





Training teachers on corpus-based language pedagogy: Perceptions on vocabulary instruction

Gamze Çalışkan^{a *} , Safiye İpek Kuru Gönen^b 

^a *Anadolu University, School of Foreign Languages, Eskişehir 26555, Turkey*

^b *Anadolu University, Faculty of Education, Eskişehir 26470, Turkey*

APA Citation:

Çalışkan, G., & Kuru Gönen, S. İ. (2018). Training teachers on corpus-based language pedagogy: Perceptions on vocabulary instruction. *Journal of Language and Linguistic Studies*, 14(4), 190-210.

Submission Date: 12/07/2018

Acceptance Date: 09/11/2018

Abstract

In recent years, there has been a growing interest in using concordance lines as part of corpus-based language pedagogy to enhance vocabulary instruction. However, teachers in various L2 teaching contexts may lack awareness on how to design and use concordance lines while teaching vocabulary, and they may need guidance in order to implement corpus-based language pedagogy effectively in their actual teaching practices. Based on this need, the present study aimed at offering in-service training on the design and implementation of corpus-based materials in vocabulary instruction, and exploring teachers' perceptions of using these materials in their classrooms. For these purposes, three EFL instructors at a Turkish state university participated in the study. Participants received a four-week training on corpus-based language pedagogy, the use of corpus in L2 vocabulary learning and how to design and implement concordance lines to enhance their instruction. Data were collected through semi-structured interviews, reflective logs and an open-ended questionnaire. Qualitative analyses revealed that EFL university instructors did not have prior knowledge about how to use corpus-based materials in vocabulary instruction before the study, and training increased their awareness on incorporating corpus-based language pedagogy into vocabulary instruction. Moreover, the participants perceived the implementation of the corpus-based materials beneficial for raising students' awareness on specific vocabulary items as well. Nevertheless, the participants stated their concerns regarding the use of corpus-based language pedagogy due to challenges in using technology and designing corpus-based materials. The findings of this study may shed light on teachers' classroom practices of corpus-based language pedagogy in vocabulary instruction.

© 2018 JLLS and the Authors - Published by JLLS.

Keywords: Corpus-based materials; concordance lines; vocabulary instruction; L2 instructors' attitudes; training language teachers on corpus tools

1. Introduction

Vocabulary has been regarded as one of the crucial areas of language learning as it is almost not possible to convey meaning without this fundamental element of language and communication (Wilkins, 1972). However, knowing the word is more than uttering its L1 equivalence and it involves various aspects of word knowledge. In one of the earlier attempts of defining different types of word knowledge

* Corresponding author. Tel.: +90 (222) 335 05 80-6115
E-mail address: gkarasahin@anadolu.edu.tr

in order to have a complete command of a word, Richards (1976) listed three aspects of word knowledge as the linguistic, psycholinguistic and sociolinguistic aspects. Elaborating on that list, Nation (1990) proposed various types of knowledge including the spoken and written form of a word, its grammatical and collocational behavior, frequency, stylistic register, conceptual meaning and its associations with other words. It may not be possible to master all these aspects, and it is probable for L2 learners to have different mastery of various types of word knowledge by learning formal, grammatical and meaning aspects earlier than other aspects (Schmitt & Meara, 1997). Since vocabulary learning is a demanding process due to various aspects of word knowledge (Nation, 2001; Schmitt, 2000), it is, then, crucial for language educators to find ways to enhance vocabulary learning in an L2 class. Schmitt (2000) suggests two approaches in vocabulary instruction: explicit teaching and incidental learning. Explicit teaching is directing learners' attention in a definite way to learn words whereas incidental learning occurs when learners are exposed to a written or spoken text without explicitly directed attention. Although both approaches have been reported effective in vocabulary learning, Schmitt (2000) highlights the significance of combining explicit teaching and incidental learning while dealing with huge vocabulary size in English language. In order to integrate these two approaches into language classrooms to enhance vocabulary learning, it is essential to use diverse techniques including applications of computer-assisted language learning (CALL) in vocabulary instruction (Nation, 2001).

In line with principles of vocabulary teaching and following advances in CALL research, there has been a growing interest in the use of corpora in vocabulary instruction (Boulton, 2009; Liu, 2013; Schmitt, 2000). In its simple terms, a corpus is defined as the collection of written or spoken texts, which is electronically stored (O'Keeffe, McCharty & Carter, 2007). It provides valuable information on various aspects of word knowledge mentioned above such as word frequency, use of words in formal and informal contexts, use of idiomatic expressions, and patterns related to prepositions (Boulton, 2009; McCharty, 2004; Nation, 2001). Based on the efforts to exploit corpus data in language teaching, considerable attention has been devoted to a new language pedagogy defined as data-driven learning (DDL). This language pedagogy involves the use of authentic linguistic examples through corpora and concordance-based activities for language learning (Johns, 1991). The components of DDL, in which learners are required to analyze corpus data through concordances, are associated with discovery learning and learner as a researcher (Johns, 1991; Chambers, 2010). In this regard, different from teacher-fronted traditional classrooms, DDL presents a new perspective on vocabulary teaching by putting the learner in the center.

In the last two decades, several studies have been conducted regarding the effectiveness of corpus-based language pedagogy in vocabulary instruction (Chan & Liou, 2005; Chen, 2011; Cobb, 1999; Daskalovska, 2015; Li, 2017; Varley, 2009). Most of these studies investigated the effectiveness of the use of corpus data in learning of collocations such as verb-noun and verb-preposition combinations by comparing DDL and traditional ways of vocabulary learning. Nevertheless, there are limited studies investigating teachers' actual classroom practices concerning the use of corpus-based materials and their perceptions of this approach (Boulton 2009; Frankenberg-Garcia 2012; Mukherjee, 2004; Römer, 2009). Römer (2011) asserts that there are still some concerns related to using corpora and concordance lines in classrooms since teachers lack awareness about corpus tools and their implementations in language teaching. Hence, this study aimed at exploring university instructors' opinions on the use of concordance lines in vocabulary instruction, and investigating these instructors' perceptions of using corpus-based materials after they receive training. The findings of the current study may illuminate teachers' future practices in using corpus-based materials, and help them gain awareness on implementing corpus-based vocabulary instruction in FL teaching.

1.1. Literature review

1.1.1. Data driven learning and vocabulary teaching

Corpus-based language pedagogy has received growing popularity recently. Use of corpora for language learning can be exploited either *indirectly* or *directly*. *Indirect* applications include using corpus tools for design and development of teaching syllabi, materials and reference books by researchers and material writers. McEnery and Xiao (2010) highlight *indirect* applications of corpus consultation in language teaching for teacher development and language testing as well. On the other hand, *direct* applications refer to integrating corpus data into classroom practices through DDL (Chambers, 2010) in which learners find the pattern or rule regarding language from a bunch of authentic data on their own. In *direct* applications, corpus data are generally brought to actual classroom practices through concordance lines which is defined as the core corpus software tool in corpus linguistics that allows to find every occurrence of a particular word or phrase (O’Keeffe et al., 2007). The implementation of concordance lines into language teaching, either by using computers or with printout materials, has been considered within the *direct* use of corpora in language pedagogy because teachers and students interact with corpus data themselves (McEnery & Xiao, 2010; Römer, 2011). That is, learners may have access to concordance lines directly by searching for the target language item themselves through the analysis of a bundle of concordance lines, or they can be engaged in tasks and handouts including concordance lines that are prepared by teachers beforehand (Boulton, 2010; Chambers, 2010; Johns 1991).

