


2018

Adult Language Instructors' Experiences Regarding Vocabulary Instruction and Synformy

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Walden University

College of Education

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Homeira Bahadorani

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Walden University

2018

Abstract

Adult Language Instructors' Experiences Regarding Vocabulary Instruction and

Synformy

by

Homeira Bahadorani

MA, George Mason University, 2004

BA, Isfahan University, 1994

Project Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

April 2018

Abstract

Language instructors play a decisive role in adult language learners' learning and retention of vocabulary through planning, selection, and teaching of vocabulary and strategies. However, some professional language schools lack extensive teacher-training programs that prepare instructors with the skills required to select and teach vocabulary, which results in a gap in practice. The purpose of this study was to explore teacher-related factors in beyond Interagency Language Roundtable (ILR) Level 2 vocabulary instruction to adults in a classroom setting in intensive language-training programs. The conceptual framework consisted of the theory of noticing hypothesis, synformy, and the comprehensible input hypothesis. Research questions addressed instructors' experiences when teaching vocabulary and synforms, the training they received on how to teach vocabulary, and the resources they need. Data were collected through semistructured interviews with 9 language instructors of less-commonly taught languages. Data were analyzed using an open-coding strategy. Results indicated participants were uncertain about their roles in teaching and selecting vocabulary and about the use of strategies and approximate number of words and kinds of words that students require to achieve general proficiency (ILR Level 3). Participants reported they had no systematic approach to teaching vocabulary or synforms. Participants also expressed a desire to receive training on vocabulary learning strategies, evidence-based best practices in teaching vocabulary, and facilitating vocabulary retention. Findings may be used to guide directors of intensive language programs in developing systematic approaches to selecting and teaching vocabulary.

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Dedication

This doctoral study is dedicated to my sons, Rastin and Rodbod, who are my inspiration, to my husband, Asghar, for his unwavering love and support, and to my parents for always believing in me.

Acknowledgments

I would like to extend my sincere gratitude to the many people who have supported me throughout this journey. First, I am grateful to my chair, Dr. Mari Vawn Tinney for her encouragement, guidance, and kindness; her dedication to the teaching profession has inspired me continuously throughout my journey. Second, I would like to thank Dr. Englesberg for his invaluable guidance. I believe this study is stronger as a result of his insight. I would also like to thank Dr. Ramo Lord and Dr. Elsa Gonzalez for their reviews and insightful comments.

I am truly grateful to my colleagues who participated in this study, without whom this work would not have been possible. I would also like to thank the head of the research site for his support and for his willingness to sign the letter of cooperation. Additionally, I would like to thank my friend, Kathryn Critchell for her countless hours of support during this entire process.

I am so thankful to my family for their unending encouragement that kept me going. To all my friends who supported me by listening to my frequent occasions of venting and provided me calm during stressful moments. To all of you who helped me complete this work, I am truly grateful.

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Section 1: The Problem

Vocabulary is a crucial aspect of language learning and teaching. It is a fundamental component of language, vital to the development of reading, writing, and listening competencies (Willis & Ohashi, 2012). Vocabulary is “the largest area of linguistic knowledge” (Caspi & Lowie, 2010, p. 8). Vocabulary knowledge includes both vocabulary breadth (the number of words a learner knows) and vocabulary depth (how well a person knows these words). According to Lewis (2000), what differentiates an intermediate-level language learner from an advanced language learner is not knowledge of complex grammar but rather the knowledge of a large number of words available to the advanced learner. At the same time, learning vocabulary is the single most challenging task that language learners face (Lewis, 2000). Therefore, teaching vocabulary is considered a critical component of any language-training program.

A teacher’s lack of awareness regarding vocabulary instruction can prevent students from advancing to higher levels of language proficiency. Additionally, many language instructors do not know how to support their students with vocabulary learning tasks (Hulstijn, 2001). Often instructors are unaware of how they should teach vocabulary and explain the intentional learning of words. Instead, many instructors encourage students to learn vocabulary incidentally with extensive reading and listening (Hulstijn, 2001), activities that are not directly geared toward vocabulary learning (Choo, Lin, & Pandian, 2012; Golonka et al., 2012). Instructors’ awareness of different ways of learning vocabulary can positively affect the way they approach and plan teaching vocabulary.

Students can learn vocabulary incidentally; however, due to time constraints in an

intensive language program, it is difficult to facilitate learning vocabulary through incidental learning only. The possibility of learning vocabulary incidentally as a by-product of other activities such as reading has been supported by research (Hemmati & Asmawi, 2015; Hulstijn, 2001; Nation, 2013c; Ponniah, 2011; Rieder, 2003; Webb, Newton, & Chang, 2013). However, in intensive language-training programs, incidental vocabulary learning alone does not provide learners with the sufficient exposure required for word processing. Because of the time constraint and the limited classroom language coverage, instructors need to select essential words and teach them explicitly (Niu & Andrews, 2012). Instructors should consider teaching essential vocabulary through approaches that facilitate both incidental and intentional learning (Niu & Andrews, 2012).

Vocabulary instruction involves not only the introduction and instruction of vocabulary but also strategies that enhance the learning and retention of words. Instructors must teach strategies to help learners develop skills for learning vocabulary independently (Niu & Andrews, 2012), which results in the students' awareness of learning strategies that help them overcome their learning style limitations and facilitate retention and production of new vocabulary items (Zheng, 2012). These approaches, when adopted by instructors, can help students learn vocabulary more effectively and efficiently (Niu & Andrews, 2012).

In this study, I explored language instructors' experiences regarding vocabulary instruction at intermediate and advanced levels of foreign languages in the context of intensive professional language-training programs, which has many implications for

practice. One of my major focuses was on synformy and the challenges that foreign language learners face in learning vocabulary and synforms, in addition to the role that instructors play in facilitating learning. Synformy, noticing hypothesis, and comprehensible input hypothesis are three components of the conceptual framework for this study.

The Local Problem

DC Language Services (DCLS) (a pseudonym for the local institution for this study) is a professional language-training school in the Washington DC area. DCLS is facing the lack of extensive vocabulary-focused teacher-training programs. This problem persists because the constraint of hiring only native speakers at DCLS has resulted in hiring instructors who are not trained language instructors (██████, 2014; ██████, 2013). As noted in these official reports, students at DCLS have voiced their concerns with instructors' lack of familiarity with teaching methodologies (██████, 2013) and more specifically with the quality of vocabulary instruction (██████, 2014). Instructors at DCLS have expressed the need for guidance in different areas such as training on methodology and approach (██████ 2014). Additionally, personal communications in 2014 with students, instructors, and specialists revealed specific problems students and instructors have regarding vocabulary instruction, which indicated a need for more training for instructors.

As noted in DCLS documentation, a problem persists at the site because the school does not give enough emphasis to vocabulary-focused teacher-development programs. Training instructors is vital at this school because, due to the constraint of

hiring only native speakers, hiring trained language instructors is not mandated, and in the case of less-commonly taught languages, it is not always possible (■■■■, 2013). At the same time, in a time-constrained language program, highly trained instructors are the key factor for students' success (Xu, Padilla, Silva & Masuda, 2012). Foreign language instructors who are not trained often have subconscious perceptions that affect the quality of their instruction and curriculum selections (Allen, 2013). Instructors might unintentionally deprive students of the opportunities needed to develop language at a higher level of proficiency because the lessons they prepare conflict with research-supported methodologies (Allen, 2013). Teacher-training programs are crucial in familiarizing inexperienced instructors with language training methodologies (Jourdenais, 2009; Tarone, 2009). This research specifically focused on the lack of vocabulary-focused teacher-training programs at DCLS and on the challenges instructors and students face in the respective areas of teaching and learning vocabulary.

Learning a large repertoire of vocabulary in intensive programs is a particularly difficult task for adult students; as a result, it is essential for language instructors to understand effective vocabulary instruction methodologies to help students. New approaches to vocabulary instruction diverge from traditional approaches in three areas: “types of vocabulary selected for instruction, teaching methods, and the role of learning strategies” (Golonka et al., 2012, p. 75). Exposure to the new methodologies and a deeper understanding of how to use them through a vocabulary-focused teacher-development program can help instructors better facilitate students' learning of vocabulary.

Time constraints for learning a large number of words make the task of vocabulary learning and teaching more challenging. Consequently, instructors' effective and direct instruction of vocabulary and strategies is essential. Foreign language learners need to learn around 3,000 words to follow a conversation at lower levels of language and around 9,000 words to read newspapers (Vitevitch, Storkel, Francisco, Evans, & Goldstein, 2014). At DCLS, students must read and comprehend general texts as well as editorials, which requires a higher depth and breadth of vocabulary knowledge. Professional adult language learners need to develop a substantial repertoire of vocabulary because, to do their job effectively, they must attain a certain level of language proficiency to be able to give professional presentations on abstract topics such as politics and economics in the target language.

Certain characteristics of lexical items also affect learning vocabulary, and teacher awareness of such characteristics can help them facilitate learning. One feature that affects the acquisition of words is similarities in form, also known as synformy. This phenomenon causes difficulty in production and recognition of a second language (Fialová, 2012), so instructors need to be responsive to students' challenges in learning synforms (Nural, 2014). With training, instructors can learn how to address the factors that affect students' ability to learn words.

In summary, the lack of extensive vocabulary-focused teacher-training programs at the study site presents a problem that needs attention because of the difficulties instructors face in teaching advanced vocabulary and because of the difficulties students face in achieving their language-learning goals (■■■■■, 2014; ■■■■, 2013). Training

instructors at DCLS to use best practices for research-supported vocabulary instruction is key in helping students develop a sufficient repertoire of vocabulary in intensive language-training programs. The need for teacher training is prominent at DCLS because learning the required repertoire of vocabulary in a short period of time is challenging for students, and hiring trained language instructors for less-commonly taught languages is not mandated by the site's administration.

Broader Educational Situation in DC Area Language Schools

In the Washington DC area, there are many language schools that train adults for the professional use of foreign languages. There are high stakes involved for the students attending professional language training schools, making it critical for them to learn the language quickly and fluently (Jackson & Malone, 2009). Shared components across language schools for many of these language programs include the transfer of learning that focuses on language proficiency and the application and functional use of the language skills. Some of the job-related tasks an individual should be able to do as a result of language training at DCLS include using the target language clearly, engaging in formal or informal conversation with a native speaker, asking questions and eliciting information from a native speaker, and reading the news and authentic texts in the target language.

The operation and requirements of many professional language-training schools are similar. Classes are small and can last up to 5 to 6 hours a day, 5 days a week in DC-area schools: (Diplomatic Language Services [DLS], 2011; Foreign Service Institute [FSI], n.d.; ICA Languages [ICAL], n.d.; International Center for Language Studies

[ICLS], 2012; Washington Language Center [WLC], 2011). The clientele for these schools is composed of government professionals required to learn languages for their job (DLS, 2011; FSI, n.d.; ICAL, n.d.; ICLS, 2012; WLC, 2011). All of the professional language schools in the DC area require instructors who are native speakers, often employed contractually (DLS, 2011; FSI, n.d.; ICAL, n.d.; ICLS, 2012; WLC, 2011). Because of the increased demand by the U.S. government for hiring native language instructors of these national critical languages, most instructors are hired based on their language skills, not their proven experience with pedagogical skills in teaching.

This study focused on language instructors' experiences and observations regarding vocabulary teaching in intensive language proficiency programs at DCLS. Insights on vocabulary instruction from the instructors' perspective had not been adequately researched (Borg, 2009). Findings may influence change in practice regarding training instructors for vocabulary instruction in less-commonly taught languages at DCLS.

Rationale

In this section, I analyze data from multiple sources to offer more context for the local problem at DCLS: an official investigation conducted in 2013; a need analysis conducted by one managerial staff member at DCLS in 2014; and personal communications with students, instructors, and specialists at the school. I cite evidence to support the need for improved teacher training at the site. I also support the need for a vocabulary-focused teacher-training program by pointing out challenges instructors face in teaching vocabulary and synforms.

As an investigation team reported at DCLS, the only requirement for hiring instructors at DCLS is that they be native or a near-native speakers of the language and have the appropriate cultural background of the country where the language is spoken (■■■■, 2013). According to this report, this requirement is insufficient for hiring trained instructors, and it affects the efficiency of the program (■■■■, 2013). Therefore, a vocabulary-focused teacher-development program is needed at DCLS because many instructors are not trained language instructors.

To help students learn vocabulary in an intensive program, instructors at DCLS need to be familiar with the research-supported effective approaches for vocabulary instruction. Deliberate and direct teaching of vocabulary is vital in helping students in intensive programs (Niu & Andrews, 2012). At the same time, the retention of vocabulary can be overwhelming for many students. Because of the nature of training at DCLS and the lack of commercial resources for less-commonly taught languages, many instructors at DCLS are involved in curriculum development and the selection of vocabulary for students. These facts highlight the problem of instructors lacking knowledge of effective approaches in vocabulary teaching and learning.

Language instructors' knowledge of methodology is as crucial as their language and culture proficiency. Jackson and Malone (2009) stated that language-teacher competency is composed of both "proficiency in the language and culture, and professional knowledge and ability as a language teacher" (p. 17). The constraint of hiring only native speakers and often hiring them urgently at DCLS has resulted in hiring instructors who are proficient in the target language but have no methodology training in

teaching languages (████ 2013). The investigation also revealed students' concerns with new instructors because the students' perceptions were that new instructors were "unfamiliar with curriculum and teaching methods" (████, 2013, p. 13). According to the investigation's report, the primary problem is pedagogical inconsistency (████, 2013). This problem is exacerbated in the case of less-commonly taught languages (████, 2013). A professional development (PD) program with a focus on vocabulary teaching can help DCLS's language instructors receive necessary methodology training in teaching languages.

A needs analysis conducted in 2014 by one managerial-level staff member at DCLS produced results that indicated a need for teacher training. This needs analysis included different instruments and extant data such as classroom observations, students' end-of-training questionnaires, focus group discussions with instructors, structured interviews with supervisors, and an electronic survey sent to instructors to assess their needs and potential work environment issues. Analysis of the data from the end-of-training surveys submitted by students indicated general student dissatisfaction with various aspects of the program including classroom instruction. One of the key findings indicated that "the amount of new vocabulary some instructors teach is unrealistic and becomes unmanageable" (████, 2014, p. 13). This statement directly relates to concerns about the quality of vocabulary instruction.

Both instructors and supervisors voiced concerns about the lack of training on teaching methodologies. Supervisors also identified the inconsistency in instructors' levels of teaching skills resulting from the lack of teaching qualification standards for

hiring instructors (■■■■■, 2014). The needs analysis indicated that during the focus group discussion, instructors expressed the need for training in different areas, such as using classroom materials, implementing methodology, and understanding how adults learn languages (■■■■■, 2014). Supervisors mentioned the need for learning theories and keeping up with research (■■■■■, 2014). Instructors and supervisors highlighted the need for a PD program.

Personal communications with instructors, students, and specialists also indicated a need for general teacher training at the site. A language instructor working at the site stated that she started teaching the day after she was hired (■■■■■, personal communication, November 23, 2013). This was her first experience in foreign-language teaching. She confirmed that she did not receive any training or time to familiarize herself with the curriculum before classroom instruction began.

Similarly, a language instructor at the site expressed concern about how to help students learn the large amount of vocabulary and how to introduce the large amount of vocabulary required to be covered in an hour session (■■■■■, personal communication, November 20, 2013). Two other language instructors from different sections commented about their experience with vocabulary teaching and synforms and highlighted that they noticed students struggling, but they also reported that they never received training on how to teach vocabulary, especially synforms (■■■■■, personal communication, June 5, 2015; ■■■■■, personal communication, June 18, 2015). Their statements confirmed the findings of the need analysis, which indicated that instructors need training on how to use classroom materials.

Students face challenges when learning vocabulary in an intensive program. Teaching strategies for vocabulary learning can help students learn vocabulary more efficiently and independently (Niu & Andrews, 2012). One language-teaching expert, who provides consultation for students at the site, expressed that most often students seek help because they cannot retain the large amount of vocabulary they are required to learn, and so they do not develop the mastery they need for their course ([REDACTED], personal communication, October 2, 2013).

A student mentioned learning all the words in the lessons seemed impossible and learning would have been easier had the instructors been able to better guide them in selecting vocabulary words and how to learn them ([REDACTED], personal communication, July, 2015). Another student who studied three languages pointed out that learning vocabulary had been the hardest part of language learning every time ([REDACTED], personal communication, May, 2015). This student expressed a preference for instructors to teach vocabulary before introducing the new lesson.

These students' frustrations were revealed in their statements about the large amount of vocabulary they need to retain as well as with the way vocabulary is taught. All of the evidence and statements indicated the need for a vocabulary-focused teacher-training program. Language instructors should be trained on how to use vocabulary instruction methodologies more effectively and how to teach students vocabulary learning strategies so students can learn vocabulary independently.

Definition of Terms

Hard languages: Languages with significant linguistic and/or cultural differences

from English, such as Armenian, Persian, Pashto, Hebrew, Greek, Hindi, Estonian, and Kurdish. The designated time for learning these languages at the ILR Level 3 is about 10–11 months (Thompson, 2014).

Interagency Language Roundtable (ILR) scale: A set of language proficiency level descriptions based on a learner's ability to communicate in the target language. It consists of descriptions of five levels of language proficiency: elementary proficiency (level 1), limited-working proficiency (level 2), professional-working proficiency (level 3), full-professional proficiency (level 4), and native or bilingual proficiency (level 5) (The ILR Proficiency Scale, 2011).

Incidental vocabulary learning: The process of learning vocabulary without learners giving conscious attention to learning a word, through activities that are not directly geared toward vocabulary learning such as reading or listening (Golonka et al., 2012).

Intentional vocabulary learning: The process of learning vocabulary when learners deliberately commit words to memory by performing activities designed for vocabulary learning (Golonka et al., 2012).

Lexical item: “Item of vocabulary associated with a lexical entry; this includes lexemes, phrasal words, and idioms” (Golonka et al., 2012, p. 1)

Neighborhood density: A group of words that are phonologically similar to a given word with only one phoneme being different, usually formed by deletion, addition, or substitution of a phoneme (Stamer, 2010).

Productive knowledge of vocabulary: According to Nation (2001), productive knowledge of words means that the learner is able to properly pronounce the word, correctly write or spell the word, and accurately use the word in an original sentence to express its correct meaning.

Receptive knowledge of vocabulary: According to Nation (2001), receptive knowledge of a word means that the learner is able to recognize the word when he or she hears or reads it, to realize that the word is made up of different morphological parts and decipher the meaning of the word by using the parts, to know the meaning of the word, and to understand the main meaning of the word to be able to understand its meaning in a variety of contexts.

Synformy: Orthographical or phonological similarity between a pair or group of words (Laufer, 2005).

Significance

This study focused on factors related to the instruction of vocabulary by exploring instructors' experiences. The findings helped identify issues that instructors encounter with vocabulary instruction and with teaching synformy in a natural language classroom setting. Findings may help improve practice by informing policies and indicating areas that need improvement.

In the context of language instruction, one aspect that had not been adequately researched is vocabulary instruction from the instructors' perspective. Researchers had limited understanding of an individual teacher's knowledge and beliefs about vocabulary instruction (Borg, 2009). This lack of research pertained to teacher-related factors with

regard to vocabulary instruction in a natural classroom setting (Nural, 2014), which necessitated more investigation.

Research that focuses on classroom vocabulary instruction was needed to better understand and tailor teacher training for improvement. Recently, there had been a focus on general vocabulary learning, but research on issues related to classroom teaching of vocabulary had been neglected (Ozturk, 2005). Current research is mostly in the form of advice on teaching vocabulary (Ozturk, 2005). Ozturk (2005) suggested that a field of research be established to lead to the development of theories of vocabulary teaching with a focus on vocabulary teaching strategies, teaching of word meaning, and teaching word form.

Synformy is an area that has been widely overlooked in research and training for instructors of foreign language. According to Nural (2014), researchers have not conducted sufficient studies on synformy in classroom instruction. Nural suggested that exploring instructors' personal theories and experiences might shed light on understanding the phenomenon of synformy and the question of whether synformy should be taught in a certain way. According to Nural, instructors do not know how to handle synforms in the classroom because research into synforms has not informed teaching guidelines or specific strategies that instructors can use to teach synforms.

Although vocabulary learning is an essential element of language at advanced levels, often instructors do not focus on vocabulary instruction in advanced-level language classrooms. Learning vocabulary is critical to mastering a language at a higher level (Lewis, 2000); however, most often this is not the focus of instruction in advanced-

level language classrooms (Vatz et al., 2013), unlike in beginner classes, which usually revolve around vocabulary instruction (Vatz et al., 2013). When vocabulary instruction does take place in advanced-level language classrooms, the main objective is to teach the meaning of words and, sometimes, variation in their usage (Vatz et al., 2013). However, difficulties include correctly recognizing the form of the word (Vatz et al., 2013). Certain challenges in vocabulary knowledge go beyond meaning and use and persist for advanced L2 learners.

Instructors are responsible for providing students with the knowledge to excel, and success in vocabulary instruction is a critical component for a student's success. Vocabulary needs to be taught deliberately (Nation, 2001). According to Laufer and Girsai (2008), there should be a focus on form as well as meaning to achieve high levels of language competence. Teaching vocabulary entirely by a meaning-focused communicative approach does not give learners the grammatical competence needed for professional levels (Laufer & Girsai, 2008). Instructors need to draw learners' attention to necessary lexical items for completing a communicative task by focusing on form (Laufer & Girsai, 2008).

Instructors should be able to plan a program that recognizes vocabulary learning as a long-term process and to help learners recycle target vocabulary items in a principled manner consistent with research-supported methods. For example, memory research indicates that forgetting often happens shortly after the learning session; therefore, it is crucial to recycle important vocabulary quickly after the first exposure (Schmitt & Schmitt, 2014). Vocabulary learning strategies enhance vocabulary learning; therefore,

language-training programs should focus on appropriate vocabulary-learning strategies (Zhang, 2012). Schmitt (2008) suggested that researchers identify the most frequently used words in a specific language. However, with less-commonly taught languages, research that could help instructors identify important words is lacking. In students' learning of less-commonly taught languages, the role of instructors is even more critical because their responsibility is to identify the most useful vocabulary.

The current study addressed the experiences and observations of language instructors regarding vocabulary teaching in intensive language proficiency programs. Strategies instructors use to cope with challenges in the classroom are directly linked to their beliefs, and understanding instructors' practices can help instructors and teacher-educators comprehend and improve the educational process (Klieme & Vieluf, 2009). Findings may influence change in practice related to vocabulary instruction through a teacher-development program.

Guiding/Research Questions

The goal of this study was to explore instructors' experiences to develop a greater understanding of teacher-related factors when teaching vocabulary in a classroom setting. I focused on instructors who teach less-commonly taught languages to professional adults in an intensive language program involving a limited time and required level of language proficiency. In the context of teaching foreign languages in the U.S., less-commonly taught languages include any living language other than English, French, German, and Spanish (Kondo-Brown, 2013). I delved into the specific phenomenon of synformy in teaching vocabulary and in mastering a foreign language beyond the ILR language

proficiency Level 2. The guiding research question was the following: What are the language instructors' experiences and observations with regard to teaching vocabulary in an intensive language program beyond the ILR Level 2? I also addressed the following subquestions:

1. What are language instructors' experiences in teaching synforms in vocabulary beyond the ILR Level 2?
2. What are the language instructors' experiences in developing skills or being formally trained in how to teach vocabulary?

Review of the Literature

Conceptual Framework

The conceptual framework of this research, which I developed based on a critical review of existing literature, consisted of two main components: noticing hypothesis and synformy phenomenon. Comprehensible input theory also informed this study. I used the framework to analyze instructors' experiences and observations when teaching vocabulary to students who are beyond the ILR Level 2 in foreign-language proficiency. This was an essential process to gain a better understanding of the issues that instructors encounter in practice when they teach vocabulary.

The noticing hypothesis, one main component of the conceptual framework of this study, brings attention to formal and explicit instruction in language acquisition, which was previously not considered necessary based on comprehensible input theory in communicative approaches. The noticing hypothesis indicates that although comprehensible input is necessary for language acquisition, it may not be enough (Zhang,

2012). Teaching students to consciously focus on form can support attaining communicative competence in a foreign language (Zhang, 2012).

The focus-on-form approach is beneficial in teaching vocabulary. Researchers have used the noticing hypothesis in studies as a rationale for the effectiveness of focus-on-form approach (Godfroid, Housen, & Boers, 2010), which supports bringing the focus of students' attention to word form during communicative activities. The focus-on-form approach is also helpful when teaching and learning synforms. Most confusion in learning synforms happens because of similarity in form. When learners in a meaning-focused context shift their attention to a linguistic form apart from that of the input, they potentially learn more about that form, which over time leads to greater accuracy and variety in the production of the target language (Godfroid et al., 2010). In another study, Plonsky and Loewen (2013) found that frequency alone did not result in higher gains in vocabulary learning. In their study, posttest results demonstrated that frequency of exposure cannot be the only basis for retaining vocabulary (Plonsky & Loewen, 2013). Plonsky and Loewen suggested incorporating the focus-on-form approach to remedy this issue. These studies highlight the importance of adding a focus-on-form element to vocabulary instruction.

Noticing Hypothesis

The noticing hypothesis theory guided this study, as noticing is a necessary step for learning. Schmidt (1990) introduced the noticing hypothesis based on the assumption that noticing is the antecedent of the conversion of input to intake, a necessary step for learning. According to Schmidt, intake is “the part of the input that the learners notice”

(p. 139), and the way noticing happens either intentionally or incidentally does not affect the result. Often input for language learners is reading and listening to materials in the target language.

Learners need to consciously notice vocabulary words that they encounter in order to learn them. According to the noticing hypothesis, for input to become an intake for language learning, it needs to be consciously perceived (Schmidt, 2012). This rule applies to all aspects of language including vocabulary (Zhang, 2012). To learn vocabulary, learners must pay attention to the form of the word and the cues in input that lead to meaning (Hulstijn, 2001; Lee, 2012; Schmidt, 2012). The more a learner pays attention to a word and its different features, the higher the likelihood that he or she will retain the new word (De Jong, 2010; Hulstijn, 2001).

Noticing requires the focus of an individual's attention. This idea refers to three levels of consciousness that Schmidt (2012) identified: "consciousness as intention, consciousness as attention, and consciousness as awareness" (p. 4). Consciousness as intention is the element that separates intentional and incidental learning. People learn information without having the intention to do so, and a good example is learning vocabulary through reading when the goal is to understand the text rather than to learn the vocabulary (Schmidt, 2012). However, in a communicative task, learners focus on meaning, and they might not pay attention to form, especially the less salient formal elements (VanPatten, as cited in Plonsky & Loewen, 2013). Therefore, deliberate intention other than having a facilitative role is sometimes necessary, particularly when learners fail to notice cues that are counterintuitive when compared to the native language

and that must be processed in a way that is different from processing them in the native language (Schmidt, 2012). According to Schmidt, deliberate intention is necessary especially when cues are not salient, as learners usually do not notice them.

Attention is a crucial component in many learning environments but especially with language development. According to Schmidt (2012), consciousness as attention, whether the attention is intentional or not, facilitates learning. Attention refers to “a variety of mechanisms or subsystems, including alertness, orientation, detection within selective attention, facilitation, and inhibition” (Schmidt, 2012, p. 4), where the common trend involves some control of information processing, when skills routinely used are not adequate.

The last item, consciousness as awareness, has been the most controversial in second-language acquisition. Because awareness and attention are closely related, it can be argued that learners are aware of what they focus on. If attention is necessary for learning, then awareness is also necessary (Robinson, Mackey, Gass, & Schmidt, 2012). However, conversely, in the concept of implicit knowledge, learners acquire knowledge without conscious effort (Reber, 1989). Consequently, they are not able to describe the information they acquired, such as an intuitive understanding of grammar rules.

The idea of consciousness as awareness presents a challenge. To solve this problem, Schmidt (2012) proposed to distinguish between noticing and understanding. *Noticing* is limited to the “conscious registration of attended specific instances of language,” and *understanding* is “a higher level of awareness that includes generalizations across instances” (Schmidt, 2012, p. 5). Schmidt proposed that noticing is

necessary in L2 learning, but understanding, which includes rules and metalinguistic awareness, mostly has only a facilitative role. Studies have shown that the awareness at the level of noticing is at the minimum facilitative if not absolutely necessary for L2 learning (Godfroid et al., 2010). The higher the level of awareness becomes, the higher the level of learning becomes.

Studies in cognitive psychology validated Schmidt's noticing hypothesis. According to Baars (2002), working memory is also dependent on consciousness. Conversely, noticing, or attention, and working memory are connected. Because of the substantial cognitive load of language learning, this link is especially important in the second-language acquisition field (Schmidt, 2012).

The level of attention or conscious processing of tasks can affect second language acquisition. Robinson (1995) argued that the level of conscious processing that different learning tasks demand can result in implicit or explicit learning but not activation of different systems that can be accessed consciously or unconsciously. Robinson defined noticing as "detection with awareness and rehearsal in short-term memory" (p. 18) and stated that it is necessary for learning. According to Robinson, the level of attention that learning tasks demands and the individual differences in memory and attention capacity can affect the level of noticing, which in turn affects second-language acquisition.

Comprehensible input alone is insufficient when teaching vocabulary (Rahmani & Nasri, 2013). Rahmani and Nasri (2013) studied the effect of the visual input enhancement method for noticing form in a meaning-focused context, and found that using only visual input enhancement did not result in significant vocabulary learning.

They attributed this result to the level of processing and noticing hypothesis and emphasized that learning and the type of attention and noticing are directly correlated.

Although the notion of noticing has been defined and understood in different ways, second-language researchers agree that noticing or attention to input is the first step of language acquisition. Moreover, for input to become intake, learners need to not only notice but recognize the distinctions between different aspects and features of their own inter-language and those of the target language (Schmidt, 2012). Noticing and being aware of the input is essentially the starting point for second-language learners to acquire a language feature.

Activities that help learners compare their language performance with that of a native speaker are useful because they trigger noticing. Learners must compare their own performance or output in the target language with the native input and notice the gap (Schmidt, 2012). For example, reformulation in writing helps learners notice the gap that exists between the target language and the way they produced the language (Williams, 2012). Reformulation through writing is a process that enables learners to compare their writings with a reformulated version provided by a native speaker and then to revise their own work.

One of the objections to the noticing hypothesis is that attention is not necessary for all kinds of learning. For instance, Gass (1997) argued that learning can happen without awareness because sometimes the input is not required for learning, and if the learning does not depend on input, attention to input is not required. In support of this argument, Gass cited studies in which researchers observed learners who were taught

only one type of relative clause also performed better on other types of relative clauses without any input on those constructions. The notion of learning without conscious detection is still debated and the subject of many studies (Schmidt, 2012). However, many researchers agree “that unconscious learning—if it exists at all—is negligible” (Godfroid et al., 2010, p. 173). Noticing is required for learning different aspects of a target language, and to learn vocabulary, learners must pay attention to both form and cues in the input that lead to the meaning (Schmidt, 2012). To learn a word or concept, students must focus their attention on that specific domain; general attention is not enough.

Another view of the role of noticing is that certain aspects of vocabulary acquisition involve unconscious processing, such as recognition and production. However, to truly develop the semantic aspects of vocabulary, deliberate learning processing is necessary (Ellis, 1994). This view indicates that “reading a word may leave a memory trace of the orthographic representation of that word without any conscious processes, but inferring its meaning is a conscious process” (Godfroid & Schmidtke, 2013, p. 188). Godfroid and Schmidtke (2013) measured attention by verbal report and following the eye movement of research participants. Godfroid and Schmidtke found a strong positive correlation between the advanced learner’s vocabulary acquisition and attention to the words while reading for fun. Based on the same study, however, some words were not learned with instances of form-focused attention.

A major factor that makes vocabulary learning through reading unsuccessful is the lack of noticing. According to Azari, Abdullah, Heng, and Hoon (2012), readers will

likely fail to notice unknown words, and as a result, learning does not occur with the new vocabulary. Azari et al. suggested that the incorporation of a glossary to provide the definitions of unknown words in L1 or L2 can help learners notice unknown words and learn them. Iravani (2015) focused on elementary-level English learners and demonstrated that using tasks that focused on output before input-focused tasks helped learners notice their vocabulary gaps and enhanced vocabulary learning.

Learning happens when learners pay attention to some aspects of the input. Further, the learner decontextualizes a word when he or she notices that word as a separate entity (Shoari & Farrokhi, 2014). Strategies for vocabulary learning can assist learners with noticing and identifying a word (Shoari & Farrokhi, 2014). The noticing hypothesis has been used as a rationale for studies with an emphasis on the use of focus-on-form (Godfroid et al., 2010). Empirical evidence has shown the effectiveness of focus-on-form and the integration of attention to form in the meaning-focused context of the communicative language practice (Laufer & Rozovski-Roitblat, 2011). Laufer and Rozovski-Roitblat (2011) defined focus-on-form as drawing learners' attention to different aspects of words during communicative activities, in contrast to focus-on-forms, which is paying attention to words through practicing decontextualized vocabulary through noncommunicative activities.

To study the issues surrounding the local problem, I investigated instructors' experiences and observations related to vocabulary instruction, thereby gaining a more in-depth understanding. The noticing hypothesis guided this study because it highlights the formal and explicit instruction of vocabulary and also emphasizes the crucial role that

instructors play in explicit vocabulary instruction. Instructors' experiences relate directly to this theory, especially to what they perceive as their role when supporting students in learning vocabulary.

Synformy

A conceptual framework that guided this study was synformy, which is form similarity between word pairs or groups of words in terms of sound, script, or morphology (Laufer, 2005). This definition highlights that synformy is related to the phonological or orthographical similarity of words (Nural, 2014).

Formal similarity of words has been researched under different names in different fields of second language acquisition. Second language acquisition research emphasizes certain characteristics of lexical items that affect how difficult these items are to learn (Schmitt, 2010a). High neighborhood density variables in psycholinguistics and language errors in the field of second-language acquisitions connect directly with the synformy phenomenon. I also present these two variables under the conceptual framework of synformy.

Synformy. Deceptive transparency is a specific factor that appears to interfere with comprehending and producing some words and that makes acquiring these words more difficult. In the context of vocabulary teaching, word learnability, which refers to how easy or difficult a certain word or combination of words are to learn, may be a determining factor in how instructors approach teaching vocabulary (Laufer, 1991). Deceptive transparency encompasses different categories such as “words with a morphologically deceptive structure, idioms, false friends, [and] words with multiple

meanings and synforms” (Laufer, 1989, p. 13). A deceptively transparent word “seems to provide clues to its meaning but does not” (Laufer, 1989, p. 11). According to Laufer (1989), among all the categories, synforms are the largest category of deceptive words.

The synformy confusion is caused by learners associating words that they already know with new or not fully learned ones. The confusion arises mainly because of learners’ insecure representation during this process of association (Laufer, 1989). A language learner might know one of the words in a pair of synforms; however, the learner may confuse the word with a word similar in form, if memory representation is not strong. The same problem occurs when the learner has acquired both pairs of synforms, but because the lexical representation is not strong, associates meaning to a wrong form.

Synformy affects vocabulary acquisition in interlexical and intralexical levels. In the interlexical level, students associate new L2 words with similar-sounding words in their first language (Nural, 2014). Cognates and false cognates are two forms of this interlexical synformy. Although cognates facilitate learning new words, false cognates (similar-sounding words that have different meanings) in L1 and L2 cause confusion (Nural, 2014). Similarly, phonologically and orthographically similar words within L2 can mislead learners in vocabulary acquisition.

When students incorrectly associate synforms, communication between speakers may break down. Synform errors create confusion because the message conveyed and the meaning received are mismatched (Nural, 2014). A report of the Center for Advanced Study of Language (Vatz et al., 2013) revealed that instructors of Chinese, Persian, and Russian believed that the main challenge their students encounter beyond the ILR Level 2

is recognizing the words they already know, because they confuse them with similar-sounding words.

Vatz et al. (2013) focused on the problem of recognizing these confusable lexical pairs in reading and listening and tested this phenomenon in three different languages, namely Russian, Chinese, and Persian. Vatz et al. suggested that this lack of recognition is a symptom of learners' fuzzy lexicons, a theory which corroborates theories about the confusion caused by synforms. According to Vatz et al. two main factors cause incorrect identification of word forms. One factor relates to the level of word knowledge and the auditory form of the word in the learner's long-term memory (Vatz et al., 2013). The second factor is unfamiliarity with the target-language sound system, which can cause the learner's inability to correctly identify words different in only one consonant (Vatz et al., 2013). Identifying similar lexical pairs is a challenge for learners, and the wrong retrieval can negatively affect the learners' comprehension and the comprehensibility of their speech. However, the sound-based problems seem to be language specific and systematic (Vatz et al., 2013).

Synform pairs or groups share certain characteristics. According to Laufer (2005), specific patterns exist regarding the way people confuse synform pairs. Synforms differ in one phoneme, syllable, or morpheme, and confusion usually occurs "in the form of substitution (e.g. prize-price), omission (e.g. economical-economic) and addition (cute-acute) in a lexical item's vowel, consonant, prefix or suffix" (Nural, 2014, p. 1754). Some of the common characteristics of synforms are the syntactic category, number of syllables (the same amount or differing by only one), syllabic position, shared phonemes

(only up to three morphemes are different in a pair), stress pattern, and initial consonant or consonant cluster (Danilovic & Demitrijevic, 2014; Laufer, 1991; Nural, 2014).

Lexical disruptions caused by synformy occur in the native language and in the L2 language. However, synformy confusions in the native language versus those in the foreign language are different. For example, the number of syllables is more salient for the adult native-language speakers than it is with the L2 learners (Laufer, 1991). Laufer-Dvorkin (1991) classified synform categories as presented in Table 1.

