# L2 VOCABULARY KNOWLEDGE AND LISTENING PROFICIENCY: HIGHLIGHTING KEY PRINCIPLES GOVERNING THEIR INTERTWINEMENT 

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#### Abstract

Empirical research exploring the relevance of L2 lexical knowledge to listening ability has shown that the two constructs are immensely intertwined in L2 learning contexts. That is, whereas L2 learners' listening comprehension can always be boosted when they possess higher levels of vocabulary knowledge, learners also can add up new words to their lexicons whilst listening to L2 content. This article critically discusses the reciprocal relationship of the two constructs of L2 listening performance and word knowledge as evident from the body of empirical research carried out on each side of the relationship. Nine key principles pinpointing the intertwinement are drawn from this body of research. The ultimate aim is to provide EFL practitioners with a firsthand guide that could regulate all classroom and non-classroom practices by teachers and learners alike as to L2 listening tasks and vocabulary learning. As such, whereas EFL teachers are encouraged to call on the nine principles prescribed here in setting up all classroom listening tasks and activities, learners are called upon to adapt and alter their L2 listening habits and strategies in and outside the EFL classroom in accordance with these principles.


KEYWORDS: vocabulary knowledge, listening proficiency, vocabulary size, aural vocabulary knowledge, written vocabulary knowledge, vocabulary breadth, vocabulary depth

## INTRODUCTION

Research on L2 vocabulary knowledge as well as listening proficiency has uncovered an interesting intertwinement between the two language constructs. For EFL learners to be proficient listeners in the second language, adequate knowledge of the L 2 lexicon is a prerequisite. By the same token, EFL learners' word knowledge can be enhanced via listening input. As such, whereas many researchers working in the realm of L2 listening and vocabulary research highlight the importance of aural word knowledge for proficient listening comprehension (e.g. Stæhr, 2009; Milton, Wade, and Hopkins, 2010; Matthews \& Cheng, 2015; Vandergrift \& Baker, 2015; Cheng \& Matthews, 2018; Wallace, 2020; Masrai, 2020), others have also acknowledged the potential of language aural input as a source for increasing L2 learners' vocabulary knowledge in terms of both breadth (i.e. quantity) as well as depth (i.e. quality) (e.g. Elley, 1989; Brett, Rothlein \& Hurley, 1996; Vidal, 2003; Van Zeeland \& Schmitt, 2013b; Maneshi, 2017; Lenhart, Lenhard, Vaahtoranta \& Suggate, 2018; Ly \& Nga, 2020; Zhang \& Graham, 2020; Jin \& Webb, 2020; Saeedakhtar, Haqju \& Rouhi, 2021). Drawing from L2 vocabulary research in general as well as research on incidental vocabulary learning via L2 listening, this article provides nine key principles which highlight the
intertwinement between L2 learners' word knowledge and their listening capacity. Whereas five of these principles underpin the pivotal role of L2 word knowledge in enhancing L2 learners' listening proficiency, the remaining four principles emphasize the other side of the intertwinement, i.e. the significant role of L2 aural input in increasing learners' vocabulary knowledge.

## Word knowledge as gear for listening proficiency

Many researchers agree that from amongst the different aspects of linguistic competence (i.e. phonological, lexical, syntactic, semantic), lexical knowledge is most paramount for L2 learners towards achieving general proficiency in the second language as well as proficiency in listening capacity in particular. In this regard, five key principles pinpointing the essential contribution of L2 word knowledge towards achieving listening proficiency, we believe, need to be addressed in any EFL classroom.

1. In terms of the modality of word knowledge (i.e. aural vs. written) most relevant to L2 listening, aural word knowledge provides more contribution to L2 listening proficiency than written word knowledge.