There have been numerous benefits of using corpora for language learning reported in the literature. According to Boulton (2009), using DDL provides learners with real life usage of the language instead of prescriptive language. One way of using corpora for language learning is the availability of identifying frequently used language structures. Using corpora in language pedagogy also displays a great deal of authentic samples of the language item in diverse contexts (Conrad, 2000; Gavioli & Aston, 2001; Gilquin & Granger, 2010; Hadley, 2002). Thus, this approach is considered a unique opportunity to be exposed to authentic data in classrooms. Another significant function of corpus-based language pedagogy is its usefulness in error correction (Gaskell & Cobb, 2004; Gilmore, 2008; Gilquin & Granger, 2010; O’Sullivan & Chambers, 2006). Moreover, it helps to raise learners’ awareness about language patterns (Gilquin & Granger, 2010; Hadley, 2002; O’Keeffe & Farr, 2003) rather than simply introducing a limited number of linguistic items.

Using corpora offers considerable gains in vocabulary learning as well. With the help of corpus-generated data presented via concordance lines, it is possible to explore real life contexts and actual uses of words within their related contexts (Chambers, 2010; Gilquin & Granger, 2010; Liu, 2013; O’Keeffe et al., 2007). Liu (2013) suggests that using concordance lines can help learners overcome the challenges of learning the usage of synonyms and other related words since corpus data represent authentic context in which these words occur. Learners can notice semantic patterns via discovery process. Moon (2010) also draws attention to the significant function of concordance lines to raise awareness on how meanings of words can vary depending on context. Additionally, integrating corpora into vocabulary instruction can facilitate learning of phrases, collocations and idiomatic expressions in their naturally occurring contexts (Cobb, 1997; Greaves & Warren, 2010; Moon, 2010; O’Keeffe et al., 2007).

The findings of empirical studies on using corpora in vocabulary instruction also highlight the effectiveness of using concordance lines. In a study, Chan and Liou (2005) investigated the effects of using corpus tools on EFL learners’ learning of verb-noun collocations and they reported that using concordances enabled students to identify the use of collocations in context. Besides, it was suggested that this approach could assist learners in internalizing induced collocations when more time was allocated to such instruction. Another empirical study conducted by Daskalovska (2015) revealed that

corpora and concordance programs could be considered as useful tools to learn verb-adverb collocations as they demonstrated the combinations of such collocations in various authentic contexts. What is more, discovery learning process was considered motivating since the learners in the study actively participated in analysis of language data. In a recent study, Li (2017) sought the possible effects of using concordance lines on verb-preposition collocations and their use in academic writing. In line with the findings of the previous studies, it was concluded that using corpus tools raised students' awareness on the accurate use of collocations in appropriate contexts.

Although researchers in the field of language teaching and learning show great enthusiasm for corpus-based language pedagogy (Römer, 2011), teachers in various language teaching contexts may lack awareness on corpus applications. Hence, the gap between corpus-based language pedagogy and practitioners need to be filled in order to benefit from corpora in language classrooms (McCarthy & O'Keeffe, 2010; Römer, 2011).

1.1.2. Language teacher education and corpus-based language pedagogy

A number of studies have discussed the crucial role of teachers to integrate corpora into language teaching. Research has focused on teachers' awareness about using corpus in language teaching and their reflections on corpus tools and materials suggesting the need for integrating corpus-based language pedagogy into language teacher education (Boulton, 2009; Frankenberg-Garcia 2012; Römer, 2011).

Farr (2008) conducted a study with 25 student teachers in an MA program in ELT by incorporating corpora through modules focusing on extensive corpus-based activities. The findings indicated that these student teachers were in favor of the use of corpus tools as it increased their awareness on language system in general. Interacting with real language use in context was found as the most beneficial outcome of corpus integration into language teaching. Although participants' general perception of using language corpus was positive, some negative experiences such as technological issues, difficulties in classroom applications and time concerns were also identified. The study put forward promising implications regarding the participants' future teaching practices since corpus-based language pedagogy was considered as an effective way to raise language awareness. Similarly, Breyer (2009) remarked the crucial role of corpus integration into initial language teacher education. She carried out a study with 18 student teachers in Germany to train them to use concordances in their teaching practices. During an 11-week course, the participants were in the role of both learners and teachers. Qualitative analyses of reflective writing tasks, software reviews and teaching materials showed that the participants' awareness increased about the role and effectiveness of corpus-based language pedagogy after the course. This study highlighted that when teachers were given opportunities, their awareness on the use of corpus for language teaching would likely to increase. In a similar vein, Mukherjee (2004) conducted a study to familiarize teachers with corpus-based language pedagogy. A total of 248 English language teachers at secondary schools in Germany participated in teacher training workshops on corpus. He collected data through a questionnaire that was applied before and after the training sessions in order to investigate teachers' awareness on corpora and the effectiveness of trainings on teachers' perceptions. The findings pointed out that 80 percent of these teachers were not aware of corpus before they received training. After training workshops, most of the teachers regarded corpus data as useful for their teaching practices and stated that corpus-based language pedagogy might take a place in language teaching agenda. Findings of this study pinpointed a need for providing training to teachers in order to guide them incorporate corpus-based data into their teaching experiences. Derived from the findings of these studies, it is apparent that lack of awareness and training may deprive the teachers from the benefits of corpus-based applications in language teaching reported so far.

In Turkish EFL setting, studies on the use of corpus-based language pedagogy in vocabulary instruction focused on learners' attitudes and beliefs towards corpus and DDL tasks (Aşık, Vural &

Akpınar, 2016; Paker & Ergül Özcan, 2017), learners' reflections on corpus-based language teaching (Şimşek, 2016; Tekin & Soruç, 2016), implementation of corpus integration through coursebook evaluation in pre-service teaching (Aşık, 2017), and opinions of EFL teachers on the use of corpora in language teaching (Aşık, 2015). However, there is a need to provide teachers opportunities to integrate corpus into language teaching and elicit their related perceptions of corpus-based pedagogy. In a study, Özbay and Kayaoğlu (2015) investigated the effects of corpus training on teachers' awareness and their perceptions of corpus tools. Six English language teachers at tertiary level were given eight-week training on how to use corpus tools to teach lexical items and some grammar structures. Data were collected through semi-structured interviews at the end of workshops. Analysis of the data demonstrated that teachers did not have prior knowledge on corpus and its use in language teaching. The results yielded that training on corpus tools increased teachers' awareness on the use of corpus as a teaching aid. This study urges for conducting similar studies in Turkish EFL context to be able to examine the impacts of training language teachers on corpus-based language pedagogy on their classroom practices.

1.2. Research questions

Although the aforementioned studies highlight the significance of using corpora in language learning including vocabulary instruction, teachers may lack awareness on how to incorporate corpus into their actual classroom practices. Thus, it is essential to familiarize teachers with corpus tools and provide them opportunities to implement corpus-based language pedagogy in vocabulary instruction. The present study aims to provide teachers an in-service training on how to use corpus-based materials in vocabulary instruction and guide them apply the ideas of corpus-based language pedagogy in their teaching practices. Investigating teachers' perceptions of using these materials in vocabulary instruction may shed light on the effectiveness of incorporating corpus tools into classroom practices. As a result, this study seeks the answer of the following research questions:

1. What do EFL university instructors think about corpus, its role in vocabulary learning and their classroom practices of vocabulary instruction before they receive training on corpus-based language pedagogy?

2. How do EFL university instructors perceive implementing corpus-based materials in vocabulary instruction during their actual classroom practices?