Table 1

Categories of Synforms

Categories	Synform Pairs are Similar in:	Synform Pairs are Different in:	Examples
Category 1	Stem (productive in English today)	Suffix	Interested Interesting
Category 2	Stem (not productive in English today)	Suffix	Numerous Numerical
Category 3		Suffix (present in one synform, absent in the other)	Historic Historical
Category 4	Stem (not productive in English today)	Prefix	Imaginary Imaginative
Category 5		Prefix (present in one synform, absent in the other)	Light Delight
Category 6		One Vowel or Diphthong	Lack Lake Luck
Category 7		One Vowel (present in one synform, absent in the other)	Live Alive
Category 8		One Consonant	Price Prize
Category 9		One Extra Consonant (present in one synform, absent in the other)	Phase Phrase
Category 10	Consonants	Vowels	Legible Eligible

Note. Data in the table are from *Similar lexical forms in interlanguage*, pp. 206–210, by Laufer-Dvorkin 1991, Tübingen: Narr.

Synforms of different categories can cause different levels of difficulty for L2 learners depending on the nature of the learners' first language or their level of proficiency in the new language. Laufer-Dvorkin (1991) indicated that synforms that differ in suffixes only (categories 1 and 2) are the most problematic, followed by synforms that are different in vowels (category 10). Kocic (2008) supported the Laufer-Dvorkin finding that category 10 is the most problematic regardless of the learners' level of proficiency. Laufer-Dvorkin also indicated that contextual clues could help learners recognize synforms.

Depending on the learners' level of proficiency, different types of synformy also can cause different levels of difficulty for L2 learners. Kocic (2008) studied the effects of synforms in English as a foreign language (EFL) context and demonstrated that difficulties caused by form similarity decrease as the level of language proficiency of L2 learners grows. However, in category 1 of synformy, words with the same root and different suffixes remain problematic for even advanced-level English learners. Kocic concluded that these types of synforms are last to be represented fully in a learner's mental lexicon, especially if they are among the less-frequently used words.

Danilovic and Demitrijevic (2014) also studied the level of difficulty of suffixal synforms (categories 1 and 2) and vocalic synforms (category 10) in connection with language proficiency level and synform confusion. Danilovic and Demitrijevic discovered that suffixal synforms are more confusing than vocalic synforms for intermediate English learners of Serbian. Danilovic and Demitrijevic also found that lower-level intermediate learners had more difficulty with synforms than upper-level

intermediate learners did. These findings support the need for improved instructional guidance on synform types for different levels of proficiency (Danilovic & Dimitrijevic, 2014).

In the case of some types of synformy, such as suffixal synforms, semantic similarities might be a source of confusion. Hulstijn and Tangelder (1993) hypothesized that when encountering suffixal synform pairs that are similar in form and meaning, such as *historic/historical*, learners tend to be uncertain about the semantic differences between these words. The words *lawful* and *legal* are an example of this problem because they have semantic differences and are similar in meaning but not in form (Hulstijn and Tangelder, 1993). Hulstijn and Tangelder specified that formal interference does not play an important role in production, because speakers search for words that fit semantically in the context of what they are trying to say and not for a certain form when producing language. In addition, Hulstijn and Tangelder argued that learning all semantic traits of a word is more time consuming than learning the formal features of a word, and thereby the semantic traits of a word can cause more problems.

Form similarity also is a challenge in producing the words of the same family. Schmitt (2010a) disputed Hulstijn and Tangelder's findings (1993) and postulated that form causes production problems in the case of the words of the same family. According to Schmitt, although understanding some derivation of a word might help learners recognize a word, this understanding may make producing that word difficult. Schmitt found that advanced L2 learners know some but not all of the derivations of a word and

concluded that learning the form of the word is not easy and, in many cases, is even more difficult than learning the meaning.

Orthographic similarities cause difficulty in production and recognition of words in a second language. In a native language, writing and reading skills develop after oral language ability. When learning a second language, however, most often phonological and orthographic knowledge develop simultaneously. In a classroom setting, orthographical and phonological similarities do not usually act independently of each other because students may simultaneously see synforms in their textbooks (orthographical) and hear them in the speech of their teacher and other students (phonological) (Nural, 2014). Zarei (2008) noted that orthography is the immediate resource for many L2 learners in comparing oral input because of how difficult it is to develop phonological knowledge. Zarei observed that in multiple choice and reading tests, orthographic similarities affect learners' perception and that in spelling and writing tests, orthographic similarities affect their production.

Neighborhood density. A psycholinguistics variable called neighborhood density (ND) has a direct connection with synformy. In the field of psycholinguistics, neighborhood density is defined as “the number of words that differ phonologically from a given target word by a single phoneme” (Stamer, 2010, p. 75), which is formed by deletion, addition, or substitution of a phoneme. Research in this field has demonstrated that ND influences spoken word recognition, production, and acquisition in adults (Stamer, 2010), though the influence of ND might be different in different languages. Stamer observed that in English, high ND had a positive effect on learners' word

production, but words from a sparse ND were recognized more quickly and easily. In Spanish, however, it had the reverse effect, in which words from a sparse ND were produced more quickly and accurately.

Phonological similarity and high ND can have a positive effect on vocabulary learning. Stamer (2010) postulated this effect because similar sounding words being grouped together is one of the ways a mental lexicon is organized (Stamer, 2010). Stamer, in his study on English speakers who were learning Spanish words, demonstrated that learners recognized and produced words from a high ND and as a result learned them more accurately than they did words from a sparse neighborhood.

Presenting vocabulary in phonological groups can support learning and retention of vocabulary in the first and second language. Wilcox and Medina (2013) demonstrated the effectiveness of this strategy in L2 vocabulary learning. In the first language, repeating some aspects of words in a group, such as certain consonant-vowel combinations, facilitated learning new words (Wilcox & Medina, 2013). Creating associations helps learners move new words from short-term memory to long-term memory (Wilcox & Medina, 2013). However, though the phonology in the second language matters, the effect of phonology on learning vocabulary is not widely understood by instructors. Wilcox and Medina suggested the packaging of L2 novel vocabulary in phonological categories, learning phonemes of words in the right order, also could facilitate students' learning and retention of words. Consequently, some aspects of synformy can help, rather than hinder, students in acquiring synform pairs.

At the same time, ND can cause comprehension problems, what is called “slip of ear.” The “slip of ear” happens when a listener fails to perceive a word correctly because of the similarity of the words. This interlingual cause is from confusion within the second language that is unrelated to the first language (Perwitasari, 2013). However, frequency of the words also is a factor in slip of ear. Perwitasari (2013) found that slip of ear occurred most often with similar pairs of words that were not frequently heard; for instance, Indonesian English-learners did not have difficulty with high frequency pairs such as food/foot despite the similarity in form.

Language errors. Research on language errors also revealed some of the problems synformy causes. The majority of research on orthographically or phonologically similar words has been conducted under the context of language errors and language acquisition (Nural, 2014). Although the number of words in a language is unlimited, the different aspects of a lexical item are limited; therefore, the number of ways a word can be used incorrectly is limited (Mahan, 2013). The two main forms of lexical errors are “phonological errors and word substitution errors” (Vitevitch, 1997, p. 211). Word substitution errors occur when a different word is used instead of the intended word. Synformy falls under phonological speech errors, though synformy encompasses orthographical errors as well.

Lexical errors make achieving advanced levels of language proficiency difficult. According to Llach (2011), a lexical error refers to “the deviations in the learner’s production of the L2 norm with regard to the use in production and reception of lexical items” (p. 71). Mahan (2013) described two reasons for the significance of lexical errors.

One reason is that the frequency of lexical errors is three times more than that of grammatical errors in L2 learners' performance. The second reason is that lexical errors cause more comprehension problems for L2 learners and are more irritating to native speakers than grammatical errors are.

Understanding lexical errors has helped researchers learn how L2 learners acquire a word and has provided evidence regarding how words are connected in the lexicon. Early studies of speech errors in L1, such as Fay and Cutler's (1977) research on malapropism, revealed that mental items are accessed through two networks: semantic and phonological. Fay and Cutler postulated that comprehension of lexical items happens through mapping sound to the meaning and production happens through mapping meaning to sound. A word becomes a functional part of the mental lexicon when all the aspects of word knowledge, such as form, meaning, and use, are acquired (Jones, 2014). Learners make errors when deciding between word options because they do not fully know a word and try to cope with that lack of knowledge (Mahan, 2013). Learners can be influenced by the native language, second language, a combination of two, or some other unknown reasons.

Studies on certain output errors such as slips of tongue, malapropism, and tip-of-the-tongue phenomenon in L1 have led to a better understanding of the lexical connections. The slip of tongue phenomenon happens when a speaker intends to say a word but accidentally produces a different word. The word produced usually has some close connections to the intended word either formally or semantically (Schmitt, 2010b). Malapropisms are phonologically related whole-word substitutions with no semantic

similarity (Vitevitch, 1997). The difference between a malapropism and other slips of tongue is that the speaker is unaware of the substitution in a malapropism (Laufer, 1991). Fay and Cutler (1977) identified that in a malapropism syllable length and main stress are similar between the malapropism and the target word. A similar trait also exists in synform errors.

The tip-of-the-tongue phenomenon occurs when a speaker feels that he or she knows a word but cannot recall it completely or cannot produce the intended word (Ecke & Garrett, 1998). Often with tip-of-the-tongue situations, speakers feel that they know certain features of the target word, such as a sound or the main stress of the word, or speakers make incorrect associations between words that are close in sound or meaning (Ecke & Garrett, 1998). Tip-of-the-tongue happens in speaking both a first language and a foreign language.

Researchers have studied the links between and the organization of lexical items in the mental lexicon to illustrate how words are acquired. Schmitt (2010b), explained that word associations can be categorized in three ways based on how words are organized in the mental lexicon: clang association, syntagmatic associations, and paradigmatic associations. Clang association occurs among words that share similar phonological features, such as *dog* and *log* (Schmitt, 2010b). Syntagmatic association is the association of words that often go together in the same sentence or phrase, like *dog* and *house* (Schmitt, 2010b). Association of words from the same grammatical category with similar meaning, such as *cat* and *dog*, is called paradigmatic association (Jones, 2014).

Lexical organization in the mental lexicon changes over time. Understanding how the mental lexicon is organized in the native language could have important implications for vocabulary teaching and learning in L2 (Schmitt, 2010b). As some individuals age, they tend to move from clang associations to syntagmatic and finally to paradigmatic associations (Schmitt, 2010b). The fact that clang association is more of an issue for children in their native language might indicate that in early stages, children's mental lexicons are organized based on word-form similarity.

The research of word associations in L2 is much more limited than it is in L1. Although L1 and L2 mental lexicons are organized similarly, they differ in how they develop. For example, clang associations are more frequent in L2 production, as they appear through language errors (Schmitt, 2010b). Wolter (2001) argued that the structure of L1 and L2 mental lexicons may be similar based on the developmental model, but phonological associations are much more important to the early stages of learning L2 vocabulary: as the knowledge of the words increases, the semantic connections become increasingly dominant in the mental lexicon. Hulstijn and Tangelder (1993) found that semantic similarities cause more interference than form similarities do for advanced language learners but not for intermediate learners. However, the organization of the mental lexicon is not different at different levels of language proficiency. The number of words that learners know is more important than the quality or organization of the mental lexicon (Hulstijn & Tangelder, 1993).

Substitution errors are some of the most common lexical errors in second language learning. In an error analysis of single-word vocabulary items in essays of third-

semester Arabic-speaking students majoring in English as a foreign language, Mahmoud (2011) found that 97% of word errors were substitution errors, meaning a wrong word was used instead of the correct word. Mahmoud also found that 14.6% of substitution errors were formal (related to form) errors, which are related to synforms of categories one through six. Mahmoud listed synforms of category 8 through 10 as a subcategory of semantic errors, which encompasses 7% of errors. Mahmoud suggested that instructors should focus on formally similar words and recommended that they use strategy-based vocabulary instruction to raise the learners' awareness similar forms that can cause confusion.

In summary, vocabulary studies have provided data that help researchers understand the phenomenon of synformy in experimental settings. The research in lexical errors in part demonstrated that synforms cause confusion for language learners (Laufer, 2013) but also showed that people systematically confuse words (Laufer, 2005). Synformy affects learning and can have impactful implications for vocabulary teaching and learning in L2. However, the effectiveness of instruction of synforms in a classroom setting remains to be explored (Nural, 2014).

Comprehensible Input Hypothesis

Krashen's comprehensible input hypothesis also informed this study. According to comprehensible input hypothesis, people acquire a language only through understanding messages or comprehensible input (Krashen, 1985). Some assumptions of Krashen's hypothesis are that the input should be (a) comprehensible, (b) relevant and compelling, (c) sufficient quantity-wise (Choo et al., 2012), and (d) incremental

(Barcroft, 2012). Based on the comprehensible input hypothesis, acquisition of a second language takes place only by exposure to comprehensible input that is slightly beyond the learners' current level of language (Bahrani, 2013a).

The level of language that a learner is exposed to should neither be too easy nor too difficult to be comprehensible. Krashen (1985) used the term $i+1$, with the assumption that if the current level of language competency is i , then the next step is exposure to the language slightly beyond this level. The level of $i+1$ is comprehensible and at the same time challenging for the language learners (Liu, 2013). The greater the amount of comprehensible input is, the faster and more efficient the acquisition of the second language becomes (Bahrani, 2013b).

Instructors must be cognizant of the current level of a learner's vocabulary when teaching so they can introduce vocabulary that challenges the learner. Comprehensible input hypothesis also involves a level of conscious attention because learners must notice the gap in input to move their understanding to the next level (Robinson, 1995). Despite the importance of comprehensible input theory, the acquisition of a second language is a process highly dependent on the learner's personal attributes, and therefore instructors cannot ignore explicit instruction.

Connections Among Key Elements of the Framework and How the Framework Relates to the Study Approach and Research Questions

The purpose of this study was to explore experiences and observations of language instructors regarding vocabulary instruction in intensive language proficiency programs. The conceptual framework of this study is composed of different theoretical

perspectives on vocabulary instruction, and each component informed the study to explore whether instructors' vocabulary instruction experiences were compatible with evidence-based best practices and practical applications of the research-supported methodologies of teaching synforms. I explain how the three components of the conceptual framework of this study, namely, noticing hypothesis, synformy phenomenon, and comprehensible input theory relate to each other and to the purpose of the study.

In the framework of comprehensible input hypothesis, learners acquire L2 vocabulary unconsciously through comprehensible input (Laufer, 2009). With this method, instructors adopt an indirect approach toward teaching vocabulary. Conversely, the noticing hypothesis highlights the formal and explicit instruction of vocabulary and the crucial role of instructors in this process. Instructors' experiences relate directly to these theories, especially in relation to what they perceive as their role when supporting students in learning vocabulary and synforms.

A major concern of many instructors is assisting learners to develop both fluency and accuracy. In the communicative approach, which is based mainly on the comprehensible input theory, instructors design instructional activities to promote incidental vocabulary learning. To help learners acquire the vocabulary, instructors expose their students to a large amount of meaningful and comprehensible input over a sustained period of time (Milton & Alexiu, 2012). Communicative approaches to language teaching help learners achieve fluency in the language; however, these learners might lack the accuracy needed for reaching advanced levels of proficiency (Godfroid et al., 2010). This observation has led to the idea that helping learners pay attention to

specific forms by adding a focus-on-form component might be necessary (Godfroid et al., 2010).

Meaningful input is vital for learning a language; however, learners who simultaneously use the focus-on-form element can improve the learning outcome. Conscious attention to form can facilitate learning by helping learners recognize the form and thereby acquire and retain it (File & Adams, 2010). Concentrating on form even for a short period of time in a purely meaning-focused activity can significantly increase gains in the retention of vocabulary items (File & Adams, 2010).

Although research has supported the possibility of learning vocabulary incidentally through exposure to a large amount of meaningful and comprehensible input, efficiency of incidental learning has been questioned. Laufer (2005) suggested that learning vocabulary through exposure to input, particularly reading input, as the sole method is not the most effective approach for second language vocabulary acquisition. Laufer maintained that vocabulary learning is an area of language that has lacked a focus-on-form approach.

Simultaneously, vocabulary learning takes the most unplanned focus-of-form attention in classroom instruction (File & Adams, 2010). Mackey (2006) investigated the effect of instructor feedback on students' noticing and discovered that feedback helped the learners notice more. Lyster (1998) observed that during classroom interactions, instructors have a lower tolerance for lexical errors, and the most corrective feedback they provide is by recasting, or reformulating, the learners' errors. This study also indicated that recasts had the lowest rate of effectiveness among different types of

corrective feedback (Lyster, 1998). Therefore, instructors can improve learning outcomes by planning a focus-on-form approach in vocabulary instruction instead.

Synforms are pairs or groups of words that are similar in form (phonological and orthographical). These similarities make learning and retaining synforms difficult for language learners. Therefore, instructors need to specially treat synformy in practice (Danilovic & Dimitrejevic, 2014). A main strategy that researchers suggest is to teach these words by raising learners' awareness of the differences in synforms by contrasting the words and giving extra attention to their differences (Zarei, 2008). Activities that force learners to pay more attention to confusing words are ultimately helpful to the learning process (Laufer, 1988). This phenomenon and the approaches that instructors adopt to treat synforms are directly related to the noticing hypothesis.

Review of the Broader Problem

To begin, I engaged in a literature review by searching terms that were directly related to the research questions including, but not limited to, *second or foreign language vocabulary instruction, second or foreign language vocabulary learning, second-language vocabulary at intermediate and advanced levels, L2 vocabulary and readings, L2 vocabulary and speaking, intensive language-training programs, second-language teacher perceptions, experiences, beliefs, and perspectives and classroom practice*. By using Google Scholar, I identified several educational databases, including the databases accessible through the Walden Library and Science Direct. After the preliminary literature review, my focus shifted to the noticing hypothesis and vocabulary learning, focus-on-form approach in vocabulary learning and instruction, direct vocabulary

instruction, explicit vocabulary instruction, incidental vocabulary learning, and comprehensible input theory.

Another area of my focus in this research was learning vocabulary similar in form, orthography, and pronunciation, which led to my search and review of literature on mental lexicon, neighborhood density in the field of psycholinguistics, error analysis, and malapropism. Finally, I gathered information on the terms *synformy* and *synforms* in the field of applied linguistics, which was one major focus of this research.

Findings from the Literature on Learning Vocabulary

Currently, researchers agree on the significant role that vocabulary plays in language learning, but many questions still remain regarding how to teach vocabulary, whether explicit attention is needed for vocabulary learning, and whether vocabulary should be taught. Throughout the history of language instruction and throughout the multitude of language-teaching methods, vocabulary has been often treated as a secondary element of language acquisition (Choo et al., 2012; Folse, 2004; McLean & Lee, 2013). Learning vocabulary as a key priority began to attract attention after Meara highlighted it as a neglected area of focus in the early 1980s (Horst, 2014). However, although more research is currently conducted in the field of vocabulary learning, vocabulary is still not treated as a main component in language teaching and teacher-training programs (Horst, 2014).

A substantial repertoire of vocabulary, as many studies have proven, positively impacts learners' ability to read, write, speak, and listen in a second language.

Vocabulary knowledge is key in learning a language and in the development of literacy

(Akpınar, 2013). The degree of proficiency in a second language has a direct correlation to the number of words that learners know (Dilek & Yürük, 2013; Folse, 2004), and a limited vocabulary is most often the reason learners' speaking in an effective manner is restricted (Barcroft, 2013). Similarly, students often achieve acceleration in language proficiency when a program's focus is on the improvement of vocabulary (Barcroft, 2013). Therefore, to support students in achieving advanced levels of language proficiency in an intensive language program, instructors should focus on vocabulary teaching.

Vocabulary learning is a challenging task for language learners, and students often need instructors' support. Language learners complain that they forget words previously memorized (Rahimy & Shams, 2012). Further, many end-of-training surveys conducted in intensive English as a second language programs demonstrate that adult learners express a strong desire for vocabulary instruction (Folse, 2004). However, instructors are often uncertain about how they can guide their students (Hulstijn, 2001). Therefore, because vocabulary learning is an enormous task for adult second language learners, instructors must have training to identify how to support their students.

When learners acquire a word, they do not understand the implications or nuances of that word immediately. Learning vocabulary is an incremental process because it involves many components including orthography, morphology, part of speech, pronunciations, meaning, collocations, meaning associations, specific use, and register (Nation, 2001). Different learning conditions also affect the way that students learn different aspects of L2 vocabulary (Laufer, 2009). Understanding all aspects of knowing

a word is an incremental process that takes time (Grabe, 2009). Therefore, instructors should consider the required time to learn all aspects of vocabulary when they plan vocabulary instruction in an intensive language program.

Researchers have focused on how L2 learners acquire vocabulary and how instructors approach teaching vocabulary. Questions such as whether the source of learning vocabulary is input, drills, lists, repetitions, or interactions have elicited ongoing debates among proponents of different approaches, such as direct or form-focused learning and instruction versus indirect or input-based learning and teaching of vocabulary (Laufer, 2009). Schmitt (2010a) reported that word engagement and the type of exposure, which facilitates form-meaning connection, are the main factors in learning vocabulary. Moreover, Schmitt suggested that anything that enhances engagement should improve vocabulary learning, including an increase in word exposure, noticing of the word, intention to learn, amount of time of the engagement, and word focused interaction. Among researchers, there is a shift toward using a mix of all approaches, meaning a combination of meaning-focused activities, form-focused activities, and repetition, as the most effective approach to learning and teaching vocabulary (Laufer, 2009). Therefore, instructors can promote engagement, select activities, and plan repetition to facilitate vocabulary learning.

When students develop language vocabulary, efficiency is key in intensive language programs because participants often have a limited time to achieve advanced levels of language proficiency. Language learners acquire a large amount of vocabulary through input. Input through extensive reading, use of graded readers, and exposure to

oral input is useful for learning vocabulary (Nation & Ming-Tzu, 1999; Schmitt, 2008). However, this approach imposes impractical time limitations for intensive language programs, because a specific amount of reading must be done every week with a focus on repeated exposure to already-learned vocabulary.

Learning vocabulary from reading only is not the most efficient method. Contextual learning of vocabulary from reading involves the acquisition of anywhere from 5% to 15% of words (Grabe, 2009). In extensive reading, which encompasses over one million words worth of texts (of which students already know 95%), the student can learn around 2,000–4,000 additional words (Grabe, 2009). Laufer (2009) enumerated three obstacles that make learning vocabulary from L2 reading more complicated. These problems include the student's lack of a sufficient vocabulary repertoire, his or her confusion caused by words similar in form, and the student's inability to guess due to factors related to the type of word, learner, or the context and textual clues.

Zahar, Cobb, and Spada (2001) found that the number of times a learner needs to encounter a word in a context to learn it mainly depends on the learner's language level, not the contextual support. Zahar et al. indicated that when reading a story, even with contextual support, learners learned 2.6 words out of every 30 words. By this method, according to the report, it would take 29 years to learn 2,000 words. Ajideh, Rahimpour, Amini, and Farrokhi (2013) suggested that extensive reading helps mainly learning partially known vocabulary but not new vocabulary. Furthermore, learners in intensive programs who split their focus between reading and speaking skills and listening skills may not have the time to read as much as is required to gain enough vocabulary.

Therefore, incorporating other approaches supports the students' acquisition of vocabulary in an intensive program.

Explicit vocabulary instruction benefits learners. As a learning strategy, encouraging language learners to spend more time on reading and listening is not enough (Hulstjin, 2001). Direct vocabulary instruction is more efficient (McLean & Lee, 2013). The explicit instruction in activities that partially decontextualize vocabulary is not only effective but results in better gain than learning vocabulary through reading does (Peters, 2014). Learning words with their translation and synonyms is also beneficial to learners who need to quickly learn a large amount of vocabulary in a short period of time (Webb, 2009). Hence, Webb suggested that explicit vocabulary instruction, in addition to other explicit and incidental tasks, is necessary for an effective vocabulary-focused program.

When instructors focus on direct vocabulary teaching and intentional vocabulary learning, students achieve higher gains at all levels of vocabulary knowledge. Receptive learning, such as learning vocabulary through reading, leads to greater receptive knowledge of vocabulary (Webb, 2009). On the other hand, learning vocabulary at the productive level, which is often harder to attain when compared to the receptive level, requires explicit focus on vocabulary learning and direct vocabulary teaching (Schmitt, 2008). For this reason, as research has confirmed, a direct L2 vocabulary instruction should complement an approach for incidental vocabulary learning.

Learning a language in a classroom setting in intensive language programs at DCLS has its own particular challenges. Acquiring vocabulary is especially challenging when learners have limited exposure to the language and are not able to use the language

in real everyday situations (Shoari & Farrokhi, 2014). For this reason, direct vocabulary instruction is especially important when the program takes place in a country where the target language is not spoken outside of the classroom (Schmitt & Schmitt, 2014). Direct instruction is critical for intensive language-learning programs because students have a limited time to reach a certain level of proficiency.

Another issue that instructors encounter is what specific vocabulary should be taught. Nation (2013a) divided vocabulary into three frequency-based categories: high-frequency words, mid-frequency words, and low-frequency words. Nation then added an additional category of specialized vocabulary that encompasses academic words and technical words. Because the importance of specialized vocabulary depends on the learner's profession, instructors must understand how to incorporate different categories of vocabulary when they plan their lessons.

Instructors and material developers must prioritize which words to teach. According to Nation (2013a), the priority rests with high-frequency vocabulary, which should be learned and taught deliberately. The second priority rests with specialized vocabulary for learners who have specific goals in their language learning (Nation, 2013a). For low-frequency words, teaching vocabulary-learning strategies to students can help them learn on their own (Nation, 2013a). However, in a topic-based approach to teaching a language, low-frequency vocabulary can also be necessary for learners' reading or listening comprehension (Schmitt & Schmitt, 2014). Therefore, instructors need to consider different factors to decide which words to teach.

The large repertoire of vocabulary that students need to achieve in advanced levels of language proficiency poses a challenge in intensive language programs. A reader must have knowledge of 8,000–9,000 word groups to read a variety of authentic texts in English (Nation 2013a). This repertoire of vocabulary includes words beyond high-frequency and technical words and covers mid-frequency words (Schmitt & Schmitt, 2014). According to Schmitt and Schmitt (2012), mid-frequency vocabulary is vital for many language uses, but instructors and material developers have largely neglected this category.

In an intensive language program (12 to 20 hours of training a week), learners can learn around 2,000 words through direct instruction over the course of a year (Grabe, 2009). In more intensive language programs (20 to 30 hours of training a week), more than 2,000 words can be directly taught through multiple exposures to words in different contexts, word lists, semantic mapping, word-part mapping, and other word exercises (Grabe, 2009). However, even in the 20 to 30 hours a week instruction range, it is still difficult to teach the 8,000–9,000 words deemed necessary for reading a variety of authentic texts unless instructors have a focused vocabulary instruction plan.

Instructors and curriculum developers should consider using approaches that increase efficiency in vocabulary learning. The frequency that words occur in a curriculum has a positive effect on learning vocabulary; however, in a regular classroom, students do not have time for reading extensively (Peters, 2014). Students learn vocabulary more effectively when reading is followed by explicit vocabulary activities, not when words occur frequently alone (Peters, 2014). Laufer and Rozovski-roitblat

(2011) concluded that, with meaning recall, participating in explicit vocabulary activities is more effective than consulting a dictionary or asking the teacher about the meaning of the word. Therefore, adding explicit vocabulary-learning activities can improve vocabulary learning in a language program.

Learners and instructors of less-commonly taught languages also face added challenges with regard to vocabulary instruction because these languages have not been researched or analyzed sufficiently (Golonka et al., 2012). Most of the data from the literature review for this study are based on research focused on learning English as a foreign language. It is reasonable to expect that the data could be different for less-commonly taught languages, especially when considering the closeness of the learners' first language to the target language. However, although research on less-commonly taught languages is lacking, English-based research helps clarify the challenge of vocabulary instruction and learning when the goal is to reach an advanced level of language proficiency.

Vocabulary Instruction

Vocabulary learning is a challenging task for adult learners. Many language learners fail to learn even a moderate level of vocabulary, indicating the need for an active and strategized approach to vocabulary learning (Schmitt, 2008) and a greater focus on vocabulary instruction (Nural, 2014). Instructors can support their students' vocabulary learning by focusing on improving retention through quality word processing and repeated exposure to already encountered words (Laufer, 2009). To enable learners to acquire the optimal number of words, starting from level zero and moving toward ILR

Level 3 in reading and speaking, instructors need to be actively involved in planning and teaching vocabulary in professional language schools.

In addition, understanding factors that affect students' ability to learn words, such as the effect of synformy, is necessary for effectively teaching vocabulary. Instructors need to make decisions about the selection of words, the time of word presentation, and the activities that help students learn and retain difficult words (Nural, 2014). Danilovic and Dimitrejevic (2014) studied synformy in the Serbian EFL context and concluded that synformy requires a special type of treatment because it causes difficulty in learning vocabulary for language learners. Synformy can have many implications for practice.

Researchers uphold two main perspectives regarding how instructors deal with synforms. One group believes that differences between words with similar orthography are usually ignored in favor of the bigger picture (Zarei, 2008). Therefore, this group believes formally similar words should be taught by contrasting words (contrastive analysis hypothesis) and by raising learners' awareness of the differences (Zarei, 2008). The second viewpoint belongs to a group who believes too much attention to differences could cause overloading and should be avoided because it makes the task of vocabulary learning even harder (Zarei, 2008).

When students focus on synforms, they should engage in specific activities. Laufer (1988) suggested that activities that draw learners' attention to confusing words and present confusing pairs side by side so learners can notice the differences can be helpful in solidifying word meanings. Laufer also recommended that instructors introduce difficult words early in the training and include them in tests more often. Nural

(2014) also investigated the phenomenon of synformy in classroom context and recommended, because of the unpredictable nature of synforms, instructors be aware of the phenomenon and be available to respond to synforms by planning introduction of synforms and by teaching vocabulary-learning strategies to their students.

Language Instructors

Language instructors play a significant role in students' success in an intensive language program. According to Jackson and Malone (2009), the effectiveness of an intensive language program rests mainly on the skills of the teacher. Language instructors need to have three domains of knowledge: "the user domain, the analyst domain, and the teacher domain" (Watari, 2013, p. 86). The user domain refers to the proficiency of instructors in the target language (Watari, 2013), the analyst and teacher domains refer to instructors' ability to analyze and assess language, and to present it in a way that would facilitate learning (Jourdenais, 2009; Watari, 2013). Therefore, it is not enough for instructors to be proficient users of the target language or to know about the grammar of the language (Jourdenais, 2009).

Language instructors need to have analytical skills and be able to assess and present materials in an effective way. At every level of language proficiency, instructors should be aware of the level of knowledge they are trying to enhance (Alali & Schmitt, 2012). For example, when students need to achieve the recall level of knowledge necessary for using vocabulary in real-world contexts, such as in the workplace, instructors should use methodologies that address that exact level (Alali & Schmitt, 2012).

Foreign language instructors' perceptions about teaching also affect the quality of their instruction. As instructors prepare and give lessons based on beliefs inconsistent with research-supported methodologies, these instructors can deprive students of opportunities needed to develop language at a higher level of proficiency (Allen, 2013). Simultaneously, research shows that a PD program for instructors can affect their beliefs in many different ways:

a) strengthen or extend instructors' beliefs; b) make their beliefs more apparent and help them verbalize them; c) help instructors put their beliefs into practice and develop links between beliefs and theory; and d) be the source of new beliefs for instructors. (Barcelos & Kalaja, 2011, p. 287)

Accordingly, providing instructors training related to vocabulary instruction can positively affect the quality of their instruction and the success of students in achieving advanced levels of language proficiency.

Instructors who provide students with guidance on lexical items and who help students develop effective learning strategies demonstrate their direct role in vocabulary learning. The purpose of this study was to explore experiences and observations of language instructors regarding vocabulary teaching in intensive language proficiency programs at DCLS. Findings may support how a PD program can positively influence practice related to vocabulary instruction. Teacher-educators can focus teacher-development programs on how to use research-supported vocabulary instruction methodologies to support students in these high-stakes language programs.

Implications

In the communicative era, administrators at intensive language schools have considered language acquisition as more of an unconscious process, so they have not emphasized teacher training. As previously demonstrated, instructors play a critical role in helping students learn the vocabulary they need, especially for professional language learners who need to achieve the level of proficiency required for success in their profession (Jackson & Malone, 2009). Consequently, language teacher education programs should evolve because language teaching has changed focus from incidental learning alone to include focus on form (Jourdenais, 2009). A facilitator with a research-based training plan for a teacher development program that has focuses on vocabulary can significantly affect professional language learners' vocabulary gain at DCLS.

Trainers in teacher-development programs should also identify the instructors' beliefs about vocabulary instruction. Beliefs are key to successful teacher training and learning in the context of language learning (Borg, 2011). Teacher development programs should not only identify the instructors' belief systems but also help instructors understand how their beliefs can impact their teaching (Alexander, 2012). It is ideal if a teacher's beliefs are compatible with the research on how to teach a foreign language as well as the research-supported methodologies of vocabulary teaching.

A vocabulary-focused PD program may help instructors teach strategies and incorporate a wide range of vocabulary-teaching methodologies that help students develop a sufficient repertoire of vocabulary. A successful facilitator for a PD program trains instructors and enables them to make informed choices in instruction (Larsen-

Freeman, 2012). The expectation of stakeholders in professional language schools should include a teacher-training program with content focusing on vocabulary instruction. Otherwise, it would continue to be difficult for professional language students in those schools to achieve their goal in the limited time that they have to learn.

Furthermore, regarding the topic of synformy, research has not been transferred to practice. Instructors do not have guidance in how to handle synforms (Nural, 2014). Exploring instructors' experiences elucidated the phenomenon of synformy. I prepared a teacher-development program and training that focuses on the use of vocabulary instruction theories to improve instruction based on the findings of this study.

Summary

Vocabulary is vital to the development of reading, speaking, and listening competencies. The proficiency level in a second language directly correlates to the number of words that learners know. Many language learners identify vocabulary learning as the most essential factor in their success. However, many language learners do not have the time to learn the large amount of vocabulary they need. Consequently, one problematic task for students in intensive language programs is vocabulary learning and retention because they often have a limited time to achieve advanced levels of language proficiency.

The role of instructors in vocabulary teaching is crucial to the success of the students. Research supports the efficiency of direct and explicit vocabulary instruction. Instructors are responsible for choosing the words that students need to learn and also for providing different instructional guidance and strategies at different levels of proficiency.

Instructors also need to be familiar with the factors that affect learning vocabulary, such as synformy. In professional language schools in the DC area, school administrators do not focus on training instructors about vocabulary instruction, which presents a gap in practice.

I designed a qualitative case study to explore instructors' experiences related to vocabulary instruction with a focus on the synformy phenomenon. The noticing hypothesis and the input hypothesis also guided and informed my research. As many studies have suggested, noticing is essential for learning vocabulary. The noticing hypothesis provided support for the effectiveness of explicit vocabulary teaching and for adding a focus-on-form aspect to the meaning-focused context of communication.

Section 2: The Methodology

This study focused on instructors' experiences related to vocabulary instruction. In this section, I describe the steps I took for implementing this qualitative case study, such as the data collection procedure and sampling strategies. Also, I explain data analysis process and ethical considerations and issues involved in the research.

Qualitative Research Design and Approach

The purpose, research questions, and available resources are factors that indicate which method of research should be used. One way to choose a study design is to identify what kind of information is needed (Patton, 1991). Research questions lead the researcher to choose a design. In this study, I chose a qualitative approach because, based on the research questions, a thorough understanding of instructors' experiences with regard to vocabulary instruction was required.

The inductive nature of qualitative studies enables researchers to capture a person's or group's point of view and provide a thorough understanding of the situation by asking open-ended questions. Qualitative methodology allows the researcher to study a phenomenon in detail and depth without being constrained by fixed categories selected before conducting the study (Patton, 1991). This is unlike quantitative studies that often involve selecting a questionnaire or survey questions based on predetermined points of view (Patton, 1991). In qualitative studies, hypotheses are developed after the collection of data (Lodico, Spaulding, & Voegtle, 2010). In quantitative studies, researchers develop hypotheses based on the research question.

The qualitative researcher strives to study naturally occurring real-world

phenomena and situations. Qualitative studies are inductive in nature, the researcher is the main tool for collecting and analyzing data, and the findings are highly descriptive (Merriam, 2009). Stake (2010) described qualitative research as allowing the researcher to explain how things happen and work. Qualitative studies are naturalistic (Patton, 1991), meaning the qualitative researcher does not manipulate the setting of the occurring phenomena or limit the output by setting fixed categories for research.

Qualitative studies typically provide information on a small number of people or situations, which can help elucidate the cases under research, but the findings are not generalizable. By contrast, in quantitative studies, people's experiences and perspectives are deductively studied by testing theoretically driven hypotheses. The advantage of quantitative studies is that the limited set of categories makes it possible to gather input from a large number of people. Quantitative studies facilitate and incorporate statistical analysis of the data for generalizable findings.

Qualitative studies aim to capture a holistic understanding of a phenomenon. With a qualitative approach, a phenomenon is a complex system that needs to be studied in its context (Patton, 1991); this is a reason that a qualitative researcher goes into the field and engages in personal contact with the participants (Patton, 1991). Qualitative researchers aim to understand a phenomenon such as a human experience with all the complexities and interconnections (Stake, 1995). In contrast, researchers use a quantitative approach to explain situations by identifying cause and effect. Quantitative studies require focus on variables to be statistically analyzed to test a hypothesis.