Milton et al. (2010) succinctly capture the difference between L2 learners' aural and written word knowledge noting that "there is a presumption here that the foreign language mental lexicon has two halves; an orthographic half, where written representations of words are stored, and a phonological half, where the aural representations are stored" (p. 84). Whereas aural word knowledge refers to an L2 learner's capability to recognize words in the aural medium, written word knowledge relates to their ability to recognize words in the written medium (Apel, Henbest, \& Masterson, 2019). This difference between aural and written word knowledge is also noted by Nation (2001, p. 27) who stresses that "what a word sounds like and what a word looks like" are indeed two distinct aspects of word knowledge. As such, whereas the former is used to account for L2 learners' variance as to the skills of listening and speaking (Milton, 2009), the latter is used as a predictor of the variance in their reading and writing abilities (Holland, McIntosh, \& Huffman, 2004). In this regard, Cheng and Matthews (2018) support the view that L2 learners' orthographic (i.e. written) word knowledge is larger than their auditory (i.e. aural) word knowledge. They attribute this to the varying nature of spoken and written words: whereas the written shape of a word is temporally constant and hence readers could frequently revisit it, the spoken form of a word exists temporarily and remains for an extremely limited time allowing only short processing times (Cheng and Matthews, 2018).

Empirical research stresses that knowing one word in orthographic form is separate and does not warrant knowledge of the same word when presented in speech (Goh, 2000). This is because the association between orthographic and aural vocabulary knowledge is far from stable (Milton \& Hopkins, 2006). It is unfortunate, however, as noted by Lange \& Matthews (2020), that most of the research dealing with word knowledge and competence in language skills (e.g. listening) only took into consideration the learners' written word knowledge. The recent direction in research on vocabulary knowledge towards measuring L2 learners' aural along with written word knowledge clearly shows
how important aural word knowledge has now become for research in the realm of vocabulary pedagogy (McLean, Kramer, \& Beglar, 2015). This is particularly evident in research seeking to evaluate the role of L2 learners' aural vs written word knowledge towards achieving listening proficiency in the second language.

Research on listening proficiency and L2 lexical knowledge stresses that aural word knowledge is more essential to listening comprehension in the second language than other kinds of word knowledge. For instance, Milton et al. (2010) looked at how relevant the scores of 30 ESL learners on the various IELTS subskills to both their aural and written vocabulary knowledge measured by two parallel tests which determined understanding of English vocabulary items in their verbal as well as written form. The results revealed a positive and strong correlation of aural word knowledge with the listening subskill ( $\mathrm{r}=0.67, \mathrm{p}<0.01$ ) with aural word knowledge explaining $44 \%$ of the learners' variance in their listening scores. Written word knowledge, however, had less correlative effect on the listening subskill ( $\mathrm{r}=0.48, \mathrm{p}<0.01$ ).

Accordingly, Milton et al. (2010) stressed the significance of the type of input modality in relevance to learners' performance in the second language noting that L2 learners' capability to speak as well as comprehend oral input is intrinsically associated with their aural vocabulary knowledge. As such, they predict that L2 learners who fail to expand their aural word knowledge will most likely struggle during listening and speaking tasks.

Cheng and Matthews (2018) conducted a large-scale investigation on a group of 250 L2 learners in which they examined how much L2 listening ability was associated with both written and aural word knowledge. The findings indicated that compared to written word knowledge which was less correlative to listening performance ( $\mathrm{r}=0.55$, $\mathrm{p}<$ 0.01 ), aural word knowledge exhibited a stronger association ( $\mathrm{r}=0.71, \mathrm{p}<0.01$ ). Factor analysis was also performed on the variables within the study and it suggested that written and aural vocabulary knowledge measures were indeed different with the two constructs loading onto separate factors. Prior to this study, Matthews and Cheng (2015) carried out an investigation in which they aimed to verify the relevance of aural lexical knowledge to L2 listening proficiency within a group of 167 L 2 learners. A test in the form of partial dictation was employed for measuring the learners' aural word knowledge. The participants were required to provide one missing word after they listened to a sentence containing this target word. Aural word knowledge was positively and highly correlative to listening ability ( $\mathrm{r}=0.73, \mathrm{p}<0.01$ ) which was in turn measured via the IELTS listening section. Regression analysis also showed aural word knowledge to be well predictive of L2 learners' listening ability as it predicted $54 \%$ of their IELTS listening scores.