2. Method

2.1. Context and Participants

The study was carried out in 2017-2018 Spring Term at the school of foreign languages of a state university in Turkey. This school offers intensive language courses in English with 20-22 hours face-to-face classes and 2 hours lab classes in which students are required to accomplish some online tasks using web tools. In the context of the study, students are placed according to the results of a proficiency exam and they have varying levels of proficiency ranging from beginner to intermediate. Students are coming from different majors and they are required to pass a final proficiency exam in order to be able to continue their education in their majors. The English language teaching program adopts an integrated-skill approach by following selected textbooks and in-house materials at all levels, which have been compiled as supplementary packs by the materials development unit of the school. These supplementary packs are one of the core teaching and learning instruments in the context of this study. The activities and exercises prepared for each level are tailor-made and they do not involve any corpus-based materials except corpus reference through dictionary sentences. Regarding materials and syllabi, there is a group

of teachers who work in various units of the school. For each level, a team consisting of unit members from curriculum, materials development, testing, and technology is in charge of the syllabus design and task requirements based on the learning outcomes. Three instructors who were the representatives of materials development unit in this team participated in the current study. These instructors had been teaching different proficiency level students and they had been preparing materials for the level they were teaching for three years. Additionally, they were responsible for compiling supplementary packs that were accessible to all teachers and students as one of the main components of the curriculum. Therefore, these three instructors were selected intentionally in line with the procedure of purposive sampling in qualitative research design (Cresswell, 2009) as they were active participants of materials design process at different levels. Details about the participants can be seen on Table 1.

Table 1. Information about the participants

	Educational Background	Years of Teaching	Teaching Level
T1	BA in Translation and Interpreting Studies	7	Beginner
T2	BA in English Language Teaching	9	Elementary
T3	BA and MA in English Language Teaching	9	Intermediate

2.2. Training on corpus-based vocabulary instruction

A four-week training was designed and implemented for the purposes of the study. This training focused on *teaching about corpora*, *exploiting corpora to teach language*, and *teaching to exploit corpora* in order to incorporate the ideas of corpus-based language pedagogy into the language classroom (Aston, 2000; Fligelstone, 1993; Mukherjee, 2004; Özbay & Kayaoğlu, 2015). Accordingly, training involved introducing the concept of corpora, exploiting the characteristics and elements of corpus-based language pedagogy, and guiding practitioners adapt these ideas in their actual teaching contexts. The training on corpus-based language pedagogy was based on the principles of Kolb's *experiential learning cycle* of experience, reflection, conceptualization and active experimentation (1984). That is, a learning environment was created where teachers were first in the position of students with opportunities to experience and reflect on that experience through various tasks. Then, teachers transferred their learning into their roles as teachers. In this respect, they conceptualized the use of corpus-based materials in vocabulary instruction and actively experimented on integrating corpus-based language pedagogy into their teaching experiences. The training lasted for four weeks in two-hour weekly sessions. Specific attention was given to make training sessions as interactive as possible by providing tasks, assignments and discussions. In total, three presentations and 14 tasks were designed based on the aim of each session. Training focused on both theory and practice in order to link corpus-based language pedagogy to teachers' classroom applications. The following procedure was carried out for training sessions:

Week 1- Overview on corpus and corpus-based language pedagogy: The first week was reserved for creating an awareness on corpus, types of corpora, DDL, and corpus applications in language teaching. Various articles focusing on these issues were assigned in order to familiarize the participants on corpus-based language pedagogy. Tasks (e.g. choosing the most frequent idioms, putting the words in order according to frequency, comparing three-words chunks used in written and spoken genres, etc.) were presented based on the approach "*surprise the teacher*" by Mukherjee (2004) to draw participants' attention to different aspects of corpus and its use in language teaching. Here is a sample task used in the first week taken from O'Keeffe et al., (2007):

Exercise A: Look at the idioms in the *CANCODE spoken corpus*. These occur at least three times more than others. Decide which of them are the top three ones.

- shut your face
- keep a straight face
- on the face of it
- face up to
- let's face it
- fall flat on one's face
- face to face

Week 2- Introduction of the corpus tool: The scope of the second week was to introduce a corpus tool and show the ways to implement concordance lines in vocabulary instruction. For this reason, the Corpus of Contemporary American English (COCA), one of the largest general corpora (Davies, 2008), was selected as the corpus in the study due to its user-friendly interface and free-access to various genres such as conversations, academic texts, fiction, popular magazine and newspaper articles (Shaw, 2011). Following the presentation on the software and its basic functions, the participants registered COCA. Then, they engaged in some tasks, which put the instructors in the role of learners to gain hands-on experience. All vocabulary items used in the tasks were selected from textbooks in their own teaching context. Tasks designed meticulously provided at least one sample activity for each level of proficiency and involved various types of exercises. Besides, the participants could have an opportunity to see two applications of corpus-based language pedagogy. First, they interacted with the raw corpus data directly through some tasks requiring computers and COCA (e.g. finding sample concordance lines, identifying the part of the speech of words and what preposition collocates with them, etc.). Then, they were provided with printout materials consisting of concordance lines from COCA, which would be more applicable in their classrooms. Here is a sample printout material used in this session:

All lines are from newspapers in COCA

Exercise A. Look at the concordance lines below and circle the correct word. Then, answer the questions about the form and meaning of the given words. Use them in a sentence.

➤ ***Job or Work?***

1. ...there are also more fundamental issues related to incomes and **job/work** opportunities that split California into a two-speed economy.
2. ...said he was troubled by the damage. " I would not **job/work** with them after that, " he said. " I would not refer...
3. ...health insurance and rent. I saw two options. Get a **job/work** return my advance and abandon two years' worth of work...
4. ...told an unnamed colleague she feared she would lose her **job/work** if she reported the incident. Another unnamed person reported Moulton...
5. ...at his home to discuss why he was late to **job/work**, the station reported. The victim told the sheriff's office...
6. ...grown-up, he said. He's been doing a lot of **job/work** around the house, finishing the kitchen project his dad started.

- ❖ *Write the part of speech of the target word in each line.*
- ❖ *Look at the lines above. Which word can be used in plural?*
- ❖ *Write your own sentences by using the target words above.*

Week 3- Material preparation using concordance lines: The purpose of the third week was to inform the participants about the steps to prepare materials using concordance lines from COCA. Hence, a presentation on procedures of corpus-based materials preparation was demonstrated. During the session, the participants expressed their own opinions about the material preparation procedures for the level they were teaching. They also contributed to the discussions by sharing some ideas about the ways to

implement these materials at each level. Following the session, the participants were assigned a task regarding the design of a corpus-based material using concordance lines from COCA. Each of these teachers chose vocabulary items according to the requirements on the syllabus. Yet, they were free to decide the activity type depending on their own classroom context since they were teaching at different levels. Then, they were asked to use the corpus-based material they prepared in their own classrooms. The following is one of the activities prepared by T3 in the study:

Exercise A. Identify the parts of speech of the underlined words in the sentences. Are they a noun (N) or a verb (V)?

PROGRESS

1. ___ This procedure helps students monitor their progress and become aware of shortcomings.
2. ___ I think we will progress and, if anything, our hand may be strengthened.
3. ___ We've made progress in terms of creating a line of security around Kandahar.
4. ___ How does a child progress along the avenue of mysteries that leads to becoming an adult storyteller?

ADVANCE

5. ___ The longer the economic advance continues, the higher the inflation rate is likely to creep.
6. ___ Activists both inside and outside of the federal government who were trying to advance a liberal program were in despair.
7. ___ One can gain tremendous knowledge and insight through this new and exciting technological advance.
8. ___ It would advance humanity, and it would keep authoritarian measures to a minimum.

SPREAD

9. ___ If you heard that an epidemic disease is spreading in one territory of land, do not enter it, and if it happens in your home land do not run from it.
10. ___ A smile spread across Lloyd's face as he held out his hand.
11. ___ It seemed to drive her more crazy. So she started spreading rumors about me.
12. ___ Aside from a potential for disease spread, it's unclear what effect the fish spill might have on the Pacific salmon.

Exercise B. Answer the following questions according to the sentences in Exercise A.