Qualitative Case Study Research Design

A case study is one of the qualitative research designs. Among the qualitative research designs, the choice depends on the research questions (Yin, 2014). A case study is most appropriate for questions about current situations or events that the researcher cannot manipulate or change and those that involve some social phenomenon that requires a thick description of different elements in the context (Yin, 2014). A qualitative case study design is used to explore experiences of real cases as they operate in their real-life context (Stake, 1995), specifically when a real-world case and its context are not easily separable (Yin, 2014). In case studies, researchers focus on a particular event and provide a thorough and vivid description of the situation, broadening the reader's understanding of the context.

There are different advantages in case study research. According to Nunan (1992), researchers can use case studies to portray various viewpoints and point out different interpretations; another advantage is the accessibility that case study reports provide as they reach a wide range of audiences, compared to other research reports. According to Nunan researchers can immediately use the information and insights gained for practical purposes such as developing professional training, providing feedback for institutions, and revising policies.

In a case study, researchers study issues in practice, represent different points of view, and use the results for making changes in practice. I chose a qualitative case study to satisfy the purpose of this study. Researchers conduct case studies to understand different aspects of a case or situation in its context, as well as to provide a complete

picture of the situation (Halinen & Törnroos, 2005). Researchers can facilitate coverage of a case within its context and yield consideration of potential relevant variables (Yin, 2014). Researchers also can advance field-based knowledge because case studies are proven to be useful for informing policies in educational settings (Merriam, 2009). In this study, I pursued a better understanding of instructor-related factors in teaching vocabulary through careful analysis of the experiences of instructors of less-commonly taught languages in the context of an adult intensive language-training program.

One distinction between case studies involves the number of cases. There are single case studies and multiple case studies. Researchers use single case studies when they consider a case for its uniqueness, and they select multiple case studies when there will be similar or contradictory patterns (Richards, 2011). Case studies differ in the number of cases, orientation, and type observed in each study (Richards, 2011). Different names have been used for multiple case studies. Stake (1995) used the term *collective case study*. Researchers use a collective case study to gain a better understanding of a larger number of cases by collecting and analyzing data from several cases that have common conditions or characteristics.

Case studies also differ depending on their orientation or purpose. Stake (1995) identified two types of case studies, namely the intrinsic case study and the instrumental case study. In an intrinsic case study, the focus is on understanding the case itself, which is inherently interesting (Stake, 1995). In the instrumental case study, the focus is on understanding an issue or issues related to the case, which helps to narrow the focus of the study (Stake, 1995). Yin (2014) identified three different types of case studies based

on their purposes: exploratory case study, descriptive case study, and explanatory case study. Merriam (2009) added a fourth type, which is evaluative case study.

Through examination of research questions, researchers can identify the case study design they need to use. Studying and understanding how a case addresses different issues contributes to the researcher's understanding of the case (Stake, 1995). In this study, I used a collective instrumental case study to understand instructors' experiences regarding vocabulary instruction. The focus was not on understanding instructors—the unit of analysis—but rather their experiences when teaching vocabulary and synforms as well as their experiences in learning how to teach vocabulary. In an instrumental case study, considering such issues is important because it helps draw attention to problems and concerns. A collective case study allows researchers to compare similarities and differences within cases (Yin, 2014). In the current study, nine instructors from three different sections were selected. This case study was exploratory because, according to Yin (2014), exploratory case studies are used for *what* questions rather *how* and *why* questions.

Another research method similar to a case study with the aim of describing what is going on in a particular context is ethnography. However, what differentiates the case study from ethnography is that a case study is more limited in nature. Ethnography is a type of qualitative study used to understand a culture as a whole, whereas a researcher in a case study focuses on a specific aspect of culture (Nunan, 1992). Similarly, in this case study I focused on instructors' experiences with vocabulary instruction.

There are other differences between a case study and ethnography. One difference

is the focus in ethnography is not the case or the unit of analysis (Merriam, 2009). The case study is defined by the case and can be combined with other qualitative methods. For example, researchers in ethnographic qualitative studies focus on understanding the culture of a particular group, which is a bounded system and is the case (Merriam, 2009). In ethnography, observation is the main tool for data collection. In case studies, though, different kinds of data collection methods can be used (Richards, 2011). I conducted a collective instrumental case study because my goal was to understand language instructors' experiences in vocabulary instruction in intensive language-training programs. A case study method was relevant to my research questions.

Participants

Selection and Justification of the Sample

In the design of this case study, I first determined the case and identified the conditions to which the case was bound. The next step was to implement a purposeful sampling method to choose the sample within the case (see Merriam, 2009). In a multiple case study, each case is selected with the expectation of having similar or contrasting results, comparable to replicating an experience, rather than the selection of a large number of cases that is representative of the pool of the respondents (Yin, 2014). Only two to three cases are necessary if the issue under inquiry is straightforward, if it does not involve strong rival explanations, and if the results do not require a high level of certainty (Yin, 2014). However, if a higher level of certainty would be needed because of the existence of rival explanations, a few more cases would be required (Yin, 2014).

The purpose of this qualitative collective case study was to gain an in-depth understanding of language instructors' experiences, training, and resources required for vocabulary instruction in intensive language-training programs. The goal of case studies is to understand the phenomenon in depth, and therefore only a few cases need to be selected (Creswell, 2012). I selected a sample of nine language instructors from three distinct language sections for this case study.

The first criterion was to select language instructors who taught languages categorized as less-commonly taught languages, which refer to any living world languages other than English, French, German, and Spanish, in the context of teaching foreign languages in the United States (Kondo-Brown, 2013). The second criterion was that among the instructors of less-commonly taught languages, only instructors who taught hard languages were to be selected. At the DCLS language school where the research was conducted, languages are grouped into categories of difficulty for native English speakers, namely world languages, hard languages, and super-hard languages. Among all of the languages, those categorized as hard or super-hard languages are also less-commonly taught languages.

A list of languages under each category was available at the school, and the list defined hard languages as languages with significant linguistic and/or cultural differences from English, such as Armenian, Persian, Pashto, Hebrew, Greek, Hindi, Estonian, and Kurdish. The designated time for learning hard languages at the ILR Level 3 is approximately 10–11 months. For consistency in time designated for learning the language at the ILR Level 3, I selected only instructors who were teaching languages

categorized as hard languages. I selected three instructors from each section for within- and across-language triangulation of data from sections with 12 to 40 instructors.

Procedures for Gaining Access to Participants

To get permission for conducting the interviews, I contacted the director's office at the site. Even though I work at the same school as the participants, I had limited interaction with language instructors outside of my department. I talked to instructors to identify whether they would consider participating, and then I sent introductory e-mail with the consent form. I e-mailed each participant individually and never sent group e-mails or e-mails as blind carbon copies. E-mails were sent to and from my personal account, and documents were saved only on my password-protected computer. My e-mail account and my computer are protected with a combination of passwords that are changed every other month for additional security. I use these methods to prohibit unauthorized access to e-mail accounts and documents.

After receiving consent forms from the participants via e-mail, I asked for convenient times and places to meet the participants to conduct the interviews. I was flexible when scheduling interviews. The interviews were conducted in public places with few distractions to make it as easy as possible for the interviewee.

Establishing Participant and Researcher Relationship

It was critical to develop a strong rapport with participants, and because we all work at the same location, I arranged via e-mail a brief visit with each participant a few days in advance of the interview to introduce myself in person, explain the research goal and corresponding procedures, and give participants the opportunity to ask questions. I

also developed an interview guide as a plan for interviewing so that I did not forget information that needed to be shared with the participants (see Jacob & Furgurson, 2012). My interview guide also helped me make sure I addressed any concerns participants had regarding different aspects of the study, including confidentiality.

I began the interview with light conversation while providing context for the participants. I found this crucial because it gave me the opportunity to build a trusting relationship with the participants while also allowing them to relax and focus on the interview. I made sure to maintain eye contact with the interviewee during the interview (see Jacob & Furgurson, 2012). During each interview, I listened more than I talked and encouraged the participant to talk by listening attentively and by offering support by smiling and nodding.

I greeted and thanked the participant and asked the participant whether he or she had any questions before the interview. Additionally, I asked the participant whether I could record the conversation before turning the recorder on and constantly reminded myself that each participant was unique. To remind myself of this, I made sure to ask questions that fit into the unique experience of each interviewee.

Ethical Treatment of Participants

The participants were all over 21 years of age and signed a consent form prior to any interviews. To obtain participants' written consent, I used a participant consent form, which included information on the procedures, the voluntary nature of the study, the confidentiality of the study, the researcher and committee chair's contact information, any risks involved in the study, and compensation (see Endicott, 2013).

In the consent form, I gave a description of the study and explained the nature and purpose of the study. I explained how the data would be used and how the study could affect their practice. I e-mailed the consent form to the candidates and, to be mindful of each participant's time and discretion, I asked participants to respond within 3 days by replying "I agree to participate in this vocabulary research study" in the e-mail subject line.

Before any interview began, I answered all questions or concerns that participants had. I explained how the data would be kept secure and confidential. I informed participants that their name, language sections, and all the people, offices, and agencies that the interviewees referred to in the course of describing their experiences would be changed to protect their anonymity. I removed all names from the data and informed the participants that all the data would be destroyed after 5 years, as required by university protocol.

In any interview, an unforeseen ethical concern researchers face is the way participants may feel when researchers ask certain questions. Participants might feel that their privacy has been violated, or they might feel uncomfortable. Further, painful memories could resurface (Merriam, 2009). Researchers should consider ethical matters in advance and should be able to handle issues that might arise unexpectedly. I was aware of these possibilities and did the best I could during the interviews.

A researcher needs to be sensitive to any issue that might harm the participants and should try to avoid it. To ensure that no harm would be done to the participants, I would have stopped the study and adjusted the methodology or interview protocol should

there have been any unanticipated problem that could have increased risks to the participants. If I had noticed that a participant was uncomfortable and did not wish to continue the interview, I would have stopped and invited the participant to leave.

I explained that participation in the study was voluntary, and after the interviews, I provided participants with their own interview transcription combined with my comments in discussing the themes I would review so that they could change data if needed. Further, to ensure voluntary participation, I avoided offering valuable gifts, monetary or otherwise. I did not have to find additional participants, as all participants I contacted in the first round continued throughout the course of the study.

Data Collection

The purpose of this study was to gain an understanding of language instructors' experiences, perspectives, training, and resource needs in vocabulary instruction in intensive language-training programs. I conducted this research to answer three questions: (a) What are the language instructors' experiences and observations with regard to teaching vocabulary in an intensive language program beyond the ILR Level 2?, (b) What are instructors' experiences in teaching synforms in vocabulary beyond the ILR Level 2?, and (c) What are the language instructors' experiences in developing skills or being formally trained in how to teach vocabulary?

The literature review revealed the need for greater research on teacher-related factors of vocabulary instruction in the context of a natural classroom. There was little known about instructors' beliefs and knowledge in relation to the teaching of L2 vocabulary (Borg, 2009). Exploring instructors' personal theories and experiences shed

light on understanding phenomenon of synformy (Nural, 2014) and vocabulary instruction.

To gain an in-depth understanding of the language instructors' experiences, I collected qualitative data, which are defined as data acquired through words (see Merriam, 2009). Observations, interviews, and analysis of relevant documents are three methods for collecting qualitative data (Patton, 1991). I used interviews and analysis of relevant documents to collect data. Specifically, I aimed to study language instructors' experiences in depth. Qualitative data collected through interviews included direct quotes from research participants' descriptions of their experiences and their beliefs and feelings.

Data Collection Instrument and Sources

Interviews. For this study, I obtained data primarily from interviews. In the field of education, the most common way of collecting qualitative data is by interviewing, and sometimes the interview is the only type of source (Merriam, 2009). The interview is one of the most important tools for collecting case study evidence because most case studies are about human activities and relations (Yin, 2014). This method of research allowed me to gain insight about a certain phenomenon and to get a full picture of participants' experiences (see DeMarrais, 2003). Qualitative interviewing begins with the assumptions that the perspective of others is meaningful, knowable, and able to be made explicit (Patton, 1991).

I used interviews as a qualitative research technique to explore participants' perspectives on different phenomena. One advantage of qualitative interviews is that they

provide more details than other data collection tools, such as surveys (Boyce & Neale, 2006). Interviews are the best way to identify what cannot be observed, such as feelings, perceptions, and thoughts (Patton, 1991). The interview is also a main tool in discovering multiple realities (Stake, 1995), especially within the field of education. In this study, I used a semistructured type of interview. According to Merriam (2009), because researchers require specific information, this kind of interview is guided by a list of questions or topics. I prepared the interview protocol ahead of time (refer to Appendix B).

I developed the interview protocol and some open-ended questions to serve as the basis for the interview. In the interview, it was essential to focus on concrete descriptions of experiences rather than abstract discussions about experiences (see DeMarrais, 2004). The interview questions focused on participants' experiences and observations when teaching vocabulary.

During the interviews, many situations required probes and asking follow-up questions for me to gain a thorough understanding of experiences. Researchers need to ask questions that purposefully follow the line of the research in a friendly and nonthreatening manner (Yin, 2014). DeMarrais (2004) enumerated a few issues that should be avoided in an interview: long and complicated questions, yes or no questions, questions not aimed at learning about details of an experience, and leading questions based on the researcher's beliefs. I followed these guidelines carefully in my interviews. I understood that the interviewer's and the participants' experiences are unique. Therefore, the questions were flexibly tailored to form the most complete picture.

During interviews, I listened carefully, took few notes, and asked for more information or clarification if necessary while remembering the research questions and goals. I understood that it was important to ensure that the interviewee stay on topic by asking him or her the right questions (see Stake, 1995). When the participants veered from answering the question, I focused on bringing the conversation back to the original questions (see Patton, 1991). Prompts and strategies under each question helped me keep the interview focused (see Jacob & Furgurson, 2012). I identified the kind of information that I expected in response to the questions so that I could stay in control of data gathering.

In order to construct a complete picture of participants' experiences, it is critical to focus on clues or gestures in participants' responses during interviews when they refer to an issue or experience (DeMarrais, 2004). An interview is more than simply asking and answering questions. Researchers should actively listen during interviews to prevent themselves from maintaining incorrect or preconceived assumptions when participants use a word or refer to an event; therefore, I asked for more details and clarification when necessary.

Reflexivity is another factor that might cause misinterpretation of the collected data. The conversational nature of the interview could cause reflexivity, which happens not only when the researcher unknowingly influences the interviewee's responses with his or her perspective but when the interviewee also unknowingly influences the line of inquiry with his or her responses (Yin, 2014). Certain skills and strategies can help an interviewer avoid reflexivity, including having a good grasp of the topic of the study to

interpret data accurately, listening carefully without bias to receive information as the interviewee expresses it, understanding the context of the experience or situation, and being attentive to affective clues and information (Yin, 1984). I was vigilant in implementing the aforementioned strategies when I conducted these interviews.

The interviews were conducted in public areas, in places free from distractions. The interviews lasted from 45 minutes to 1 hour and were digitally audio-recorded. Prior to the interviews, I organized the room and set up the digital recorder. I used a small digital voice recorder to record the interviews and tested it to make sure it did not have any issues before the interview began. I also had an extra recorder in case the original one had a problem. However, recording an interview is not a substitute for carefully listening and diligently taking notes (Yin, 2014). After the interview, I downloaded the interview audio file to a password-protected computer and deleted the file from the recorder.

I ensured confidentiality by changing participants' names, language sections, and all the people, offices, and agencies that the interviewees referred to in the course of describing their experiences. In interview transcriptions, I changed the names of participants to protect their anonymity. I removed their names from the data and secured them in a password-protected computer. Data will be destroyed after 5 years, as required by university protocol. I saved the files in a password-protected computer. Although all names and data that could identify participants were removed, I had a system in place to identify the source by entering the date of the interview and adding a pseudonym correlated to each participant (see Table 2).

Table 2

Some Characteristics of the Participants

Participants	Gender	Instructors' L2 Language Instruction Experience Prior to DCLS	Instructors' Years of Experience at DCLS	Language
Ayden	Male	Some experience	6 years	Language X
Ethan	Male	No experience	2 years	Language X
Gina	Female	Some experience	5 years	Language X
Bella	Female	No experience	5 years	Language Y
Camilla	Female	10 years of experience	5 years	Language Y
Dan	Male	Some experience	6 years	Language Y
Faith	Female	Some experience	7 years	Language Z
Helen	Female	No experience	11 years	Language Z
Ian	Male	Some experience	6 years	Language Z

Note. A pseudonym correlated to each participant

After each interview, I noted my observations and reflected on how I conducted the interview. I was specifically focused on whether my experiences and beliefs were brought into the interview through interpreting the participants' responses. It is essential for new researchers to know themselves when they undertake a qualitative case study for the first time (Watt, 2007). I also reflected on the points I had noticed, including what I had chosen to probe about. I kept a journal to record my own reflections. The journal was also part of the research database.

Written documents. For verification and augmenting data, I examined relevant documents that were available to the public. Using relevant documents was essential in the data collection plan, and these were used to corroborate the data collected from interviews. These data sources are necessary to identify and inform behaviors and actions (Yin, 2014). In using documents as another source for collecting data, I was aware that documents were prepared for different objectives. Therefore, I needed to critically

analyze the documents and identify the objectives for preparing the document so that I would not misinterpret the information.

Role of the Researcher

As a language and culture instructor, my main responsibilities include the instruction of students (which also entails lesson planning and preparation) and the development of supplementary and instructional materials. The instructors who participated in the interview process had all the same tasks. I also serve as a learning advisor by counseling students to help them progress, and I am an examiner in test administration. Some of the participants had similar tasks. As a language instructor, I had no authority to affect other language instructors' jobs or their ratings in any way, so there was no concern for my influence over them.

As a current language instructor, I possibly had a bias in my research. When a researcher has a potential bias for or against a topic and participants can sense the bias, that bias can threaten the validity of the data. I started this study because of my own observations of the challenges that students face when learning vocabulary and synforms. I considered the lack of vocabulary-focused teacher-training programs as a problem. Being aware of this bias possibility, I took steps to minimize bias in collecting and analyzing data by employing strategies such as writing in my researcher log and doing member checking (see Creswell, 2012). Conversely, I experienced some advantages being a language instructor. Because of my experience and familiarity with the context of participants' work, I was able to better understand instructors' perceptions and

experiences and ask more focused follow-up questions. The shared experience also helped me build rapport with participants.

Data Analysis

By using an open-coding strategy, I analyzed the data collected through interviews. Through analysis, researchers can make sense out of the data (Merriam, 2009). In a collective case study, researchers perform two stages of analysis: “within-case analysis and cross-case analysis” (Merriam, 2009, p. 204). To begin, I analyzed each case as a comprehensive case. Accordingly, after the analysis of each case, I used a cross-case analysis to build categories and abstraction cross cases. Data analysis included several steps: transcribing data, organizing raw data, coding, recoding, developing categories, and finding relationships between categories (see Lacey & Luff, 2001). The following steps I describe adhere to Lacey and Luff’s (2001) recommendations for data analysis.

Transcribing Data

After each meeting with participants, I transcribed the interviews word for word within a few days. Transcribing the interviews and analyzing the data within a short time period enabled me to use the experience for future interviews (see Hatch, 2002) and avoid the possibility of missing information from each interview. Also, I recorded descriptions of any gestures or behavior that were important to the analysis of the data.

Coding and Recoding

After uploading each transcript in Dedoose, I analyzed each case first as a comprehensive case. Yin (2014) suggested working the data from the ground up as one of the analytic strategies researchers can use at this stage, meaning that researchers can use

an inductive strategy to find useful concepts by examining data without starting with propositions. The interview data and excerpts contained content meaningful to my research questions that indicated how to apply the appropriate codes in Dedoose.

My process for coding the data included reviewing transcripts and notes and identifying points and segments related to the research questions several times. Data were related to research questions and theories that guided the study (see Saldana, 2009). In the coding phase, my objective was to read the data and label words, phrases, and sentences as items that were relevant. It was important to include all relevant data (see Lacey & Luff, 2001). During the process of recoding, I established a preliminary list of all the relevant elements of the qualitative data.

The different visualization tools in the Dedoose application, such as color coding and creating a code tree, were particularly helpful. The application automatically color highlighted each excerpt according to the code (see Figure 1). Color-coding made it easy to scan all the related data in individual transcripts. Through reading and rereading, I ensured all relevant items were coded. An option in the Dedoose application helped me to connect the codes and concepts that were related to each other and to organize them into a code tree to outline superordinate and subordinate levels of codes. Another option of the application was to click on each excerpt to display it in the larger contexts. This option was helpful for zooming in and out to see the codes to reevaluate them. By giving equal attention to all data items, I did not exclude any of them through the assumption that one or another was not relevant (see Lacey & Luff, 2001).

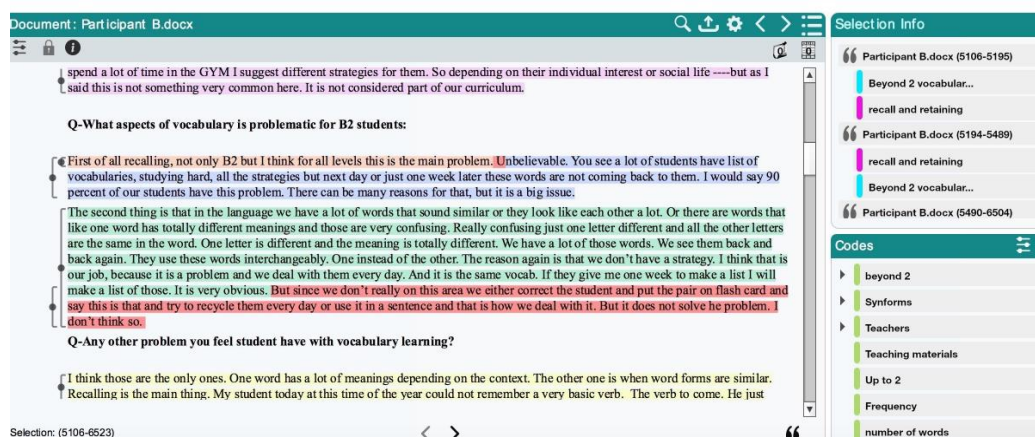


Figure 1. Color-coded excerpts.

Reading the entire data set helped me build a basis for identifying all the data items that could represent themes. Consequently, I examined and reexamined the data to understand how patterns uncovered the deeper meaning communicated by the participants. Using a cross-case synthesis technique to further analyze the data, I took advantage of a Dedoose option to export data to Excel and Word for organization and analysis. I exported all the information and excerpts from all the interviews that were related to a specific code into one place. Using the program features allowed me to zoom in on each excerpt to see it in the larger context and reevaluate it in comparison with the excerpts from other interviews under the specific code. This comparison feature also facilitated the reevaluation of links at this level and the creation of new code trees to outline superordinate and subordinate levels of codes.

Organizing data in Dedoose and Word files allowed me to see data from different interviewees in the same place. This system helped me to format the data from all the interviews to find patterns and insights that were relevant to inquiry. In the Dedoose

application, the organized data appeared as a matrix with the codes in the top of the matrix listed horizontally. The coded identifiers of the participants were displayed vertically in the left column, with the number of related comments and responses in each participant's row across that column corresponded under any table-heading wording. Clicking on each number opened the excerpts (see Figure 2).



Figure 2. Creating a matrix in Dedoose with the codes in the top of the matrix appearing horizontally.

I also uploaded the organized data into an Excel spreadsheet. Each case was presented comprehensively. This helped me to better organize the data and to look across and down comments. Such an array helped with data analysis by allowing me to notice similarities, contrasts, or differences and to see patterns or outliers across groups (see Yin, 2014).

Development of Categories and Finding Relationships Between Categories

After brainstorming, reading the transcriptions, and sorting, resorting, and highlighting codes that were related to research questions, I generated different categories

or subthemes. According to Merriam (2009), categories should respond to research questions, be based on the data, and cover all the data. Categories are broader ideas that arch over a number of extracted codes and parent codes created by bringing different codes together. In identifying patterns and categories to break the data into manageable units, I began synthesizing them, and I repeated this process numerous times until the initial themes emerged. The underlying research questions were crucial in guiding me in which elements to consider. I then conceptualized the data by labeling and connecting the subthemes to themes and then identified the relationship between them. The resulting connections echoed the perspectives of the participants.

Procedure to Ensure Accuracy and Credibility

It was essential that I provide information regarding my perspectives and my relationship to the case. To validate their findings, researchers should be transparent in reporting the approaches and choices they make in the process of analyzing data (Lacey & Luff, 2001). Transparency about the role and perspective of the researcher is also vital because it helps his or her audience to better accept the findings (Hays, 2004). Merriam (2009) also suggested obtaining participants' consent, ensuring confidentiality of data, and involving the participants in the member checking while conducting a qualitative study. I took the following measures to address accuracy and credibility.

Member checking. Member checking was a strategy that I used to increase credibility of data collected through interviews. I sent the participants a transcript of their interview and also shared preliminary findings with some of the participants to get feedback from them about the accuracy of data. This procedure was not only a

professional courtesy but an essential part of ensuring the credibility of the findings (see Hays, 2004).

Researcher's bias and reflexivity. Another important strategy for credibility of data is called reflexivity. Reflexivity refers to critically reflecting on the self as researcher to explain biases and assumptions and also refers to researchers knowing themselves and their biases before asking questions in an interview (Merriam, 2009). I used a reflection journal to immediately record my observations and thoughts after each interview. By using this process, I had more details recorded and could better understand my biases and beliefs when I conducted the interviews and reflected on them later.

Triangulation. Triangulation is another method for ensuring the validity of data. I cross-checked data from interview notes, reflection journal notes, documents available to me, and interview transcriptions to triangulate data. I had permission to use only documents that were publicly accessible.

This study included interview data from nine instructors from three different sections and languages to ensure that the data was triangulated. Interviewing different people that can provide different views on the same topic within the case is another example of triangulation of different sources (O'Connor & Gibson, 2003). I triangulated the data by interviewing three instructors in the same language section to discover intralanguage issues. Regarding inherent language differences, specifically regarding synformy, the selection of instructors from three different language sections helped to triangulate the data for interlanguage issues.

Procedures for Dealing with Discrepant Cases

In experimental research, reliability refers to the extent that research findings can be replicated. However, in social science and studies of individuals' experiences, such a definition is problematic. Discrepant cases do not discredit the findings of a qualitative study. On the contrary, data that present variation in the understanding of the phenomenon can help add to the credibility of the findings (Merriam, 2009; Yin, 2011). A qualitative study is based on the assumption that there are multiple realities and qualitative researchers seek to explore a phenomenon as people experience it. Examining all the data fairly adds to the validity of the study.

Researchers can interpret data in different ways. The important issue is that the interpretation and findings are supported by the data (Merriam, 2009). Researchers notice details in discrepant cases that help them consider alternative interpretations, which make the analysis stronger. Therefore, in my analysis of data, I paid attention to and presented all data without involving preconceived ideas that could block alternative interpretations (see Yin, 2014). I noted discrepant cases and included some of participants' comments regarding them in the findings.

Findings

The purpose of this study was to develop a better understanding of teacher-related factors of vocabulary instruction, including instructors' experiences, training, and resource needs in intensive language-training programs. Three research questions guided this research. The main research question of this study was "What are the language instructors' experiences and observations with regard to teaching vocabulary in an

intensive language program beyond the ILR Level 2?” Findings of this study revealed that, although language instructors identified different challenges when teaching vocabulary in an intensive program, they were not always able to explain what caused the problem or how to solve the issues. Instructors to a large extent were uncertain about their roles in teaching vocabulary and in how to verify strategies they applied or recommended to learners to overcome the challenges in vocabulary acquisition. Participants displayed the sense that they lacked control in certain challenges of vocabulary teaching, such as limiting the number of vocabulary words. Findings suggested that a PD program in research-based best practices in vocabulary instruction could empower instructors by validating strategies they use and by enhancing the quality of teaching in foreign language vocabulary.

The first research subquestion was “What are instructors’ experiences in teaching synforms in vocabulary beyond the ILR Level 2?” The interview data indicated that training on synformy phenomenon could help instructors better understand the nature of the challenges caused by synformy and respond in a timely manner. Participants were not familiar with the term *synformy* nor had they had any training on this phenomenon. During the interviews and in the consent form, I introduced the term *synformy* to them through a brief explanation and examples from English. Eight of the nine participants acknowledged that synformy is an area of difficulty for students and should be addressed by instructors.

The second research subquestion was “What are the language instructors’ experiences in developing skills or being formally trained in how to teach vocabulary?”

The data indicated that participants had little to no formal training on how to teach vocabulary. Participants expressed a strong desire to learn about best practices in teaching vocabulary. A teacher-development program could train instructors and enable them to make informed choices in their instruction.

Themes and Research Question Alignment

The analysis of data through coding and data synthesis yielded three key themes and eight subthemes. In the following section, I present a discussion of the findings that emerged from the analysis of data (see Table 3). I also present verbatim quotes from participant interviews to support the findings. The three themes that emerged from the data are (a) instructors' vocabulary teaching experiences, (b) inadequate teacher-training programs, (c) and instructors' experiences and observations regarding *synforms*. The themes are further divided into subthemes, which I discuss (see Table 3).

The first theme, vocabulary teaching challenges and instructors' experiences, emerged from an analysis of three interview questions that addressed the main research question "What are the language instructors' experiences and observations with regard to teaching vocabulary in an intensive language program beyond the ILR Level 2?"

An analysis of responses to the interview questions (see Table 3) guided by Subquestion 2 yielded the second theme, inadequate teacher preparation training. The participant responses to two interview questions (see Table 3) addressed the first research subquestion, and led to development of the third theme, challenges of teaching *synforms*. Because the terms *synforms* and *synformy* were unfamiliar to instructors, I explained them in the consent form and also during the interview.

Table 3

Themes and Research Question Alignment

Research questions	Interview questions	Themes	Sub themes
What are the language instructors' experiences and observations with regard to teaching vocabulary in an intensive language program beyond the Interagency Language Roundtable (ILR) scale Level 2-limited-working proficiency?	<ol style="list-style-type: none"> 1. What has your experience been in teaching vocabulary to students who are beyond the ILR Level 2 at this school? 2. How do you usually teach vocabulary to beyond Level 2 language students? What strategies have you found useful? 3. What aspects of vocabulary learning have you noticed that beyond-Level 2 students generally have problems with? What teaching challenges have you experienced? 	Theme 1: Vocabulary-teaching challenges and instructors' experiences	<ol style="list-style-type: none"> 1- Challenges of teaching vocabulary beyond the ILR Level 2 2- Vocabulary teaching and learning strategies 3- Uncertainty about best implementation approaches to vocabulary instruction
What are the language instructors' experiences in developing skills or being formally trained in how to teach vocabulary?	<ol style="list-style-type: none"> 1. How much training did you receive on teaching vocabulary before coming to this school? 2. What has your experience been in learning how to teach vocabulary? 3. What resources are available to you for teaching vocabulary? 4. What resources or training on certain topics or methods would you like to receive in order to teach vocabulary to students who are beyond Level 2? 	Theme 2: Inadequate teacher-preparation training	<ol style="list-style-type: none"> 1-Lack of in-service support and professional development training 2- Lack of educational background in language teaching 3- Instructors' requests for resources and training
What are instructors' experiences in teaching synforms in vocabulary beyond the ILR Level 2?	<ol style="list-style-type: none"> 1. What has your experience and observation been in teaching synforms, words that are similar in writing and pronunciation? 2. What strategies and methods have you found useful in teaching synforms, words that are similar in writing and pronunciation, for students who are beyond Level 2? 	Theme 3: Instructors' experiences and observations regarding synforms	<ol style="list-style-type: none"> 1- Challenges caused by synforms 2- Strategies and training on how to teach synforms

Vocabulary Teaching Challenges and Instructors' Experiences

Theme 1, vocabulary teaching challenges and instructors' experiences, reflects how instructors verbalized their observations and experiences of teaching vocabulary in an intensive language program. The theme incorporates participants' descriptions of how they teach vocabulary, participants' observations of challenges related to teaching and learning vocabulary, and participants' perspectives on their role and the effectiveness of the methods they use. The following subthemes describe different aspects of instructors' observations and experiences that they expressed in the interviews:

1. Challenges of teaching vocabulary beyond the ILR Level 2
2. Vocabulary teaching and learning strategies
3. Uncertainty about best implementation approaches to vocabulary instruction

Subtheme 1, challenges of teaching vocabulary beyond the ILR Level 2, demonstrates that instructors, based on their experience, were able to identify many challenges related to vocabulary that affect students' performance. The challenges instructors specified include challenges related to different aspects of knowing a word, challenges related to students' personal traits, and challenges related to the language programs' objectives and enforced practices.

Subtheme 2, vocabulary teaching and learning strategies, presents the strategies instructors recommended in response to the challenges students have in retaining the large amount of required vocabulary, including recycling and producing it. However, the recommended strategies were not always practical nor did the instructors consistently apply them. The data also revealed that analyzing the challenges and adopting strategies

to target specific challenges made instructors uncertain. Instructors were hesitant to express why they recommended or used certain strategies. Subtheme 3, instructors' uncertainty about the best implementation approaches to vocabulary teaching, shows that instructors were confused and hesitant about implementing techniques.

Challenges of teaching vocabulary beyond the ILR Level 2. Participants reflected on challenges about teaching vocabulary to students at the intermediate level and higher. Analysis and synthesis of the interview data yielded three categories of challenges: (a) challenging elements of learning vocabulary, (b) challenging personal traits of students, and (c) challenging aspects of the program.

Challenging elements of learning vocabulary. During the interview, participants pointed out several aspects of vocabulary learning that they identified as problematic for students beyond the ILR Level 2, including pronunciation, morphology, register, the nature of vocabulary beyond the ILR Level 2, direct translation, script, and borrowed words. Although some challenges can be considered language specific, such as script, many of the challenges that the instructors mentioned were common among all the languages. I discuss these challenges in the following paragraphs.

Pronunciation. An aspect of learning a word that some participants considered problematic among learners was the pronunciation of words (Camilla, Helen, Faith, & Ian). According to participants, mispronunciation not only affects students' production but their ability to learn a word when it is hard to pronounce. On this issue, Ian commented, "Pronunciation and the use of words are the main problems when it comes to vocabulary." Camilla stated, "When you cannot pronounce a word correctly, it is difficult

to learn. When pronunciation of a word is easier, there is a better chance of learning it.”

Helen also reported difficulties students have with pronunciation:

I think it is also an aspect of [the] ear being attuned to a certain sound. I feel that sometimes, because there are some sounds that do not exist in English, even when you capitalize them and put marks on them, they are still hard for students to hear.

They need to drill those sounds a lot so you can both hear and produce them.

As an example, Helen talked about a student who had graduated a week earlier but still had difficulty with pronouncing a particular sound, which negatively affected her performance.

Faith also pointed out that for sounds that do not exist in English, the problem of pronunciation persists even at advanced levels of proficiency. She commented, “Students need to work hard to learn pronunciation, even beyond the ILR Level 2. Some of the letters do not exist in English and the sound is very different to create, especially nasalized sounds.” Faith also suggested that instructors should support the students in hearing the differences between these sounds as a possible solution to the problem. In summary, four participants found pronunciation as one of the problematic areas for teaching and learning vocabulary.

Nature of vocabulary beyond the ILR Level 2. Two of the participants identified words that students were required to learn at this level as more difficult because they are conceptual, less-frequently used, and harder to associate with other words or ideas (Ayden & Ian). Additionally, words that convey a cultural concept specific to the foreign language are especially challenging. Ayden explained that the words beyond the ILR

Level 2 are less frequently used, and students do not hear or see them that often, which makes it difficult to learn them. According to Ayden, beyond the ILR Level 2, “Words are more challenging because students do not hear these words every day and even native speakers do not talk this way every day, and you have to force yourself to talk at the level three.” Ayden elaborated that instructors speak mostly at the level of two, and they need to deliberately raise the level of the language they use, which is often a challenge for instructors and students.

Ian suggested that teaching higher-level words is more difficult because they are more conceptual in nature.

Teaching vocabulary is a really hard job especially when it comes to beyond the ILR Level 2, because it is about concepts. The beginner level is much easier because you talk about objects and things. You can teach vocabulary at the beginner level by PPT, realia, objects, even with gestures, but when it comes to concepts beyond the ILR Level 2, it becomes really difficult and you have to deal with details of a word and try to explain it through scenarios and examples in different contextual interpretations. (Ian)

Ian commented that memorizing conceptual words are harder because students cannot easily associate them with things.

Direct translation from English. According to some participants, another issue that students struggle with is the attempt to translate directly from English (Camilla, Gina, & Ian). Consequently, concepts that do not exist in English or are expressed differently in the target language are harder to learn. Camilla considered the issue as

more problematic for first-time language learners. She stated, “First-time language learners definitely have problems because they think everything has an equal equivalent in the target language.” Camilla added that students need to know not every word in English has an equivalent in the language they are learning.

Gina gave examples of concepts expressed differently in the target language that made direct translation from English problematic for students. She believed these kinds of problems are hard to prevent because students naturally think in their first language and translate accordingly.

In my language you can say check e-mail but you cannot say write e-mail. But you can write a letter. If we do not mention that in the beginning, they are going to use that incorrectly. Another example is that we have two adjectives to describe a person pertaining to the country—one for the nationality and one that reflects the state. And we need to make [the] distinction from the very beginning. But we cannot really avoid these kinds of problems because they think in English, and they incorrectly translate. (Gina)

Gina reported that, in their section, they ask students to write short presentations for homework so instructors can pinpoint areas of difficulty and give them more focused feedback.

Ian described the difference between expressing concepts in two languages versus literally interpreting language, which causes difficulty for students. According to Ian, compound verbs are especially hard because students can misinterpret the verb by literally translating the verbal element.

