on the development of vocabulary learning. As displayed in Table 3, the bulk of the teacher (95.6%) and learner (71.6%) participants thought that it was necessary to spend time on vocabulary development outside the classroom. Likewise, 95.6% of the teachers and 91.2% of the learners believed that out-of-class activities, such as watching movies, listening to songs, playing video games etc., could positively affect vocabulary learning. The data further indicated that the teachers and learners believed that textbooks were not the only source of vocabulary (91.2% and 75.2%, respectively). These responses seem to indicate that the participants understood the effect of incidental learning approach on vocabulary development.

Understanding of vocabulary knowledge aspects

The last section of the questionnaire, which focused on the participants' understanding of the main aspects involved in knowing a word, comprised five items. A general look at Table 4 shows that the teacher and learner participants seemed to understand that word knowledge involves three basic aspects (i.e., form, meaning and use). Looking at item 13, it can be seen that more than half of the teachers (65.9%) and learners (59.3%) considered *meaning* as one of the most important word knowledge facets. However, the remainder were either uncertain or disagreed with this statement. In response to the second statement of this section (item 14), nearly half of the teachers (50.5%) and learners (70.80%) strongly agreed and agreed to the importance of form in knowing a word. The greatest

Table 2 The frequency and (percentage) of the participant responses under the three items of the role of textbooks in developing vocabulary learning and knowledge aspects

Section 2 items	Strongly agree		Agree		Neutral		Disagree		Strongly disagree	
	T	L	T	L	T	L	T	L	T	L
(Item 7) Textbooks help improve vocabulary learning	10 (21.9%)	25 (22.1%)	53 (58.2%)	59 (52.2%)	10 (10.9%)	24 (21.2%)	7 (7.7%)	5 (4.4%)	1 (1.1%)	0
(Item 8) The Vocabulary activities provide opportunities to practice	10 (11.0%)	24 (21.2%)	50 (54.9%)	58 (51.3%)	17 (18.7%)	24 (21.2%)	11 (12.1%)	5 (4.4%)	3 (3.3%)	2 (1.8%)
(Item 9) Vocabulary activities support learning word knowledge aspects	2 (2.2%)	2 (1.7%)	4 (4.4%)	11 (9.7%)	5 (5.5%)	19 (16.8%)	36 (39.6%)	44 (38.9%)	44 (48.4%)	37 (32.7%)

T teacher participants, L learner participants

Table 3 The frequency and (percentage) of the participant responses under the three items of the effects of the incidental learning approach

Section 3 items	Strongly agree		Agree		Neutral		Disagree		Strongly disagree	
	T	L	T	L	T	L	T	L	T	L
(Item 10) No need to spend time on vocabulary learning outside classrooms	1 (1.1%)	1 (.9%)	0	11 (9.7%)	3 (3.3%)	20 (17.7%)	37 (40.7%)	36 (31.9%)	50 (54.9%)	45 (39.8%)
(Item 11) Learning vocabulary comes only from textbooks	2 (2.1%)	3 (2.7%)	0	12 (10.6%)	6 (6.6%)	13 (11.5%)	36 (39.6%)	47 (41.6%)	47 (51.6%)	38 (33.6%)
(Item 12) Out-of-class activities help learn vocabulary	56 (61.5%)	80 (70.8%)	31 (34.1%)	23 (20.4%)	4 (4.4%)	7 (6.2%)	0	2 (1.8%)	0	1 (.9%)

T teacher participants, L learner participants

Table 4 The frequency and (percentage) of the participant responses under the five items of the vocabulary knowledge aspects

Section 4 items	Strongly agree		Agree		Neutral		Disagree		Strongly disagree	
	T	L	T	L	T	L	T	L	T	L
(Item 13) Meaning is the most important knowledge aspect	27 (29.6%)	28 (24.8%)	33 (36.3%)	39 (34.5%)	18 (19.8%)	33 (29.2%)	11 (12.1%)	10 (8.8%)	2 (2.2%)	3 (2.7%)
(Item 14) The least should be known about a word is its form	24 (26.4%)	34 (30.1%)	22 (24.1%)	46 (40.7%)	15 (16.5%)	23 (20.4%)	20 (22.0%)	6 (5.3%)	10 (11.0%)	4 (3.5%)
(Item 15) Knowing how to use a word is important	55 (60.4%)	62 (54.9%)	30 (33.0%)	38 (33.6%)	5 (5.5%)	12 (10.6%)	1 (1.1%)	1 (.9%)	0 (0%)	0
(Item 16) Knowing a word involves knowing receptive/productive knowledge	23 (25.3%)	27 (23.9%)	54 (59.3%)	64 (56.6%)	9 (9.9%)	16 (14.2%)	4 (4.4%)	6 (5.3%)	1 (1.1%)	0
(Item 17) Some aspects are more important than others	31 (34%)	41 (36.3%)	27 (29.7%)	31 (27.4%)	8 (8.8%)	7 (6.2%)	22 (24.2%)	31 (27.4%)	3 (3.3%)	3 (2.7%)