1. What are the 2 verbs used before the noun "progress"?
_____ & _____
2. What are the 2 adjectives used before the noun "advance"?
_____ & _____
3. What is the noun used before the noun "spread"?

4. What is the noun used after the verb "spread"?

Week 4- Reflection on using corpus-based materials in vocabulary instruction: In the final week of training, participants shared their own experiences regarding both preparation of the corpus-based materials and the implementation of the activity in their classroom. The discussion was based on their active participation in the preparation of corpus-based material and hands-on experience in using concordance lines in vocabulary instruction. The participants reflected on their own experiences with the corpus tool, its practicality in the classroom, and benefits and drawbacks of using corpus-based materials in vocabulary teaching regarding actual classroom experiences.

2.3. Instruments

The study employed qualitative data collection instruments in order to explore teachers' prior knowledge about corpora and corpus-based language pedagogy in vocabulary instructions, and their perceptions regarding their own applications of corpus-based materials in vocabulary instruction. For the aims of the study, semi-structured interviews (see Appendix A), reflective logs (see Appendix B) and an open-ended questionnaire (see Appendix C) were used as the instruments. All these instruments were developed for the specific context and purposes of this study, and two experts in English language teaching ensured the reliability of the data collection instruments.

2.3.1. Semi-structured interviews

A semi-structured interview is assumed to be useful for its flexibility to elicit interpretive data (Nunan, 1992). In order to answer the first research question regarding the participants' prior knowledge about corpus and the use of corpus tools in vocabulary instruction, semi-structured interviews were conducted with all participants. These interviews focused on exploring their familiarity with corpus, their experiences of corpus in language teaching, and their actual classroom practices for vocabulary

instruction to detect any encounter of corpus-based language pedagogy. The interviewees were informed about the procedure and then one-on-one interviews were carried out with each participant. All interviews were conducted in the participants' native language and were audio-recorded.

2.3.2. Reflective logs

Reflective logs provide valuable source of data since they are composed of participants' own written expression in the research (Cresswell, 2009). They were kept by the participants in the study in order to investigate their perceptions of each training session. For this purpose, the participants were asked to write their thoughts and feelings about their experiences regarding the use and implementation of corpus-based materials for vocabulary instruction. During four-week training, they wrote a total of three reflective logs since the last training session focused on an overall discussion and reflection of the training process.

2.3.3. Open-ended questionnaire

The questionnaire, consisting of five open-ended questions, was utilized to reveal the participants' perceptions about the use of corpus tool, potential benefits and drawbacks of using corpus-based language pedagogy in vocabulary instruction, and whether they would like to use it in their future practices. The questionnaire was also used to gain insight into their overall perception of training and their own experiences with corpus in vocabulary instruction.

2.4. Data collection and analysis

Data were collected via multiple instruments described above. First, semi-structured interviews were held with each participant in order to investigate their prior knowledge about corpora, the use of corpus-based materials in vocabulary instruction and their current vocabulary teaching practices. Then, these participants were informed briefly about the procedures of four-week training. They were asked to write reflective logs for three times following the concurrent three training sessions. At the end of the fourth and last session, which was based on an overall discussion, data were gathered through an open-ended questionnaire to reveal these teachers' perceptions of using corpus-based materials in vocabulary instruction.

As for data analysis, qualitative data collected through interviews, reflective logs and an open-ended questionnaire were analyzed following the ideas of the grounded theory which aimed at generating theory grounded in data rather than analyzing the data according to an identified theory (Miles & Huberman, 1994). Constant Comparative Method (CCM) was used to identify, delineate and categorize the segments of the data as this method was appropriate to generate categories from the data rather than using preconceived ones (Boeije, 2002; Fram, 2013). By using CCM, data were first segmented into codes. A code here refers to a word or a phrase including any feeling or thought regarding the perceptions of the participants (Allan, 2003). After the identification of the codes, they were compared and contrasted continuously in order to group similar units. This ongoing analysis process enabled to form and generate sub-categories and main categories. All data were analyzed by two independent raters to ensure inter-rater reliability. One of the raters was one of the researchers in the study and the other one was experienced in qualitative analysis. The inter-rater reliability was measured simply by calculating percentage with the application of a formula suggested by Tawney and Gast (1984). It was found 0.81, which was considered an adequate level of reliability (Cresswell, 2005).

3. Results

3.1. EFL university instructors' views about corpus, its role in vocabulary learning and their classroom practices prior to training

In order to answer the first research question, the analysis of qualitative data obtained from semi-structured interviews generated 68 codes in total. These codes established three main categories with seven sub-categories as can be seen in Table 2 below.

Table 2. Main and sub-categories related to participants' views prior to training

Main Categories	Sub-categories	N*
Vocabulary instruction practices	Activity types for practice	20
	Ways of presenting vocabulary items	12
	Sources used for material preparation	5
Familiarity with corpora	General information	17
	No prior knowledge & experience	5
Views on corpus-based materials in vocabulary instruction	Exposing students to authentic data	7
	No information & experience	2
	Total	68

N*= Number of the codes

One of the main categories emerged from the qualitative analyses was related to instructors' existing classroom practices in vocabulary instruction. In order to reveal their prior knowledge on corpus and its use in language teaching, it was important to explore their actual classroom practices of vocabulary instruction. Three sub-categories regarding teachers' instructional practices revealed their preferred activity types for practicing vocabulary (20 codes), ways of presenting vocabulary items (12 codes) and sources they used for material preparation (5 codes).

The findings put forward that teachers in the study used similar activities for practicing vocabulary in different levels. Due to washback effect of end term exams used in the institution, teachers generally preferred activity types that prepared students to such exams. Hence, they mostly used gap-filling and matching types of activities for vocabulary practice. While preparing these practice activities, none of the teachers consulted corpus data nor they had awareness on such alternative. As for teachers' preferred ways of presenting lexical items, all participants reported following a certain pattern in vocabulary instruction. That is, they mostly taught target lexical items in the textbook explicitly by using sample sentences and/or giving definitions in English or in Turkish depending on the nature of the word and the level they were teaching. These preferred ways focused on deductive presentation of vocabulary instead of learners' discovery of the target words. While developing materials, these teachers tended to write their own sentences, specifically *T1* and *T2* who were teaching lower level proficiency students (beginner and elementary). Besides, they acknowledged that they sometimes consulted online dictionaries as a source in order to adapt or simplify examples in these dictionaries for use as supplementary materials. As a result, exploration of teachers' prior experiences regarding vocabulary

instruction revealed that they did not have any prior experience of implementing corpus-based language pedagogy in their vocabulary teaching practices before training.

The reasons why teachers did not engage their students in corpus-based materials to teach words might be associated with the second main category displayed in Table 2. The results of data analysis pointed out that the teachers never used corpus language pedagogy due to their unfamiliarity with it. Although *T1* and *T3* had general information about corpora (17 codes), none of the teachers in the study had an experience of using corpora in language teaching (5 codes). The following excerpts show teachers' ideas regarding their familiarity with corpora:

T1: **“When I was studying at university, I met a corpus called British National Corpus (BNC). We were using it when we had some hesitations about language for translation studies...but I’ve never used it for teaching purposes.”**

T2: **“This is the first time I’ve heard this term.** It does not make any connotation even if I heard it before.”