One form with several meanings: homographs. Bella, Helen, and Ian identified the change in meaning of words in different contexts as another challenge students face when they try to use or recognize a word. Bella reported that when students encounter a word in a context where it means something else, knowing only one meaning of the word can actually cause more confusion, to the extent that students might miss clues that could help them guess the meaning of that word. Bella explained,

In reading, one problem is that we have those words that have [a] total different meaning depending on the context—four, even five, different meanings. This causes problems especially under pressure. When they think of a meaning and when there are not real clues to help readers get the real meaning, they can go really wrong—if not the whole text, at least for one paragraph. It is very tricky.

Ian also noted that many words have different meanings in different contexts. Helen reported problems with usage of a word in different contexts. According to her, words might need to be supported with different structures in different contexts. Helen further explained that another problem is when students extend use of a word to contexts the word is used in English, which sometimes does not work in the target language.

Morphology. According to Camilla, Ayden, and Ian, recognizing or using a word with added suffixes and prefixes makes it difficult for students to recognize the root that students know. Camilla explained, “Suffixes, proposition, and postpositions are all added to a word that then change the meaning of the word.” Ian also reported that enclitics are problematic for students because the same morpheme can create different parts of speech and confuse students. Conversely, Dan believed that giving students the root and helping

them break down a word could be a useful strategy in vocabulary learning but was not sure whether this strategy could be implemented in the classroom.

Script. Script in non-roman languages causes difficulties for learners. Ian explained, “We do not have upper case or lower case. So we do not know where a word starts, where it ends or where the other starts. Some letters are not connected to previous letters, and there is a space between them.” At another point of the interview, Ian stated that because diacritics (vowels) are missing in the script, students do not see the short vowels, which can cause much confusion. Faith talked about the font problems in newspapers. She described that font is like cursive, which is more difficult to read because, for example, dots are sometimes not in their actual place. Among the three languages included in this research only instructors of one of the languages pointed out this challenge.

Borrowed words from languages other than English in the target language.

Some participants reported that borrowed words are challenging for students (Ayden, Camilla, & Ian). Ian explained that borrowed words are one of the reasons teaching vocabulary is especially difficult. Ian stated, “We have a lot of borrowed words and for this reason, teaching vocabulary is really difficult.” Ayden mentioned that borrowed words are even problematic for native speakers. According to Ayden, “There are borrowed words from another language that are not familiar for native speakers. The language has changed very rapidly during the past 15 years in the country.”

Camilla also observed that instructors need to help students learn borrowed words and added, “The other challenging words are loan words and also long words.” Bella

reported that change of the meaning of borrowed words in the language causes confusion for students who know the original language.

Difference between reading words and speaking words. Participants reported two different issues. One problem was that when reading and speaking materials were not matched, students were forced to encounter a greater number of words. The second issue for learning some languages was that students encounter an inherent level or register difference between words of written and spoken language even when these registers are aligned topic-wise. These register differences cause challenges for students when they use reading words for speaking.

Ian explained,

Most often, reading does not align with speaking, so students are forced to deal with two sets of words. It also is an issue when students think they can pick words from reading that can then be used directly in speech, which can sound very strange because the words they have chosen are very rarely used in speech.

Helen also reported the challenge of separating reading and speaking vocabulary and explained, “Drawing the line between speaking and reading vocabulary has always been difficult. As a result, we developed two lists of reading and speaking words, whereas before we only had one list.” Faith also reported a similar problem with using words from reading an authentic text that might be from a higher level than what students can structurally support. According to Faith,

When they read an authentic piece, they have to deal with that level of language. We do not really encourage them to use those words for speech because they

won't get to that level, but some of students are just fascinated by the language.

They want to challenge themselves and use those words, and sometimes we have to undo it, because they are not using it correctly.

Challenges related to students' personal traits. Some instructors identified challenges that were categorized as student-related challenges, because these challenges are directly linked to individual students' attitudes, language-learning perceptions, language-learning background, and strategies for learning vocabulary.

Students' ability and attitudes to limit the number of words to learn. This issue is directly related to the challenge of dealing with the large amount of vocabulary students need to learn. Instructors identified that a common issue for students is limiting the number of words that a learner tries to learn. Some instructors attributed the ability to pick and choose the right amount of vocabulary as skill sets of adept language learners. Other instructors considered students' drive for learning a large number of words as a problem caused by students' high expectations and their beliefs about language learning.

Bella reported that, even when instructors try to limit the amount of vocabulary, it does not mean that students limit the number of words they try to learn. It appeared to her that instructors could not do much about this issue. Bella explained,

Another problem, especially with weak students, is that they try to learn a lot of words. They think the more words they know they will be better at speaking or reading learning the language. This is something we try to manage as instructors. We know that too much vocab is not good, but whatever we do, still almost every student has this idea. Even if we do not give them vocabulary, they themselves

make lists of vocabulary and the amount of vocabulary is too much, and they cannot control it. Even if instructors say that, they still cannot control it.

Bella added that “students can limit the number of the words they learn, but they usually do not want to.” Camilla similarly expressed that instructors are successful in limiting vocabulary, but students themselves want to learn all the vocabulary they see or hear. Camilla reported, “Students ask for more vocabulary. Sometimes the learner is the problem—because they do not know how to learn it, but there are some strong-willed students who want to know a lot of words but they cannot.”

Camilla illustrated this issue with a student: “There was a student who was stuck in production. Then we realized that she was writing down long lists of vocabulary. Then, she remembered the awkward words but not the high-frequency and useful ones in everyday speaking.” Dan, along with Bella and Camilla, considered that students who are not able to pick and choose words are weak language learners. According to Dan,

Often, these students cannot tell if a word is important or if they should learn it or not. These are weaker students who do not know how to learn and use less vocabulary [to] be able to say things. Recently, one of my students, wanted to say “members of the parliament.” We only have one word in the language, and she knows that word. Why is she bringing in four words with possessive relation? She is making it too difficult. And she knows that; but somehow, at that moment, she just cannot think of anything else. Maybe nerves.

Dan further explained that students sometimes learn a lot of words because it gives them a sense of achievement. Dan commented, “Students feel achievement by

memorizing vocab because of what they lack in fluency. They want to achieve something and they keep loading vocabulary. And no matter what we say, we cannot stop them. They do it.”

Learning vocabulary is critical to mastering a language at a higher level (Lewis, 2000), and instructors and material developers have a crucial role in planning which words to teach (Nation, 2013b). At DCLS, instructors’ perception of the students’ role in limiting vocabulary seems to contradict the literature.

Retaining and recalling vocabulary. Vocabulary retention was one of the main issues that participants discussed. Bella believed that vocabulary retention is the most problematic issue for students and causes high levels of frustration among students. Bella described,

Recalling is the biggest issue. You see a lot of students have lists of vocabularies, studying hard, all the strategies, but the next day or just 1 week later these words are not coming back to them. I would say that 90% of our students have this problem. There can be many reasons for that, but it is a big issue.

Bella then highlighted this issue with an example: “My student today at this time of the year could not remember a very basic verb, the verb *to come*. Imagine! He just could not. It happens a lot with even basic words. Recollection is a very big issue.”

Helen also pointed out the problem of vocabulary retention for some students: “We have students who generally have problems with retention. They struggle with words; for example, they learn them and know them and use them for a week, but then

they forget them.” Helen mentioned that in such cases students are referred to learning advisors for strategies.

Interference of other languages. Ayden and Ethan pointed out how similar words between languages can impede students’ acquisition of vocabulary. Ethan brought up the problem that some students have with using words from another foreign language by explaining that “interference of other languages from the same family that the student knows is sometimes problematic. I had to constantly correct one student on the spot because he was using vocabulary from another language.” Bella mentioned a similar problem with common words between languages. According to Bella, “When students have had a previous learning experience with languages, they think these words mean the same thing, which can be very confusing.” These languages either are from the same family of languages or are languages that share some borrowed words.

Program-related challenges. Most participants (Bella, Camilla, Faith, Gina, & Helen) pointed out that the number of words students need to learn in a day during the limited time of their training is a challenge. I categorized this issue as a program-related problem even though instructors did not explicitly express it as such. Instructors’ attitudes toward this challenge were more of inactiveness because they considered this challenge to be a preordained problem in the program that resulted in their having little control over the issue.

Amount of required vocabulary. According to participants, there are different reasons for this challenge, including the objectives of the program, the perceptions of students, and the use of authentic materials. All the participants expressed concern about

the number of words students are exposed to because of using authentic materials.

Participants reported that because they use authentic materials, they could not control the number or level of vocabulary words (Ethan, Faith, & Ian). Their attitude was that authentic materials were the only option. Ian expressed, “There are often many complaints about the number of the new vocabulary when reading. Because we give students authentic texts, we have no control over the texts and the same problem exists when speaking.”

Language sections usually select authentic texts based on the topic, length, and level of difficulty (Faith & Gina). Word lists for the texts are provided by instructors or material developers based on the topic, students’ interests (Ethan), and what instructors assume to be high frequency or important (Ethan, Faith, & Ian). Ethan described,

During reading, we have certain vocabulary lists and we handpick some high-frequency words. The word list is about 40 words and they cannot memorize all those words. We choose the words based on their interest and what we think is important.

According to Faith, the number of words students do not know in a text depends on the length of the text.

Sometimes it is more than it should be but we do not have any control over that.

There are too many words in the word lists and often the text contains even more words that are foreign to students. We gave them key words, but there are still a lot of words they do not know and then have to look up. So on their own, they

look up the words they do not know or google them, which usually gives the incorrect meaning depending on the context. (Faith)

In another section's reading materials, each lesson included two sets of vocabulary lists for each reading. One list consisted of topic-related words, which instructors believed were important for reading and wanted students to learn. These words were in addition to the 80 words introduced through dialogs in speaking class for a week. The other list of each lesson consisted of text-related words that students did not know, and instructors instructed them to use the list to read the text but to not focus on memorizing those words. However, despite the instructors' instruction that students did not need to learn the text-related vocabulary, students felt overwhelmed.

Sometimes students complain about the number of words, and we tell them these are not words that you need to learn; these are only to help you understand the text, but students still complain about it because they are very competitive and they do not want to miss a word. (Ian)

Some sections try to limit the number of words by using texts of the same topic to enable them to recycle words as much as possible. Ideally, listening and speaking curriculum are about the same topic. However, this is not the case in all sections. Additionally, not all sections have a listening program. Ian shared, "Most of the time, an issue is that our readings are not aligned with speaking. So students are dealing with two sets of words."

Gina added a different perspective by explaining that the number of vocabulary words is more of a problem of the program's objectives and time limit. According to

Gina, students' performance at ILR Level 3 requires knowledge of different kinds of words and phrases, including idiomatic expressions, transitional phrases, connectors, and low-frequency words, but the time students have for training is not sufficient. Gina commented, "Learning the large number of the vocabulary in a short time is the main problem for our students." Gina further explained,

One complaint our students have about vocabulary is that it is too much.

Especially for reading if they need to get to ILR Level 3. It is very difficult. There are a lot of words you need to know. A lot of connector words are not common words, but they change the whole meaning of the sentence, if you do not know that word or a lot of advanced words that you need to know. To speak, to understand, there are a lot of set expressions we use. Proverbs, there are thousands of them in the language that they cannot learn in the short period of time they are in training.

Gina's observation was that the goal of achieving general proficiency was challenging based on the limited training time.

Helen pointed out two additional reasons why controlling the number of words is difficult. According to Helen, it is difficult to control the words that different instructors and different students bring to class. The other reason is the format of the test, which is a proficiency test. Helen explained,

We have 5 hours every day and sometimes in the speaking class, though the topic is confined, the experiences of instructors and students are different. And because of that, different vocabulary develops. So there is a shift from the 20 words that

the first instructor gave. Now we give them vocabulary lists. In spite of that, it is hard to control vocabulary. The other reason is [that] the format of the test, which is not an achievement test, creates uncertainty about what words they really might encounter during the test. Therefore, every word seems important to students, and they try to learn them all.

Consequently, a main challenge for instructors and learners has been the amount of vocabulary students are required to achieve.

According to Niu and Andrews (2012), instructors need to select essential words, teach them explicitly, and teach strategies to help students develop skills for learning vocabulary independently. Although the time constraint of intensive programs magnifies the role of instructors in helping students, instructors felt that they could not do much about the amount of vocabulary.

Vocabulary teaching and learning strategies. Three strategies were supported by the majority of instructors at DCLS: (a) using words in speaking, (b) recycling, and (c) implementing strategies for handling the excessive amount of vocabulary. The following paragraphs present descriptions of how instructors used these strategies.

Using words in speaking or the productive use of words. All participants expressed that learners should use vocabulary words in everyday speech. Ayden stated, “Our biggest recommendation is that when you learn a word you should try to use it. This is very important so that the new words become part of your active vocabulary.” Bella made a distinction for an effective strategy based on the learner’s personality type but

nonetheless recommended using the words as one of the most effective strategies for learning vocabulary. Bella stated,

[For] the person who likes speaking and is more outgoing, I recommend to use that means of using vocabulary in speaking, and I am a fan of that and I think it is the best way you really can learn vocabulary. But on the other hand there is a student who does not like to speak a lot but likes reading so we use that.

Camilla underlined the idea of meaningful use of vocabulary as an effective way of retaining vocabulary. According to Camilla,

Vocabulary teaching only takes place if you make them meaningful for students.

We need to use a word in the context and it needs to make sense. Tell students if they use it, they learn it, and if not, they will lose it.

Dan stressed that students should try to use words they know rather than simply accumulating more words. Ethan also underlined the role of production and use of the words of the day. Ethan reported that they concentrated mostly on production, discussions, and the ability to ask questions. Ethan helped students “to handpick and recycle vocab.”

Helen also pointed out that students should focus on language production and the use of the words rather than memorizing them. According to Helen, the emphasis in the curriculum seems to be more on the production of words so students are able to speak rather than on the accumulation of knowledge. Faith expressed, “We give students the words they need, but it is more important to teach them how to use them.” Gina also

reported that she helped her students to use words every day until they learned how to use them.

Based on the data, it appears that a successful strategy that instructors can employ is encouraging students to use vocabulary in meaningful output. The literature supports the productive use of vocabulary for learning words (Nation, 2013a). When a language-learning program has an explicit focus on vocabulary learning, direct vocabulary teaching, and intentional learning, students can achieve higher gains at all levels of vocabulary knowledge, including the productive level.

Recycling. Almost all participants expressed the idea of recycling as a strategy to help learners hear, use, and read the same vocabulary over and over. They use the word *recycle* mainly for the idea of revisiting and focusing on the same words and topics in three modalities: reading, speaking, and listening. Although writing is not emphasized in the language programs at the school, some participants believed that students must use the key words in writing also. Participants also used the term *recycling* to refer to focusing on a limited number of words and using them over and over.

Ayden stated,

I try to use the same vocabulary in my speech when I talk. I want to recycle them and want students to hear them in more and more varieties and combination[s] to make it as natural as possible and to let them hear how I can use the same word.

Bella expressed that what instructors can do to support students in learning a large number of words is “to recycle [words] and help students learn them in the context. Repeat them and correct students, give students homework.”

Dan also used the term *recycle* for selecting a few words for a week and then using the same words over and over. He stated, “I usually recycle at least five words a week. I engage in constantly recycling on purpose and I think it works.” Ethan also mentioned the strategy “to recycle vocabulary as much as possible.” Ethan further explained,

During the class, I put the words on the board and later after the class I typed in the same words with stress marks and meaning and e-mailed them to my students so they could go over them in their own time.

Gina illustrated that one responsibility of the instructors is to recycle words. According to Gina, “[the] instructor’s task is to include these words and to keep them appearing over and over again so students encounter them often.” Ian reported that they use fluency readers for recycling words. This was the only section that reported use of fluency readers.

Camilla gave the textbook developers credit because they recycle words in their material. She commented, “They did a good job developing the course book because the words are recycled. It is in compliance with [the] reading course.” Helen suggested that it would be an effective approach if the section would create a pool of words students need for their job so that they can drill those words over and over. This strategy is aligned with literature on the effectiveness of multiple exposures and spaced repetition in learning vocabulary.

Strategies for handling the excessive amount of vocabulary. Instructors recommended two main strategies for managing the amount of vocabulary learners are

exposed to: (a) deliberate selection of the words and (b) optimal use of a limited number of words. Instructors recommended that students limit the number of words they need to focus on and learn. To manage the number of words, instructors tried to help learners select important words. Faith underlined the instructors' role in helping students select words they need to learn. She commented, "It is also [the] responsibility of the teachers to show them [the] importance and how to use them or discourage them [in the] using of some words. Some students want to learn every word."

Camilla shared an experience with one particular student who had tried to learn a lot of words and was not able to retain them. She explained how she and the other instructors decided to help her:

We limited the amount of vocabulary, and we told her you do not need all these words. At the end, their goal is proficiency to be able to do their job. So we chose the words for her. For example, for economy you need those 10 words, for speaking you need these 10, and use it.

However, instructors' selection of words appeared to be mostly random. As Ayden reported,

We always try to limit the vocab we use, so they talk about news. And during the speaking they try to say something and do not know the word and say what is this word and, at that moment, I decide if this word is important to give or not. If it is important, we give it and say this is what it means and explain that this is a very important word, and you will see this frequently. Take note of it. Or conversely, I

will say do not worry about this word or quickly give the equivalent but say it is not important. So we make note right there if the word is important or not.

Gina separated the words that students needed for recognition from words they needed to speak and recommended that students focus on words they need for speaking in their job. Gina helped students select such words. She stated,

For active vocabulary you do not need to learn all the vocabulary you need to identify, so we only focus on those words that are important for speaking to do their job. These words are usually in the book, but even if they are not, I point out those words, like *economy*, which is a very important word.

Therefore, instructors' feedback happens in the moment and is based on what students try to convey rather than being a systematic part of the teaching process.

Faith shared the daily practice of helping students select words for speaking:

In the morning of each day, we give them the list, and we point out that some of these words are only to know for reading, and you do not need to use them for speaking. So we separate the words because some are important for reading. So for the words that are important to use, we help them to make sentences.

Faith explained in another part of the interview the difficulty instructors face in selecting words. She stated,

That is quite a challenge because like in English there are frequency-based words, or essential words, or 500 or 1,000 words. We do not have that. What we keep in mind for choosing the words is what they need for the job. We do not teach them the real language really; we only teach them what they need for their job.

It appeared that, despite the fact that the objective of achieving ILR Level 3 requires a large repertoire of vocabulary, instructors identified that it is crucial to limit the number of words students learn. Instructors felt that students are not going to be able to learn all the words required in the limited time of the training. Instead, instructors must find a way to help students learn the most practical vocabulary with various levels of usefulness. Without a doubt, instructors did not have a systematic approach to this challenge and are random and inconsistent in their efforts. This finding supports the investigation's report that the primary problem is that students learn languages under a multitude of different learning conditions and curricula (■■■■, 2013).

Another strategy recommended by some instructors aimed to optimally support students by using simplified language coupled with what they have already learned. In other words, students should find a way to convey their message with the words they currently know. Ayden encouraged his students to use this strategy. Ayden told his students, "You need to train your brain that without knowing a word, there are still many ways to explain your point." At the same time, although Ayden felt that this was a necessary strategy, he mentioned that it has some shortcomings, including not meeting students' expectations and the precision required for the level of the language they need to achieve.

Other strategies. One or two participants recommended other strategies for learning vocabulary, including writing words and using words in compositions; providing translation from the target language into English or the other way around; learning the word parts; implementing the use of technology and programs such as Anki, rapid rote, or

Quizlet; providing topic-wise glossaries and glossaries with audio files; and learning to guess the meaning of the words from the context. Prereading activities (including forming word-clouds, brainstorming, and discussing what students know about the topic) for introducing key words were some of the widely used strategies for reading vocabulary.

Uncertainty about best implementation approaches to vocabulary

instruction. Regarding their experiences in teaching vocabulary, instructors explained the format in which vocabulary was presented in their curriculum or what they perceived to be expected of them to do in their programs. They usually used the pronoun “we,” including other instructors in the program. As a follow-up with additional questions about their own personal experiences in dealing with challenges, they expressed uncertainty about whether they are doing the right thing.

Bella shared her experience in helping students who had difficulty with recalling and retaining vocabulary. She expressed, “Unfortunately, I feel most of the time that I cannot help them because what I am telling them does not seem to be working. Maybe it is working a little, but it is not enough.” Further commenting about the general situation at the school, Bella believed that many instructors at the school do not know what vocabulary strategies are. She commented, “We do certain things without knowing that they are actually vocab strategies, but no one at least in my section knows there are different vocabulary strategies” (Bella).

Dan talked about his uncertainty with teaching word families and whether he should teach them together. While talking about word families, Dan reflected that he should learn more about them.

I usually ask students and they say, “Yes, it is good,” but they sometimes do not know what is good for them. But I am not sure if that is actually helpful and it is not confusing. I have asked a lot of people, but they do not know much about it.

(Dan)

Dan was uncertain about how to get information regarding the best approaches in teaching word families. Helen was also uncertain about the best way or ways of teaching vocabulary:

Different people do different things. Earlier on, like 5–6 years ago, I used to write words on the board, the key words. It gave students the confidence they needed to read the article. I think I should go back to that. The thing is with so many competing ways of teaching now that I find that there seems to be no standard of you should teach that way or not.

Faith was not sure whether her section’s approach was effective. She stated that it was important for instructors to know whether their strategies were productive, specifically because of the amount of vocabulary that the students are required to learn. She said, “It is one thing to give students vocab lists, but how do we know if they learn them and retain them? How do you check after a month or two months?” Faith also believed that the curriculum’s goal was not robust enough but was not sure how to improve it.

The majority of participants identified the large amount of vocabulary as a major challenge. Simultaneously, all participants believed that students should limit the number of words they try to learn. Meanwhile, there was no clarity about the role of instructors in how they could help students or about how many words students actually should learn in a day or a week.

Participants mentioned different numbers of words for the amount of vocabulary that students are responsible for or are able to learn daily. These are some examples of what participants reported: “They need to memorize 20 or 30 words a day. I know this is a lot but that is the way it is” (Ayden). “In one workshop they said 8 words in a week maybe is enough. Our expectation cannot be 10–20 or even 5 a day, but then how many of those words can they remember actively and successfully using in the classroom?” (Camilla). “Maybe 5—no, maybe 5 every other day” (Dan). “The recommendation is about 20 words a day and more than that is discouraged” (Ethan). “Research stated that if students are given a certain number of words, for example, around 26–28 words a day, and every day they are given different words, but every day these words are repeated at intervals during the day, and these words are high-frequency words” (Helen). “I tried to limit the new words to 15–20 max a day depending on how familiar they were with the topic” (Ethan). “The weekly list is about 80 words. Twenty words every day for the first 4 days of the week. . . . For reading, the number of words go beyond 80 a week” (Ian). Gina also expressed that one of her main questions has always been “How many words a day can students learn?”

The number of the words that instructors believed students should know spanned from 8 each week up to 140 a week. All instructors agreed that students would get overwhelmed if they try to learn too many words, and therefore they needed to limit the number of vocabulary they wanted to focus on. But participants had some uncertainty about what the instructors' role should be. Helen shared her confusion about limiting vocabulary as a strategy when she started her work at the school:

The focus has always been more on content and grammar, not vocabulary. Of course, we learned to control our speech for vocabulary to have it controlled and gradual. However, there was no formal way of knowing that this is a strategy that we need to use in class.

Some participants believed that limiting vocabulary is not the instructors' responsibility. Dan, for example, believed students are mainly responsible for selecting the words. Dan said, "I usually ask students and tell them to be selective when it comes to learning vocabulary. Do not try to take in every word. You be the judge and decide." Some of the participants saw students trying to learn too many words as a problem caused by students' high expectations and attributed the ability to pick and choose the right amount of vocabulary to being a skilled language learner.

In summary, in many cases instructors shared their approaches for teaching vocabulary and added expressions such as "I do not know if this is a strategy," "if this is the right thing to do," or "there might be better ways of doing this." They rarely explained on what basis they decided to adopt a strategy. This finding supports Hulstijn's (2001) conclusion that, although vocabulary learning is an enormous task for adult

second-language learners, instructors are often uncertain about how they can guide their students.

Inadequate Teacher Preparation Training

For Theme 2, inadequate teacher preparation training, the data indicated how instructors expressed their experiences in developing skills for teaching L2 vocabulary. The following key subthemes describe the scope of the lack of adequate teacher preparation training: a) instructors' lack of educational background in language teaching, b) their lack of in-service support and professional training, and c) their requests for resources and training.

Subtheme 1 shows that most instructors began their job with little educational background in teaching or language teaching. Findings also revealed that teacher-trainers at this school rarely focused on vocabulary instruction during in-service staff development workshops. The second subtheme explains how teacher-trainers at the school support instructors with training on how to teach vocabulary. The data indicated that teacher-trainers have only occasionally discussed vocabulary during workshops about reading or speaking for beginner levels. Subtheme 3 indicates that instructors wish to receive training on how to target specific areas of vocabulary teaching.

Lack of educational background in language teaching. Most participants expressed that they had had little or no training prior to entering the classroom. Ayden, Bella, Dan, Ethan, Faith, and Helen had no educational background in language teaching. Instead, they previously held jobs not related to the instruction of languages. Bella remarked that she had had no training in language teaching before starting the job. She

clarified that her learning to teach vocabulary was “like swimming. Like when they throw you on the sea and you learn to swim.”

Dan also had a similar experience and had had no formal training before coming to school. Dan acknowledged,

I am a . . . by trade. Languages are my thing though. I speak four languages pretty fluently. But I do not know how I do it. I do not have formal training other than what I got here.

Helen replied that she had no prior training in vocabulary teaching. She explained, “I was not in the languages before. I was a researcher and consultant. I was a native speaker. When I started here, I got the books and I had a great mentor.” Faith shared that she had previously worked on a project in a university and had received minimal training for teaching critical languages, but regarding teaching vocabulary, she had learned how by doing it. In response to the question about how she learned to teach, she answered,

By teaching. Before that, I assumed that this is a simple work and all I need is to provide explanation. Sometime I see students have the vocabulary and the words are dancing around them, and they cannot put them together. I needed to understand how they perceive it and see words through their eyes.

The other participants who had an educational background in teaching (Camilla & Ian) or language teaching (Gina) also expressed that they had or limited training in vocabulary instruction prior to the start of their work. Gina explained, “In university, we studied basic approaches on language teaching, but we never focused specifically on vocabulary teaching.” Ian, who had been a university professor in his country, also mentioned that he

had had no training at all in vocabulary teaching. Ian “developed [his] own approach and strategies.” In summary, based on the data, most instructors at DCLS come from a professional background other than language teaching.

Lack of in-service support and professional training. Most participants indicated that they had received little to no professional training that directly related to teaching vocabulary. However, one participant found general training to be helpful. Two of the participants expressed that they had a colleague as a mentor when they had started, which they found helpful. Five of the participants (Bella, Gina, Faith, Helen, & Ian) indicated that they had not received any training on vocabulary teaching for the intermediate to advanced level at all. Gina, who has an educational background in language teaching, reported, “No training on vocabulary here. And the staff development sessions I attended here were not that useful to me.”

Bella shared, “I did not get any training here either. I attended some workshops that taught me some vocab games, and there were some exercises suggested but for beginners not for beyond [ILR] level 2.” Ethan explained that he did not go through an instructor-orientation program because he had missed the timeline. Ethan commented that, because of the specifics of language instruction at the school, even people with a lot of experience teaching language need training to learn how to work there. As for training on vocabulary teaching, Ethan elaborated that “the vocabulary teaching has been more traditional through word lists that students need to memorize. I was not exposed to theory and practice through training.”

Faith stated that she “did not get any training here.” Camilla commented that training has been “somehow neglected at [the] work place.” Camilla reported,

Here I had one workshop that it was about vocabulary and specifically what to expect from the learner and how they can retain the vocabulary. This was one workshop I took 2 years ago. In other workshops, occasionally vocabulary comes up.

At the same time, Ayden believed that the amount of training received at work was sufficient. Ayden did not believe “knowing about teaching means that you can use it.” Instead, he assumed that most instructors learn through trial and error.

Dan and Helen mentioned that having a colleague as a mentor was helpful in the beginning of their careers as language instructors. Dan expressed, “Observing more experienced instructors was the biggest training. They showed me the way a little bit, but then you go and explore it yourself.” Dan also mentioned that examiner training was important too because he learned what students need to succeed on their test. In summary, participants mostly mentioned learning about vocabulary teaching indirectly through workshops that had a different focus. Data revealed that instructors lacked access to necessary professional training on vocabulary teaching at DCLS and that vocabulary had rarely been the focus of teacher-training workshops.

Instructors’ requests for resources and training. Subtheme 3 relates to instructors’ ideas for resources and for training instructors need to become better equipped to teach vocabulary. Participants mainly talked about in-service training in response to the question about what training or resources they had to teach vocabulary.

Participants felt that practicality, research-based practices, and focus would improve the existing in-service professional training sessions.

Instructors named word lists (including thematic word lists, lesson-related word lists created either in Word files or in apps such as Rapid rote, Anki, and Quizlet) as the main resources for vocabulary teaching. Audio files of such lists were also available for student access in the language lab at the school and online in some sections. At the beginner level, some instructors reported the use of smart-board technology (Helen), story line (Dan), or realia (Ian) for teaching vocabulary.

As for the resources and training they wish to have, some participants said that their main requests were for training to target specific areas of vocabulary teaching, such as vocabulary-learning strategies and for training to work with students' learning difficulties. They expressed an interest in training on practical strategies based on evidenced-based best practices. Another request was for an increase in the quality of the current workshops, which supports findings of the need analysis conducted at the school by [REDACTED] (2014). The need analysis also indicated that instructors asked for training in different areas, such as training on how to use classroom materials, on methodology and approach, and on how adults learn languages ([REDACTED], 2014).

Training on specific aspects with a focus on the application theory in practice was one of the main training supports requested. Gina shared,

I like more practical sessions, maybe something more innovative. So if there is a new approach to learn vocabulary, I like to have a session on that. Or someone to answer my questions, like these are the five most useful activities that you should

do every day in class to get result[s]. So either something new that we should know or something old that we need to do daily. Have a little base of research and theory but to be more focused on practice. But it should be research based.

She also stated that she would like to learn how to help students with learning difficulties. She believed that instructors who are involved in curriculum development and have some training on development of teaching materials are much more successful.

Bella stated that she wanted training that focused on different aspects of vocabulary teaching:

I need training on specific aspects such as recalling. I need a workshop or a series of workshops that would teach me how to help students who have problem[s] with recalling; or workshops that deal with vocabulary strategies for production. Give me workshop on vocabulary in reading. How can I teach them? I might be able to refer students to resources but how to help them maximize the benefit of those tools, I do not know really.

A few instructors referred to the new focus of the school on implementing vocabulary-based instruction founded on Nation's four strands. According to Nation (2007), for a well-balanced language program, the activities should be evenly distributed into four strands: meaning-focused input, meaning-focused output, language-focused learning, and fluency development.

The school recently hosted Nation for teacher instruction, and although most of the participants had heard of the approach, they were skeptical about the effectiveness and substantially uncertain about what the actual approach entailed. Ayden mentioned

that he had heard about teaching vocabulary based on word frequency and that he wanted to learn more about it. “Honestly I have heard in one staff meeting that your program can be based on word frequency. I [would] like to see how it works” (Ayden).

Ethan pointed out the need to train instructors for vocabulary-based instruction, especially with opportunities to observe a good model,

I believe training is necessary because beyond the ILR Level 2, students do not learn vocabulary that quickly. I think vocabulary-based instruction as a method should be introduced and people should be trained, because it is not like the traditional method of a lot of grammar—some reading, some vocabulary. It is helpful to see a good model of classroom instruction or to be able to observe it.

At the same time, Ethan had reservations about the effectiveness of the approach for the specific context of the school:

From what I understand and especially with [the] school’s focus on Nation’s approach for a well-balanced course, this probably would become more and more popular and probably would be the norm for a while. We need to see how this theory works for us, because our environment and our requirements are quite different than the other schools.

Some instructors were more concerned about students’ reactions to an approach or about the effectiveness of any approach because of individual differences. Ian stated that he is “interested in anything that makes our students more flexible and to be understanding that every language is different, and there are limited resources.” However, he believed that without students’ buy in, no approach would be successful.

Ethan also expressed a similar idea that “new approaches need to be sold to students as well, because people who come here, their career is on stake, and they are very demanding and rightfully so. We need to have their buy in.”

Camilla believed that although training is important, individual differences were much greater forces in shaping teaching success. She stated, “It is good if there are sources teachers need to know to be well equipped to help students, but students are different, and we need to customize our training to their need.”

Some participants reported problems with the quality of the staff development workshops. Dan liked the staff development workshops but had concerns about how the workshops were run and the expertise of the people who ran the workshops. Dan would like the school to invite more experts from outside the school. However, he also understood that that trainers need to incorporate the level of English proficiency of instructors in their lesson plans:

We are a very diverse population here, and sometimes in the workshops they ask everyone’s opinion on let’s say teaching vocabulary, and you come out of the workshop with nothing being settled. Some workshops are black and white, and some are redundant. Some of the ideas are worthy of the learning, some are not. But it is what it is. I do not know. I wish we would do more of bringing people from outside the school and see what they do. On the other hand, there is not a place like here that is doing foreign language at this scale and scope for adults for proficiency. Our school is probably leading in this area. Also, it is hard to train us.

English is a factor. We are busy and so on. Bringing experts from outside is probably expensive, but it could be worth it.

Gina stated that “the training here is very general sometimes.” She believed that a focus on assessment or pedagogy as a general topic might be helpful only for people with no background in teaching.

To summarize, participants requested training on some specific topics such as vocabulary-learning strategies, evidenced-based best practices, vocabulary retention, individual differences, and learning difficulties. Some participants believed that it is crucial to explain the program and school’s training approach to students so that they could better identify with the goals meant for their success. Participants also believed that by inviting experts, introducing research-supported approaches, considering elements such as instructors’ time and the fact that English is the second language of most instructors, understanding the students’ needs, and focusing on practicality could improve the quality of the professional training in the school. One participant pointed out the value of observing a good model of classroom instruction.

Challenges of Teaching Synforms

Theme 3 describes instructors’ observations and experiences in teaching synforms and their observations of challenges caused by synformy. The following subthemes demonstrate different aspects of instructors’ observations and experiences in teaching synforms: a) challenges caused by synformy, and b) Strategies and training on how to teach synforms.

Subtheme 1 shows that the majority of the participants believed that synformy is an area of difficulty for students and that instructors need to address it. The findings consist of descriptions of how instructors had developed their own approaches to address this phenomenon individually. Instructors used strategies such as repeating the terms, separating pairs at the time of teaching, making associations, and identifying differences. All participants reported that they had never been trained to teach synforms, and some participants expressed uncertainty about their approach.

None of the participants had training about synforms. They had developed their own approach to help students with learning synforms. However, they intuitively employed strategies such as the identification of differences, repetition of words, and separation of the introduction of words to deal with synformy, which align with research-supported practices. All participants felt the need to address the problem caused by synformy, and some expressed uncertainty about strategies for dealing with synforms. The findings corroborate Nural's (2014) research in the way the instructors responded to synforms; the response was mainly governed by student-related factors including reactions, misunderstandings, time, words, and resources available to them.

Challenges caused by synformy. The majority of the participants pointed out that synformy is an area of difficulty for students. Ayden, who is bilingual and teaches two languages at the school, believed that synforms are problematic in every language, not only for students but even sometimes for native speakers. Ayden mentioned that students use these words interchangeably, which creates confusion. Bella reported that synforms are “confusing in reading and listening also but mostly in speaking.” She

observed that among different synforms, suffix mix-ups are the most common. According to her, synforms are challenging for all students:

Almost every student makes these mistakes, and it is consistent and when under pressure no matter what strategy they have used, they will make mistakes. Even very fluent, very advanced students make these mistakes.

Dan acknowledged difficulty with synforms, but he expressed a different viewpoint that confusion caused by synforms was insignificant. Dan explained that the context could help the interlocutor guess the right word. He believed that synformy is mainly a problem with sounds unfamiliar to English speakers. Dan stated,

The confusion happens especially with sounds that are foreign to English speakers. Of course, we do not expect them to get those sounds 100 %. Those are hard. I personally do not have a specific method to teach them, other than repetition. But it is not a big problem. Even with the example I just gave the context of the sentence can make it clear.

According to him, synforms are less problematic in reading than they are in speaking and listening.

Ethan reported that synformy is an issue that requires a lot of repetition. He gave the example of verbs with their sole difference as the place of stress.

If we consider a synform, the words, especially verbs, that have different meaning[s] depending on stress, it is an issue in my language, because stress can change the meaning of a word; for example, the verbs to urinate and to write. We

need to bring attention to this that stress can change the meaning, and it is important.

He observed that verb prefixes cause confusion, however, more at the beginner level and not as much at the advanced level.

Prefix is what shows if the verb means to go or to come. The verbs might sound similar and causes confusions in the beginner level. For the students I had for beyond the ILR Level 2, this confusion was not there because students had enough experience in the language to overcome it.

Ian, on the other hand, observed that synformy is more problematic at beyond the ILR Level 2. According to Ian, instructors identify this problem when students have learned many words in Level 2 and beyond. He believed that confusion caused by synforms is common, and when students use phonetically close words interchangeably, they miscommunicate. Ian described,

These are very common. Like word *time* and incidents that students mix them up in the language; Or *intelligent* and *land*. They mix them up. There is a saying that only mothers understand their children. We teachers only can understand them.

Helen observed that synforms are problematic for students who are trying to learn a lot of words. She explained, “Some students have problems with synforms, and based on my observation, students who have problem[s] with synforms are the ones who are very focused on vocabulary learning.”

Gina shared that synforms are problematic for almost all students. The challenge is that different students have problems with different groups of synforms. She stated,

Almost every student mixes up similar words. Maybe different words for different students but everyone has problem with those words. It seems it is random when it comes to words that students mix up.