The above research clearly shows the importance as well as the relevance of L2 learners' aural rather than written word knowledge towards achieving success in L2 listening. As such, we believe that EFL classrooms where listening proficiency is the core target should adopt practices that focus on aural rather than written form of word
knowledge as it has proven to be the major construct of significance to L2 listening comprehension.

## 2. There is a clear discrepancy as to the lexical coverage of aural word knowledge (i.e. aural vocabulary size) needed for success in L2 listening performance.

There is a lack of agreement among researchers studying the association of aural word knowledge to L2 listening ability as to the aural vocabulary size needed to achieve success in L2 listening. Whereas some researchers tend to suggest that lower levels of aural vocabulary size would be adequate for successful L2 listening comprehension, others have strictly suggested far much higher limits. The recommended vocabulary sizes in the literature fall between the range of the 2000 most frequent words (Van Zeeland \& Schmitt, 2013a) and the 7000 most frequent words (Nation, 2006). On the more lenient end, Van Zeeland \& Schmitt (2013a) compared the relative association of L2 learners' vocabulary size to their listening and reading abilities and suggested that lower levels of word knowledge were needed for listening comprehension compared to reading comprehension. They suggest that instead of putting too much effort towards increasing their vocabulary sizes, L2 listeners may focus on factors other than word knowledge when dealing with aural input including the contextual knowledge that can be obtained from the tone of voice, gesture as well as facial expressions. Although Van Zeeland and Schmitt (2013b) concluded that greater levels of word knowledge resulted in greater levels of listening performance, they stress that some learners who possessed lesser levels of vocabulary knowledge still showed sufficient listening comprehension.

In a corpus-driven study, the Cambridge and Nottingham Corpus of Discourse in English (CANCODE), an oral language corpus that contains around 5 million words, was examined by Adolphs and Schmitt (2003). They concluded that one could secure $94.76 \%$ of lexical coverage if they knew the most frequent 2000 words whereas knowing the most frequent 3000 words can lead to a lexical coverage of $95.91 \%$. Similarly, Webb and Rodgers (2009) conducted an analysis on corpus containing the lexical items featuring in television movies and programs and found that knowing the most frequent 3000 words allowed coverage of above $95 \%$. Also, Matthews and Cheng (2015) found that their subjects' aural word knowledge falling only in the 2000 and 3000 frequency bands, which are high-frequency words, predicted $52 \%$ of the variation in their L2 listening performance. This finding clearly shows the significance of possessing knowledge of high-frequency words for L 2 listeners. In a similar corpus study, the British Academic Spoken English (BASE) corpus was examined by Dang and Webb (2014) who concluded that recognizing the 3000 most frequent words as per the British National Corpus (BNC) as well as knowledge of the Academic Word List (AWL) can collectively provide coverage of $95 \%$ of academic spoken English. However, if L2 learners were not familiar with the AWL list, they may be required to know the most frequent 4000 words within the BNC corpus for them to achieve the same level of coverage at $95 \%$ (Dang \& Webb, 2014). Finally, towards the more stringent end, Nation (2006) suggested that for EFL learners to gain lexical coverage of $98 \%$ of aural input from spoken materials, they were required to be familiar with the most frequent 6000-7000 words.

## 3. Breadth of word knowledge (i.e. quantity) is more vital for achieving success in listening comprehension than depth of word knowledge (i.e. quality).

Qian (2002, p. 515) draws attention to the common distinction found in L2 vocabulary research of word knowledge as having two distinct aspects: vocabulary breadth (i.e. "the size of vocabulary or the number of words the meaning of which one has at least some superficial knowledge") as well as vocabulary depth (i.e. "how well one knows a word"). Masrai (2021, p. 4) similarly notes the distinction stating that whereas "vocabulary breadth is the number of words the learner knows receptively", "vocabulary depth is the quality of knowledge that the learner has of a given word". To the researcher, the existence of such distinction in L2 vocabulary pedagogy research is of high merit as it enables course designers, textbook authors, as well as teachers to direct their efforts to the word knowledge dimension learners are in most need of. As such, if learners are lacking when it comes to the size of words they are familiar with, efforts are directed towards increasing their breadth of vocabulary knowledge. However, if the learners' quality of word knowledge is somewhat low, efforts are directed instead towards raising their depth of vocabulary knowledge.