T3: **“If people narrow the meaning of a word or broaden it, we can learn it thanks to these dictionaries which are mostly digital.”**

The excerpts above revealed that participants were not aware of corpus-based language pedagogy although their familiarity with corpus was diverse. *T1* expressed that she was informed about corpus tools for translation studies during her BA study. *T3* holding MA degree in ELT remarked that she heard the term via a project conducted by her instructors at university whereas *T2* did not meet corpus at all before the study. These findings are aligned with the concerns regarding rare implementation of corpus-based language pedagogy by teachers during their classroom practices (Boulton, 2009; Breyer, 2009; Frankenberg-Garcia 2012; Mukherjee, 2004; O’Keeffe et al., 2007; Römer, 2011). Likewise, Aşık (2015) highlighted the lack of teachers' awareness, knowledge and familiarity related to the use of corpora in Turkish EFL context. These participants' reported responses indicated that there was insufficient pre-service training on corpus-based language pedagogy. This might be a signal for the need to implement this approach in teacher education programs and to raise teachers' awareness on corpus applications as suggested by previous studies (e.g. Breyer, 2009; O’Keeffe & Farr, 2003; Farr, 2008). Moreover, the reason why teachers are unfamiliar with the use of corpus in language teaching can arise because of the scarcity of in-service training on how to make use of corpus data in classrooms (Boulton, 2009; Mukherjee, 2004; Römer 2011). In all circumstances, providing teachers with training on corpus tools either in pre-service or in-service periods can be regarded as the key to be able to make corpus data apparent to students.

The final category shown in the Table 2 demonstrated teachers' general views on corpus-based materials in vocabulary instruction. Two teachers who had familiarity with corpora reported that corpus-based materials might work in teaching vocabulary since they were regarded as the source of authentic data in various contexts (7 codes). Teachers generally had difficulty in finding language data taken from natural contexts of use and they mostly limited their practices to textbook activities. In this respect, this finding pointed out the utmost importance of corpus data representing actual use of the language in many situations. This invaluable feature of corpora was highlighted by many scholars in the research area of corpus-based language pedagogy (Boulton, 2009; Chambers, 2010; Gilquin & Granger, 2010; Liu, 2013; Nation, 2001; O’Keeffe et al., 2007). Although *T1* and *T3* stated some future implications regarding the use of corpus-based materials in vocabulary learning, *T2*, the one who was unfamiliar with corpora at all, could not suggest any teaching implications as she did not have any prior information or experience of using corpus-based language pedagogy in vocabulary instruction (2 codes). However, participants in general stated in the interviews that they were willing to learn and implement ideas of corpus-based language pedagogy if they were given opportunities.

3.2. EFL university instructors' perceptions about using corpus-based materials in vocabulary instruction during their actual classroom practices

The participants in the study received training on corpus-based language pedagogy and had a chance to design and implement corpus-based vocabulary teaching materials in their actual teaching contexts. They kept reflective logs during training and answered an open-ended questionnaire at the end of this experience. The analysis of data gathered from both reflective logs and open-ended questionnaire originated 108 communication units within three main categories. Main and sub-categories related to EFL instructors' views about using corpus-based materials were displayed in Table 3.

Table 3. Main and sub-categories related to participants' perceptions about using corpus-based materials in vocabulary instruction.

Main Categories	Sub-categories	N*
Awareness about corpora	Corpus applications in vocabulary instruction	28
	Knowledge about corpora	20
	Corpus-based materials preparation	6
Benefits	Raising students' language awareness	5
	Providing authentic data	4
	Teaching particular lexical items	4
	Usefulness for higher proficiency levels	3
	Other (s)	9
Challenges	Time-consuming	9
	Level-appropriateness	8
	Limited use	6
	Technological problems	6
Total		108

N*= Number of the codes

As shown in Table 3, teachers' awareness on corpus applications in vocabulary instruction (28 codes), knowledge about corpora (20 codes), and corpus-based materials preparation (6 codes) increased after they received training on corpus-based language pedagogy in vocabulary instruction. The excerpts below show how they benefited from training sessions in gaining awareness about the use of corpora:

T1: "The sessions were **practical** and **to-the-point**, making those theoretical parts more understandable. My favorite session was of the second week as it covered the actual topic with interesting sample tasks. Those samples also provided good ideas on **how to prepare corpus-based tasks for in-class use.**"

T2: "Today's workshop was quite fruitful as I personally **gained an insight of corpus and data-driven learning (DDL)**...Going step by step made it easier to get what corpus was and to see what was expected from us."

T3: "I realized that there are **ways** to make students **analyze the target foreign language structures** through the guidance of the teacher."

All three teachers reported that training sessions expanded their perspectives on the usefulness of corpus-based vocabulary instruction as they learned about corpora and corpus-language pedagogy through presentations, tasks and discussions. It was also highlighted that the most appealing point was to discover the ways to utilize corpus applications in their own classroom. Moreover, preparing corpus-based materials was valuable as they gained hands-on experience. In this way, they had an opportunity to implement corpus-based language pedagogy in their own teaching contexts. These findings indicated the crucial function of creating training opportunities for teachers and to make them aware of the ways to exploit corpus data in language teaching (Boulton 2009; O’Keeffe et al., 2007; Römer, 2011). In this regard, in line with the findings of the previous studies, the results of this current study highlighted the positive outcomes of providing sufficient guidance and training opportunities in order to help teachers realize the effectiveness of corpus-based language pedagogy for enhancing vocabulary instruction (e.g. Breyer, 2009; Farr, 2008; Mukherjee, 2004; Özbay & Kayaoğlu, 2015). As a result, it can be assumed that teachers’ awareness on corpora and corpus applications may increase with the help of comprehensive training sessions. What is more, the participants’ reported statements remarked that receiving training helped them to develop a new perspective to interact with corpus tools, gain hands-on experience, and to understand how concordance lines could be exploited in practice for vocabulary instruction. Frankenberg-Garcia (2012) also highlighted the efficacy of improving teachers’ corpus skills through consciousness-raising tasks. Hence, training sessions can be considered as beneficial to help teachers equip themselves with new skills and to encourage them to implement corpus tools in their classrooms.

In addition to the impacts of training on teachers’ awareness, the participants expressed benefits of using corpus-based materials in their actual practices of vocabulary instruction as shown in Table 3. The sub-category related to benefits of implementing corpus-based materials in vocabulary teaching focused on the effectiveness of using corpus in raising students’ language awareness (5 codes), providing authentic data for vocabulary instruction (4 codes), teaching particular lexical items (4 codes), and its usefulness for higher proficiency levels (3 codes). The following excerpts exemplify the participants’ thoughts regarding the benefits of using corpus-based materials in vocabulary instruction.

T1: “It provides **authentic material** from native speakers, so teachers can use them in class, and **learners’ language awareness** may be improved through corpus data.”

T2: “It could be useful to show **the commonest words** and **prepositions** used together with the target words in spoken or written language.”

T3: “It is really useful to use corpus to present students a limited number of target vocabulary items in a range of contexts by **strengthening their critical thinking and analysis skills**.”

As it is visible from the excerpts above, each of these participants reported that using corpus-based materials were effective in order to make students aware of language patterns since analyzing corpus data included a self-discovery process (Breyer, 2009; Gilquin & Granger, 2010; O’Keeffe & Farr, 2003). Corpus-based materials were also considered valuable as they represented authentic data. In teachers’ regular vocabulary teaching practices, students interacted with invented materials which lacked authenticity. Thus, the findings of the study underscored the idea that corpus-based materials retrieved from authentic data might provide context to teach English words (Boulton, 2009; Gilquin & Granger, 2010; Nation, 2001; O’Keeffe et al., 2007).