She also believed that for some pairs of words, the problem is foreign sounds that are hard for students to differentiate:

If they learn, like in English, *when* and *then* they are spelled differently but the sound is very similar and some people even do not hear the difference, they are likely to make mistake[s] on those words. They might have problems with one [set] of pairs in speaking but in listening might have problem[s] with a different set of pairs that are totally different.

Faith reported that at the time of the interview she was helping a student who had great difficulty with synforms. Based on her observation, synformy has been consistently problematic for many students:

Words that are very close in pronunciation or spelling but have totally different meaning[s] are problematic. Students usually pick the wrong word. Both in reading and speaking but especially in speaking, because in reading both might work, but in speaking it can change the meaning all together. And that can be really problematic. Like there are two words that are close, one means *to move* and the other one means *to die*. So they want to say they moved from Washington to Maryland, but they say they died from Washington to Maryland. There are words that just differ in the suffix. Like *tabdil* and *tabdili*. These are challenging both for reading and speaking.

Camilla also believed that all students have problems with synforms, and if instructors do not address these issues directly, then the problem persists throughout the training. She stated,

They all have problem[s] with similar words. Like two words that are similar and one means *to listen* and the other means *to get dressed*. Sometimes adding a suffix to some words makes it a totally different word that might be rude also, so those things. These similar words are the most challenging ones, and they are carried out during the course unless teachers address them.

Some instructors expressed that foreign sounds and difficult sounds are two reasons students mix these words up. The participants responded with statements that indicate such a view. “It is a combination of things like foreign sounds, similar spelling, close pronunciation” (Faith), and “the confusion happens especially with sounds that are foreign to English speakers” (Dan). “If they learn like in English ‘when’ and ‘then’ they are spelled differently but sound is very similar and some people even do not hear the difference” because these two sounds are foreign to them (Gina). My own observation has been that instructors often consider confusion caused by synforms to be a pronunciation problem.

Another characteristic of synforms that some instructors pointed out was the individual nature of the problem. “These mix ups are different for different students” (Ian); “different students might have difficulty with different groups or pairs of synforms” (Gina). Often, instructors need to attend to different pairs that different students find problematic.

Strategies and training on how to teach synforms. All instructors mentioned that they were never trained on how to teach synforms; most instructors expressed uncertainty about what strategies should be used. The following statements indicate such uncertainty. “I do not know how to cope with it. I am still confused with *push* and *pull* myself or *import* and *export*” (Ian). “We do not have a formal strategy as such. We just give them examples, written examples or some drills” (Helen), “We see them back and back again. They use these words interchangeably, one instead of the other. The reason again is that we do not have a strategy” (Bella). “I personally do not have a specific method to deal with them” (Dan).

At the same time, most of the participants found themselves in situations in which they had to address difficulties caused by synforms, especially in speaking. Some instructors explained how they treated synformy after recognizing the issue. Although two instructors (Helen and Camilla) mentioned that these words should not be introduced simultaneously, none of the participants reported how they approached these words systematically or how to prevent the problem. Most instructors developed their own approaches to help students with synforms, including repetition, separation, and identifying differences.

Repetition. Most instructors believed that repetition could help learners overcome the problem (Ayden, Bella, Camilla, Dan, Ethan, Gina). Ayden mentioned that repetition is important because students avoid using these synforms when they are not sure which word is correct. This factor adds to the difficulty of learning these words. Ayden commented,

It always comes with practice, with active use of the word and trying to combine them with other words and to not avoid them. Because students are not sure which one they should use, they try to avoid it by going around it. We try to use the words and recycle them. To make these words more frequent sounds scary but it actually does not take so much time.

Camilla also pointed out the importance of repeating and frequently using synforms. She expressed that “frequency of using those words also helps to learn them. If students use them frequently, they have a better chance of remembering them.”

Separation. Some participants believed that synform pairs should not be taught together (Helen and Camilla), although none of the participants explained what measures they took to avoid exposing students to such pairs at the same time. Instructors reported what strategies they recommended or used to target errors rather than to prevent them. Helen, however, talked about her experience with one problematic pair:

Synforms are also a challenge; for example, *I* and *in* are written the same and they are pronounced slightly different. So as instructors, what we do is that we space them out. Initially, we only use *I* and then when the students have mastered *I* then we introduce the *in*.

One participant identified that if students confused synforms, her strategy was to make students work with one word at a time. Bella shared,

Based on my experience dealing with these pairs, one strategy I encourage to use is writing. Use them in writing but each in different assignment. For example, write a paragraph using only this one and next time write a paragraph using the

other one. Like there are two words that differ only in one letter, one means *to move* and the other one means *to meet someone for the first time*. So I will ask the student to write a paragraph with *moving* and use it over and over in that paragraph. Because when you use the vocab in the context, it make[s] sense and it will stick. Although we do not have writing in this school, but I think it is helpful, and I will give it as homework, and then I will ask them the next day in class to say it so it will be doubled. This is something I tried myself, but I am not sure if it is a real strategy.

The data revealed that instructors intuitively used strategies aligned with research-based best practices. Training on how synforms cause confusions and how to prevent them can benefit instructors in teaching synforms.

Identifying differences. Some instructors recommended that synforms be compared to identify the differences, either by providing context or by focusing on form through writing (Ayden, Bella, Ethan, & Ian). Camilla shared,

The problem with synforms is that it changes the meaning and students say something they do not intend to say. So we clarify the differences and give them exercises for one of the words in the pair. For example, we have *to carry* and *to move* getting mixed up. We need to give a context to establish some meaningful sentences. So for that, we use written drills so they can answer correctly.

Ayden reported, “I try to help students separate these two forms. I help them learn the words in a phrase. I try to divide them to find the border between.” Some participants

recommended learning these words in context. Some developed some written drills (Camilla & Faith).

Learning synforms in a phrase and making associations. One participant recommended memorizing the word in a phrase (Ayden). Making associations and using mnemonic devices are other strategies two instructors suggested for dealing with synforms in speaking (Gina & Ian). Ian shared,

We use the context for comprehension purposes. I usually tell them to make some associations. I do not know if there is a scientific way of dealing with such words.

These mix ups are different for different students.

Gina highlighted the need for paying individual attention to students' problem, because different students might have difficulty with different groups or pairs of synforms. She shared,

For speaking, for handling synforms the only way is repetition. Making it clear to students. Working on one word at the time and then mixing them up. Working until the problem is resolved. Taking notes. I think it is very individual. There are some patterns of words, which many students get them wrong, but there is individual mix up as well. Therefore, we should work with them individually and keep repeating and showing the difference between the words, using them in the different contexts in speech, making them repeat it until it is clear. For listening, it is the exposure. The more you listen, the more you are able to hear the difference between the words. I sometimes ask my colleagues to record something

containing those words in different contexts. But these pairs are also problematic in listening.

In summary, some of the instructors offered effective strategies such as learning the synforms in a phrase, using mnemonic devices, and making associations.

Reading strategies. Participants considered focus on word form as one of the main strategies for reading (Ayden, Bella, Camilla, & Ian). In one of the language sections, participants had activities to look for a certain word among similar ones (Ayden & Gina). One teacher made fill-in-the-blank exercises to help students identify the differences among the words so that they could choose the right word based on the context (Faith). For listening, one teacher recommended more exposure to listening to passages that use these words in different contexts (Ian). Ayden stated that students “need to imagine these words and see them. Write them and re-write them again.”

Gina shared her strategy for dealing with synforms in reading. She stated,

In reading, this is also problematic. Sometimes I give them some devices to remember the meaning like the longer word means this and the short one means that; if there is a way to remember them by association like if this word is similar to an English word, I say this word is funny like “three bush green,” and this word means this.

Ian reported that when students read, focusing on spelling of the words is important. He shared,

For readings comes to spelling. They mix up words such as *vaghe*’ and *vaghe*’*e*. There are certain words. When they see these close words, they mix them up.

What we do is that we focus more in the beginning and take a lot of time on the script.

Gina explained,

If they have problems with words that have similar spellings when they encounter them they do not know if it means that or this. So if they see *three* or *tree* they do not remember which one is which. In this case, I also try to help them by making associations if applicable, and if not, I try to help them see those words more often.

Faith also shared her approach for dealing with synforms. She observed that the context helps students identify similar words in simple sentences, but when the context is more complex, students find using contexts to be more difficult. She explained,

I also give these words in fill-in-the-blanks. What I also did that was very time consuming was I found how these words were used in authentic texts so they can see the pair the way they are used in authentic materials. Because if you give them in a simple sentence like “I am lazy,” they get it. It is easy but when they see it in actual authentic materials, like “policies are very lazy,” is a concept that they need to get exposed to it. I had to give students such examples which might be in a two-line sentence. You need to read and understand two lines to know the meaning of one word and that takes too much time of the class, and too much time of the teacher but you just have to do it. And need to do it for words a student mixes up. You see similarities between the words that students mix them up.

Instructors recommended focus-on-form strategies to deal with synformy confusion in reading. Regarding how instructors learned strategies for teaching synforms, all instructors reported that they never had any training in this area.

Summary of Findings

The purpose of this study was to gain an understanding of teacher-related factors in vocabulary instruction, specifically beyond the ILR Level 2, in a classroom setting. I explored instructors' experiences, training, and resource needs in intensive language-training programs. Specifically, I focused on instructors' observations of synformy. Two areas that researchers have not adequately studied from the point of view of instructors are classroom vocabulary instruction experience and synformy, which is one factor that affects vocabulary learning (Nural, 2014). The results of the study indicated how instructors at DCLS view and incorporate vocabulary instruction in an intensive language program.

Vocabulary teaching challenges and instructors' experiences. The findings revealed that, based on their experiences at DCLS, participants identified several challenges related to vocabulary that affect students' performance. Some specific challenges include pronunciation; morphology; register, such as differences between reading and speaking words; the nature of vocabulary learning beyond the ILR Level 2; direct translation from English; script; borrowed words; homographs; synformy; vocabulary retention; and the amount of words students need to learn in a limited time.

Participants' observations corroborate research on the specific factors that affect students' ability to learn words. These factors are "pronounceability, orthography, length,

morphology, synformy (similarity of lexical forms), grammar (part of speech), and semantic features (such as abstractness, specificity and register, idiomaticity, and multiple meanings)” (Ansarian & Khojaste, 2013, p. 8). One factor exclusive to intensive language programs at DCLS is the large amount of vocabulary that students need to learn within a limited time frame and how instructors and students adapt to the challenge.

During interviews, instructors were excited and comfortable talking about challenges. However, analyzing the situation and adopting strategies to target specific challenges made them uncertain. Instructors were hesitant to express recommendations or to name certain strategies they used. In instances when instructors did share approaches for teaching vocabulary, instructors often demonstrated uncertainty with expressions such as “I do not know if this is a strategy,” “if this is the right thing to do,” or “there might be better ways of doing this.”

Further, participants rarely explained how frequently they implemented certain strategies or how they decided to adopt a strategy. A common theme among all of the instructors interviewed was that none had allocated a specific amount of time in their lesson plans for teaching vocabulary. Rather, vocabulary was addressed on an as-needed basis, specifically when students were reading or speaking or in reaction to students’ errors.

Participants were able to identify some specific challenges and thus tried to address them. However, they viewed challenges like the large amount of vocabulary as unavoidable and did not feel empowered or responsible in addressing them. In addition,

at DCLS, instructors were not clear on the approximate number of words and kinds of words students need to learn to achieve general proficiency (ILR Level 3).

Despite the fact that achieving ILR Level 3 requires a large repertoire of vocabulary, participants identified that a crucial strategy would be to limit the number of vocabulary words to allow the students a greater chance of success. Participants felt that students are unable to and should not try to learn all the introduced words within the time frame of the training. However, interview data indicated that participants did not have a systematic approach to this challenge.

Determining what classifies words as required or useful was to a large extent based on individual instructors' intuition and their perception of what skills and knowledge students need to be successful in their jobs or to pass the end-of-training test. Other than selecting words based on different topics, participants did not report that they analyzed vocabulary based on frequency or any other standard and were random in their approaches to help students learn the most useful vocabulary.

Participants gave feedback about the usefulness of words mostly as a reaction to the students' language output or request for words. Some participants also pointed out important vocabulary but only when the students encountered the words in reading. Participants felt that they could not do much about the amount of vocabulary, and they believed that the students have the main responsibility of limiting the number of words they are trying to learn.

Participants identified that the breadth of vocabulary is a problem yet is unavoidable because they use authentic materials, which constantly expose students to a

large number of words they do not know. Therefore, instructors felt they had no control regarding the selection of words. None of the participants mentioned modifying authentic reading or listening material as a possible solution. Instructors were aware of the large amount of vocabulary introduced through authentic materials, and some of the instructors tried to help students be selective when choosing specific words to learn. However, the selection of words was based mainly on the instructors' intuition and therefore was random. In many cases, participants assumed the problem was the students' expectation to learn all the words in the texts.

Study participants were uncertain about the role of instructors in teaching vocabulary. The findings of my study support Hulstijn's (2001) conclusion that vocabulary learning is an enormous task for adult second-language learners, and instructors are often uncertain about how they can guide their students. Folse (2011) also noted that, although language instructors recognize the gap in their students' vocabulary, they are often uncertain how to incorporate vocabulary into lesson plans. However, lack of clarity regarding which words or the volume of words instructors need to teach appeared to have a determining effect on their approach to teaching vocabulary.

Participants responded in similar ways to the challenges that many students have with vocabulary retention. Participants used three main strategies at DCLS: (a) encouraging productive use of vocabulary, (b) recycling, and (c) limiting the number of words. I was not able to verify the extent that these strategies were implemented or could be effective because such verification would require further research through observation

and interviewing students. However, based on the data from the interviews, recommended strategies were not always practical or used systematically.

All participants agreed that learners should use words from everyday speech. This strategy aligns with research that suggests the productive use of words promotes productive knowledge, because conveying a message requires retrieving the spoken form of a word (Nation, 2013a). Without pushed output, some words might remain in receptive knowledge only (Laufer, 1998). Also, using words in a verbal interaction gives the learner the opportunity to get feedback from other speakers (Ellis et al., 1994). Interacting with other learners can allow individuals to notice the gaps in their language, and this awareness can help students learn new concepts, including vocabulary (Swine, 1985, as cited in Laufer, 2017).

Encouraging students to use new vocabulary in their speech also helps them to use the words creatively. Creative use, producing, seeing, or hearing already-known words in a new creative meaning, is another cognitive condition that helps learners retain words (Nation, 2013a). This process makes learners rethink the meaning of a word and, as a result, learn the word. Creative use can be productive when learners use a word in new ways and in different contexts, or it can be receptive when learners meet a word in different meanings or contexts.

Participants encouraged learners to use vocabulary in their everyday speech. The productive and creative use of words in speaking is a useful strategy to enhance learning by helping learners both notice the gap and retrieve what they have learned. However,

based on the data, it is not clear how instructors at DCLS systematically support students with selection of words.

Instructors should observe which areas learners need help in during the process of learning vocabulary. Vocabulary learning is an incremental process, and the productive use of words is often harder to attain when compared to the receptive level (Schmitt, 2008). Therefore, to support students in the productive use of words, instructors need to analyze the situation and be aware of the level of knowledge they are trying to enhance by using methodologies that address this exact level (Alali & Schmitt, 2012). Also, according to Nation (2013a), learners differ in how well they learn receptively or productively. Although understanding how to evaluate whether instructors supported the productive use of words requires further research, this strategy can have a positive impact on learning vocabulary.

Based on the data, the majority of the participants recommended a recycling or repetition strategy. Instructors encouraged the use and recognition of vocabulary mainly through topic-wise conversations, reading, and sometimes listening. Retrieval and repetition of vocabulary through linked skills are beneficial (Nation, 2013a). In linked-skills activities, learners focus on the same vocabulary several times, each time through using a different skill. Repetition is effective in helping students learn and retain vocabulary (Nation, 2013a). However, instructors were not always clear in their explanation of recycling; most instructors explained that by recycling they meant having the same words appear in reading, listening, and speaking situations within a certain period of time. Instructors focused on a topic rather than the intervals necessary for

spaced repetition. Additionally, the data indicate that they did not always emphasize topics, and in some sections, vocabulary in reading, listening, and speaking materials did not match each other. Finally, some sections did not have regular input through listening.

Participants did not report a systematic approach toward making sure that learners' repeated encounters with words supported spaced repetition through the curriculum. Creating an extensive reading program that encourages learners to experience words in different contexts is one approach to ensure that learners encounter words repeatedly in different contexts and therefore learn the words more effectively. However, none of the participants mentioned an extensive reading program. The reading course participants mentioned was mainly an intensive reading course. Although some instructors mentioned that reading is the main tool for introducing vocabulary, none reported a clear or systematic way for how words were chosen, other than through the introduction of specialized words with different topics.

Instructors' awareness and use of spaced repetition could improve the quality of vocabulary instruction at DCLS. Besides through repetitions, learning a word is best attained by spacing their repetitions (Nation, 2013a). During the interviews, only two participants mentioned spaced repetition, but they did not explain how they used this principle in their lesson plan. One of the participants recommended her students use Anki, a vocabulary learning software that supports spaced learning.

Also, more research is needed to determine whether the amount of vocabulary is a program issue at DCLS because the program sets unrealistic goals for the period of time allocated for training. According to Grabe (2009), instructors in intensive language

programs may be able to teach more than 2,000 words with a focused vocabulary instruction plan. However, teaching the 8,000–9,000 words deemed necessary for reading a variety of authentic texts (or the 5,000 words for speaking) seems challenging and even overwhelming. I was not able to find any evidence in the literature that supports learning such an amount of vocabulary within a year in an intensive program. In addition, because multiple instructors teach the same class through rotations at DCLS, without an instructional program with integrated high-frequency words and spaced repetition, it is hard for individual instructors to plan the entire course to achieve such a goal.

In summary, although fully determining the extent of the issue was not possible, it seems that instructors are unclear about how many words are necessary for students to achieve ILR Level 3 and about the prioritization and selection of words. Without a systematic way of knowing which words are useful for students, it is difficult for instructors to guide students or plan their lessons around vocabulary learning. DCLS instructors seem to have a preconceived perception about their role in teaching vocabulary. Instructors assume that the students, rather than the instructors, have the responsibility to select and limit vocabulary. However, their assumption that it is not the teacher's responsibility to select and teach the essential words contradicts the literature. Instructors play a vital role in selecting words, teaching vocabulary explicitly, creating an extensive reading program, focusing on strategies that help learners develop skills for learning vocabulary independently, and providing guidance for students (Niu & Andrews, 2012; Nation, 2013b). Strategies are especially important when students need to learn mid- and low-frequency words.

Challenges of teaching synforms. In this study, I also focused on another area in learning vocabulary: synformy and instructors' experiences in teaching synforms. Most participants reported synformy as problematic for reading, listening, and speaking. None of the participants had any training about synforms, and they had never heard of the term. Most participants reported the need to support students with learning synforms, which they identified as a pronunciation problem.

Participants mostly developed their own approach when helping students with synforms. Understanding what causes synformy can help instructors to teach synforms more effectively. Simultaneously, instructors expressed uncertainty regarding strategies for dealing with synforms. Findings corroborate Nural's (2014) case study in which the instructor found synformy problematic and tried to respond to student confusion regarding synforms. Participants discussed how they dealt with individual synformy problems, which further supports Nural's (2014) research. The way the instructors responded to synforms is mainly governed by students' errors or queries.

Based on the available data, I could not determine the extent to which instructors attended to synforms or if their approaches had been effective. However, based on what participants described, some instructors intuitively employed strategies to approach synformy, such as identifying differences, implementing repetition, and recommending separation of confused words in practice, which are strategies that align with the research-supported practices that Laufer (1989) recommended. However, none of the participants reported that they considered synformy in their lesson plan or noted measures they took to prevent confusion in presenting synforms in a lesson or a vocabulary list.

Training experiences and needs of instructors. Participants indicated that most participants began their job with no educational background or formal training in teaching or language teaching. These data confirm the ■■■ (2013) investigation results. It appears that due to the constraint of hiring only native speakers, hiring trained language instructors is not mandated and, in the case of less-commonly taught languages, is not always possible.

The findings of my study suggest that teacher-educators rarely focus on vocabulary instruction in teacher-training workshops at DCLS, although they occasionally discussed vocabulary during reading or speaking workshops for beginner levels. This finding supports Horst's (2014) study that vocabulary is not treated as a main component in language teaching and teacher-training programs.

As for the resources and training that instructors wished they had, instructors' main requests were for receiving training on how to target specific areas of vocabulary teaching, such as vocabulary learning strategies and working with students' learning difficulties. This need instructors expressed would model best practices, which supports the findings of Rossiter, Abbott, and Kushnir (2016). The instructors expressed a strong interest in training in practical strategies.

Participants expressed a desire to receive training on some specific topics such as vocabulary learning strategies, evidence-based best practices in teaching vocabulary, facilitation of vocabulary retention, the effects of individual differences, and difficulties in acquiring vocabulary. The findings support the DCLS need analysis that indicated instructors expressed the need for training in multiple areas, including using classroom

materials, teaching methodologies and approaches, and understanding how adults learn languages (■■■■■, 2014).

Some participants reflected a need for school-supported sessions to explain the school's training approach to students so that students could then better identify with the program. Participants also believed that hiring experts who could introduce research-supported approaches to teaching vocabulary would improve the quality of the professional training in the school. Based on the data, teacher-trainers must consider elements such as instructors' time, as well as the fact that English is the second language of most instructors. The teacher-trainers need to understand how instructors can address specific students' needs and focus on practicality. One participant pointed out the value of observing a good model of classroom instruction.

Instructors need training to help students with strategies and other successful pedagogical approaches for teaching. Training would enable instructors to plan vocabulary-focused lessons and to learn different approaches to teaching vocabulary, including explicit instruction (Folse, 2011). In addition, Folse (2011) recommended that learners should have training to understand strategies of "noticing, practicing, and retaining vocabulary" (p.153) and strongly urged a systematic focus on vocabulary teaching. Vocabulary instruction involves not only the introduction and instruction of vocabulary but also teaching strategies that enhance the learning and retention of words (Niu & Andrews, 2012). Using strategies results in students' awareness of learning strategies to overcome their learning style limitations and facilitates the retention and production of new vocabulary words (Zheng, 2012). Therefore, a PD program with a

focus on teaching vocabulary could help instructors adopt effective pedagogical approaches and help students with strategies.

Participants expressed that a PD program for training instructors would enable them to make informed choices in instruction. Instructors who provide students with guidance on lexical items and help students develop effective learning strategies support students in learning vocabulary efficiently (Schmitt, 2008). Additionally, training can boost instructors' self-efficacy, which in turn results in higher achievement for students (Arsal, 2015; Karimi, 2011).

Conclusion

I used a case study research method to better understand instructors' experiences in vocabulary instruction when teaching intermediate- and advanced-level language learners in an intensive language-training program. One major focus of this research was on instructors' experiences in teaching synforms and the challenges L2 learners face in learning synforms. I also focused on instructors' training experiences in how to teach vocabulary and centered on their resource needs. The noticing hypothesis and synformy guided the study.

The qualitative data were collected through individual semistructured interviews that were conducted to explore the research questions from a purposeful sampling of nine language instructors who taught less-commonly taught languages to professional adults in an intensive language program. I examined the data to find patterns that would facilitate my understanding of participants' experiences regarding vocabulary teaching. The analysis of the data established three themes: a) vocabulary teaching challenges and

instructors' experiences, (b) inadequate teacher preparation training, and (c) challenges of teaching synforms.

The findings of this research could improve procedure because teaching is a dynamic practice in which the teacher plays a vital role in student success. Based on current best practices and the findings of this study, the ideal option for a project could be providing a professional training for instructors at DCLS on using research-supported vocabulary instruction methodologies. The need for teacher training is prominent at DCLS because learning the required large repertoire of vocabulary in a short period of time is challenging for all students, and hiring trained language instructors for less-commonly taught languages is not always feasible.

Section 3: The Project

Based on the findings of this study, I proposed a professional development (PD) program for instructors who teach less-commonly taught languages at DCLS. Findings indicated that improving language instructors' competence in vocabulary instruction would have a significant positive impact on the quality of the language training at DCLS. I designed the PD module and selected the content to address issues such as instructors' lack of extensive vocabulary-instruction training and their lack of a cohesive research-based approach to vocabulary selection and instruction.

I also included content that would help enhance the quality of instruction by introducing methods and strategies to overcome challenges related to synformy and retention. The proposed PD comprises (a) a description of the project goals and objectives, (b) a detailed outline of the instructional design and delivery methods, (c) the content of the program, and (d) the evaluation plan. In this section, I provide a rationale for the project genre, a literature review, and possible social change implications. I also provide information about the existing resources, potential barriers, and timeline for the implementation of the project.

Description and Goals

The findings of this study indicated a need for relevant professional development. The purpose of this case study was to gain a thorough understanding of teacher-related factors in vocabulary instruction in a classroom setting through exploring instructors' experiences, training, and resource needs in intensive language-training programs. Through interviews, I found that many instructors do not have the necessary training to

provide the best support in helping students learn vocabulary and, more specifically, to assist students regarding factors that affect words' learnability, such as synformy.

Participants expressed a great interest in receiving training, especially on practical strategies and helping students with long-term retention of vocabulary.

I designed a teacher-development program with a focus on developing background knowledge about the nature of vocabulary and different aspects of learning a word to enhance instructors' skills and confidence level in teaching vocabulary. Based on the study findings, I considered topics such as the incremental process of learning a word, vocabulary teaching methodologies and strategies, principles of learning that help retention, and synformy.

The proposed PD project is a 3-day face-to-face program of facilitated learning.

The program is designed to achieve seven main goals:

1. develop in instructors an understanding of the principles of vocabulary; teaching based on the current theories of language acquisition and research;
2. expand the pedagogical approaches, strategies, methods, and tools available to instructors for teaching vocabulary in an intensive program;
3. show instructors how to apply principles of vocabulary teaching and principles of learning that affect long-term retention of vocabulary;
4. raise instructors' awareness of standards for setting planning priorities such as word frequency and coverage;
5. broaden instructors' understanding of the phenomenon of synformy and approaches to teaching synforms;

6. deepen instructors' awareness of different aspects of vocabulary learning and expectations of learning rate and retention of vocabulary; and
7. raise instructors' awareness of their beliefs and practices in the classroom through reflection.

I planned the PD program based on these main objectives. My goal was to engage instructors and keep them motivated by including relevant pedagogical practices. With these objectives and best practices in mind, instructors can see how and why they can benefit from different tools and strategies in teaching vocabulary to help students meet their goals of reaching general professional proficiency level in an intensive program.

Professional Development Program Objectives

Upon completion of the PD program, language instructors will be able to do several things:

1. discuss what methods are effective for teaching vocabulary as well as why they are effective;
2. demonstrate competence in the implementation of a wide range of teaching strategies;
3. apply the major concepts, principles, theories, and research related to vocabulary instruction to design lessons that support vocabulary learning and long-term retention;
4. discuss the instructional priorities such as word frequency and coverage and adapt teaching materials based on these priorities;

5. analyze challenges students have with learning synforms and be able to discuss and apply strategies for teaching synforms;
6. describe what a word is, explain what it means to learn a word, decide what words students need to learn, and identify challenges that students face in learning a large repertoire of vocabulary; and
7. modify vocabulary teaching strategies after reflecting on information gained from training goals and objectives and from self-evaluation.

Target Audience

The target audience for the PD program is the language instructors who teach in an adult intensive language-training program at DCLS. The instructors' teaching experience at the school ranges from the novice level to over 20 years of experience. Some of the common characteristics that language instructors at DCLS share include being a native speaker of the language they teach and being able to teach one of the less-commonly taught languages with limited teaching resources. Also, English is usually instructors' second language. Some of the instructors have no training in language teaching and vocabulary teaching.

Rationale

Findings of this research indicated that many instructors at DCLS do not have the professional training and the background knowledge necessary for teaching vocabulary. In addition to language proficiency, language instructors need to have knowledge of language acquisition theories and how this knowledge links to practice in their classroom (Huhn, 2012). Participants acknowledged the need for professional training on best

approaches to teaching vocabulary and expressed interest in having training. Participants were specifically interested in learning strategies and approaches to address specific challenges students have in learning vocabulary.

In intensive language programs at DCLS, students need to develop a large repertoire of vocabulary and retain it for a long time to be able to speak at a professional level and read and comprehend newspaper articles. Instructors' cost-benefit analysis of the vocabulary that they teach can be used to maximize students' efforts (Schmitt & Schmitt, 2014). A vocabulary-focused program is imperative to students' success; to implement such a program, instructors need to have a good understanding of best practices regarding prioritizing instructional elements related to vocabulary, such as selection of high-frequency words and useful vocabulary (Nation, 2013a).

The focus of this study was on teaching vocabulary beyond the ILR Level 2; however, without a systematic way to select words that help students achieve ILR Level 2, it would be difficult for instructors to select the words for moving beyond that level. To teach vocabulary at any level, instructors need to be able to assess students' current vocabulary level and guide them for the next level of learning (Alali & Schmitt, 2012). Unless there is a systematic approach in teaching vocabulary, such as a frequency approach, it would be difficult for instructors to know what students need at each level.

Based on the frequency-approach trend, instructors should ensure that students first learn the most frequent words in addition to specialized words related to each student's learning goals and his or her field of specialty, as these words are the most useful. The frequency approach is the dominant trend in teaching English vocabulary

(Lessard-Clouston, 2013). For many of the less-commonly taught languages, research in this area is either limited or nonexistent. Nonetheless, instructors should understand the concepts of high-, mid-, and low-frequency words, as well as specialized words, to choose appropriate vocabulary for students to learn.

Understanding the frequency approach could help instructors plan their lessons. Nation (2013a) suggested that instructors should teach the high-frequency words. Nation also advised that instructors teach, model, and practice learning strategies so that students can learn low-frequency words independently. Without understanding different categories of words based on the frequency approach, instructors might not be able to help students learn the required words.

Study participants expressed a great interest in learning evidence-based best practices. Participants were aware of the many challenges students face when learning vocabulary in an intensive program, and acknowledged that in many cases they are unsure of how to best address these challenges. One of the participants expressed that she was interested in learning how to address specific challenges. The project was developed to help instructors better understand the process of learning vocabulary and to apply pedagogical practices that support learning.

Professional development can boost instructors' confidence and self-efficacy by providing different tools for teaching and also validating some of the approaches they have adopted. Karimi (2011) concluded that professional training has a positive effect on instructors' self-efficacy. Self-efficacy is "a form of motivation, which in the context of a school refers to a teacher's desire to implement the teaching strategies he/she believes to

be appropriate and efficacious” (Overbaugh & Lu, 2008, p. 45). Self-efficacy can enhance language instructors’ judgment of what they can do in their classes (Karimi, 2011), which directly affects students’ achievement. Instructors’ confidence is directly related to their mastery of knowledge and skills in a specific field.

In an intensive program, instructors have an important role in helping students deal with different challenges, including learning and using a large vocabulary at both productive and receptive levels. According to Schmitt (2008), instructors who actively help students select lexical items and assist students in developing effective learning strategies can aid students with learning vocabulary more efficiently. Instructors’ perceptions of how students learn vocabulary and the strategies and methods they adopt in teaching words can affect students’ learning.

I designed a PD program to assist instructors who do not have the necessary training to better understand the process of learning vocabulary and to enable them to incorporate a wide range of vocabulary teaching methodologies. Teacher-training programs are crucial in familiarizing instructors with language-training methodologies (Jourdenais, 2009; Tarone, 2009). A PD program can better prepare instructors to help students develop a sufficient repertoire of vocabulary in an intensive language-training program. A PD may also reduce the chance of instructors adopting ineffective approaches of vocabulary teaching.

Review of the Literature

I conducted a literature review to support the content of the project and also the PD for language instructors. I used the Walden University online library and the DCLS

library for this literature review. I also used Google Scholar, which connected me to a number of databases such as EBSCOhost, ProQuest Central, Education Resources Information Center (ERIC), Education Research Complete, and Science Direct, in addition to books, journals, and the Walden University Library of Theses and Dissertations. The main search terms were *language teacher development, vocabulary instruction, vocabulary learning strategies, reflective learning, andragogy, microteaching, extensive reading, teaching strategies, deliberate learning, Nation's four strands, spaced repetition, testing effect and retrieval, dual coding, vocabulary teaching techniques, noticing, synformy, and word-frequency.*

I used andragogy principles (Knowles, 1979), reflective learning, and microteaching models as frameworks for creating the PD program. I also used Nation's (2013a) vocabulary teaching principles, vocabulary learning strategies (Schmitt, 1997), and synformy (Laufer, 1991) to guide the content selection for the PD program, which will be delivered via a 3-day face-to-face workshop.

Professional Development

As the knowledge and skill base of language teaching develops, language instructors are more in need of in-service PD. Even instructors who have been adequately trained at the preservice level need in-service PD because it is impossible for instructors to learn everything at that level (Farrell, 2015). Additionally, instructors have different needs at different stages of their career.

Professional development training for second language teacher education has traditionally focused on two areas: classroom teaching skills and knowledge about

language and language instruction. However, researchers have indicated that knowledge of language teaching does not often transfer into practice despite the informative nature of the traditional PD training (Burns & Richards, 2009). In a developmental approach toward professional training, teacher-educators should recognize that in addition to training instructors for language teaching skills, they should consider how to facilitate development as part of constant experiential and intellectual professional growth.

It appears that language teacher educators often lack the understanding of how to support instructors with the use of their knowledge. Teacher-educators should understand what the instructors' beliefs and knowledge are to better help language instructors with the use of their knowledge (Burns & Richards, 2009). Reflective practice can be used to explore the link between teacher beliefs and classroom practice and can provide opportunities for developmental growth.

A PD program should encourage language instructors to reflect on their practice and evaluate it in order to support positive change. With reflective practice, instructors can improve their teaching strategies by reflecting on their practice and beliefs and what underlies their unique approach. One way to encourage reflection on practice is through microteaching. Microteaching, a technique for trainees to practice a specific teaching skill in a short period of time, also provides opportunities for reflection and dialogue, which are necessary in reflective practice.

Reflective learning. Instructors need to reflect on their practice, evaluate it, and change it accordingly. The reflective practice can help instructors become aware of their underlying beliefs and assumptions about teaching and gain new insights by better

understanding their profession. Reflective practice has become one of the popular concepts in the field of foreign-language teacher education in recent years (Farrell, 2016). In reflective practice, instructors systematically reflect on their own practice to help them improve their decision making in teaching (Farrell, 2016). Engaging in discussion with others can facilitate this process (Farrell, 2016). Reflective learning, in which instructors reflect on their actions, can happen both inside and outside the classroom.

Reflective-learning practice dates back to 1933, when Dewey introduced the idea of reflection-on-action. Dewey (1933) believed that experience is overcome by routine and tradition. Dewey highlighted that although tradition can limit creative thinking and reasoning, experience is actually the main trigger for reflection. Reflection releases individuals from the limitations of sense and tradition. According to Dewey, education is about “an emancipation and enlargement of experience” (p. 156). Therefore, instructors should use reflection to grow professionally; otherwise, they will be constantly performing routines. Dewey enumerated five fluid phases of reflective thought: (a) a situation is interpreted as problematic, (b) the problem is then inspected and defined, (c) suggestions are considered as possible solutions, (d) reasoning and suggestions develop a hypothesis, and (e) the hypothesis is tested through actions or thoughts and can lead to conclusions such as the acceptance or rejection of the hypothesis. Therefore, the sequence begins with facts and events, continues to ideas and reasoning, and concludes with the application of the new ideas as a new experience.

Schon’s idea of reflection-in-action expanded reflective practice. Schon was interested in how instructors think and make decisions in their practice. Schon (1983)

believed that by reflecting in action, a teacher becomes a researcher in the practice context. According to Schon (1983), when a situation is confusing, the practitioner can reflect on his or her own understanding of the situation and then move to solve the problem. This move creates another situation that helps the practitioner reframe the situation, test it, and construct a new theory.

Both ideas of reflection-on-action and reflection-in-action support the same goal of helping instructors to understand their practice and to better link it to their underlying beliefs and knowledge (Olivero, 2015). Farrell (2012) added the idea of reflection-for-practice to the ideas of reflection-on-action and reflection-in-action. According to Farrell, instructors should consciously monitor the situation and their actions while teaching a lesson (reflection-in practice), review their actions after teaching a lesson (reflection-on-practice), and reflect before designing or teaching a lesson (reflection-for-practice). Farrell argued that instructors at all levels should actively engage in a reflective practice because it helps them understand their underlying assumptions and beliefs.

A skill that instructors need to grow professionally throughout their careers is systematic self-reflection. In language teacher education, the ultimate goal of teacher-educators, when they apply reflective practice, is to help instructors become autonomous instructors who through self-reflection continuously grow professionally (Richards, 2008). Teacher-educators play an important role in guiding reflection that makes trainees aware of different perspectives and approaches in language teaching (Kourieos, 2016). Teacher-educators should encourage instructors to engage frequently in a systematic self-reflection and evaluation (Miladinovic, 2017). Professional development is a lifelong

process that cannot be done through formal professional training only. In other words, trainees need to develop the skills of observing and reflecting on their own teaching.

Instructors who reflect critically on their beliefs and practice are more effective. Van Beek (2016) indicated that self-reflection is one of the characteristics of outstanding language instructors. When instructors understand through reflection what they do and why they do it, they are better prepared in future instructional decision-making (Farrell, 2015). Reflective practice may also confirm to instructors their current practices or might indicate changes instructors need to make through conscious analysis of concrete evidence.