As to L2 listening, research suggests that vocabulary breadth (i.e. size) is the dimension of more favor towards achieving success in the listening skill. Stæhr (2009) examined the correlation between the receptive written word knowledge of 115 EFL Danish learners and their L2 listening comprehension. Whereas the Vocabulary Levels Test (VLT) created by Schmitt, Schmitt, \& Clapham (2001) was employed for measuring the subjects' vocabulary breadth, the Word Associates Test devised by Read (1998) was the measurement tool used for assessing their vocabulary depth. Listening ability was in turn assesed using the listening component in the Cambridge Certificate of Proficiency in English (CPE) test. The findings indicated that the participants' vocabulary breadth and their listening ability were positively and strongly correlative to each other ( $\mathrm{r}=0.70, \mathrm{p}<0.01$ ). In addition, the learners' vocabulary depth correlated to their listening ability ( $\mathrm{r}=0.65, \mathrm{p}<0.01$ ). However, the findings also revealed that whereas learners' vocabulary breadth explained $49 \%$ of the variation in their listening performance, vocabulary depth had a marginal prediction rate of only around $2 \%$ to the listening scores.

Wang and Treffers-Daller (2017) also conducted a similar study on 151 EFL Chinese learners in which they looked at the relationship between the learners' vocabulary size and their L2 listening ability. Whereas listening performance was measured using the IELTS test listening part, the Vocabulary Size Test devised by Nation \& Beglar (2007) was administered to assess the learners' vocabulary size. The results showed the learners' vocabulary size was significantly correlative to their listening ability ( $r=0.44$, $\mathrm{p}<0.01$ ) with analysis of regression showing vocabulary size as accounting for most of the score variation in the learners' IELTS listening test $\left(\mathrm{R}^{2}=.19, \mathrm{p}<0.01\right)$.

Li and Zhang (2019) recently examined L2 listening comprehension of 290 EFL learners and its relationship with three distinct aspects of their L2 word knowledge:
size, depth, and fluency. The participants' L2 aural word knowledge in terms of size, depth as well as fluency was assessed via some vocabulary knowledge tests. The IELTS test listening part was used to measure the learners' listening comprehension. An analysis via structural equation modeling (SEM) indicated that the three aspects of vocabulary knowledge in question all significantly predicted L2 listening ability. However, again, the learners' aural vocabulary size was the strongest predictor among the three aspects of word knowledge as to listening performance in the second language ( $\mathrm{R}^{2}=.34, \mathrm{p}<0.01$ ).

These findings do not in any way suggest ignoring work on perfecting learners' depth of knowledge about L2 words in listening tasks, but they rather stress that more time and effort should be dedicated to increasing word knowledge quantity than quality. That is, learners need to know more English words albeit relatively than they need to know more information about each new word they encounter while being exposed to L2 aural input.

## 4. Good knowledge of academic vocabulary ensures better performance in academic listening.

Teng's (2016) study revealed that lexical knowledge significantly correlated with L2 listening comprehension of academic spoken texts. He stresses that the thresholds for lexical coverage as well as vocabulary size required for successful comprehension of aural input by L2 learners vary based on the kind of oral input (e.g. general, academic ...etc.) they are exposed to. In other words, whereas some types of spoken input (e.g. academic) may require larger vocabulary sizes to succeed in listening comprehension, others may involve a rather smaller vocabulary size. Whereas Coxhead (2000) concluded that the Academic Word List (AWL) he developed accounts for around $10 \%$ of the words found in academic texts, it was concluded by Dang \& Webb (2014) that the AWL accounts for $4.41 \%$ of the words used in academic lectures and seminars. The corpus of the British Academic Spoken English (BASE) was examined by Dang \& Webb (2014) who concluded that knowledge of both the 3000 most frequent words within the British National Corpus (BNC) along with the (AWL) can afford coverage of $95 \%$ of spoken academic English. However, with the AWL excluded, EFL learners are required to be acquainted with the 4000 most frequent words in the BNC to achieve the same amount of spoken academic English coverage (Dang \& Webb, 2014). These corpus-driven findings clearly indicate the virtue of possessing specific knowledge of academic rather than general vocabulary as represented by the AWL when it comes to listening tasks in which spoken academic rather than general content is at stake for EFL learners.