The participants emphasized that corpus-based materials were useful while teaching particular lexical items such as collocations, verbs used with prepositions, confusing words and part of speech. This finding echoed one of the reported benefits of using corpora in vocabulary instruction for providing data on diverse aspects of word knowledge (Nation, 2001; Schmitt, 2000). That is, corpus data may offer broad information about language patterns such as what words or prepositions collocate with the target

lexical item, and how words are used in appropriate contexts. These suggested gains of using corpus-based language pedagogy were also supported by empirical studies investigating the effectiveness of using concordance lines in vocabulary learning (e.g. Chan & Liou, 2005; Cobb, 1999; Daskalovska, 2015; Li, 2017; Paker & Ergül-Özcan, 2017; Varley, 2009). Furthermore, the teachers in the study considered the use of corpus-based materials more appropriate for higher proficiency level students. They added that autonomous and advanced learners would get more benefits from corpus inquiry as it required self-discovery and a certain level of autonomy. Özbay and Kayaoğlu (2015) also asserted that teachers were in favor of using corpus tools with higher proficiency level students since corpus search and analysis of concordance lines would be challenging for beginners.

In addition to these categories, one teacher remarked that corpus data might be useful to give feedback on common mistakes made by students. Another occurring idea was that teachers working in testing unit might use corpus tools. That is, teachers may consult corpus data while preparing tests and check possible alternatives for answer keys. Such idea of using corpus for language testing purposes is one of the pedagogical uses of corpora classified as the *indirect* applications assuming that corpus consultation can be used by material writers or test developers to influence language teaching indirectly. (Braun, 2005; McEnery & Xiao, 2010; Römer, 2011).

The final category was related to challenges teachers faced using corpus-based materials in vocabulary instruction. These challenges were mainly associated with technology and design of the corpus-based materials. Four sub-categories regarding challenges pinpointed that designing corpus-based materials was time-consuming (9 codes), these materials were not appropriate for learners from all proficiency levels (8 codes), they offered limited use of language data (6 codes) and they were not useful due to technological problems (6 codes). The excerpts below can provide deeper insights into challenges expressed by the participants:

T1: “In theory, it is a good idea to use COCA for teaching purposes. But in practice, **its slowness** gets annoying after a while, and scanning concordance lines to find **appropriate content for the level** we teach is highly **time-consuming**.”

T2: “It was also **difficult** to limit sentences appropriate for **low-level of students**.”

T3: “Finding an **appropriate context or subject in our syllabus** and preparing materials accordingly was really **time-consuming**.”

Teachers stated their concerns regarding time and energy spent for materials preparation based on corpus data. This demanding process was considered time-consuming as they had to analyze all concordance lines and find the most suitable ones for target lexical items in their teaching contexts. Specifically, teachers who were teaching beginner and elementary students pointed out that it would be much easier to write their own sentences for teaching lexical items. Therefore, time concern was determined as one of the barriers hampering the use of corpus tools in language classrooms. Boulton (2010) also draws attention to the amount of time that needs to be devoted to corpus-based material preparation by emphasizing the scarcity of ready-made materials. What is more, identifying appropriate concordance lines was quite challenging for lower proficiency levels. Therefore, level appropriateness was one of the drawbacks of using corpus-based materials according to teachers' reports. Although direct use of corpus search through computers was mostly regarded useful for advanced levels, Boulton (2010) and Liu (2013) suggested that printout materials prepared by the teacher according to needs of students might work with even lower levels. Thus, printout materials may be more practical while presenting corpus-based materials to teachers. Moreover, the teachers asserted that corpus-based materials were not suitable for presenting all target words indicated on the syllabi. However, it could be appropriate for teaching specific linguistic items such as collocations, synonyms and prepositions since the strength of corpus-language pedagogy was to analyze lexical items in order to deduce language

patterns and rules. Hence, it can be asserted that the nature of target words plays a role in teachers' preferences and classroom practices.

The findings of the study put forward that corpus-based materials would have limited use in vocabulary instruction. In addition to difficulties in preparing corpus-based materials, technological problems were identified as potential obstacles for the participants. Although the software was known by its user-friendly interface, the participants had some difficulties due to its slowness and limited access for free users while preparing their materials. Such technical problems were highlighted as one of the important challenges teachers faced while incorporating ideas of corpus-based language pedagogy into their teaching practices (Boulton, 2009; Breyer, 2009; Farr, 2008; O'Keffee & Farr, 2003).

All in all, the results of the study showed that it was significant to familiarize teachers with corpus-based language pedagogy in order to raise their awareness on corpus applications, and encourage them to use the approach in vocabulary instruction. In this regard, including theoretical and practical aspects of corpus-based language pedagogy in trainings was enlightening as it helped to introduce the rationale behind the approach and the ways to implement it in language classrooms. The participants also gained hands-on experiences on how to use corpus tools, which in turn may likely to increase the possibility of using corpus tools in future classroom applications. The findings of the present study indicated that teachers benefited from corpus data in vocabulary instruction since it displayed actual uses of the language in various contexts, and helped students notice language patterns related to target language lexicon. In spite of the gains offered by using corpus-based materials in vocabulary instruction, the challenges originating from technological issues, heavy workload of material preparation and level and subject appropriateness were also revealed in the current study. All in all, it can be suggested that raising awareness on corpus tools and equipping teachers with basic skills may reduce the distance between researchers and practitioners, and make use of corpus data in language teaching more prevalent among teachers.

4. Conclusion and implications

This study explored teachers' views on corpus-language pedagogy before and after they received training on corpus-based language pedagogy in vocabulary instruction. The overall results indicated that the teachers lacked information about the use of corpus-based materials in language learning. This finding corroborates with the previous research stressing teachers' unfamiliarity with corpus tools and their use as one of the main obstacles of corpus implementation in language teaching (Boulton, 2009; Frankenberg-Garcia 2012; Mukherjee, 2004; O'Keffee et al., 2007; Römer, 2011). Hence, to be able to integrate corpus data into classroom practices, it is crucial to increase teachers' awareness on exploitation of available corpus tools (O'Keffee & Farr, 2003). The present study also remarked the positive effects of training given teachers on corpus applications as the results indicated that teachers' awareness increased on both theoretical and practical aspects of corpora.

The current study investigated teachers' perceptions on using corpus-based materials in vocabulary instruction regarding their hands-on experiences in their own teaching contexts. The findings yielded that teachers realized the benefits of using of concordance lines in vocabulary learning since it could raise learners' linguistics awareness about language patterns through authentic data excerpted from various contexts (Boulton, 2009; Breyer, 2009; Chan & Liou, 2005; Cobb, 1997; Dakalovska, 2015; Gilquin & Granger, 2010; Nation, 2001; O'Keffee & Farr, 2003). The present study also revealed that teachers regarded this approach suitable for teaching particular lexical items (e.g. confusing words, prepositional verbs, or collocations) and higher proficiency level learners. In this regard, teachers may need more guidance and practice opportunities to use corpus-based materials with lower proficiency

level learners as it may be possible to benefit from corpus-based language pedagogy in various proficiency levels when appropriate materials are designed (Boulton, 2010). In general, this study shed light on the reasons regarding teachers' hesitations in corpus implementation as the results echoed some concerns such as difficulties in designing materials, its applicability to limited lexical items and level appropriateness (Breyer, 2009; Farr, 2008; Özbay & Kayaoğlu, 2015).

One implication of the study is that, there is a need for language teacher education programs to update their curricula according to recent language teaching approaches such as the use of corpus-based language pedagogy. The participants of this study indicated that they did not receive any training on the use of corpus for language teaching during their pre-service years. Hence, integrating corpus-language pedagogy into language teacher education can be promising for future implementations of this approach in language teaching. Furthermore, in the light of the findings of this study, it is obvious that teachers are in need of in-service training on corpora. With the help of training, their awareness can increase on corpora and the ways to implement corpus-based materials, which may encourage them to enhance vocabulary teaching practices. The final remark can be made on the development of corpus-based materials. Teachers may tend to use corpus in their classrooms when they are provided with ready-made materials. Therefore, textbook writers and material developers can decrease teachers' burden if they produce more materials prepared accordingly.