Instructors can be resistant based on beliefs from a prior language-learning experience. Language instructors' prior second-language learning experiences have a strong impact on instructors' beliefs about language teaching and learning and on the way they teach language (Borg, 2009). Ignoring teacher beliefs can obstruct teacher-educators from helping language instructors internalize new knowledge (Borg, 2009). Instructors need to experience a strong alternative practice; otherwise, it is hard for them to change the conceptions they have (Borg, 2009). Even if instructors find the new approaches convincing because of the rationale these approaches are based on, they need to be able to imagine how to link them to their practices (Borg, 2009). Helping instructors make this bridge is vital in determining instructors' decisions to apply the evidence-based approaches. This issue is particularly important in DCLS because instructors come from different countries and have learned English in different ways, so examining these imprinted ideas should be considered as an important part of professional training.

Another focus that teacher-educators need to consider is group discussion. What separates reflective learning from traditional learning is that the trainees are at the center of their development when they analyze and evaluate their own actions (Ögeyik, 2016). In reflective practice, the role of teacher-educator changes from demonstrating how to bring theory into practice to facilitating opportunities through tasks and activities for trainees to engage in reflecting on the way they are teaching. Such reflections would be more effective in in-group discussions than in isolation (Chien, 2014). In discussions, instructors have a better chance to make their reflections explicit.

Professional development programs based on reflective learning can be considered in stages. Wallace (1991) presented a reflective model in two stages for professional education. The first stage is the pre-training stage, wherein PD instructors should find out what mental constructs instructors have. Instructors, especially the more experienced ones, often maintain mental constructs that they either consciously or unconsciously allow to guide their actions.

Stage two of Wallace's reflective model is professional development or education. This stage has two key elements, namely received knowledge and experiential knowledge (Wallace, 1991). Received knowledge is the knowledge of theories, facts, or concepts related to teaching, whereas experiential knowledge is the practical knowledge gained by a shared experience of practice in a teacher-development course. These two forms of knowledge are not isolated but rather have a reciprocal relationship. The reflective cycle is "the continuing process of reflection on 'received knowledge' and 'experiential knowledge' in the context of professional action (practice)" (Wallace, 1991,

p. 56). The cycle of practice and reflection can lead to a dynamic professional competence.

Reflection is a conscious and systematic examination that helps instructors evolve their beliefs and professionally grow. The results of this study suggest that teacher-educators at DCLS use reflective practice in designing professional training for language instructors. Such an approach can help with reflection on practice and with connection to actions of other levels in teaching, such as theory, philosophy, or principles.

Microteaching. Microteaching, since its introduction by Allen in the 1960s, has been an integral part of teacher education. Teacher-educators have used microteaching in PD programs to enhance practical, pedagogical, and reflective skills of teacher trainees (Yan & He, 2017). Additionally, microteaching is an effective activity in PD training for teacher-educators to encourage reflection and collaboration with colleagues.

Microteaching activities help instructors link theory to practice.

In addition to the content knowledge and language proficiency, foreign-language instructors need to have knowledge of language-learning theories, and they need to know how to translate this knowledge into practice. Microteaching can help raise language instructors' awareness of how to put their theoretical knowledge into practice (Legutke & Dittfurth, 2009). Therefore, instructors should have opportunities to connect theory and practice and to receive feedback and guidance on their performance (Huhn, 2012).

Teacher-educators also can use microteaching for enhancing instructors' language-teaching skills. The positive effect of microteaching in enhancing teacher trainees' practical pedagogical skills has been well researched. Two main factors that are

conditions for positive effects in this approach are reflective activities and collaboration with peers (Yan & He, 2017). Participating in microteaching also positively affects instructors' sense of self-efficacy (Arsal, 2014; Ögeyik, 2013). Presenting opportunities for collaboration and engagement in reflective activities, while providing enough scaffolding, can enhance trainees' practical teaching skills and boost trainees' self-efficacy.

In a reflective model, teacher-educators use microteaching as a technique for reflection. Engaging in microteaching is the process of moving through cyclic stages of “teach; review and reflect; [and] re-teach approach” (Legutke & Dittfurth, 2009, p. 2013). Reflecting on teaching performance can reveal instructors' tacit theories and beliefs about language learning and teaching (Koc & Ilyas, 2016). In order to change such beliefs, PD facilitators need to engage trainees in practice that challenges such beliefs rather than try to shape their behaviors (Wallace, 1991). Microteaching fits with reflective teaching as an approach that teacher-educators use to help instructors make positive change in their practice by understanding their beliefs.

In this approach, one teacher trainee takes the role of the teacher, who teaches a microlesson, and the others take the place of language learners. Lessons last around 5–10 minutes in duration (Legutke & Dittfurth, 2009). Then the trainees discuss and, based on predetermined norms, evaluate the lesson. By observing what their peers do, trainees can decide how they should perform their own microlesson. In the re-teaching stage, trainees refine their lesson plan based on their peers' feedback, the teacher-educator's feedback, and their own reflection.

Different models of microteaching are equally effective in PD programs. To use microteaching as an activity for promoting reflective learning, Ögeyik (2016) proposed three stages in language-teacher education while trainees learn a new language: “microteaching, observation and analysis, and critical reflection and course of action” (p.1504). In the microteaching stage, Ögeyik suggested that trainees experience learning a language using certain techniques to go through an experience similar to what their students will go through.

In the second stage, trainees and trainers discuss and analyze the impact techniques used during the microlesson had on their learning. In the third stage, trainees and the trainer critically reflect on what happened in the other stages related to the application of the techniques and on how to improve the techniques, based on the experience and existing literature about language learning.

When reflecting, instructors can see and verbalize through their actions their beliefs about learning and teaching. Comparing what instructors do in conjunction with discussing beliefs can provide a basis for them to examine their teaching practices. To maximize the reflective component of a microteaching activity, Kourieos (2016) recommended lessons be videotaped for evaluating a microlesson and helping trainees to self-analyze and self-evaluate.

Use of videotaping, along with discussion with peers and guided reflection, can help teacher trainees to link theory to practice and become aware of their beliefs. Reflection is a vital stage that improves teaching by helping trainees to decide on better

ways to teach (Ögeyik, 2016). Such assessments help trainees to get a better understanding of the teaching profession.

Some criticisms of microteaching include some instructors feeling disheartened because of the stress microteaching causes (Punia, Miglani, & Singh, 2016), as well as some trainees feeling uninterested in the activity because it seems unnatural (Al-Humaidi & Abu-Rahmah, 2015). Individuals who train instructors should consider all factors when deciding on the use of microteaching as an assessment. If trainees are not aware of the purpose of microteaching, they may have negative feelings toward the activity. Therefore, a main responsibility of teacher-educators is to motivate the trainees (Punia, Miglani, & Singh, 2016). Providing adequate training before microteaching and providing suitable feedback after a microlesson can alleviate stress and motivate students (Ögeyik, 2016).

Andragogy. Andragogy, which outlines the components of how adults learn, can provide guidelines on how to structure a PD program. Malcolm Knowles introduced andragogy, the art and science of helping adults learn, to American educators. This theory has formed the understanding of how adults learn and continues to be a strong force in adult learning (Henschke, 2011). Knowles, Holton, and Swanson (1998) identified that adult learners have six distinctive characteristics: they (a) benefit from a self-directed learning experience, (b) have a great deal of experience, (c) need to understand the purpose behind the learning, (d) need to understand the relevance of the learning content and its immediate applicability, (e) need to be internally motivated and ready to learn as

they enter a learning environment, and (f) need to have a learning orientation that is problem centered.

Based on this theory, adults' unique learning characteristics and needs can be addressed through practical steps in the design of the learning experience. These steps include (a) preparing adult learners for the learning experience; (b) allowing learners to diagnose their needs and define what they want to learn; (c) involving them in learning plans, supporting learners to carry out their own learning; (d) involving them in evaluation of the learning program; and (e) providing a safe and comfortable environment conducive to learning (Knowles, 1995).

Professional-development facilitators can consider how to individualize instructions to meet trainees' needs, consider their feelings, plan short activities to reduce tension and stress in the group, restrain their desire to teach directly but instead focus on some approaches that could help trainees learn, listen to trainees' reactions in a responsive but non-defensive way, and affect the attitude of trainees toward their language teaching approaches by the interest and support they demonstrate.

The principles of andragogy not only are important for instructors' professional development but, because the language instructors at the school work with adult learners, can be helpful in language instructors' own teaching methods as well. A teacher-training program should be oriented around helping instructors learn how to learn and how to help their students learn (Knowles, 1979). Considering the long hours of contact each teacher has with students on a daily basis at DCLS, if instructors do not understand andragogy, they can cause problems in their students' learning of the language. In courses taught

with andragogy in mind, the teacher acts as a resource or facilitator for the learner (Bangura, 1996). This idea is especially important at DCLS because language instructors come from different cultures and might have different assumptions about learning and education.

A PD facilitator needs to be aware of the learners' self-concept. Language instructors are adults, and adults appreciate control over their learning while they resist situations imposed on them (Knowles et al., 1998). According to Knowles (1980), adults perceive themselves as responsible for their own lives and have developed a psychological need for others to perceive them as self-directing. A large number of language instructors at DCLS are 35 to 60 years old, and this age range falls in the middle adulthood stage of the Erickson developmental stages, which is the stage in which people expect to be in charge (Harder, 2002). Paying attention to this stage and the role of facilitators in creating a peaceful environment of trust is critical.

Adults have accumulated individual experiences that are different from others'. Any group of adults compared to a group of youths is more diverse in terms of "background, learning style, motivation, needs, interests, and goals" (Knowles et al., 1998, p. 66). When adults' experiences are not recognized, adults might perceive these situations as rejections of their identities as people (Knowles et al., 1998). With this in mind, preparing a PD for instructors requires a greater emphasis on individualization of teaching and learning strategies.

Vocabulary Instruction

Many educators are concerned about the role of instructors in helping students learn vocabulary. Although the number of word families that students need to learn differs by language, for all foreign-language learners, vocabulary learning is an overwhelming task (Laufer, 2017). This is especially true in an intensive language program in which students need to learn a large amount of vocabulary in a short period of time.

In recent years, many researchers have focused on vocabulary instruction and have recommended best practices and strategies that instructors can use to help learners acquire vocabulary. However, the gap between research and practice seems to be widening at the same time (Korthagen, 2007). In other words, instructors likely do not apply research-based approaches in their practice.

Some studies elucidated inconsistencies between what instructors believe and use in practice and what evidence-based best practices for vocabulary instruction entail. Rossiter, Abbott, and Kushnir (2016) enumerated several of these inconsistencies, including “setting of instructional priorities (e.g., word/phrase frequency and coverage, expectations of learning rate and retention), assessment, extensive reading, technology, and dictionary choice, use, and training” (p. 12). Kovac (2017) focused on instructors’ experiences in teaching English and found that instructors need more training in vocabulary instruction. The findings of these two studies corroborate the findings of this study that PD in vocabulary instruction is necessary for teacher and student success.

From the findings of my study, I learned that instructors are interested in receiving training in teaching vocabulary. Rossiter et al. (2016) also found that instructors showed a great interest in receiving training and that they were especially interested in topics such as bringing research into practice, using learning strategies, and performing assessments. This conclusion also corroborates the results of my study.

The following paragraphs elaborate in detail the need for a focused training on different areas, including instructional priorities, extensive reading, facilitation of learning and retention of vocabulary, and the use vocabulary learning strategies and techniques.

Instructional priorities. I found through interviews that instructors at DCLS did not have systematic approaches for helping students learn the most useful vocabulary. Instructors' beliefs affect the way they teach, and a better understanding of the best practices would enhance their instruction, particularly with regard to prioritizing instructional elements related to vocabulary (Rossiter et al., 2016). Findings of this study indicated that instructors' feedback about usefulness of words most often occurred in reaction to the students' needs during output. Instructors' decisions about the importance of a word were mainly based on their intuition and what they perceived to be important for the students' end-of-training test.

In designing a course or planning vocabulary instruction, instructors should focus on high-frequency words by consulting a corpus or frequency dictionary of the target language. When selecting words, instructors and learners should also consider the learners' interests and personal needs (Nation, 2013a). Learners at any level should set a

goal for the next step of language education by assessing how many words they already know, and instructors should provide guidance in the process.

Learning high-frequency words should be students' priority. According to Nation (2013a), high-frequency words are so important that both learners and instructors should spend time focusing on these words. Therefore, attention to high-frequency words must be supported through incidental learning, explicit teaching, deliberate vocabulary learning, and spaced repetition. Nation also suggested that instructors plan a program in which learners meet these words repeatedly through the four strands of meaning-focused input, meaning-focused output, language-focused activities, and fluency-building activities.

Instructors and learners need to pay deliberate attention to high-frequency words because, without knowing a reasonable amount of high-frequency words, comprehension of texts will be inaccessible and learners will not be able to produce language. However, according to Nation (2013a), in a well-balanced program only one quarter of the time must be allocated to deliberate study and only a small part of this time should be for deliberate teaching. Consequently, instructors should carefully select the vocabulary they will teach directly, and that vocabulary should mainly be within the first few thousands of high-frequency words and technical words students need for their employment.

Extensive reading. At DCLS, the lack of an extensive reading program is one area that indicates the gap between practice and evidence-based best practices. This finding corroborates the conclusions of Rossiter et al. (2016) as well. According to Nation (2013b), providing an extensive reading program can be the most important

change a teacher could make in vocabulary instruction. The instructors interviewed for my study did not mention having an extensive reading program nor did they talk about the effectiveness of extensive reading programs in teaching vocabulary. It appeared that the school did not have an extensive reading program.

An extensive reading program provides opportunities for students to read a large quantity of texts at the right level, meaning that learners are familiar with 98% of the vocabulary in the texts. Extensive reading can enhance retention of vocabulary by providing conditions for the repetition, retrieval, and noticing of words in a variety of contexts (Nation, 2013a). This is an area that needs attention at DCLS.

Numerous encounters with a word through input can enhance learning. An average of 12 encounters is required for learning words incidentally (Laufer, 2017). Some researchers challenge the idea of learning vocabulary through input and through reading large quantities of material. They argue that to meet new words by reading them 12 times, learners would need to read millions of words a year, which is unrealistic considering the time and ability of learners. However, based on the rate of 150 words per minute, learning 1,000 word families a year through an extensive reading program, especially for the first few thousands of high-frequency words, is a feasible task (Nation, 2014). A corpus of 200,000 words can provide at least 12 repetitions of the first 2,000 word families, and a corpus of 3,000,000 provides 12 repetitions of the first 9,000 words. Provided that the texts are at the right level, 12 encounters with a word can enhance learning by offering opportunities through repetition, retrieval, and meeting words in different contexts. However, spacing the encounters of the words can be a

challenge because learners need to meet the words often enough before they completely forget them.

Another argument against the effectiveness of extensive programs is that students cannot choose the right level of texts, especially texts for adult learners at the beginner level. This problem is much greater for less-commonly taught languages, which lack resources such as graded books. Therefore, a successful extensive reading program still requires a great deal of teacher guidance, including suggestions on selecting books that match the level of the learners' language proficiency (McQuillan, 2016) or necessitates the development of such materials by instructors for less-commonly taught languages. Training instructors at DCLS about how to use an extensive reading program can be a great help for students in learning and retaining vocabulary.

Besides supporting students by providing an extensive reading program, direct and indirect instruction of vocabulary and deliberate learning are an integral part of a language program. The number of encounters with vocabulary, the amount of attention given to a specific word, and the degree of cognitive manipulation are some of the vital factors in helping students retain vocabulary (Laufer, 2017). Instructors can support learning and the long-term retention of vocabulary by teaching strategies, providing conditions for learning, and using general principles of learning. In the following paragraphs, I examine some of these factors more closely.

Facilitating learning and retention of vocabulary. Instructors have an important role in teaching and helping students with strategies for deliberate vocabulary learning. In section 1, I discuss the theory of noticing as one of the conceptual

frameworks guiding this study. For learners to acquire a word, they first need to notice it and become aware of its existence as a useful language item (Nation, 2013a). Instructors can trigger noticing by placing the words they consider necessary in a text and making sure that these words are repeated. Instructors also can create activities that draw learners' attention to those words. Noticing involves decontextualizing, which for vocabulary learning means learners giving attention to a word "as part of the language rather than as a part of a message" (Nation, 2013a, p. 103). According to Nation (2013a), some factors that may affect noticing include salience of a word, previous contact with the word, instruction of words, and learner realization of a need for a word to comprehend or produce language or to fill a gap. Some activities instructors can provide for decontextualizing words may include negotiation, textual enhancement, providing simple definitions, or raising word consciousness by learning about word parts, register, and word order (Nation, 2013a). However, for direct vocabulary instruction, instructors need to set specific goals to teach only high-frequency vocabulary, explain only the most important aspects of a word, and avoid spending too much time on a single word (Nation, 2013a). These guidelines can help instructors and learners at DCLS to limit the number of words and maximize the benefits of their efforts.

Instructors can support learning and the long-term retention of vocabulary by providing conditions for learning and by using general principles of learning. In the following paragraphs, I examine more closely some of these conditions and principles, including motivation, retrieval, spaced learning, depth of processing effect, dual coding effect, and feedback.

Motivation. Motivation is a required condition for learning. It also enables noticing (Nation, 2013a). Instructors can enhance students' motivation by encouraging learners' autonomy and by setting specific goals for vocabulary learning (Beglar & Hunt, 2005). Likewise, helping students rapidly increase their vocabulary size can boost students' confidence in language learning and in turn increase their motivation (Beglar & Hunt, 2005). Another way instructors can motivate students is by selecting materials and activities relevant to what students need for their employment.

Retrieval. Another cognitive condition that helps learners retain a word is retrieval, also known as testing effect. Retrieval practice is an effective tool to enhance students' learning. Research in cognitive science indicated that retrieving information from memory leads to better retention and understanding (Larsen, Butler, & Roediger, 2013). With regard to vocabulary instruction, research supports incorporating opportunities for retrieval of second-language words, and instructors should consider providing opportunities for retrieval to learners by incorporating vocabulary in different tasks after learners have initially met the words through input (Bancroft, 2015). Different tasks help students focus on different aspects of a word. Kang, Gollan, and Pashler (2013) compared practicing retrieval for vocabulary learning with repeating after the teacher. Kang et al. found indications that retrieval practice was more effective in production and comprehension of the words than imitation practice was. Pronunciation ability also was equally good in both practices.

Adding retrieval activities to input can increase incidental learning. Bancroft (2015) found this to be the case when input is compared to reading for meaning alone.

Barcroft suggested that by adding simple activities to input, instructors can increase incidental vocabulary learning. Some of the effective activities Barcroft used in his study included taking out repeated words from a text and asking students to fill in the blank or asking students about words and giving them time to retrieve the meaning.

Metsämuuronen and Mattsson (2013) also recommended implementing repeated testing to increase learners' second-language proficiency level, specifically their proficiency level in using vocabulary.

Retrieval can be receptive in the sense that by hearing a word or seeing it, learners retrieve its meaning. It also can be productive when learners retrieve a written or spoken form of a word to communicate meaning. The distinction between productive and receptive knowledge is important for both learning and teaching vocabulary. Learners need to focus on receptive knowledge for receptive use and productive knowledge for productive use (Nation, 2013a). Instructors can help learners by checking how well learners do in receptive or productive learning and assist them with the area that they need help.

Spaced practice effect. The spaced practice effect as one general principle of learning could guide instructors in finding methods beneficial to vocabulary learning and the retention of language. Many studies concluded that spaced retrieval practice enhances long-term retention and has advantages over mass learning (Nakata, 2015; Bury, 2016; Lotfolahi & Salehi, 2017). For example, Lindsey et al. (2014) conducted a study on middle-school students to test the effectiveness of a retrieval-practice software for a systematic and personalized review of the materials. The findings of the study indicated

that use of a spaced repetition software enhanced retention of course materials up to 16.5% compared to retention with mass learning.

Simply scheduling a single review unit enhances retention of vocabulary. Based on the timing of the final memory test, Kupper-Tetzel, Erdfelder, & Dickhauser (2014) tested whether the space between the initial learning and review should be planned. Kupper-Tetzel et al. studied how middle-school students learning English-German vocabulary pairs performed in their final test with review lags of 0, 1, or 10 days. Kupper-Tetzel et al. concluded that optimal timing in scheduling the review unit depends on the length of the desired retention interval or, in other words, the length of time until the final test. Instructors should consider longer lags for review if they desire a longer retention interval. In Kupper-Tetzel et al.'s study, when the test was scheduled after 7 days, the students most benefited from the review unit after 1 day; but when the test was after 35 days, students benefited from lags of both 1 day and 10 days.

Although studies suggest that learners greatly benefit from spaced repetition practice in acquiring foreign language vocabulary, researchers debate over the most effective way to distribute the retrieval attempts. Research shows that increasing intervals in spaced repetitions is superior to equally-spacing repetitions in enhancing learning. In studying how effectively participants learned vocabulary pairs with spaced repetition, Gerbier, Toppino, and Koenig (2015) studied three different participant schedules: (a) expanding (days 1, 2, and 13), (b) equal spacing (days 1, 7, and 13), and (c) contracting (days 1, 12, and 13). Gerbier et al. found that the expanding schedule was more effective in producing better performance than the other schedules were. Another study involving

128 college students learning 20 Japanese-English word pairs demonstrated that expanding spacing intervals had a “limited, but statistically significant” advantage (Nakata, 2015, p. 36) over equal spacing. Bury (2016) postulated that because expanding intervals creates challenging learning conditions, it could have an advantage over equal-interval repetition in enhancing vocabulary retention.

Furthermore, some other studies fail to show the advantage of increasing intervals over equal intervals. Kang, Lindsey, Mozer, and Pashler (2014) argued that what the studies which fail to show the advantage of expanding intervals have in common with one another is comparing the two approaches in a single session. Kang, Lindsey, Mozer, and Pashler’s study indicated that when learning L2 vocabulary was spread over 4 weeks, expanding retrieval and equal-interval practice produced the same result in a final test given 8 weeks later. However, the schedule of expanding intervals was more effective in helping learners retain vocabulary over the whole training period.

Another challenge for foreign language instructors and students has been the way textbooks are developed. In foreign language textbooks, the authors rarely bring introduced vocabulary back in following chapters (Carpenter, Cepeda, Rohrer, Kang, & Pashler, 2012), even though spaced learning practice can help students with vocabulary learning and retention (Carpenter et al., 2012; Golonka et al., 2012). Ansarin and Khojasteh (2013) recommended that revisions and recycling of the vocabulary be part of a language program and that the program be structured with different kinds of recycling activities, vocabulary games, and explicit review sessions that falls within the retention period.

Long-term retention of vocabulary is vital for students at DCLS because they need to retain vocabulary for doing their jobs and for their end-of-training test. During interviews, some instructors mentioned their concerns about retention and also expressed that many students are frustrated because they forget after a while words they felt they had learned. Instructors can help with the long-term retention of words by re-exposing learners to the same words frequently.

Depth of processing principle. One factor that supports long-term retention is the depth of processing of information. According to Hulstijn and Laufer (2001), the chances of some information moving from short-term memory into long-term memory is determined by the depth with which the learner initially processes information in spite of the length of time that the information remains in his or her short-term memory. Deep processing strategies support long-term retention by creating meaningful mental associations (Oxford, 2011). Activities that require more cognitive effort from the learner in the initial stages of learning help the learner retain the information.

Instructors can help students retain vocabulary by incorporating activities that require a higher level of cognitive effort. The degree of “depth of processing” of an item is the amount of cognitive effort that learners employ when processing a word (Nassaji & Hu, 2012). An example of introducing information with cognitive effort is activities that demand students to search and organize information rather than passively receive information organized by the instructor (Golonka et al., 2012). Researchers have suggested that tasks that require a greater degree of depth of processing positively affect both initial learning and form-meaning associations (Nassaji & Hu, 2012). This principle

also supports the noticing hypothesis (Nassaji & Hu, 2012) because it suggests learners actively pay attention to unknown words.

Dual coding effect. Dual coding effect is another principle of learning that is effective in enhancing vocabulary learning in intensive language-training programs. When students provide input in more than one modality, they improve their language acquisition by more deeply processing material and retrieval prompts and by supporting different learning styles. The dual coding enables deeper processing because different channels of receiving information, such as visual and linguistic channels, are encoded and stored separately and because different representations of information helps learners remember information more effectively (Golonka et al., 2012). For example, the use of audio, video, and captions can help vocabulary learning and retention (Sydorenko, 2010). Therefore, instructors and students can take advantage of modern technology by incorporating multimedia learning.

Feedback effect. Instructors should be aware of the importance of feedback in vocabulary instruction. Providing feedback on learners' performance at an appropriate time prevents the fossilization of wrong information, which inhibits learners from acquiring the correct form of words (Golonka et al., 2012). Research suggests that early feedback is more effective than delayed feedback (Golonka et al., 2012). Feedback also facilitates the acquisition of vocabulary because it centers attention on what is corrected (Robinson, Mackey, Gass, & Schmidt, 2012). This feature is also consistent with the noticing hypothesis.

Teaching and utilizing vocabulary-learning strategies and techniques.

Instructors who teach strategies and create activities that integrate techniques to promote retention can directly helping students learn vocabulary. Teaching vocabulary-learning strategies not only helps students learn a larger number of words more efficiently but also has a positive effect on students' depth of vocabulary knowledge in foreign-language-learning contexts (Rahimi, 2014). In addition, instructors can accommodate different types of learners and learning styles by using teaching strategies (Nanda, 2017).

According to Rubin, Chamot, Harris, and Anderson (2007), research on strategies that successful language learners use demonstrated that teaching and directing learners toward use of language-learning strategies promotes effective learning.

Teaching strategies can help students take control of their learning independent of their instructors. Using strategies is particularly important for learning vocabulary beyond level 2, when students need to deal with learning more of mid- and low-frequency words. The number of mid- and low-frequency words is so high that it would be impossible to directly teach these words in class (Nation, 2013a). At that level, instructors need to teach strategies so that students can handle these words on their own. In using any technique, it is vital that instructors know why they are using it, what each technique actually does, and what to look for to see results (Nation, 2013a). Instructors need to analyze the situation and select the right technique. Instructors also should have in mind that by only introducing and applying a technique or strategy, that strategy does not become a part of the learner's routine (Coady & Huckin, 1997). Learners require repetition to use a strategy consistently.

Students need to know what the goal of each strategy is and when to use it to implement strategies successfully; they also need to become comfortable using the strategies. Nation (2013a) recommended that instructors plan teaching strategies by deciding on which strategies to teach, how much time they want to allocate for teaching a strategy, and providing ample opportunity for learners to use the strategy. Instructors also need to monitor use of vocabulary strategies and provide feedback as necessary. Instructors sometimes might even need to convince learners to use strategies.

It is critical for instructors to understand how different strategies promote learning different aspects of vocabulary knowledge. For example, strategies such as processing words and their meaning both visually and linguistically, avoiding interference, instantiating or recalling an example of the meaning of a word, processing of words more deeply, and imaging or implementing keyword technique can strengthen retention of vocabulary (Nation, 2013a). Instructors need to know how to accommodate different learners and situations by integrating and teaching different methods and strategies.

Strategies can help students' autonomy in learning vocabulary. Explicit teaching of vocabulary learning strategies can especially benefit inexperienced language learners because they might not be aware of the advantages of consciously using learning strategies. Therefore, instructors need training to have a solid knowledge of vocabulary learning strategies so that they can familiarize their students with them by providing their students with opportunities to practice different strategies. In the following paragraphs, I explain keyword technique and word-part technique, which are two effective vocabulary learning strategies.

Keyword technique. Keyword technique is one strategy that students can use for vocabulary retention. The keyword method is one mnemonic technique that helps students learn vocabulary more effectively and enhances their retention despite their proficiency level (Alibeigynejad & Fahimniya, 2015; Hamzavi, 2014; Nanda, 2017; Tavakoli & Gerami, 2013). Language instructors and curriculum developers should consider using memory strategies such as mnemonics enhance vocabulary retention (Ashouri & Moghadam, 2015). At DCLS, instructors can use keyword technique for teaching words with phonetic resemblance to words in students' native language.

The keyword method is an effective strategy for learning and retaining new vocabulary. Sagarra and Alba (2006) compared three methods for learning vocabulary, namely memorization, the keyword method, and the non-mnemonic technique of semantic mapping. Researchers showed, as they had hypothesized, that the method helped the most in learning and retention of new vocabulary was the keyword method, which requires the deepest level of processing. However, their findings that the semantic method, which requires a deeper level of processing than rote learning, was the least effective went against researchers' hypothesis based on depth of processing theory. The second-most effective method in comparison to the semantic method was rote memorization.

The keyword technique can reduce learners' dependency on their short-term phonological memory. An important factor that affects learning of a word is its pronounceability, because whether a learner can hold a phonological form in short-term memory or not directly affects learning of that word (Papagno & Vallar, 1992). Size of

short-term phonological capacity differs for different learners and can impact long-term learning. Meaning-based strategies of learning word forms such as keyword approach and learning underlying phonotactic patterns can also support the acquisition of new words by helping learners to not be restricted by the size of their short-term memory (Nation, 2013a). In summary, it is critical to use other strategies such as keyword technique to reduce learners' dependence on their short-term phonological memory.

Instructors should consider teaching a combination of strategies. Implementing a combination of strategies results in better learning because each strategy has its shortcomings; for example, keyword technique focuses on words out of context (Wei, 2015). The keyword technique is also more effective in learning concrete high-imagability words (rather than abstract words) and foreign word forms that are easy to learn or that resemble words in the L1. Wei (2015) indicated that the keyword method was less effective, compared to the word-part technique and to self-strategy learning. Ellis and Beaton (1993) also showed that the effectiveness of the keyword technique is different for words of different parts of speech; for example, this strategy works better with nouns than with verbs. Also, their research revealed that the keyword technique is effective for receptive knowledge, whereas rote repetition more effectively promotes the productive learning of vocabulary in comparison. The combination of both techniques, however, was the most effective.

Word-part technique. The word-part vocabulary learning technique is another mnemonic device that helps learners retain vocabulary by helping them connect the form and meaning of a new word to a known word. This technique, like the keyword

technique, also incorporates two stages of learning. In the first stage, learners recognize the form similarity between the L2 new word and the known family word, and then in the second stage they identify the meaning similarity and connect the new concept to the known concept (Wei, 2015). For the first stage, which involves breaking the word, students can benefit from explicit knowledge of prefixes and suffixes. According to Nation (2013a), instructors should draw students' attention to word parts and teach the most frequent and productive roots, suffixes, and prefixes, which can help students make a full use of the word families of known words and learn complex words more easily.

For languages similar to English, which have inflectional and derivational affixes, word-part technique can be an effective strategy for retaining vocabulary and learning new complex words. Wei (2015) indicated that students who used word-part technique had an advantage over the ones who used keyword method in the translation tests. Nation recommended that instructors pay particular attention to this technique that is as effective as keyword technique. Nation (2013a) suggested that students deliberately learn the meaning of the suffixes and prefixes and familiarize themselves with their forms. Nation also advised instructors to select the affixes students need to learn, test students to see whether they know these affixes, and plan activities to help students learn them. According to Nation, instructors should use every opportunity to model use of this strategy.

Synformy. Phonologically or formally similar words often confuse language learners because the learners' previous knowledge of a member of a synformic pair interferes with the acquisition of the new word. Laufer (1989) pointed out that this

confusion may come from two sources: (a) the learner knows one member in a pair, but his or her formal representation of the word in the memory is weak, causing the learner to perceive the other synformic pair member as the same word; or (b) the learner knows both words in a synformic pair but, because the form-meaning relation is not strong, confuses one word's meaning with the other's.

Problems caused by synformy are often unpredictable. Incomplete representations of vocabulary items in students' minds are often affected by different associations, which can include personal life experiences and previous language-learning experiences; this makes synformy problems unpredictable (Nural, 2014). Nonetheless, instructors should be responsive to synformy and should plan teaching synforms. Instructors should also identify when synforms will be introduced in conjunction with larger lesson plans (Barcroft, 2004; Nural, 2014). Therefore, language instructors need to be cognizant of factors that affect vocabulary learning and teaching.

Instructors need to consider different strategies to help students learn synforms more effectively. Teaching words with formal or semantic similarities together can negatively affect learning, because these pairs can be cross-associated in the learner's mind (Laufer, 2005). Activities that force learners to pay attention to confusing words after all members of the synform group or pair have been introduced individually and separately can help prevent these problems (Laufer, 2005). Therefore, instructors should plan their lessons in a way that avoids teaching synforms in tandem with vocabulary.

Another aspect of teaching that instructors should consider when developing plans for synforms is the specific aspect of words learners need to focus on. Form, meaning,

and form-meaning mapping are fundamental components for vocabulary learning.

Barcroft (2015) clarified that these three components need to be treated through appropriate tasks in instruction and learning. Instructors should avoid focusing on meaning in initial stages because it can negatively affect students' ability to pay attention to formal properties of the new words (Barcroft, 2004). Instructors need to incorporate different tasks that invoke different modes of processing to facilitate learning. For instance, when instructors introduce new L2 words, semantic tasks such as sentence writing help learners with the meaning component but not with the other two components.

There are different aspects in knowing words, including synforms, and often learners can deal with only a small amount of information at a time. Receptive knowledge of synforms is quite different than knowing them productively (Danilović & Dimitrijević, 2014). Instructors and learners should bear in mind that vocabulary learning is a cumulative process, and instructors should encourage repetition and exposure to synforms through different kinds of input (Nural, 2014). Giving too much information simultaneously is often confusing for learners.

Instructors should consider special treatment in dealing with suffixal synforms. Suffixal synforms are more problematic than vocal synforms for English learners (Danilović & Dimitrijević, 2014). According to Danilović and Dimitrijević, learners with lower levels of proficiency confuse synform pairs.

Many advanced students of English as a foreign language also struggle with confusing synforms that are either suffixal (economic/economical) or vocal

(arise/arouse/rise/raise) (Argüello Pitt, González de Gatti, & Orta González, 2015).

Through error analysis, Argüello Pitt et al. (2015) studied synform confusion and concluded that the lack of applying English grammar rules appropriately (interlanguage) and the lack of reading comprehension skills are some causes for this confusion. Argüello Pitt et al. suggested revisiting how instructors teach grammar.

Summary

In summary, adult language learners who need to achieve general proficiency (ILR Level 3), face the challenging task of learning a substantial repertoire of vocabulary in a limited time. To help students succeed in achieving their language and vocabulary goal, language instructors need to be equipped with tools, strategies, and relevant background knowledge regarding vocabulary instruction. A professional training based on the principles of andragogy and reflective learning, along with a focus on developing background knowledge about principles of vocabulary instruction, could support instructors. This type of training could help instructors improve their instructional skills and boost their confidence level when teaching vocabulary.

However, focusing solely on theories or on the application of theories does not guarantee development of teaching skills in trainees. Teacher-educators need to add a reflective component to the process of teaching how to teach. Microteaching is an effective method that teacher educators can use to help instructors learn through collaboration and reflective activities; microteaching activities can also enhance trainees' practical teaching skills and boost their self-efficacy.

Implementation

Once I have approval from the staff development office to implement the PD program, I will request to schedule the 3-day workshop during the winter break or summer time after students' graduation, when instructors have free time. The staff development office at the schools will disseminate information about the program among the instructors and supervisors via e-mail. Instructors who volunteer to attend will sign up through the staff development office.

Twelve 90-minute sessions will take place over 3 consecutive days (see table 4). I will conduct these sessions at the school in a face-to-face format. These face-to-face sessions will include presentations, discussions, collaboration with colleagues, hands-on activities, and simulations that lead to a better understanding of the current situation of vocabulary teaching and that gradually build the knowledge of best practices in vocabulary instruction.

In every session the goals are to (a) tap in to participants' prior knowledge, (b) focus on participants' interests in what will be presented as new material, and (c) allow time for discussions and reflection. New material will be presented through modeling, slides, video, and participants' independent research.

Potential Resources and Existing Supports

At DCLS, the trainers in the staff development office support the implementation of professional training sessions by providing time, space, and room setup; disseminating information; and facilitating participants' registration. The management also supports training sessions and encourages instructors to attend development programs that focus

on enhancing instructors' teaching skills. The support from the staff development office and management can significantly improve the chance of successful implementation of the program.

I developed a 3-day face-to-face PD program because this format accommodates reflective learning through discussing strategies and sharing experiences. These types of PD programs are common at DCLS. Supervisors will release instructors from other duties for the period of the training. Offering the core content in a face-to-face format leads to less distractions for instructors because instructors are assigned by their supervisors to focus on training. Other formats such as online training might be considered part-time development, and instructors might get distracted with other tasks or be too tired to concentrate after a few hours of teaching. Another benefit of the face-to-face format is that instructors can ask for elaboration simultaneously if the materials' language is unfamiliar to them.

Potential Barriers

A foreseeable problem with the 3-day face-to-face format is that sometimes supervisors cannot afford to release instructors for 3 days, so some interested instructors might be deprived of the opportunity. To tackle this problem, I will offer the program in the summer time or the week between Christmas and New Year's Day when fewer students are at the school. I also will make the core content and all the PD materials available on the school SharePoint site; this way all instructors at the school can have access to the PD materials.

Roles and Responsibilities

I designed the PD program based on the findings of the study. I have also prepared notes for the facilitator and all the content needed for the training. My plan is to facilitate the planned activities and sessions myself or help others to do so. I will review the exit cards and the evaluation form and modify the design accordingly.

The major stakeholders who work and have interests toward success of this PD program include students, language posts, language instructors, language-training supervisors, division directors, and the school's staff development office. Language instructors directly work with students, and as PD participants, instructors have a major role in the success of the program. Their responsibility is to actively participate in the discussions and other activities. It is also important that PD participants communicate their needs during the program and carefully evaluate the program.

Supervisors manage and direct the language-training programs. Division directors oversee the different language section activities. Supervisors and division directors are the people who have the authority to give instructors permission to attend the PD.

Support of the staff development office is critical for the success of the program. The employees in this office are responsible for making PD programs happen in the school. They support PD programs by providing resources, booking rooms, promoting the program, and encouraging staff to attend.