## 5. Vocabulary knowledge provides a better prediction as to L2 aural performance than syntactic knowledge.

Vafaee \& Suzuki (2020) examined the degree to which vocabulary knowledge in comparison to syntactic knowledge may contribute to L2 listening performance taking into account other affective and cognitive factors (including working memory,
metacognitive knowledge, and L2 listening anxiety). 263 EFL learners participated in the study. Whereas the participants' listening proficiency was measured through an IELTS listening test, a set of nine measurements were employed to assess the different factors involved in the study. These included a pair of tests for aural vocabulary knowledge, another pair of tests for aural syntactic knowledge, two tests of working memory, two questionnaires on L2 listening anxiety as well as one questionnaire on metacognitive knowledge. Quantitative analysis via structural equation modeling (SEM) showed that the learners' vocabulary knowledge, as well as syntactic knowledge, significantly predicted their L2 listening performance. Vocabulary knowledge, however, had a stronger predictive power over L2 listening performance as its effect size was double that of syntactic knowledge ( .55 vs . 28 ). The other factors at play in the investigation (i.e. working memory, listening anxiety, and metacognitive knowledge) were also found to be significant contributors to L2 listening comprehension. Although Vafaee \& Suzuki's (2020) study displays the major role vocabulary knowledge entertains compared to syntactic knowledge when it comes to L2 listening performance, we believe that replications of their study may be needed to further support the significant importance of word knowledge over syntactic knowledge as to L2 listening proficiency.

## Aural input as a source of word knowledge

Drawn from research examining incidental L2 vocabulary learning through listening (e.g. Vidal, 2003; Maneshi, 2017; Zhang \& Graham, 2020; Jin \& Webb, 2020), the four principles presented here represent the other side of the interrelationship between L2 listening and word knowledge, i.e. how aural input in the second language can help L2 learners expand their vocabulary knowledge.

## 6. Frequency of word exposure and/or word occurrence during engagement with aural input is fundamental to word learning via listening.

L2 vocabulary research stresses the role of frequency of word occurrence (i.e. the number of appearances of a word in a spoken or written text) in both recognition as well as retention of target words (e.g. Webb \& Chang, 2015; Peters, Heynen, \& Puièmge, 2016). This particularly applies to L2 word learning via the aural medium as asserted by Matthews (2018, p. 23) who states that "without having encountered the equivalent degree of exposure to the target language characteristic of native speakers, L2 learners typically have sub-optimal aural vocabulary knowledge; that is learners have difficulty recognizing words in the spoken form". Penno, Wilkinson, \& Moore (2002) examined repeated story listening and concluded that students exhibited only some knowledge of the target keywords after they have listened to a story once. However, it was found that the more times the learners were exposed to the story, the deeper their knowledge of the target words became allowing them to retell the story using the target words more correctly. Also, Vidal (2003) investigated incidental word acquisition from L2 listening and concluded that frequency of word occurrence, collectively with some other factors, accounted for a large amount of the variation in word learnability via listening, a finding that was also supported by Van Zeeland and Schmitt (2013b).

Brown, Waring, \& Donkaewbua (2008) and Vidal (2011) explored comparative word learnability via listening and reading. The amount of word meaning recognition as well as recall was compared in both approaches to word learning. The findings of the two studies collectively showed that word learning via listening contributed to better word retention than word learning via reading. Moreover, it was found that a higher rate of frequency of word occurrence was needed to learn words via listening as opposed to reading. In a recent study that examined EFL learners' repetitive listening to two songs (one time, three times, or five times), Maneshi (2017) looked at the association between frequency of exposure to selected words in the two songs and the magnitude of word learning. Lexical comprehension of the target words in each song was assessed via two separate multiple-choice tests. One major finding was that frequency of exposure was indeed a positive contributing factor to target word learning.