The implications of the results are limited to the specific context of this study. It is essential to conduct similar studies with more participants in various teaching contexts since the research was carried out with a small sample size. Besides, the length of the study was four weeks due to time restriction. Longitudinal studies may be designed in order to investigate the effects of trainings on teachers' actual classroom practices in vocabulary instruction. The strengths and weaknesses of using corpus-based materials at different proficiency levels can also be explored in future studies. Moreover, the scope of the current study was the use of corpus-based materials in vocabulary instruction. Thus, further research can be conducted in other language areas to be able to give both linguists and teachers fruitful insights into corpus applications.

References

- Allan, G. (2003). A critique of using grounded theory as a research method. *Electronic Journal of Business Research Methods*, 2(1), 1-10.
- Aston, G. (2000). Corpora and language teaching. In L. Burnard and T. McEnery (Eds), *Rethinking Language Pedagogy from a Corpus Perspective: Papers from the Third International Conference on Teaching and Language Corpora*. Frankfurt am Main: Peter Lang, pp. 7-17.
- Aşık, A., Vural, A. S., & Akpınar, K. D. (2016). Lexical awareness and development through data driven learning: Attitudes and beliefs of EFL learners. *Journal of Education and Training Studies*, 4(3), 87–96. DOI:10.11114/jets.v4i3.1223
- Aşık, A. (2015). The use of corpora in EFL classrooms: What do Turkish EFL teachers know and offer to promote pragmatic competence?. *The Asian EFL Journal*, 17(4).
- Aşık, A. (2017). A sample corpus integration in language teacher education through coursebook evaluation. *Journal of Language and Linguistic Studies*, 13(2), 728-740.
- Boeije, H. (2002). A purposeful approach to the Constant Comparative Method in the analysis of qualitative interviews. *Quality & Quantity*, 36, 391–409.

- Boulton, A. (2009). Data-driven learning: reasonable fears and rational reassurance. *Indian Journal of Applied Linguistics*, 35(1), 81-106.
- Boulton, A. (2010). Data-driven learning: taking the computer out of the equation. *Language Learning*, 60(3), 534-572. DOI: 10.1111/j.1467-9922.2010.00566.x
- Braun, S. (2005). From pedagogically relevant corpora to authentic language learning contents. *ReCALL*, 17(1), 47-64.
- Breyer, Y. (2009). Learning and teaching with corpora: reflections by student teachers. *Computer Assisted Language Learning*, 22(2), 153-172. DOI: 10.1080/09588220902778328
- Chambers, A. (2010). What is data-driven learning? In A. O’Keeffe and M. McCarthy (eds), *The Routledge Handbook of Corpus Linguistics*. London: Routledge, pp. 345- 358.
- Chan, T. P., & Liou, H. C. (2005). Effects of web-based concordancing instruction on EFL students' learning of verb-noun collocations. *Computer Assisted Language Learning*, 18(3), 231-251.
- Chen, H.-J.H. (2011). Developing and evaluating a web-based collocational retrieval tool for EFL students and teachers. *Computer Assisted Language Learning*, 24(1), 59-76. DOI: 10.1080/09588221.2010.526945
- Cobb, T. (1997). Is there any measurable learning from hands-on concordancing? *System*, 25(3), 301–315.
- Cobb, T. (1999). Breadth and depth of lexical acquisition with hands-on concordancing. *Computer Assisted Language Learning*, 12(4), 345–360. <http://dx.doi.org/10.1076/call.12.4.345.5699>
- Conrad, S. (2000). Will corpus revolutionize grammar teaching in the 21st century? *TESOL Quarterly*, 34(3), 548-560.
- Creswell, J. W. (2005). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. New Jersey: Prentice Hall Publishing.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Los Angeles: Sage Publications.
- Daskalovska, N. (2015). Corpus-based versus traditional learning of collocations. *Computer Assisted Language Learning*, 28(2), 130-144. DOI: 10.1080/09588221.2013.803982
- Davies, M. (2008-) *The Corpus of Contemporary American English (COCA): 560 million words, 1990-present*. Available online at <https://corpus.byu.edu/coca/>
- Farr, F. (2008). Evaluating the use of corpus-based instruction in a language teacher education context: perspectives from the users. *Language Awareness*, 17(1), 25-43. DOI: 10.2167/la414.0
- Fligelstone, S. (1993). Some reflections on the question of teaching, from a corpus linguistics perspective. *ICAME*, 17, 97-109.
- Fram, S.M. (2013). The Constant Comparative Analysis Method Outside of Grounded Theory. *The Qualitative Report*, 18(1), 1-25.
- Frankenberg-Garcia, A. (2012). Raising teachers’ awareness of corpora. *Language Teaching*, 45(4), pp. 475- 489. <https://doi.org/10.1017/S0261444810000480>
- Gaskell, D., & Cobb, T. (2004). Can learners use concordance feedback for writing errors? *System*, 32(3), 301–319. <https://doi.org/10.1016/j.system.2004.04.001>

- Gavioli, L. & Aston, G. (2001). Enriching reality: language corpora in language pedagogy. *ELT Journal*, 55(3), 238-246.
- Gilmore, A. (2008). Using online corpora to develop students' writing skills. *ELT Journal*, 63(4), 363-372.
- Gilquin, G & Granger, S. (2010). How can data-driven learning be used in language teaching? In A. O'Keeffe and M. McCarthy (eds), *The Routledge Handbook of Corpus Linguistics*. London: Routledge, pp. 359- 370.
- Greaves, C & Warren, M. (2010). What can a corpus tell us about multi-word units? In A. O'Keeffe and M. McCarthy (eds), *The Routledge Handbook of Corpus Linguistics*. London: Routledge, pp. 212- 226.
- Hadley, G. (2002). An introduction to data-driven learning. *RELC Journal*, 33(2), 99-124.
- Johns, T. (1991), Should you be persuaded?: Two examples of data-driven learning materials. *English Language Research Journal*, 4, pp. 1-16.
- Kolb, D.A. (1984). *Experiential Learning: Experience as the Source of Learning and Development*. Englewood Cliffs, NJ: Prentice-Hall.
- Li, S. (2017). Using corpora to develop learners' collocational competence. *Language Learning & Technology*, 21(3), 153–171.
- Liu, D. (2013). Using corpora to help teach difficult-to-distinguish English words. *English Teaching*, 68(3), 27-50.
- McCarthy, M. (2004). *Touchstone: From Corpus to Classroom*. Cambridge: Cambridge University Press.
- McCarthy, M. & O'Keeffe, A. (2010). Historical perspective: what are corpora and how have they evolved? In A. O'Keeffe and M. McCarthy (eds), *The Routledge Handbook of Corpus Linguistics*. London: Routledge, pp. 3- 13.
- McEnery, T. & Xiao, R. (2010). What corpora can offer in language teaching and learning. In E. Hinkel (Ed.), *Handbook of Research in Second Language Teaching and Learning*. London & New York: Routledge, pp. 364-380.
- Miles, M.B. & Huberman, A.M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks: Sage Publications.
- Moon, R. (2010). What can a corpus tell us about language? In A. O'Keeffe and M. McCarthy (eds), *The Routledge Handbook of Corpus Linguistics*. London: Routledge, pp. 197- 211.
- Mukherjee, J. (2004). Bridging the gap between applied corpus linguistics and the reality of English language teaching in Germany. In U. Connor and T. Upton (eds) *Applied Corpus Linguistics: A Multi-dimensional Perspective*. Amsterdam: Rodopi, pp.239-250.
- Nation, I. S. P. (1990). *Teaching and Learning Vocabulary*: New York: Newbury House.
- Nation, I. S. P. (2001). *Learning Vocabulary in Another Language*. Cambridge: Cambridge University Press.
- Nunan, D. (1992). *Research Methods in Language Learning*. Cambridge: Cambridge University Press.
- O'Keefe, A., & Farr, F. (2003). Using language corpora in initial teacher education: Pedagogic issues and practical applications. *TESOL Quarterly*, 37(3), 389–418.