T teacher participants, L learner participants

agreement occurred over statement 15. Remarkably, 93.4% of the teachers and 88.5% of the learners understood the importance of *use* in knowing a word. A similar rate of agreement was observed in response to statement 16, as more than 80% of both teachers and learners believed that word knowledge entails both receptive and productive aspects of word knowledge. The similar high percentages of strong agreement and agreement over the last item of this section indicate that both teachers and learners attached varied importance to the different word knowledge aspects involved in knowing a word. The data reported in this section seem to suggest that both teachers and learners are aware of the basic aspects of word knowledge (i.e., form, meaning and use) involved in knowing a word, but they weighted the importance of word aspects differently.

The participants’ discrepant beliefs

In order to determine whether there were significant differences between the teachers and learners’ responses to the 17 questionnaire items, a series of independent sample t-tests was conducted. As can be seen from Table 5, the teacher and learner participants differed significantly in their beliefs about vocabulary learning and knowledge. With regard to their beliefs about the importance of vocabulary learning in relation to other language skills and grammar, significant differences in the teacher and learner response means emerged for item one (M = 3.26, M = 2.35), item three (M = 3.90, M = 3.48), item five (M = 3.89, M = 3.51), and item six (M = 4.56, M = 4.03), respectively (*p* value > 0.05 for all four items). With regard to the role of the textbooks used in in promoting vocabulary development, teachers and learners also differed significantly in their beliefs.

Table 5 Descriptive mean and (standard deviation) and inferential analysis of the teacher and learner responses to the questionnaire items

Survey items	Teachers (N = 91)	Learners (N = 113)	t	Sig. (2-tailed)
<i>The importance of vocabulary learning</i>				
Item 1	3.26 (1.15)	2.35 (.94)	6.196	.00
Item 2	1.90 (1.01)	2.12 (.88)	- 1.674	.09
Item 3	3.90 (1.14)	3.48 (1.13)	2.627	.00
Item 4	2.48 (1.13)	2.27 (.91)	1.515	.13
Item 5	3.89 (.76)	3.51 (1.01)	2.959	.00
Item 6	4.56 (.71)	4.03 (1.13)	3.915	.00
<i>The role of textbooks to vocabulary development</i>				
Item 7	2.95 (.98)	3.23 (1.18)	- 1.846	.06
Item 8	2.42 (.95)	2.12 (.85)	2.386	.01
Item 9	2.30 (.81)	2.96 (1.21)	- 4.515	.00
<i>The role of incidental approach to vocabulary learning</i>				
Item 10	4.24 (.62)	3.96 (.94)	2.480	.01
Item 11	4.41 (.73)	3.96 (1.02)	3.464	.00
Item 12	1.43 (.58)	1.42 (.76)	0.130	.89
<i>Vocabulary knowledge aspects</i>				
Item 13	2.23 (1.06)	2.30 (1.02)	- 0.477	.63
Item 14	2.68 (1.36)	2.12 (1.01)	3.395	.00
Item 15	1.47 (.65)	1.58 (.71)	- 1.056	.29
Item 16	1.97 (.79)	1.88 (.70)	0.781	.43
Item 17	2.84 (1.0)	3.09 (.92)	- 1.876	.06

Significant mean differences emerged in teacher and learner responses for item eight ($M=2.42$, $M=2.12$) and item nine ($M=2.30$, $M=2.96$) ($p>0.05$ for both). Concerning the participants' beliefs about incidental vocabulary learning, a significant mean difference also emerged for item 10 ($M=4.24$, $M=3.96$) and item 11 ($M=4.41$, $M=3.96$) ($p>0.05$ for both). The results of the independent sample t-tests also revealed a significant difference in the response means of the teachers ($M=2.68$) and learners ($M=2.12$) ($t=3.39$, $p<0.05$) relating to their understanding of the different dimensions involved in knowing a word (item 14).