The majority of students are assigned to language training with a specific language requirement. The students are usually highly motivated for personal and

professional reasons. These students need to reach the level of the proficiency required for their jobs and their career development. The students' success in achieving the required level of language proficiency directly affects their specific jobs.

Table 4

Proposal for Implementation and Timetable

Time	Focus
Day 1	
8:00-9:30	What is vocabulary? Why is it important? Different aspects of knowing a word
9:45-11:15	What are the challenges? What is the teacher's job? Planning what words to teach
12:30-2:00	Conditions for Learning Vocabulary: Motivation, cognitive Factors, Nation's four strands Spaced Repetition
2:15-3:30	Cognitive factors: Noticing, retrieval, creative use Meaningful relationship How to evaluate vocabulary learning activities?
3:30-3:45	Wrap up /Exit card
Day 2	
8:00-9:30	Extensive reading and Vocabulary
9:45-10:50	Intensive reading and Vocabulary
10:50-11:15	Depth of Processing and Vocabulary Exercises
12:30-2:00	Teaching Strategies
2:15-3:30	Teaching Strategies (continued)
3:30-3:45	Wrap up / Exit card
Day 3	
8:00-9:30	Synformy Word cards and vocabulary notebooks Project instructions
9:45-11:15	Project: putting it all together
12:30-2:00	Participants presentations
2:15-3:00	Participants presentations (continued)
3:15-3:45	Wrap up/ Evaluation

Note. Timeframe for twelve 90-minute professional development sessions are planned to take place over 3 consecutive days

Project Evaluation

Evaluators use two general models to assess the effectiveness of a PD program. One model is based on the trainees' assessment of whether their learning goals are realized, and the second model is based on the trainees' assessment of the program (Woodward, 1991). In order to address whether the PD program goals and learning objectives are met, program facilitators and evaluators can use both models to some extent. At the end of the first two days of training, PD participants will respond to a formative evaluation. At the conclusion of the program, they will complete a summative evaluation survey.

Evaluation of the Course by Trainees

A PD program's model of evaluation is the trainees' evaluation of the course. Questionnaires, feedback forms, and discussion groups are some of the tools trainers can use to encourage participants to share their views during the course, at the end of the course, or sometimes after a course (Woodward, 1991). At DCLS, facilitators will ask participants to give feedback during and at the end of the program.

Formative evaluation. Program facilitators will implement a formative evaluation during the course by using exit cards to determine whether the project is successful in accomplishing its goals. Formative evaluation implemented in this manner is a useful tool for eliciting quick feedback on what has worked for PD participants and what they wish to change. Eliciting feedback during an ongoing training will inform the facilitator to modify training if necessary. Program facilitators will invite PD participants at the end of the first two days of training to provide an anonymous written narrative in

response to prompts or some open-ended questions. Facilitators will use prompts or questions to help participants reflect on what they have learned. The exit cards will also provide participants with the opportunity to express what they would like to change and to identify what additional resources they need. At the end of each day, facilitators will collect the exit cards and will have the chance to review participants' feedback and make changes accordingly for future programs to best help participants accomplish their goals.

Summative evaluation. At the end of the program, I will use a questionnaire to gather information from participants about their views on the effectiveness of the program. The end-of-the-program evaluation will be partly in the form of a Likert scale questionnaire and partly in the form of open-ended questions. Questions and statements in the questionnaire will address the effectiveness of the PD program and its learning goals. I will analyze the information from this form for building future workshops.

Evaluation of the Course by Assessing Trainees' Progress

Another model of evaluating a training program is to assess the trainees' new skills as they apply them in a real-world situation. One model of assessing trainees is the process model. With the process model of assessment, I will look at the PD program "less as an input-output equation" and more as an opportunity for trainees to become able to evaluate their own progress (Woodward, 1991, p. 213). Program facilitators can use microteaching activities as a tool for this kind of assessment (Wallace, 1991).

The linked microlessons that groups will plan and teach at the end of the training will bring different components of the program together. An integrating activity such as microteaching, which requires trainees to connect different components of the training,

works as an assessment type. Wallace (1991) recommended that, due to the artificial nature of this activity, it would be better if microteaching is not used directly as an assessment. However, Wallace did suggest that microteaching could be used for assessing the trainees' ability for critically reflecting on their own teaching. After each group's microlesson performance, the participants in that group as well as the other participants will get a chance to critically evaluate the performance through discussion. The self-evaluation and feedback participants provide after each performance will help facilitators gauge to what extent they have realized the learning objectives.

Implications Including Social Change

Local Community

Learning vocabulary is usually the most challenging task that language learners face (Lewis, 2000), and learning a large repertoire of vocabulary in a limited time in intensive programs is a particularly challenging task for students. Moreover, an effective approach toward teaching vocabulary and strategies that could help students learn vocabulary independently is a critical component of any language-training program. A vocabulary-focused teacher-development program can help instructors better facilitate students' learning of vocabulary.

The themes established from the data analysis of this study indicated the lack of extensive vocabulary-focused teacher-training programs and the lack of a cohesive evidence-based approach toward teaching vocabulary. In addition, instructors voiced a strong interest in learning about the best practices of vocabulary instruction and in

knowing how to support students with the daunting task of vocabulary learning. Guided by these themes, I chose PD as my project genre.

I designed the proposed PD program to address issues such as (a) the instructors' lack of training in vocabulary instruction; (b) the program's lack of a systematic approach in prioritizing and selection of vocabulary items, specifically for proficiency level beyond the ILR Level 2; and (c) long-term retention of vocabulary and the factors that affect students' ability to learn words, such as synformy. During the training, instructors will individually and collectively reflect on their teaching situation to learn and develop relevant knowledge with strategies to plan and create a vocabulary-focused program. The instructors' working knowledge of vocabulary-teaching strategies may enhance students' learning and retention of vocabulary in an intensive language program. In addition, this training may boost instructors' confidence.

Upon completion of this PD program, language instructors will be better prepared to evaluate vocabulary-related issues in their language programs and will be able to respond more effectively to students' problems. Exposure to the new methodologies and a deeper understanding of how to use them can help instructors better facilitate students' learning of vocabulary. With the new skills that instructors will gain in this PD program, instructors can amend the language courses and lesson structures to include vocabulary-focused activities and strategies that enhance the quality of the language programs and improve students' language-learning experience.

Far-Reaching Goals

The findings yielded a better understanding of the instructor-related factors in teaching vocabulary that can be implemented in other language programs. One aspect of language instruction in which adequate research was lacking was the discussion of vocabulary instruction from the instructors' perspective (Borg, 2009). The project was designed based on this study and may benefit teacher-educators to design a vocabulary-focused teacher-development program to facilitate a deeper understanding of vocabulary instruction methodologies and therefore bridge research into practice.

Teacher-educators who implement the design and methods of this PD program could also positively influence change in vocabulary instruction in less-commonly taught languages at other language schools. Vocabulary is one of the main components of language learning and is also one of the more challenging elements of language learning that requires special attention. Implementing this project may help language instructors in intensive language programs to learn and develop effective strategies and skills to change the way they approach and plan vocabulary instruction.

In the U.S., professionals have a high need to master critical languages for their jobs. Many of these languages are less-commonly taught languages, and access to language-training resources for them is severely lacking, including trained language instructors and useful materials. There is a need for training professionals who need these languages to succeed in their high-stakes jobs. Meeting this demand means that more structured language-training programs are needed. Training language instructors ensures the success of both instructors and students, which is only possible through using the

evidence-based best practices. The goal of this PD is to support language instructors in gaining pedagogical knowledge, tools, resources, and strategies that may allow them to provide effective vocabulary instruction for their students. Based on the findings of this study I selected the content of the proposed PD program, which the facilitators may use to support instructors as they work to enhance students' vocabulary learning.

Conclusion

Based on the findings of this study, I proposed a PD program to help enhance the quality of vocabulary teaching at DCLS. The PD program goal is to increase language instructors' competency in implementing the best pedagogical practices for teaching vocabulary. With such training, instructors will be able to support adult language-learners in developing effective strategies for learning vocabulary. Teacher training with a focus on vocabulary instruction enhances vocabulary learning in an intensive language program in which students need to learn a large repertoire of vocabulary in a limited amount of time.

Section 4: Reflections and Conclusions

In this section, I reflect on my journey as a novice researcher aiming to complete the project study. I discuss limitations and strengths of the project study and directions for further research. I explore what I learned through my experience as a researcher and how this changed me as a practitioner. I also describe how the study's findings guided the design of the PD project study. Finally, I discuss the impact of this project study on social change.

Project Strengths and Limitations

Project Strengths

One of the strengths of this project study was the exploration of participants' experiences through in-depth interviews. The enthusiastic participation of instructors in this case study allowed me to answer each research question. Themes emerged from data analysis that led to the selection of the content and design of the PD program.

Another strength of this study was the focus on issues related to teaching vocabulary in less-commonly taught languages. There is limited research on instructors' perspectives of teaching less-commonly taught languages. Through the study, I provided valuable insight about the challenges that instructors of less-commonly taught languages face and their beliefs of best practices when teaching vocabulary in intensive language programs.

Project Limitations

One major limitation of this study was the lack of inclusion of in-depth views of students in intensive programs. The exploration of students' views when learning

vocabulary could have complemented instructors' views in better understanding challenges. However, administrative limitations at the local site did not permit student participation in this study.

Another limitation of the project was the fact that participants mainly consisted of instructors with 5 or more years of experience working at the school. Including more novice instructors could have provided greater insight regarding the choice of PD content material and training needs because resources for novice instructors differ from those of more experienced instructors. From over 100 instructors who currently work at DCLS and teach less-commonly taught languages, I chose to interview nine. Although these interviews were valuable, the sample size was small. It would not be accurate to assert that these nine instructors represented the vocabulary-teaching experiences of all DCLS instructors' who teach less-commonly taught languages. Further studies would be necessary to learn about this diverse group of instructors.

Recommendations for Alternative Approaches

A survey would be a good alternative for this research. Rossiter et al. (2016) used an online survey to investigate the vocabulary knowledge, beliefs, and practices of instructors of adult English-as-a-second-language (ESL) learners. In the survey, Rossiter et al. elicited information from participants about their knowledge, vocabulary-teaching techniques and strategies, and other instructional practices. Using a survey such as the one designed by Rossiter et al. could be beneficial at DCLS to get input from a larger number of instructors. A survey might also be used to compare instructors' approaches to vocabulary instruction with their years of experience.

A similar survey with a focus on vocabulary learning could also be used to elicit information from language students. A study with a focus on students' experiences regarding vocabulary could complement the current project study. Learning about students' experiences would help instructors better understand the vocabulary and synformy issues and better focus training on what students need.

An alternative to 3 days of face-to-face training would be a blended learning program composed of weekly face-to-face 3-hour sessions for 4 weeks with self-study learning modules in between. The blended-learning approach would allow instructors to study the training materials at their own pace, and more content could be covered. The face-to-face sessions would be used for discussion and reflection and would give the instructors the opportunity to test some of the strategies in their classes and report the results in face-to-face training sessions.

Scholarship, Project Development, and Leadership and Change

Each step of the doctoral journey has been an opportunity to grow. The culmination of course work, being a consumer of research, analyzing myself as a practitioner, becoming a researcher, and developing a teacher-training program were all experiences that created learning opportunities. This journey has given me a critical perspective, and I find myself beginning another journey of evolving as a scholar.

The study gave me the opportunity to examine the challenges and successes of language instructors in intensive language programs. Analysis of data collected by interviews allowed me to better understand language instructors' experiences and their beliefs and views of their teaching situations. Also, I was better able to understand myself

as a teacher through reflection on ideas that I shared with other instructors.

Conducting educational research has given me a different perspective in viewing issues that arise in foreign language instruction. I have been able to use what I have learned to inform my instructional practices. I have also been able to respond to workplace challenges more effectively. For example, I have found what I learned from the research to be useful in a curriculum development project I am currently involved in at the site.

The doctoral journey has changed the way I engage with my colleagues. It has improved my communication and writing skills and has given me a stronger voice in expressing my ideas. At the same time, working on the project study has helped me develop a stronger grasp of the teaching situation and see opportunities for change. I am working on developing a new curriculum for my section, and what I have learned from my study has allowed me to convince others that change is possible and can be effective when reconsidering typical approaches.

My new practitioner perspective has changed my approach as an instructor and as a learning advisor. I now view and analyze instructional issues differently. I also try to carefully examine the issue before rushing to a solution, and I learned that I must first understand the problem before arriving at a solution.

The main reason I chose to study at the doctoral level was to do research in the field of foreign language learning. I have always felt that conducting research on a unique intensive language program for adults can contribute to the field of foreign language study. I wanted to acquire the scholarly knowledge and skills necessary to do that.

I teach a less-commonly taught language, and I deal with many challenges common among this group of languages. As a learning advisor, I talk to students to understand their difficulties with language learning at a deep level. I hear questions and requests that students have. Many of these questions are intriguing and could be topics of future studies.

Conducting a literature review and gathering and analyzing data for a case study at DCLS provided me with firsthand knowledge and experience that will help me with future studies. I can see myself embarking on many new projects going forward. The work I did has not only prepared me for conducting research but has also changed my view on how to be a better consumer of research for practice. I can discern among existing data, and what I have discovered has been valuable to my practice.

The process I have learned in the literature searches has improved my analytical skills and allowed me to develop a more refined critical perspective. I used to read the findings of published studies as a finalized product, but I learned through my own study and literature reviews that studies and findings are a piece of broader scholarly discussions. I approach studies now with a better understanding of the nuanced component versus the overall picture. I also can better discern the strengths and limitations of studies.

As a researcher, I now understand the importance of narrowing the problem and asking focused questions. A risk of not having a clearly defined problem is that it could mean that the wrong research method is selected. Without careful description of the problem and focused research questions, there could be a high failure risk.

I will always remember my first interview and how nervous I was trying to not make mistakes. Every interview has made me better prepared for the next one. Now I have a better understanding of the need for an interview protocol including open-ended questions and preparation for different situations.

Analyzing the data was another significant learning experience. The process of transcribing interviews and organizing the data was overwhelming. I tried several different approaches before using the Dedoose application. The data could be easily organized and retrieved using this software. I gained much insight and skills as I learned how to break data down to codes and themes.

The PD training I developed based on the findings of the study was another learning experience. I learned how to set realistic goals, be selective and prioritize the content of training, and use different activities to facilitate learning. This experience made me more aware of different aspects of planned training programs. I planned a program to bring research into practice, and that experience made me grow as an educator.

Reflections on the Importance of the Work

My interest in this study started many years ago when I began teaching at DCLS. As a language instructor and learning advisor, I observed how students struggled with learning and retaining vocabulary. I witnessed students who were overwhelmed and frustrated by the large number of words. I started to feel that a focus on the vocabulary element of language learning was missing in the language program at DCLS; many times I found myself empathizing with students rather than helping them.

Consequently, I started this project with the goal to better understand the situation and how instructors could help students learn vocabulary. I heard from many colleagues about the struggle that students have with vocabulary learning; it became clear that I was not alone in the challenges I saw and how unprepared I felt, especially regarding the challenges of teaching vocabulary. I was interested in learning about other language instructors' experiences with general vocabulary instruction and synforms.

Many students with whom I worked had difficulty handling synforms. I wanted to understand the nature of the problem with learning synforms and how this issue differed for different languages. My goal was to explore the resources and training instructors needed to help students learn vocabulary and synforms in an intensive language program.

Based on my observations, I concluded that the main challenge was teaching vocabulary after the ILR Level 2. At this level, students usually lacked the vocabulary they needed, and that was the period that students' frustration surfaced. I decided to narrow the focus of my research questions to vocabulary teaching beyond that level. However, what I learned through preparing this project changed my view of the issue.

By engaging in data analysis and the literature review, I learned that a big part of the problem at DCLS is a planning issue and starts before students get to ILR Level 2, which went against what I used to think about the nature of vocabulary learning beyond the ILR Level 2. This insight has changed the way I approach vocabulary at DCLS. The findings backed the development of a PD program that is focused on what instructors need to plan when teaching vocabulary. The findings of the study and the PD program may have a positive impact on vocabulary instruction at DCLS.

Implications, Applications, and Directions for Future Research

Most instructors at DCLS are educated professionals from other fields who are hired to teach on the basis of their native language proficiency. The study findings indicated that many language instructors do not have much training in pedagogical theories and practices. However, they bring a wealth of work experience from other fields and the knowledge of culture to the school. Many of them become great language instructors whom many students admire.

I learned through interviews that instructors at DCLS share common traits and ideas. They have observed many shared challenges and have learned similar strategies through experience. However, despite the commonalities of instructors' experiences, differences were evident in the way they ranked challenges and prioritized their efforts, which was probably based on their understanding of how vocabulary is learned.

Two common ideas expressed by instructors were intriguing. One idea was that each class is unique, and instructors need to customize their teaching. Another common idea was their skepticism about what the school management presents as new research-supported approaches. I wondered how instructors would reconcile these two ideas without dismissing discussions about how to find a systematic shared approach to improving vocabulary instruction.

The top-down management approach of the schools' language training will not be successful without involvement and buy-in of the instructors. In addition, the unique instructional situation and intensity of the program must be approached with caution, especially when identifying the application of the best practices in other fields such as

English as a second or foreign language. Simultaneously, when management develops new approaches, it does not always result in a deeper understanding of the vocabulary-teaching process. The top-down approach cannot be effective without instructors' realization of the need for change. Language instructors need to understand the challenges of vocabulary teaching through reflection and learning about the vocabulary-acquisition process. Therefore, if DCLS management is open to identifying alternative PD approaches, training and outcomes could be positively changed.

Currently, instructors do not have progressive debates on specific elements of language teaching such as vocabulary. Successful experiences among instructors can provide the basis for much-needed discussions among them. Familiarity with learning theories and best practices can validate what instructors do and empower them to share successful experiences with others in their field.

Many instructors asked for practical tips for teaching vocabulary. I think that having a practical element to the content of training is important. However, for instructors to confidently make decisions on how to use different practical strategies, they need to analyze their teaching situation and understand the impact of each strategy. Familiarity with research-based best practices will give instructors the confidence needed to make decisions and participate in discussions that will have a meaningful impact on vocabulary instruction at DCLS. I developed this PD program, which will help instructors reflect on their teaching and understand core elements of vocabulary learning and principles of learning, from data analysis and literature review. This approach in PD will bring about positive change in the way instructors teach vocabulary at DCLS.

This study generated valuable findings that may help practice at DCLS. The themes that emerged not only helped explain the situation of the vocabulary instruction at DCLS but also raised some questions about how effective the vocabulary-learning process is for students in an intensive language program. As a result, a worthwhile direction for future research would be taking a case study approach to exploring the experiences of adult students in an intensive language program. Such research would provide a more complete understanding of students' views regarding vocabulary learning and students' challenges in intensive programs. The in-depth understanding of different factors that interact in learning vocabulary may inform practice and help instructors effectively target the areas that help students learn vocabulary.

I completed the project study and the PD program as the final steps of my doctoral journey. The journey itself, however, impacted me greatly, which is something that I did not anticipate. When I enrolled in the doctoral program, my main goals were to develop the skills necessary for research and to further my education. Though I learned necessary research skills, the knowledge I gained deepened my understanding of the meaning of research. A research study is a long process and, along that journey, I became much more aware of the incremental learning process and developed the discipline necessary to slowly move towards this learning goal. But above all, the critical perspective I gained is my ultimate takeaway from the journey, which has impacted many aspects of my personal and professional life.

This study has had a strong connection to my teaching and has directly affected my skills as a practitioner; I am a better teacher as a result of this process, and the

findings from the study and the development of the PD program will help other language instructors also. The study helped me better understand myself as a practitioner and other instructors' needs and experiences in a specific teaching situation. This study has given me a platform to focus my attention, and it is the beginning of my future study. I will continue to study the topic of teaching vocabulary, and I hope to work with other instructors and educators to develop programs that change practice in order to help language learners have a better language-learning experience. A number of possibilities lie ahead for me, and I will use what I learned to support language instructors and students in intensive language programs.

Conclusion

Adult language learners whose professional goals require general proficiency (ILR Level 3) face the challenging task of learning a substantial repertoire of vocabulary in a limited time. Vocabulary is vital to the development of language proficiency, and the level of language proficiency directly correlates to the number of words that language learners know. Therefore, in intensive language programs in which participants often have a limited time to achieve advanced levels of language proficiency, retaining vocabulary is one of the most challenging elements of language learning. To help students succeed in achieving their language and vocabulary goals in this setting, language instructors need to be equipped with tools, strategies, and relevant background knowledge regarding vocabulary instruction.

My purpose in this study was to develop a better understanding of teacher-related factors of vocabulary instruction in intensive language-training programs. The study's

focus was on language instructors' experiences, training, and resource needs in teaching vocabulary beyond the ILR level 2 for less-commonly taught languages. I also focused on the phenomenon of synformy in teaching vocabulary.

The findings of this study revealed that language instructors identified many challenges when teaching and learning vocabulary, including challenges that are related to different aspects of knowing a word, to students' personal traits, or to the school's language program objectives and enforced practices. Additionally, instructors recommended strategies such as recycling words and using the words in speaking, which are effective strategies in vocabulary learning. However, the majority of instructors were uncertain about their roles in teaching vocabulary. Instructors were not always able to analyze the challenges and explain the underlying cause of issues that students faced. Instructors were uncertain on how to adopt strategies to target specific challenges, were hesitant to justify why they recommended or used certain strategies, and were not confident about implementing vocabulary-learning techniques.

The findings also indicated that most participants had little to no training prior to starting their job as a language instructor and had received little in-service professional training that directly related to teaching vocabulary. Instructors expressed a great interest in learning about evidence-based best practices in teaching vocabulary. Equally important, the findings revealed that instructors did not have any training on synforms or how to teach them. Although many instructors intuitively adopted effective strategies to address challenges caused by synforms, they were not able to explain the nature of the

challenges caused by synformy and were uncertain about how to respond to these challenges in a timely manner.

The findings of this study helped to better identify specific areas of instructional knowledge related to vocabulary teaching that could best help language instructors learn and develop effective strategies and skills to approach and plan vocabulary instruction. The focus of this study was beyond the ILR level 2; however, the findings revealed that without a systematic approach in planning and prioritizing which words to teach, such as a frequency approach, it would be difficult for instructors to know what students need at any level. To improve their teaching skills and specialized language knowledge, instructors should focus on prioritization of the words required for students to achieve higher levels of proficiency from the start of the language-training program. Instructors must have a solid understanding of the best practices for prioritizing instructional elements related to vocabulary, such as the selection of high-frequency words and useful vocabulary.

A vocabulary-focused program is imperative to students' success. To implement such a program, language instructors not only must incorporate the words students need but also must provide instructional guidance and strategies at different levels of proficiency. The findings of this study led to the development of a professional training program with a focus on developing background knowledge around the principles of vocabulary instruction. Specifically, this study clarified the need to prioritize instructional elements and the application of evidence-based best practices to support instructors with their instructional skills and to empower them by validating their strategies.

As a result of the professional development training, language instructors will be better prepared to evaluate vocabulary-related issues and to respond more effectively to students' problems. Implementing this program could help language instructors in intensive language programs to learn and to develop effective strategies and skills that may change the way they approach and plan vocabulary instruction. Training language instructors ensures the success of both instructors and students and has the potential to affect much positive social change for intensive language programs.

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Appendix A: The Project

This professional development program is designed to support instructors of less-commonly taught languages face the challenge of teaching vocabulary in an intensive program. The goal is to help instructors make informed decisions with regard to selecting vocabulary and strategies to teach vocabulary and to determine which instructional methods and activities best support vocabulary learning needs of language learners in an intensive language program, in which students need to achieve ILR Level 3 proficiency. The training will impart the principles and methods of teaching vocabulary through reflective activities and hands-on lesson planning, presentation, and critique.

Timeframe

The professional development program is a 3 day face-to-face training presented through twelve 90-minute sessions at the school. These face-to-face sessions will include presentations, discussions, collaboration with colleagues, hands-on activities, and simulations that lead to a better understanding of the current situation and gradually build the knowledge of best practices in vocabulary instruction. A formative evaluation and a summative evaluation will be provided at the end of the first two days of training and at the conclusion of the program, respectively.

Target Audience

The target audience for the PD program is the language instructors who teach in an adult intensive language-training program.

Professional Development Program Goals

These goals and objectives can help instructors better understand how and why they can benefit from the content of the PD program and different tools and strategies in teaching vocabulary. The PD program is designed to help instructors support students meet their goals of reaching general professional proficiency level in an intensive program. The program is designed to achieve seven main goals:

- develop in instructors an understanding of the principles of vocabulary; teaching based on the current theories of language acquisition and research;
- expand the pedagogical approaches, strategies, methods, and tools available to instructors for teaching vocabulary in an intensive program;
- show the instructors how to apply principles of vocabulary teaching and principles of learning that affect long-term retention of vocabulary;
- raise instructors' awareness of standards for setting planning priorities such as word frequency and coverage;
- broaden instructors' understanding of the phenomenon of synformy and approaches to teaching synforms;
- deepen instructors' awareness of different aspects of vocabulary learning and expectations of learning rate and retention of vocabulary; and
- raise instructors' awareness about their beliefs and their practices in the classroom through reflection.

Professional Development Program Objectives

Upon completion of the PD program, language instructors will be able to do several things. They will be able to

1. discuss what methods are effective for teaching vocabulary as well as why they are effective;
2. demonstrate competence in the implementation of a wide range of teaching strategies;
3. apply the major concepts, principles, theories, and research related to vocabulary instruction to design lessons that support vocabulary learning and long-term retention;
4. discuss the instructional priorities such as word frequency and coverage and adapt teaching materials based on these priorities;
5. analyze challenges students have with learning synforms and discuss and apply strategies for teaching synforms;
6. describe what a word is, explain what it means to learn a word, decide what words students need to learn, and identify challenges that students face in learning a large repertoire of vocabulary; and
7. modify their vocabulary-teaching strategies after reflecting on information gained from these training goals and objectives and from self-evaluation.

Facilitator Notes

Preparation:

Materials: Name tents, markers, pens, sticky notes, notebooks, highlighters, flip charts, and a double-pocket folder on the table for each participant with the program schedule in one pocket and all the handouts in the other pocket.

Room setup: Three tables with four chairs and a flip chart for each table; the sign-up sheet and icebreaker sheets on a table close to the door.

Day 1—Morning

8:00 Coffee/Sign up/Icebreaker Activity

Ask participants to take a seat. Follow up on the icebreaker activity briefly by asking questions like “Who was able to fill out all of the boxes?” and “What answer did you find the most interesting?”

8:15 Welcome and Introduction/Schedule and Goals/Developing Norms

Introduce yourself, and ask participants to introduce themselves and to share which language they teach, how long they have been working at the school, and what they hope to learn in this workshop.

Briefly give an overview of the 3-day workshop and introduce the procedures, goals, and objectives for today’s PD session.

Assist the participants to develop a list of norms and ground rules by asking them, “When you are in a workshop, what do you look forward to the most, and what do you dread the most?” Record their responses on a poster sheet and pin it on the wall.

8:30 What is vocabulary? Why is it important? (Slides 2–7)

Participants as a whole group will discuss what vocabulary is and why vocabulary is important. Share a quote about vocabulary to build interest and extract ideas and opinions. Then write what the participants say on a flip chart. Discuss together and present a definition and some examples of what encompasses a definition of vocabulary.

8:45 Different Aspects of Knowing a Word (Slides 8–16)

Reflection break

Participants will individually reflect on a word or phrase they have taught in class recently and will write in their notebooks considering the following questions: Why did you introduce that word? What did you expect students to do with the word? Does that word usually go in a phrase with other words? Does it have irregular forms? What was difficult for students learning the word? In what context can students use the

word? (10 min.)

Video and follow-up discussion

The participants will watch a video about the importance of vocabulary and the different aspects of knowing a word. Then, as a whole group, participants will discuss what it means to know a word. Record different aspects of knowing a word on a flip chart as participants point them out. (10 min.)

Presentation

Present different aspects of knowing a word and allow time afterwards for discussion, questions, and comments. (25 min.)

Content: Different aspects of knowing a word and the distinction between receptive and productive knowledge.

Suggested resource: *Learning Vocabulary in Another Language*, Nation, 2013, pp. 44–91 (book).

9:30

Break

9:45

What are the challenges in teaching vocabulary? (Slide 17)

Brainstorming

Participants will individually brainstorm about the issues they and their students have with teaching and learning vocabulary. (5 min.)

Group discussion

In groups of four, participants will share, discuss, and compare the issues they have jotted down. Each group will pick five main issues and will write them down on a poster card. With the whole class, each group will share what they discussed and the five key challenges they picked. (15 min.)

Debriefing

Debrief the activity by highlighting the common issues that the instructors mentioned and invite questions and comments. (10 min.)

Hang the key issues and challenges from each group on the wall.

10:15

What is the teacher's job? (Slide 18)

Group brainstorming and discussion

Give each participant a number from one to four and ask participants to break into new groups according to their numbers.

At their tables, participants will brainstorm and engage in discussions about what a teacher's jobs and responsibilities are with regard to vocabulary. Each group designates one person to write the key issues and challenges they discussed on a flip chart. Participants will choose and vote as a whole group on the top four responsibilities. (10 min.)

Sharing ideas with the whole group

One person from each group will volunteer to share what they discussed and the four main responsibilities, as other groups gather around that group's flip chart.

After each presentation, ask other groups whether they have any

comments or questions. (10 min.).

10:35 The Teacher's Job (Slides 19-22)

Presentation

Present to participants what a teacher's job responsibilities are with regard to teaching vocabulary and how they can plan what words to teach. Allow time afterward for discussion, questions, and comments. (15 min.)

Content: A synopsis of research findings that explains major roles instructors can have in teaching vocabulary and provides practical tips for teaching vocabulary.

Suggested resources: *Teaching Vocabulary*, Lessard-Clouston, 2013, pp. 16–22 (book); *Teaching Vocabulary*, Nation, 2008, pp. 1–6 (book).

10:50 Frequency Approach (Slides 23–30)

Presentation

Explain the meaning of *word frequency* and its significance in teaching vocabulary. (5 min.)

Content: Topics such as the amount of vocabulary learners need to know; frequency-based word lists; and the definitions of different categories of words, such as *high-frequency words*, *mid-frequency words*, *low-frequency words*, and *specialized words*.

Suggested resource: *Learning Vocabulary in Another Language*, Nation, 2013, pp. 16–35 (book).

Group discussion

In groups, participants will discuss what they think about the frequency approach for selection of vocabulary in their teaching situations. (10 min.)

Sharing ideas

Each group will share the highlights of what they discussed with other groups.

After each group shares ideas, invite other participant questions, comments, and suggestions. (10 min.)

11:15 Lunch

Day 1— Afternoon

12:30 Planning Activities for Vocabulary Learning (Slides 31–33)

Reflection

Instruct participants to reflect on the last 4 weeks of their class and make a list of at least 20 activities done in class that they think directly or indirectly have had an impact on vocabulary learning. Instruct them to write each activity on a separate sticky note. (15 min.)

Presentation

Briefly explain instructors' roles in creating opportunities for using vocabulary through activities and how a student's vocabulary grows from it. (5 min.)

Content: Creating opportunities for vocabulary learning and the concepts of incidental and deliberate vocabulary learning.

Suggested resource: *How Vocabulary is Learned* (Oxford Handbooks for

- Language Teachers), Webb & Nation, 2017, Kindle version, (book).
- 12:45** **Nation's Four Strands** (Slides 34–47)
- Presentation
- Explain how to approach a vocabulary-focused training using Nation's four strands. (15 min.)
- Allow time for whole-group discussion, comments, and questions. (10 min.)
- Content:* Nation's four strands and teaching vocabulary in a well-balanced program.
- Suggested resources: "Four strands," Nation, 2007, available at <https://www.victoria.ac.nz/lals/about/staff/publications/paul-nation/2007-Four-strands.pdf> (article); "Applying Four Strands to Language Learning," Nation, 2012, available at <https://www.victoria.ac.nz/lals/about/staff/publications/paul-nation/2007-Experience-tasks.pdf> (article); *Learning Vocabulary in Another Language*, Nation, 2013, pp. 2–4, p. 578 (book); "Instructed Second Language Vocabulary Learning," Schmitt, 2008, available at https://docs.wixstatic.com/ugd/5f2482_2500e8cc2e71419d90b923eb4a462b4f.pdf (article).
- Pair activity
- Hang six charts displaying the four strands on the walls and instruct participants to collaborate with another colleague to classify the activities of the last 4 weeks that they came up with in the previous reflection break. They will stick each note on the part of the chart they believe it belongs to. Remind them to use the table of activities. (15 min.)
- Hang the charts before the start of the session in different corners of the classroom with enough space between them.
- Sharing ideas
- Each pair will share their experience and what they learned doing the activity. Also, the pairs will tell the group which activity or activities that they have done in class and found to be the most effective.
- At the end, debrief what was shared and compare the charts to show patterns. (15 min.)
- 1:40** **Spaced Repetition** (Slides 48–52)
- Presentation
- Explain the importance of space repetition for learning vocabulary. (10 min.)
- Group brainstorming and discussion
- In groups, participants will discuss how they can integrate spaced repetition in their teaching and curriculum. (5 min.)
- Sharing ideas
- One person from each group will volunteer to share the highlight of what they discussed in their group. (5 min.)

2:00 Break**2:15 Cognitive Factors: Noticing, Retrieval, Creative Use (Slides 53–67)**Presentation

Give a presentation on cognitive factors involved in vocabulary learning: noticing, retrieval, and creative use. (15 min.)

Content: Cognitive factors involved in vocabulary learning including noticing, retrieval, and creative use.

Suggested resource: *Learning Vocabulary in Another Language*, Nation, 2013, pp. 102–112 (book).

Open forum

Allow time for sharing questions, comments, and ideas about the presentation. (10 min.)

2:40 Retention (Slides 68–73)Presentation

Explain factors that can strengthen retention of vocabulary, how to introduce vocabulary in lexical sets, and what to avoid. Demonstrate the keyword and word part technique. Allow time for questions and comments. (15 min.)

Content: Factors and techniques that can strengthen retention of vocabulary, such as keyword and word part technique.

Suggested resources: “The word part technique: A very useful vocabulary teaching technique,” Zheng & Nation, 2012, available at

<https://www.victoria.ac.nz/lals/about/staff/publications/paul-nation/zheng-word-part-technique.pdf> (article); *Learning Vocabulary in Another Language*, Nation, 2013, pp. 112–118 (book); *Teaching Vocabulary*, Nation, 2008, pp. 107–114 (book).

2:55 How to Evaluate Vocabulary-Learning Activities (Slides 74–79)Presentation

Demonstrate to participants how to use vocabulary questions from *Technique Feature Analysis* (Nation & Webb, 2011) as a tool for evaluating the effectiveness of activities. (10 min.)

Content: Technique Feature Analysis criteria.

Suggested resources: *How Vocabulary is Learned* (Oxford Handbooks for Language Teachers), Webb & Nation, 2017, Kindle Location 5461 (book);

“Involvement Load Hypothesis and Technique Feature Analysis,” available at <http://ijrltt.com/fulltext/paper-26092016094840.pdf> (article).

Pair activity

The same pairs from before will work on their chart of activities, this time analyzing the activities for how they create conditions of learning for vocabulary. (10 min.)

Sharing ideas with the full group

Each pair will share their experience and what they learned or noticed through the activity. (10 min.)

Record the highlights of what participants share and debrief what was shared at the end of this discussion. (5 min.)

3:35 Exit Card

Give index cards to participants and have them complete the formative evaluation questions. At the door, put a box for participants to drop off the cards as they leave.

3:45 End of the First Day**Day 2—Morning****8:00 Vocabulary in Extensive Reading (Slides 76–89)**Presentation

Provide a definition of extensive reading and explain what 98 % *familiar vocabulary coverage* means. (10 min.)

Content: Vocabulary learning through extensive reading.

Suggested resources: “Principles guiding vocabulary learning through extensive reading,” Nation, 2015, available at

<http://nflrc.hawaii.edu/rfl/April2015/discussion/nation.pdf> (article); “The inescapable case for extensive reading,” Warring, 2009, available at http://www.robwaring.org/er/what_and_why/er_is_vital.htm (article);

Teaching Vocabulary, Nation, 2008, pp. 69–82 (book).

Reflection break

Participants will reflect on what access their students have to reading and listening material, in and out of class, that is interesting to them and is 98 % comprehensible to them? How would they know if the materials are 98 % comprehensible and interesting? (5 min.)

Video

Participants will watch a video of Paul Nation talking about extensive reading and whether learning 1,000 words a year with an extensive reading program is feasible. (15 Min.)

Debrief what was discussed in the video and present the characteristics of extensive reading. Participants, as a whole group, will share their ideas, comments, and questions about the video. (10 min.)

Group discussion

In groups of four, participants will discuss whether they would consider developing an extensive reading program. Why or why not? Groups should discuss pros and cons of developing such a program for their language and what they would need in order to do it. (10 min.)

Sharing ideas

Each group will share what they discussed with the whole group. (10 min.)

Video

Participants will watch an excerpt of Paul Nation’s lecture about instances of successful extensive reading programs. (5 min.)

Ideation

Participants are encouraged to think of creative ways to develop an extensive reading or listening program for their students. They should individually come up with as many ideas as possible and write each of their ideas on separate sticky notes. (5 min.)

Sharing ideas

On a designated chart, participants will post their ideas and share them with the full group one by one. (15 min.)

Record the participants' ideas to post on the class Padlet for participants' future access. Debrief the ideation activity by highlighting some of the practical solutions, common interests, and creative ideas. (5 min.)

9:30 Break**9:45 Vocabulary Instruction in Intensive Reading** (Slides 91–96)Presentation

Demonstrate how to deal with different vocabulary in intensive reading. Allow time for questions and comments. (15 min.)