- O’Keeffe, A., McCarty, M. & Carter, R. (2007). *From Corpus to Classroom: Language Use and Language Teaching*. New York: Cambridge.
- O’Sullivan, I., & Chambers, A. (2006). Learners’ writing skills in French: Corpus consultation and learner evaluation. *Journal of Second Language Writing*, 15, 49-68.
- Özbay, A. Ş. & Kayaoğlu, M. C. (2015). EFL teachers’ reflections towards the use of computerized corpora as a teaching tool in their classrooms. *Çukurova Üniversitesi Eğitim Fakültesi Dergisi*, 44(1), 85-104.
- Paker, T. & Ergül-Özcan, Y. (2017). The Effectiveness of Using Corpus-Based Materials in Vocabulary Teaching. *International Journal of Language Academy*, 5(1), 62-81. DOI: <http://dx.doi.org/10.18033/ijla.3494>
- Richards, J. C. (1976). The role of vocabulary teaching. *TESOL Quarterly*, 10(1), 77–89. DOI: 10.2307/3585941
- Römer, U. (2009). Corpus research and practice. In K. Aijmer (ed.) *Corpora and Language Teaching*. Amsterdam: John Benjamins, pp.83-98.
- Römer, U. (2011). Corpus research applications in second language teaching. *Annual Review of Applied Linguistics*, 37, 205–225. DOI: 10.1017/S0267190511000055
- Schmitt, N. & P.Meara (1997). Researching vocabulary through a word knowledge framework: word associations and verbal suffixes. *Studies in Second Language Acquisition*, 19(1), 17–36.
- Schmitt, N. (2000). *Vocabulary in Language Teaching*. Cambridge: Cambridge University Press.
- Shaw, E. M. (2011). *Teaching Vocabulary Through Data-driven Learning*. Brigham Young University, USA.
- Şimşek, T. (2016). Turkish EFL learners’ reflections on corpus-based language teaching. *Global Journal of Foreign Language Teaching*, 6(1), 21-27. DOI: <https://doi.org/10.18844/gjflt.v6i1>
- Tawney, W.J. & Gast, L.D. (1984). *Single subject research in special education*. Columbus: Merrill.
- Tekin, B., & Soruç, A. (2016). Using Corpus-assisted learning activities to assist vocabulary development in English. *TOJET: The Turkish Online Journal of Educational Technology, Special Issue for INTE 2016*, 1270–1283.
- Varley, S. (2009). I’ll just look that up in the concordancer: integrating corpus consultation into the language learning environment. *Computer Assisted Language Learning*, 22(2), 133-152. DOI: 10.1080/09588220902778294
- Wilkins, D.A. (1972). *Linguistics in Language Teaching*. Australia: Edward Arnold.

Appendix A. Semi-structured interview questions

1. Are you familiar with corpus linguistics? Do you know any corpus?
2. Have you ever used computer-based corpus? If yes, why? And how?
3. How do you teach vocabulary items in the coursebook?
4. How do you create supplementary materials to teach vocabulary?
5. What type of exercises do you prepare for vocabulary practice?
6. Do you think corpus-based materials can be used for vocabulary instruction? If yes, how?

Appendix B. Sample reflective log

1. What do you think and how do you feel about today's session?

Today's workshop was quite fruitful as I personally gained an insight of corpus and data-driven learning (DDL). I hadn't heard of corpus and its origin, types and places of uses until I read some articles about it. The articles, especially the one by McCarthy, and the discussion with my colleagues followed by the workshop helped me to see some benefits and drawbacks of corpora and DDL. It could be fairly hard to design all the lessons according to corpora but useful to figure out how and why to use corpora in lessons. In fact, as a learner and teacher, we can benefit from them in learning or teaching process. Using corpus-based materials in lessons would be helpful to see particular grammatical and semantic characteristics of a language and to boost learner's awareness of the natural use of the vocabulary...

Appendix C. Open-ended questionnaire

1. What is your overall impression of the workshop sessions? Please comment on the positive and negative aspects.

2. What do you think about COCA as a tool for vocabulary instruction? Did you have any difficulty in using it?

3. Do you think that teachers and/or learners may profit from corpus data for vocabulary instruction? If yes, How?

4. In the future, would you consider consulting the corpus for vocabulary instruction? If yes, how would you use it?

5. Would you like to use concordances while preparing vocabulary teaching/ practice materials in the future? Why/ why not?

Derlem tabanlı öğretim konusunda öğretmen eğitimi: Kelime öğretiminde bağımlı dizin satırlarının kullanımına yönelik algılar

Öz

Son yıllarda, kelime öğretiminde derlem tabanlı öğretimin bir parçası olan bağımlı dizin satırlarının kullanımı artan bir ilgi görmektedir. Fakat, çeşitli yabancı dil öğretim ortamlarındaki öğretmenler, derlem tabanlı materyal geliştirilmesi ve bağımlı dizin satırlarının kelime öğretiminde kullanımıyla ilgili farkındalık sahibi olmayabilirler. Öğretmenler, sınıflarında derlem tabanlı öğretimi etkili bir biçimde uygulayabilmek için rehberliğe ihtiyaç duyabilmektedirler. Bu gereksinim doğrultusunda bu çalışma, kelime öğretimi için derlem tabanlı materyal geliştirme ve uygulama üzerine eğitim sunmayı ve öğretmenlerin sınıflarında bu materyalleri kullanmaya yönelik algılarını ortaya çıkarmayı amaçlamaktadır. Bu nedenle, bir devlet üniversitesindeki üç yabancı dil öğretmeni bu çalışmaya katılmıştır. Katılımcılar derlem dilbilimi, yabancı dilde kelime öğreniminde derlem kullanımı ve bağımlı dizin satırları kullanımıyla ilgili dört haftalık bir eğitim almışlardır. Veri toplama aracı olarak yapılandırılmış görüşmeler, yansıma günlükleri, ve bir açık uçlu anket kullanılmıştır. Nitel analizler, katılımcıların bu çalışmadan önce kelime öğretiminde derlem tabanlı materyal kullanımıyla ilgili bilgi sahibi olmadıklarını ortaya çıkarmış ve çalışmanın bir parçası olarak aldıkları eğitim sayesinde derlem araçlarının kelime öğretiminde kullanımı konusunda farkındalık sahibi olduklarını göstermektedir. Ayrıca, katılımcılar derlem tabanlı

materyallerin kullanılmasını öğrencilerin dil farkındalıklarını arttırması açısından da faydalı bulmuşlardır. Bununla beraber, katılımcılar derlem tabanlı öğretimde teknoloji kullanımı ve materyal geliştirmeye dair zorluklarla ilgili kaygılarını dile getirmişlerdir. Bu çalışmanın bulguları, öğretmenlerin derlem tabanlı kelime öğretimine yönelik sınıf içi uygulamalarına ışık tutmaktadır.

Anahtar sözcükler: derlem tabanlı materyal; bağımlı dizin satırları; kelime öğretimi

AUTHOR BIODATA

Gamze Çalışkan is working as an English instructor at Anadolu University School of Foreign Languages. She is currently pursuing her MA degree at Anadolu University, Department of Foreign Language Education. Her research interests include corpus-based language pedagogy, teacher education, and materials development.

Safiye İpek Kuru Gönen is an Assistant Professor at Anadolu University Faculty of Education Department of English Language Teaching. She has been working as a foreign language teacher trainer for 15 years. She is interested in reflective practices in FL teacher education, affective factors in FL learning/teaching, technology and FL teaching. She has published research articles nationally and internationally.