In terms of the exact rate of word occurrence needed for successful learning of words via listening, there seems to be some discrepancy in this regard. Webb (2007) recommends a minimum of ten repetitions as a threshold for learning new words. Vidal's (2011) study concluded that whereas only two to three word occurrences were sufficient to learn a new word via reading, five to six word occurrences were needed to achieve word learning via listening. Van Zeeland and Schmitt (2013a) suggest that whereas short-term knowledge of word form and grammar via listening can be established with a limited amount of word exposure, longer word retention (i.e. in terms of form, grammar, and meaning) involves more than fifteen word occurrences. To the researcher, this recommendation of Zeeland and Schmitt (2013a) is most convincing as it encompasses the different extents of word learning since it takes into consideration the difference between targeting short-term learning gains as opposed to long-term word knowledge retention.
7. Songs are a good source of listening material for word learning as they involve repeated listening which guarantees frequent exposures to target words.

The appreciation of songs as one source of second language learning and teaching is not new (Medina, 1993). In a study examining incidental learning of word knowledge via listening to songs, Maneshi (2017) lists six advantages for which songs deserve to be praised as an indispensable source for word learning. One advantage is that songs are abundant with a huge amount of language input (Maneshi, 2017). Second, as Murphey (1992) notes, corpus studies that analyzed pop songs concluded that this type of songs is repetitive and resembles everyday conversation and that it was slower than regular spoken discourse by half as it had an average speech speed of 75.49 words per minute. A third advantage for which songs deserve to be cherished as a good source of aural input is that people have the tendency to listen numerous times to the same song (Kerekes, 2015). Fourth, as Maneshi (2017) stresses, it is most likely that many words will be heard in different songs. A fifth advantage is that studies of brain imaging have found listening to songs to be assistive to one's memory when it comes to language acquisition (Maneshi, 2017). Sixth, as concluded by Doleon (2016), incorporating songs in EFL classrooms has been found to lower levels of anxiety in classrooms suffering from high anxiety levels. All in all, these six different advantages of songs as
a source of L2 listening share one remarkable common feature that songs merit which ensures a high rate of target word exposure, that is, repetitiveness.

## 8. Teacher talk is another good source of aural input for L2 learners.

Webb \& Nation (2017) stress the significant role of teacher talk in EFL classrooms drawing attention to the limited amount of L2 exposure EFL learners have when being outside of their classrooms. Jin \& Webb (2020) examined the role of listening to L2 teacher talk on incidental word learning of both words as single units as well as collocations. Two tests (one for overall comprehension, and the other for meaningrecall), were employed to assess the learners' comprehension of teacher talk. The findings showed that employing teacher talk as a listening input for EFL learners significantly contributed to their word learning in terms of both single words as well as collocations. Such findings are in tandem with the common recommendation in EFL pedagogy that calls for teachers to use only the target language in their classroom interactions with students as teacher talk has been proven to be of high value to incidental L2 word learning.
9. Explicit instruction and explanation of target words in a listening material using either L1 or L2 either pre or post-listening enhances both recognition and retention of new words.

Research dealing with incidental word learning during L2 listening stresses the contribution of target word explanations, provided to learners either in their native or foreign language, in learning new words. In a study examining the role of target word explanations during engagement with aural input on L2 word learning, Elley (1989) asked eight teachers in eight primary school classes in New Zealand to read aloud two stories to a total of 178 pupils studying in those classes. The learners were distributed into three different groups: one control group and two treatment groups. Two stories were selected for oral reading to the study subjects. The control group did not listen to any of the two stories. Whereas the first treatment group listened to the first story accompanied by teacher explanations of target words, the second treatment group listened to the same story without any target word explanations provided. As to the second story, the roles of the two treatment groups were reversed with the second group receiving explanations and the first receiving no explanations. All three groups including the control were subjected to a pretest, a posttest as well as a three-month delayed posttest. The results indicated that both treatment groups achieved an increase in word learning under the two conditions of receiving explanations or not. However, the increase for those who received target word explanations was found to be greater than those who did not receive any explanations ( $40 \%$ vs. $15 \%$ ). The delayed posttest revealed that these word learning gains were fairly permanent.