Discussions and implications

Past research looking at teachers and learners' beliefs and understanding relating to vocabulary learning and knowledge is scarce. The present study expands on past research studies in two ways: it is the first study to combine data from both EFL teachers and learners in relation to their beliefs and understanding related to vocabulary learning and knowledge; and it is one of the very few studies that examined teachers and learners' cognition in relation to different aspects of vocabulary learning and knowledge. One of the most interesting findings that emerged to answer the first research question was the positive beliefs that both teachers and learners held about the importance of vocabulary in language development. Generally, over half of the teachers and learners attached equal importance to vocabulary as they did to listening, speaking, reading, writing and grammar in L2 learning. Such findings, which could be taken to suggest that most of the participants understood the centrality of vocabulary in language development and proficiency (Nation, 2013; Webb & Nation, 2017), echo the reported findings of other studies on EFL learners and teachers. Chung and Fung (2022) found that their Hong Kongese EFL learners perceived vocabulary as a key means of enabling them to use the language proficiently. A study by Bergström et al. (2021) on Swedish EFL teachers revealed strong positive beliefs about vocabulary learning, which was deemed to be a key component of language proficiency.

These findings can probably be explained in light of the premises of the 'core' and 'peripheral' subsystems of beliefs (Phipps & Borg, 2009). It could be suggested that the teachers and learners' theoretical beliefs about the importance of vocabulary learning constitute peripheral beliefs, which are assumed to be affected by individuals' teaching and learning experiences. It seems that the participants' beliefs have been formulated by personal and practical experiences. That is, the participants' present personal experiences might have infused into their beliefs the importance of vocabulary in comparison to grammar. This shows that on-going practical experiences lead teachers to reassess and fine-tune their beliefs about teaching (Gabillon, 2012).

The present findings are strikingly interesting because they oppose the traditionally held view that the development of grammatical competence is at the center of L2 courses (Sánchez-Gutiérrez et al., 2022) and thus should be given primacy over vocabulary. Despite the positive beliefs shared by the teachers and learners in this study about the importance of vocabulary, as revealed in the descriptive statistics, the inferential statistical analysis showed significant differences in the beliefs held by them, which merit further investigation. The results showed significant variations in the teachers and learners' responses to four out of the six items in the first section of the questionnaire.

Generally, the teachers appear to better understand the predictive role of lexical learning in EFL development, compared to learners. They also seem to place a higher value on the importance of vocabulary in comparison to other language skills. For instance, 64.8% of the teachers strongly disagreed with statement six, which states that vocabulary has no key part to play in language proficiency, compared to 39.8% of the learners.

The findings of the analysis of the responses to the items in the second section of the questionnaire revealed that both teachers and learners believed that the English textbooks employed in their educational setting contributed to vocabulary development. The role of textbooks in vocabulary learning was confirmed by the fact that the vast majority of the teachers (69.20%) and learners (74.30%) agreed that the textbooks supported vocabulary learning by providing effective vocabulary-learning activities. This finding seems to resonate with the view of many researchers (e.g., Bergström et al., 2021; Sun & Dang, 2020) that well-structured textbooks and teaching materials play a crucial role in supporting lexical learning. Although most teachers and learners agreed over the facilitative role of textbooks in vocabulary learning, almost two thirds of the teacher and learner participants believed that the vocabulary activities in the textbooks did not pay adequate attention to the different aspects of vocabulary knowledge. That is, most vocabulary activities in the textbooks focus on one knowledge aspect mainly *meaning*, and they devote cursory attention to the different word knowledge aspects involved in knowing a word. This finding lends support to the results reported in several corpus-based studies that examined the different aspects of vocabulary knowledge addressed in a range of general English textbooks in various EFL contexts (e.g., Alshumrani & Al-Ahmadi, 2022; Brown, 2011; Sun & Dang, 2020).

In addition, although most of the participants considered textbooks to be important for vocabulary learning, they did not consider them as the only source of vocabulary input; they were aware of other potential sources of vocabulary learning outside the classroom. These findings demonstrate their understanding of the importance of incidental vocabulary learning, a useful learning approach suggested by a large number of incidental vocabulary studies (Dang et al., 2022; Puimège & Peters, 2019) due to its positive effect on vocabulary learning. Closely connected to these beliefs, the results showed that more than 90% of the teachers and learners believed that engagement in various out-of-class activities (i.e., viewing TV/movies, playing video games, listening to spoken materials, reading) had the potential to support vocabulary learning. These findings seem to be based on their understanding that reliance on formal classroom instruction alone cannot account for the many thousands of words that are needed for proficient language use (Dang & Webb, 2014), and that activities outside the classroom can contribute to vocabulary development (Peters, 2018).