Content: Vocabulary learning through intensive reading.

Suggested resource: *Teaching Vocabulary*, Nation, 2008, pp. 59–65 (book).

Video

Participants will watch a video of Paul Nation talking about vocabulary in intensive reading. (30 min.)

Group activity

Participants in groups will discuss and categorize different vocabulary. (20 min.) [Handout #1]

10:50 Depth of Processing and Vocabulary Exercises (Slides 98–105)Presentation

Explain depth of processing theory and vocabulary exercises according to the level of proficiency and depth of processing of students.

Demonstrate how instructors can help students use word cards and a word notebook. (10 min.)

Suggested resource: “Vocabulary notebooks: Theoretical underpinnings and practical suggestions,” Schmitt & Schmitt, 1995, available at https://docs.wixstatic.com/ugd/5f2482_6515d7e1dedd40caace48d113287f86b.pdf (article).

Group discussion and brainstorming

In groups of four, participants will discuss how instructors encourage learners' autonomy by teaching them strategies. (5 min.)

Sharing ideas

Each group will share what they discussed with the full group. (10 min.)

11:15 Lunch**Day 2—Afternoon****12:30 Vocabulary-Teaching Techniques and Teaching Vocabulary-Learning Strategies** (Slides 105–112)

Participants will get a list of vocabulary strategies. Participants will volunteer to share whether they have used any of the strategies and what they think about their potential effectiveness. Participants will then select 12 strategies they would like to learn or learn better. They also can recommend other strategies that are not included on the list. (10 min.)

Note to facilitator: Record the list of the strategies participants have selected

on a chart. Instruct participants to choose two strategies and put a check mark next to the strategies they choose. No more than two people can choose the same strategy. Each participant then pairs up with the person who has selected the same strategy.

There will be two rounds of micro-lessons. Participants will work in pairs and focus on one of the strategies they have selected, one at a time.

First round

Participants will get a description of the strategy that they will present at the first round. They can use the internet or resources provided by the facilitator to research the strategy they will use in their mini lesson. The facilitator will be available for helping groups with strategies. Each pair will decide how to give their presentation. (20 min.)

Each pair will present the strategy they choose within 5 minutes. Next, a discussion and question-and-answer session will follow. The full group will discuss how they would use that strategy and which level of proficiency that strategy suits the best. (Total of 60 min.)

Note to facilitator: Discuss briefly the purpose and guidelines for microteaching. Demonstrate the activity if participants find the activity's directions complicated. Keep note of time.

2:00 Break

2:15 Teaching Strategies (continued)

Second round

Participants will regroup for the second strategy with the person who has selected the same strategy.

Participants will work in pairs. They will get a description of the strategy they will demonstrate. They can use the internet or resources provided by the facilitator to research the strategy they present. The facilitator also will be available for helping groups with strategies. Each pair will decide how to give their presentation. (20 min.)

Each pair will present the strategy they chose within 5 minutes. Next a discussion and question-and-answer session will follow. The full group will discuss how they would use that strategy and which level of proficiency that strategy suits the best. (Total of 60 min.)

Suggested resources: "Current trends in vocabulary learning and teaching," Schmitt, 2007, available at

https://docs.wixstatic.com/ugd/5f2482_795f5357bdf84c369a8224e978678ae7.pdf (book chapter); "Vocabulary learning strategies," Schmitt, 1997, available at <https://www.norbertschmitt.co.uk/book-chapters> (book chapter);

"A practical Guide for Teaching Vocabulary," Ur. Haim, Plavin, Shlayer, Steiner, Timna, 2014, available at

http://cms.education.gov.il/EducationCMS/Units/Mazkirut_Pedagogit/English/TeachersResourceMaterials/Publications/Teachingvocabulary.htm (article);

"Vocabulary Learning: A Critical Analysis of Techniques," Oxford & Crookall, available at

<http://www.teslcanadajournal.ca/index.php/tesl/article/viewFile/566/397>
(article).

3:35 Exit Card

Give index cards to participants and have them complete the formative evaluation questions. At the door, put a box for participants to drop off the cards as they leave.

3:45 End of the Second Day

Day 3—Morning

8:00 Synformy (Slides 113–129)

Presentation

Give a presentation on synformy phenomenon and introduce different kinds of synforms. (20 min.)

Content: Synform categories and practical tips on teaching synforms.

Suggested resource: *Similar lexical forms in interlanguage*, Laufer-Dvorkin, 1991 (book).

Reflection break

Participants will reflect on problematic synforms in their language and how they have been dealing with them. (10 min.)

Group discussion

Participants in groups will share their experiences with synforms and the strategies they have used to teach them. (10 min.)

Sharing ideas

Each group will share what they discussed with the full group. (10 min.)

Presentation

Share with participants how research can inform practice in teaching synformy. (10 min.)

9:00 Review (Slides 129–131)

Present Nation's principles of teaching vocabulary (Nation, 2013a, p. 574).

9:20 Project Instructions

Give instructions about the final project.

Linked Micro-Lessons

In groups of three, participants will have 90 minutes to design a vocabulary-focused lesson to teach within 15 minutes. Other participants will have the roles of students. The participants in each group will work together to prepare the lesson as a whole, and then they will decide who teaches which part. The group will need to come up with the materials to teach or enhance one of the lessons they have in their curriculum for teaching vocabulary. The participants are encouraged to be creative. They will be able to use all the facilities available such as a smart board, charts, realia, etc.

9:30 Break

9:45 Project: Putting It All Together

Time for designing the lessons.

11:15 Lunch

Day 3—Afternoon

12:30 Participants' Presentations

Each group will demonstrate how to teach a vocabulary-focused lesson. (15 min.) and, after their presentation, will answer the other participants' questions about the lesson and their selection of certain words, activities, strategies, and materials. Each group will be given time to self-evaluate their own teaching and lesson plan. Each group will also receive feedback after their presentation from other participants and the facilitator according to Nation's principles of teaching vocabulary. (15 min.)

2:00 Break**2:15 Participants' Presentations (continued)****3:00 Wrap-Up Activity**Sharing at least one takeaway

Allow participants to think of one thing to share (an "aha" moment, something they want to think about, something they will try, a statement that has stuck with them, etc.). Instruct them to write that idea on an index card clearly and place them on a table. Ask participants to read each index card and rate them from 1–3 according to how they think the card is relevant to them. Calculate the numbers on each card and rank three of them with the highest score.

3:25 Evaluation

Participants will complete the PD evaluation form.

Presentation Slides

Vocabulary



1

Which one is considered as Vocabulary?

- ☐ Nice to meet you!
- ☐ Happy
- ☐ The
- ☐ As well
- ☐ Take advantage of
- ☐ John
- ☐ Is
- ☐ Of
- ☐ Good morning
- ☐ Of course
- ☐ Right away
- ☐ My

3

Why Vocabulary?

Vocabulary is a fundamental component of language, which is vital to the development of reading, writing, and listening competencies.

Willis & Ohashi, 2012

5

What is it?

“The words of a language, including single items and phrases or chunks of several words which carry a particular meaning, the way individual words do.”

Lessard-Clouston, 2013

2

Which one is considered as Vocabulary?

- ✓ Nice to meet you! (**formulaic sequences**)
- ✓ Happy (**single word**)
- ✓ The (**single word**)
- ✓ As well (**chunks**)
- ✓ Take advantage of (**chunks**)
- ✓ John (**single word**)
- ✓ Is (**single word**)
- ✓ Of (**single word**)
- ✓ Good morning (**formulaic sequences**)
- ✓ Of course (**chunks**)
- ✓ Right away (**chunks**)
- ✓ My (**single word**)

4

Language Learners' View

- Many language learners regard vocabulary knowledge as the most important factor in their success and consider lack of sufficient vocabulary as the main difficulty in both productive and receptive levels of language use (Choo et al., 2012).
- Vocabulary learning is an issue for adult second language learners and they express a strong desire for vocabulary instruction (Folse, 2004).

6

What does it mean to know a word?

<https://www.youtube.com/watch?v=XvAVMJH7B04>

7

was difficult for students learning that word?



Think of a word or phrase you taught in class recently. Why did you introduce that word? What did you expect students do with the word? Does that word usually go in a phrase with other words? Does it have irregular forms? What was difficult for students learning that word?

8

Reflection Break

Think of a word or phrase you taught in class recently. Why did you introduce that word? what did you expect students do with the word?
Does the word usually go in a phrase with other words? Does it have irregular forms? What was difficult for students learning that word?



9

Receptive and Productive Knowledge

Receptive knowledge:

- **Recognition** and meaning recall

When one hears or reads a word, perceives the form and tries to retrieve the meaning.

productive knowledge:

- Form recognition and form recall

When one conveys a message, retrieves spoken or written form of a word

Schmitt, 2010

10

Which one is easier?

All things being equal, **receptive knowledge** is easier to acquire, because it

- gets more practice
- involves less amount of knowledge
- access
- motivation

Nation, 2013

11

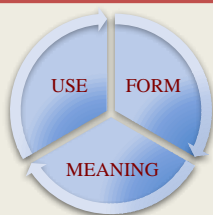
Receptive or Productive?

Learners need receptive learning for receptive use and productive learning for productive use



12

What is involved in knowing a word?



Nation, 2001, p. 27

13

What is involved in knowing a word?

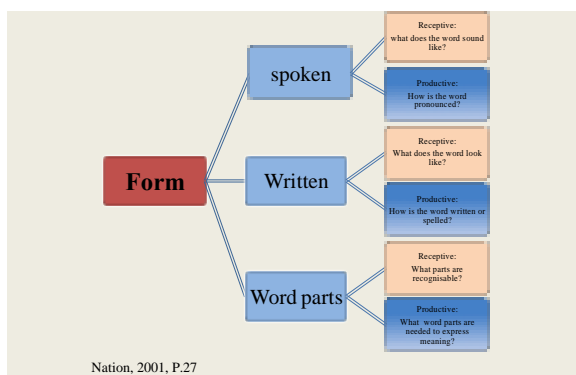
Refer to
<https://eslsecondarynetworkceom.wikispaces.com/file/view/What's+involved+in+knowing+a+word+-+table.pdf>

Nation, 2001, p. 27

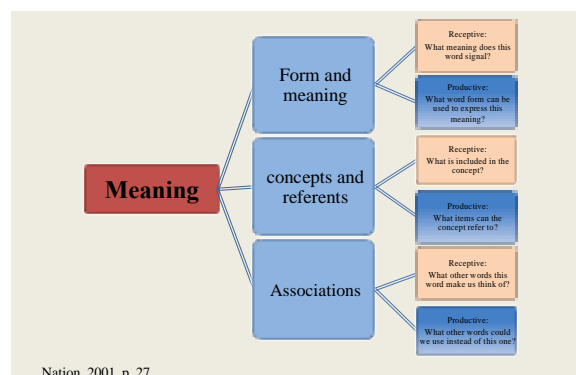
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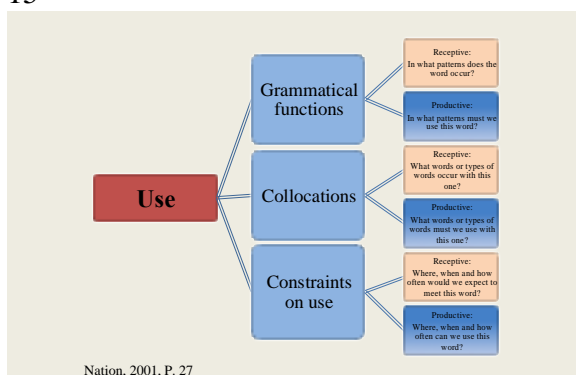
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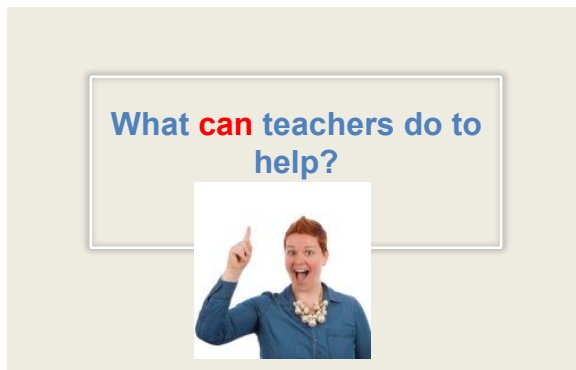


17

What are the challenges in learning vocabulary?



18



19

In order of importance:

1. Planning
2. Strategy training
3. Testing
4. Teaching vocabulary



20

Planning

Teachers should plan **what words** to focus on and plan **opportunities** for students to learn a word



21

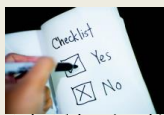
What words?

Not all vocabulary is created equal



22

Is there a particular reason I should choose this word?



- ☐ It is **relevant** to my students' learning objectives
 - ☐ It is a **high frequency** word
 - ☐ It is **easy** to learn
- Nation, 2013

23

Frequency approach

Simply put:

More frequent words are more useful than the less frequent words

Zimmerman & Schmitt, 2005, P. 165

24

High-frequency: what does it mean?

Corpora research in English has resulted in three levels of vocabulary

High-frequency	Mid-frequency	Low-frequency
2,000 word families	2,000-9,000 word families	9,000+ word families

Nation, 2013

25

How many words a learner need?

Daily conversation

2,000 - 3,000 for Basic communication

5,000 - 7,000 for conversation on a wide range of topics

Schmitt 2013

26

- knowing the 3,000 most frequent word families can enable students to recognize 95% of the words in most spoken discourse types and therefore have reasonable comprehension of conversations

- Webb, & Nation, 2017, Kindle version

The 8– 9,000 most frequent word families account for 98% of the words in newspapers and novels, and reaching this level of vocabulary knowledge can enable students to understand written discourse

Webb, & Nation, 2017, Kindle Version

26

27

Approach high-frequency and low-frequency words differently



High frequency: Teach them

Low frequency words: Teach Learners to use strategies for learning them

Laufer, Meara, & Nation (2005, p. 5)

29

Discussion

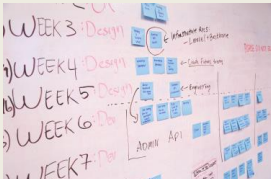
What are your thoughts about the frequency approach to vocabulary development in your own teaching situation?



30

Planning

Teachers should plan **what words** to focus on and plan **creating opportunities** for students to learn a word



How do we learn vocabulary?

- Incidental Learning
- Deliberate Learning

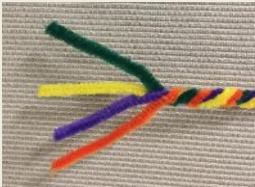
Deliberate and incidental learning complement each other by adding different aspects of vocabulary knowledge

How to facilitate learning of a large numbers of words?

Planning a well balanced program that facilitates a combination of both incidental and intentional learning

How?

Use **four strands** approach to frame the vocabulary component of a course.

A photograph showing four separate strands of string in green, yellow, purple, and orange. These strands are tied together at a point, forming a single, thicker rope. The background is a textured, light-colored surface.

CREATING A BALANCED LESSON PLAN

Language Focused Learning


Meaning Focused Input

Meaning Focused Output

Fluency Development

25% 25% 25% 25%

3/4 communicative, message-focused activities, 1/4 deliberate learning and teaching



Nation, 2013


Meaning Focused Input

Learners learn new vocabulary and encounter already met vocabulary to enrich their knowledge of vocabulary through **reading and to listening** a large quantity of good materials:

Enormous, easy, and enjoyable

Activities:

- extensive reading and listening, pair and group activities, linked skills activities

A photograph of two young women with long brown hair, smiling and looking at a smartphone held by one of them. They are wearing patterned shirts.

38

Meaning Focused Output

Learners get the opportunity to enrich their vocabulary through **speaking and writing**.

Activities:

prepared talks, discussion and writing about what they read or listened to, taking part in problem solving activities, conversations and role plays, retelling, pair or group activities

39

Language focus

◆ Students **deliberately learn** new words

◆ Teachers **explicitly teach** vocabulary, **draw students attention** to different aspects of a word, and **teach strategies** (guessing from context, word cards, using dictionary, Using word parts)

Activities: intensive reading and listening, getting feedback on speaking and writing, strategy training, doing vocabulary exercises, pronunciation practice

41

Teachers should set specific goals to only teach:

- high frequency words, and technical words students need for their jobs
- the most important aspects of a word, and to avoid spending much time on a single word



43

Encourage Learner's Autonomy

by helping them:

- Know what vocabulary to learn
- Know how to learn
- Get motivated to make their own vocabulary learning decisions

45

Fluency Development

Learners have opportunities to get more proficient in using words they already know. There should be no new words.

Fluency activities involves:

- Easy familiar materials
- Some pressure to do it faster
- Focusing on conveying or receiving messages
- Repeated use

Activities: speed reading, extensive reading of easy materials, rereading and repeated listening, 10 minute writing, 4/3/2

40

Explicit Teaching

In a well-balanced program only ¼ of the time must be allocated to deliberate study and **only a small part** of this time should be designated **for deliberate teaching** of vocabulary.

42

- **Set demanding vocabulary goals** and **test** that students have actually achieved this goal

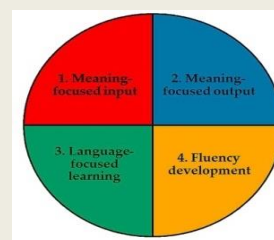
Laufer, Meara, & Nation (2005).

- **Give frequent vocabulary tests**, even if words are practiced in class
- **Practice collocations that are different from the learners' L1**

Laufer, Meara, & Nation (2005)

44

Collaborate with another colleague to classify the activities of the last 4 weeks



46



Vocabulary learning is an incremental process

- Learners can only process a small amount of information at a time.
- Different aspects of knowing a word need to be developed through meeting the words through different strands.
- There is a gradual move from the form and meaning of a word to its appropriate use in context.

47

- Revisions and recycling of the vocabulary should be structured in a way that falls within the retention period through different kind of recycling activities, vocabulary games, and explicit review sessions.

49

Discussion and Brainstorming

How can you integrate spaced repetition into your lesson plan and curriculum?



51

To learn a word

One first needs to **notice** a word and become aware of existence of that word as a useful language item.

53

Spaced repetition practice enhances long-term retention

We forget what we learn, unless it is recycled and repeated.

48

Spaced Repetition

- https://www.youtube.com/watch?v=ldkUEfkjX_8

50

Three cognitive processes that lead to learning vocabulary:

- Noticing
- Retrieval
- Creative use

Nation, 2013

52

Noticing

Involves decontextualizing, which for vocabulary learning means learners should give attention to a word “as part of the language rather than as a part of a message” (Nation, 2013, p. 103) .



54

Some factors that may affect noticing include:

- Salience of a word
- Previous contact with the word
- Instruction
- Learner realization of a need for a word to comprehend or to produce language or to fill a gap

Nation, 2013

55

Noticing can be supported by:

- Looking up dictionaries
- Deliberately studying a word
- Guessing a word from context
- Requesting an explanation of a word

57

Different ways of communicating a word's meaning:

- Performance
- Picture or diagram
- Showing objects
- L1 translation
- Defining it in the second language
- By providing context clues

59

Retrieval

- Can be **receptive** in the sense that by hearing a word or seeing it learners retrieve its meaning.
- Can be **productive** when it involves retrieving written or spoken form of a word to communicate meaning.

61

Teachers can trigger noticing by:

- Placing the words they consider necessary in a text
- Creating some activities to draw learners attention to those words

56

Activities for decontextualization may include:

- Negotiation
 - Definition
 - Textual enhancement
 - Providing simple definition
 - Raising word consciousness
- to learn about word parts, register and word order

Nation, 2013

58

Tips for Teaching

- Provide a brief, clear definition of a word in the first meeting.
- Focus on generalizable underlying meaning of a word
- Prioritize what should be explained about particular word

60

Tips for practice

- Provide students with repeated encounters with the target words
- For long-term retention of a word students need to retrieve the word from memory several times

If the form and meaning are presented at the same time, retrieval does not happen



62

Creative Use

To produce or to see or hear already known words in a **new creative meaning**, which makes learner to rethink the meaning of the word and as a result learn the word.

For example the meaning of cement in these two sentences:

They need a ton of cement.

They cemented their relationship.

63

Teachers can have a direct role in helping students learn vocabulary by:

creating activities that promote retention

65

Retention

Factors that can strengthen retention of vocabulary:

- Processing words both visually and linguistically
- Avoiding interference such as interference that might be caused by near synonyms, posits, or semantic lists
- Instantiation or recalling an example of the meaning of a word
- Deeper processing of word
- Imaging or keyword technique.

67

Word-Part Technique

Drawing students' attention to word parts, helps them:

- To make a full use of the word families of known words
- To learn complex words easier

69

Creative Use

- Can be **productive** by using a word in new ways or different context
- Can be **receptive** by meeting a word in different meanings or contexts.

64

Avoid interference from related words

Words that are similar in **form** or **meaning** are better to be introduced separately.

66

The Keyword Technique

Usually results in 25% more learning than other deliberate learning activities

Nation, 2008

How is it done?

Learner finds an L1 word (**Keyword**) which sounds like the target L2 word. Then creates an image combining the two concepts

68

There are two stages in learning by word part technique:

1. First, the learner needs to recognize the form similarity between the L2 new word and the known family word
2. Second, the learner then needs to identify the meaning similarity

Wei, 2015

70

Teach most productive stems, prefixes, and suffixes

Some activities:

- Word part tables
- Breaking down complex words
- Making complex words
- Choosing the correct form

71

Criteria Included in Technique Feature Analysis

- **Motivation**
- **Noticing**
- **Retrieval**
- **Varied encounters and varied use**
- **Retention**

Nation & Webb, 2017

72

Motivation

- Is there a clear vocabulary learning goal?
- Does the activity motivate learning?
- Do learners select the words?

Nation & Webb, 2017, part 5461

73

Noticing

- Does the activity focus attention on the target words?
- Does the activity raise awareness of new vocabulary learning?
- Does the activity involve negotiation?

Nation & Webb, 2017, part 5461

74

Retrieval

- Does the activity involve retrieval of the word?
- Is it productive retrieval?
- Is it recall?
- Are there multiple retrievals of each word?
- Is there spacing between retrievals?

Nation & Webb, 2017, part 5461

75

Varied Encounters and Varied Use

- Does the activity involve varied encounters and use?
- Is it productive?
- Is there a marked change that involves the use of other words?
- Nation & Webb, 2017, part 5461

76

Retention

- Does the activity ensure successful linking of form and meaning?
- Does the activity involve instantiation?
- Does the activity involve imaging?
- Does the activity avoid interference?
- Nation & Webb, 2017, part 5461

77

Extensive Reading

Extensive reading is the best supported technique we have in the field of second language pedagogy.

Krashen, 2003

78

Extensive Reading

- Extensive reading means reading a large quantity of texts or a long text at the right level.
- Right level means that learners are familiar with 98% of the vocabulary in the texts.

79

Extensive reading is the only way in which learners can get access to

- Language at their own level
- Read something they want to read,
- The pace they feel comfortable with which will allow them to meet the language enough times to pick up a sense of how the language fits together and to consolidate what they know.

Waring, 2005

81

How extensive reading supports vocabulary learning?

- A corpus of 200,000 words can provide at least 12 repetitions of the first 2000 word families .

Twelve repetitions, provided that the texts are at the right level, can provide enough opportunities through:

- Repetitions
- Receptive retrieval
- Deliberate attention
- Meeting words in different contexts to enhance learning.

83

- A successful extensive reading program still requires a great deal of teacher guidance, including suggestions on selecting books that match the level of the learners' language proficiency

McQuillan, 2016

85

Reflection Break

- What access do your students have to reading and listening material, in and out of class that is interesting to them and is 98% comprehensible to them?



80

How extensive reading supports vocabulary learning?

- Watch the video

From 5:30 to 16:00

https://www.youtube.com/watch?v=GpsVp95Wu_E

82

Teacher's role

Providing an extensive reading program is the most important improvement a teacher can make in vocabulary instruction.

Nation, 2013

84

Group Discussion

- What would you think about developing an extensive reading program in your teaching context?
- What are the pros and cons?



86

- Watch the video: 39:00 –43:00
- https://www.youtube.com/watch?v=GpsVp95Wu_E

87

Vocabulary in Intensive Reading

- Intensive reading is part of the language focused strand (1/4). It should be roughly about 1/16 of the curriculum.

89

Good words:

- High frequency words
- Useful topic words
- Technical words
- Words with useful word parts
- Words to develop strategies such as guessing from context

91

When you pay attention to words, you should be able to justify it.



93

Ideation

- How would you develop an extensive reading or listening program for your students?



88

Words in Intensive Reading

Make decision about the words:

- Should time be spent on it?
- How should be the word dealt with?

90

Ways of dealing with a word in intensive reading:

- Pre-teach the word: only 5-6 words
- Replace the unknown words in the text
- Put the unknown word in a glossary
- Put the unknown word in an activity after the text
- Do nothing about the word
- Help learners use the context to guess the word
- Spend time to looking into a range of meaning and collocations

• Nation, 2001

92

Video- How to teach intensive reading vocabulary by Paul Nation

- <https://www.youtube.com/watch?v=o9Bl2kjGYeo>

(30 min.)

94

Vocabulary Strategies by the Level of Proficiency

- Beginners know less language material, therefore for the beginner levels rote learning in addition to mnemonics are more effective, provided that there are repetitions
- For higher levels more contextualized strategies in addition to other strategies such as rote learning can be used.
- Repeated exposures and practice is a must for every level.

95

Depth of Processing

Activities that require greater cognitive effort from the learner in initial stages of learning help retention of the information

96

Vocabulary Exercises According to the Level of Mental Processing

Paribakht and Wesche, 1997, p. 183

Selective attention category:

To help learner notice the words

Activities such as: boldfacing the words in a text or providing a word list and asking learners to find the words in the text.

Paribakht and Wesche, 1997, p. 183

97

Selective attention category:

To help learner notice the words

Activities such as: boldfacing the words in a text or providing a word list and asking learners to find the words in the text.

Paribakht and Wesche, 1997, p. 183

98

Recognition category:

Partial recognizing words and their meaning

activities such as matching words and definition, or multiple choice activities.

Paribakht and Wesche, 1997, p. 183

99

Manipulation category:

To draw on learners' knowledge of morphology and grammar

for example activities that involve using affixes to construct words.

Paribakht and Wesche, 1997, p. 183

100

Interpretation category:

Analysis of words' meanings in contexts

for example understanding meaning of the words in a text and recognizing the terms that could be used to substitute them.

Paribakht and Wesche, 1997, p. 183

101

102

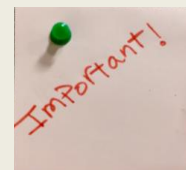
Production category:

To require learners use the words in the right context

The activities in this category are the most demanding for example answering a question that requires use of certain words.

Vocabulary Teaching Techniques and Vocabulary-Learning Strategies

- Use a variety of strategies.
- No one strategy can help everyone.



103

Mini-syllabus for Strategy Development

- The teacher models the strategy for the learners.
- The steps in the strategy are practiced separately.
- Learners apply the strategy in pair supporting each other.
- Learners report back on the application of the steps in the strategy.
- Learners report on their difficulties and successes in using the strategy outside class time.
- Teachers systematically test learners on strategy use and give them feedback.
- Learners consult the teacher on their use of the strategy, seeking advice where necessary.

Nation, 2001, p. 223

104

A Taxonomy Of Vocabulary Learning Strategies

- Discovery strategies
- Consolidation Strategies
- Refer to
- "Vocabulary learning strategies" (Schmitt, 1997, available at <https://www.norbertschmitt.co.uk/book-chapters>)

Schmitt (1997)

105

Discovery strategies

Determination Strategies	Social strategies
<ul style="list-style-type: none"> • Analyze part of speech • Analyze affixes and roots • Check for L1 cognate • Analyze any available pictures or gestures • Guess meaning from textual context • Bilingual dictionary • Monolingual dictionary • Word lists • Flash cards 	<ul style="list-style-type: none"> • Ask the teacher for an L1 translation • Ask the teacher for paraphrase or synonym of new word • Ask the teacher for a sentence including the new word • Ask classmates for meaning • Discover new meaning through group work activity

106

Consolidation Strategies

Social	Social strategies
<ul style="list-style-type: none"> • Study and practice meaning in a group • Teacher checks students' flash cards or word lists for accuracy • Interact with native speakers 	<ul style="list-style-type: none"> • Use English-language media (songs, movies, newscasts, etc.) • Use spaced word practice (expanding rehearsal) • Testing oneself with word tests • Skip or pass new word • Continue to study word over time

107

Consolidation Strategies

Cognitive
<ul style="list-style-type: none"> • Verbal repetition • Written repetition • Word lists • Flash cards • Take notes in class • Use the vocabulary section in your textbook • Listen to tape of word lists • Put English labels on physical objects • Keep a vocabulary notebook • Use semantic feature grids

108

Consolidation Strategies

Memory		
<ul style="list-style-type: none">-Study words with a pictorial representation of its meaning-Image word's meaning-Connect words to a personal experience-Associate the word with its coordinates-Connect the word to its synonyms and antonyms-Paraphrase the word's meaning	<ul style="list-style-type: none">-Study the spelling of a word-Study the sound of a word- Say new word aloud when studying-Image word form-Underline initial letter of the word-Configuration-Use Keyword Method-Affixes and roots (remembering)-Use new words in sentences-Part of speech (remembering)	<ul style="list-style-type: none">-Use cognates in study-Learn the words of an idiom together-Use physical action when learning a word-Use semantic feature grids-Use semantic mapsUse 'scales' for gradable adjectives-Peg Method-Group words together with a storyline-Locis Method

109

110

Some Resources

A Practical Guide for Teaching Vocabulary

http://cms.education.gov.il/EducationCMS/Units/Mazkirut_Pedagogit/English/TeachersResourceMaterials/Publications/Teachingvocabulary.htm

Vocabulary Learning: a Critical Analysis of Techniques

<http://www.teslcanadajournal.ca/index.php/tesl/article/viewFile/566/397>

A specific factor that appears to interfere with comprehension and with the production of some words, thus making the acquisition of these kinds of words more difficult is **deceptive transparency**.

111

- Deceptive transparency encompasses different categories such as words with a morphologically deceptive structure, idioms, false friends, words with multiple meanings and synforms.

Laufer, 1989, p. 13

112

- A deceptively transparent word is “a word which seems to provide clues to its meaning but does not” (Laufer, 1989, p. 11).

113

Synforms

Synforms are the largest category of deceptive words.

Laufer, 1989

114

Synformy

- Synformy is form similarity between word pairs or groups of words in terms of sound, script or morphology.

115

Why is it important?

- It can cause interference with comprehension and production of some words, thus making the acquisition of these kinds of words more difficult
- It can cause communication breakdown

116

- The confusions by synforms arise mainly because of learners' insecure representation of the one or a pair or a group of the similar forms in the memory.

Laufer, 1989

117

118

Specific patterns exist around the way people confuse synform pairs.

Synformic confusion usually occurs in the form of:

- **Substitution** (e.g. prize- price)
- **Omission** (e.g. economical-economic)
- **Addition** (cute – acute) in a lexical item's vowel, consonant, prefix or suffix"

119

Categories	Synform Pairs are Similar in:	Synform Pairs are Different in:	Examples
Category 5		Prefix (present in one synform, absent in the other)	Light Delight
Category 6		One Vowel or Diphthong	Lack Lake Luck
Category 7		One Vowel (present in one synform, absent in the other)	Live Alive
Category 8		One Consonant	Price Prize

121

Synforms which differ only in suffixes (categories 1 and 2) are the most problematic, followed by synforms that are different in vowels (category 10).

Laufer, 1991

123

Tip for Practice

Avoid focusing on meaning in the initial stages of learning new words, because it can negatively affect the ability to pay attention to formal properties of the new words

Barcroft, 2004

125

Synform Categories

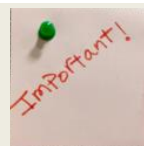
Categories	Synform Pairs are Similar in:	Synform Pairs are Different in:	Examples
Category 1	Stem (productive in English today)	Suffix	Interested Interesting
Category 2	Stem (not productive in English today)	Suffix	Numerous Numerical
Category 3		Suffix (present in one synform, absent in the other)	Historic Historical
Category 4	Stem (not productive in English today)	Prefix	Imaginary Imaginative

120

Categories	Synform Pairs are Similar in:	Synform Pairs are Different in:	Examples
Category 9		One Extra Consonant (present in one synform, absent in the other)	Phase Phrase
Category 10	Consonants	Vowels	Legible Eligible

Laufer, 1991

122



- Form, meaning, and form- meaning mapping are fundamental components for vocabulary learning.
- Different tasks invoke different processing that facilitates learning of certain components but not others and for successful vocabulary learning different kind of tasks should be included.

124

Tip for Practice

Do not teach several new synforms together; instead, have the students practice them after all members of the pair or group have been encountered individually.

Laufer, Meara, & Nation (2005, p. 4)

126

Tip for Practice

Use activities that force learners to pay more attention to confusing words after all members of the synform group or pair have been introduced individually and separately

Laufer, Meara, & Nation (2005)

127

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• Pictures

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*Handout # 1***How do you deal with different vocabulary in intensive reading?**

Make a decision about the following words:

- Should time be spent on it?
- How should the word be dealt with? Put the corresponding number in the right box. There might more than one way for treating each word.

1. Low-frequency words
2. Words that are important for the message but can be replaced with a high-frequency word
3. Technical words
4. High-frequency words
5. Words with useful suffix or prefix
6. Words that are easy to guess
7. Cognates and borrowed English words
8. Words that are important for the message of the text
9. Collocations
10. Low-frequency words that are not important for the message
11. Words with useful parts
12. Many unknown high-frequency words
13. Words we want students to learn

(Nation, 2008)

Words to replace:	Quickly give the meaning of the word	Pre-teach the words:
Words not to replace:	Put it in glossary:	Put an exercise after the text:

Participant Formative PD Program Evaluation**Exit Card**

Choose one:

Formulate a question about something that remains unclear to you.

Describe an “aha!” moment.

Explain one idea that you found particularly interesting or valuable.

What information would you like to have added onto the agenda for future sessions?

Participant Summative PD Program Evaluation Questionnaire**Evaluation of the Workshop**

Thank you for participating in this program. Please take a few minutes to complete the evaluation below. Your feedback is greatly appreciated, and it will help prepare for future training sessions.

Instructions: Please rate the following statements by circling one of the ratings.

1. The professional development objectives were clearly stated.

Strongly agree Agree Neutral Disagree Strongly disagree

2. Presentations provided information that pertains to what my students need.

Strongly agree Agree Neutral Disagree Strongly disagree

3. The presenter was knowledgeable in the content.

Strongly agree Agree Neutral Disagree Strongly disagree

4. I learned new vocabulary strategies that I can use in my classroom.

Strongly agree Agree Neutral Disagree Strongly disagree

5. I learned how to incorporate principles of teaching vocabulary into my lesson plans.

Strongly agree Agree Neutral Disagree Strongly disagree

6. The materials presented were helpful in supporting my knowledge of vocabulary teaching strategies.

Strongly agree Agree Neutral Disagree Strongly disagree

7. The professional development activities helped me better understand how to teach vocabulary.

Strongly agree Agree Neutral Disagree Strongly disagree

8. The professional development sessions helped me better understand my responsibility as a teacher with regards to teaching vocabulary.

Strongly agree Agree Neutral Disagree Strongly disagree

9. The professional development sessions influenced a change in my teaching.

Strongly agree Agree Neutral Disagree Strongly disagree

10. The professional development sessions helped me to approach teaching vocabulary with more confidence.

Strongly agree Agree Neutral Disagree Strongly disagree

On the lines provided please,

Share any suggestions that you have for improving this training.

Explain one idea or strategy that you found particularly useful and you think you would use it in your practice.

Tell us what information you would like to have added to future training sessions.

Appendix B: Interview Protocol

Interview Protocol

Research Topic: Vocabulary Instruction and Synonymy: A Case Study of Instructors' Experiences

Interview Steps and Procedures:

1. Welcoming and words of appreciation for the participant's time and interest
2. Introductions
3. Explanation of the interview process:
 - The interview lasts up to an hour.
 - Remind the participant that the interview will be recorded and that the interviewer may take a few brief notes.
 - Explain the confidentiality of all identifying personal information and clarification that a pseudonym will be used.
 - Ask participants whether they have any questions or whether additional information is needed.
 - Take additional notes with observations immediately after the interview.

Questions for the interview:

4. What has your experience been in teaching vocabulary to students who are beyond the ILR Level 2 at this school?
5. How do you usually teach vocabulary to beyond level 2 language students? What strategies have you find useful in teaching vocabulary?

6. What aspects of vocabulary learning have you noticed that beyond level 2 students generally have problems with? What challenges have you experienced in teaching vocabulary?
 7. What has your experience and observation been in teaching synforms, words that are similar in writing and pronunciation?
 8. What strategies and methods have you found useful in teaching synforms, words that are similar in writing and pronunciation for students who are beyond level 2?
 9. What resources are available to you for teaching vocabulary?
 10. How much training did you receive on teaching vocabulary before coming to this school?
 11. What has your experience been in learning how to teach vocabulary?
 12. What resources or training on certain topics or methods would you like to receive in order to teach vocabulary to students who are beyond level 2?
 13. Is there anything else that you would like to add?
- 5) Ask probing, open-ended questions based on the interviewee's responses; such as:
- Could you elaborate on this point?
 - Could you give me an example of such situations?
 - Could you tell me more about this experience?
 - How did you feel about that?
- 6) Ask for elaboration of terms and concepts participant uses.
- 7) At the end of the interview thank the participant and remind him or her that I will send the participant the draft of the preliminary analysis of data to review where any of his or her words

from the interview would be shared. I will ask each participant to verify the drawn information or assumptions reported and return it to me by e-mail with any comments.