In a similar study, Brett, Rothlein, \& Hurley (1996) compared the relative effectiveness of three different story listening conditions on L2 learners' word learning. Three groups of subjects were allocated to one of three conditions: story listening accompanied by
target word explanations (i.e. first experimental group), story listening without explanations (i.e. second experimental group), and non-exposure to story or target word explanations (i.e. control group). Two stories were used in the study with each story listened to over five days. A pretest and a posttest associated with each story were given for the three groups. Additionally, a six-week delayed posttest on the two stories combined was conducted. As to the immediate posttests, the findings showed that the learners who listened to the stories accompanied by target word explanations had significantly immediate higher vocabulary learning gains than those who listened to the stories without target word explanations or those who neither listened to the stories nor received target word explanations. A similar result was obtained with the delayed posttest. Zhang and Graham (2020) examined the effects of four target word explanation conditions provided to four groups of learners after listening to an aural content. These included L2 explanations, codeswitched L1 and L2 explanations, explanations with extra crosslinguistic information as well as no explanations. After being subjected to these four conditions, the participants took a pretest, a posttest as well as a delayed posttest on the keywords they had in the listening material. The results showed that all three groups which received the three different kinds of target word explanations significantly surpassed the no explanations group in both the immediate in addition to the delayed posttest.

A fourth study conducted by Pujadas and Mu~noz (2019) examined the word learning gains from watching a TV series for a cohort of 74 Spanish high school EFL learners divided into four groups. The subjects watched over the course of one year a total of twenty four episodes of the TV series under one of these four situations: L2 captions + word pre-teaching, L2 captions + no word pre-teaching, L1 subtitles + word preteaching, and L1 subtitles + no word pre-teaching. The results of the pretest and posttest of target words in the TV series revealed that the four groups achieved considerable word learning gains. However, the two groups that received word pre-teaching either via L1 subtitles or L2 captions achieved the most significant increases in word learning. The results from these studies collectively reflect the significant effect of aural input enhancements, in the form of keyword explanations provided to L 2 learners, in learning new words via listening. Apparently, these vocabulary learning gains can both be immediate short-term gains as well as retained longer-term word knowledge. As such, EFL teachers are highly encouraged to include the provision of keyword explanations, either in L2 or L1, as a routine when undertaking listening tasks in their classrooms.

## CONCLUSION

This article aimed at delineating key principles that govern the notably reciprocal relationship between L2 vocabulary knowledge and listening. Nine key principles were identified. For better L2 listening performance, these principles recognize the value of vocabulary knowledge over syntactic knowledge, aural over written word knowledge, word knowledge quantity over quality as well as possessing knowledge of academic vocabulary. Reciprocally, as to the efficient utilization of L2 aural input in enhancing vocabulary knowledge, teacher talk, as well as songs, have been empirically shown to be highly useful sources. Moreover, teacher explanations of target words along with the
frequency of word occurrence in aural content have both been acknowledged as contributing factors to increasing word knowledge gains through listening.

All in all, the ultimate goal of this article was to provide all members involved in EFL teaching and learning (namely course designers, teachers, and learners) with a literature-informed guide that directs both their knowledge as well as practices as to the interrelation between L2 listening and vocabulary knowledge. As for course designers, the principles identified here (e.g. the value of songs as a good source of L2 listening content) should assist in developing content that is compliant with those principles (e.g. incorporating a song-listening activity in the units of an EFL coursebook). Similarly, EFL teachers are encouraged to set up classroom activities that originate from the prescribed principles (e.g. focusing on vocabulary knowledge rather than grammatical knowledge when working on listening tasks). As to learners, firsthand classroom instructions based on these principles regularly provided to them by their teachers may help alter their EFL listening habits and strategies accordingly (e.g. becoming more attentive to teacher speech in compliance with the principle that values teacher talk as a source of L2 word learning). Finally, it is hoped that these nine key principles we highlighted here which show the interactive relationship between L2 word knowledge and listening performance are actively attended to by EFL researchers and practitioners. In this regard, ideas for real-life practical activities in and outside the EFL classroom which duly put these principles into use remain wide open.

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