Another interesting result is the significant differences identified between the teachers and learners' beliefs, which were indicative of their diverse understanding of the importance of the incidental approach to vocabulary learning. For instance, the teacher participants better understood the need for incidental learning approach for vocabulary learning and the potential of exposure to English outside the classroom to foster incidental word learning. It could, however, be argued that due to their schooling experience, language learners consider the exposure to English that they receive in the classroom sufficient for word learning, and that they believe it is the responsibility of

language classes and textbooks to provide sufficient opportunities for language learning. These discrepant beliefs held by the teacher and learner participants can be ascribed to the contradiction between core and peripheral beliefs. Teachers' beliefs about the role of the incidental approach in enhancing vocabulary learning constitute core beliefs, which are assumed to be more important and difficult to change (Pajares, 1992). On the other hand, the learners' beliefs constitute peripheral beliefs as they are mediated by a range of contextual factors (Phipps & Borg, 2009).

The last part of the questionnaire examined the teacher and learners' understanding of what constitutes word knowledge. The findings from this section of the questionnaire showed that the teachers and learners were aware of the three general dimensions (i.e., form, meaning and use) involved in knowing a word (Nation, 2013). In particular, their responses to questionnaire items 13, 14 and 15 reflect their awareness of these three basic word knowledge aspects. A large number of the teachers and learners agreed on the importance of these three aspects of knowing a word. Another noteworthy finding is the participants' understanding of the categorization of word knowledge dimensions into receptive and productive mastery levels. Over two thirds of the participants considered that it was important to know a word at a receptive level and at a productive level. These findings align with Bergström et al. (2021) and Sun and Dang (2020), who found that their teachers and learners were aware of the importance of all word knowledge aspects.

These findings generate several important implications for the field of L2 research. Firstly, the data have shown a general awareness of the importance of the incidental learning approach for L2 word learning, reinforcing the need to implement several out-of-class resources to expose learners to a wide variety of L2 words. EFL teachers are thus encouraged to urge learners to make good use of a wide range of out-of-class materials (e.g., viewing TV series/movies, listening to songs, reading novels, to suggest a few). These materials are potential sources for word uptake (Peters, 2018). Additionally, the data revealed that both teachers and learners valued the various vocabulary knowledge aspects differently. This limited understanding of the complex nature of word knowledge may impede word learning, as word knowledge is a complex construct that consists of several separate dimensions (Nation, 2013). Thus, there is a need to increase EFL teachers and learners' awareness of the importance of various knowledge dimensions involved in knowing a word. Moreover, I acknowledge that illuminating beliefs about vocabulary knowledge is not enough; rather formidable efforts are needed to investigate the underlying reasons behind such beliefs. Methodologically, this entails adopting qualitative measures (e.g., interviews, open-ended questionnaires, focus groups), which would allow for an in-depth investigation of these essential phenomena (Phipps & Borg, 2009).

Limitations and future directions

Despite contributing to the literature by reporting several intriguing findings about EFL teachers and learners' cognition in relation to vocabulary learning and knowledge, the present study is limited in several ways. Overcoming these limitations could provide new directions for further research. Firstly, and most profoundly, although the results of this quantitative study are generalizable as they are based on data collected from a relatively large number of participants, post-questionnaire interviews and classroom

observations could illuminate the underlying reasons behind the beliefs, and the degree to which such beliefs are related to classroom practices. Additionally, due to cost and time limits, the study only recruited teacher and student participants from one specified higher educational setting in an EFL context. Future research could include participants from multiple educational settings within this EFL setting and across other EFL contexts, in order to provide a comprehensive picture of the cognition and understanding of language teachers and learners about vocabulary learning and knowledge.

Conclusion

Drawing on the information from teachers and students, this research was an attempt to provide valuable insights into EFL teachers and learners' beliefs and understanding of vocabulary learning and knowledge. The questionnaire analysis showed that the teachers and learners shared similar positive beliefs about the central role of vocabulary to L2 development in comparison with other language skills and grammar, as well as the role of textbooks and incidental learning in promoting word knowledge. Despite showing a congruence in their beliefs, several teachers and learners' responses differed significantly statistically. The study highlights the value of combining information from teachers and learners to achieve a better understanding of vocabulary learning in an EFL context.

Author contributions

This study is single-authored. The author is the only contributor to the research.

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Availability of data and materials

The data will be shared upon reasonable request.

Declarations

Ethical approval and consent to participate

Ethical approval was received from the university. Informed consent was obtained from all participants before they participated in the research.

Consent for publication

The individual participants were informed that the research would be published in a journal and the results would be shared with them.

Competing interests

The authors declare no competing interests.

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