L2 Incidental Vocabulary Acquisition Through Extensive Listening to Podcasts

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INTRODUCTION

During my first semester of teaching English as a Foreign Language (EFL) I had five hundred students. I taught ten sections of Advanced English at the University of Science and Technology in Beijing, China. Each section had fifty students, whom I met with for one and a half hours once a week. The main goal of the course was to help undergraduates with advanced English proficiency pass the College English Test, a university exit requirement for all undergraduates in China. A secondary goal of the course was to prepare students for graduate study in English-speaking academic environments, since a majority of them would eventually go on to graduate studies in the U.S., England, or Australia.

Constrained by time and large class sizes, I struggled with ways to provide enough meaningful input and practice for my students. Moreover, my students came from all different academic fields, ranging from computer science to philosophy to sports management. It would have been impossible to teach five hundred students the field-specific vocabulary each of them would need for their graduate studies. I did the best I could to make our class time meaningful, but my students constantly asked me the best way to learn academic vocabulary outside of class. As a novice teacher at the time, I did not have a good answer for them. In their free time, many of them watched English movies and listened to music on the Internet or through their smartphones and iPods. Some students even chose to watch or listen to academic lectures from American universities. I encouraged them to keep doing what they were doing outside of class.

Of the students who did this extensive listening outside of class, many felt discouraged because they did not know enough[2] vocabulary to understand the lectures or found it difficult to catch all of the words while listening to authentic materials. This led them to question whether or not they could actually study abroad at an English-speaking university. These conversations with my students were frustrating because I did not see how I could help them with so few class hours and such large classes.

Similar challenges surfaced again during my teaching practicum at the Community English Program (CEP) at Teachers College, Columbia University. I co-taught a ten-week long course called Advanced Studies, which was the highest level of English as a second language (ESL) offered by the CEP. The course was unique in that it was the only CEP course without a pre-determined curriculum. Instead, the Advanced Studies teachers were expected to create a curriculum based on the students' needs. The course met three evenings per week for two hours each time. The majority of our students were visiting scholars in graduate programs at Columbia

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University. One common goal they shared was the need to improve their academic English proficiency in order to better understand lectures, participate in class discussions, and write academic papers. After conducting a needs analysis, we learned that lack of vocabulary was a major hurdle to their comprehension and participation in their graduate classes. Similar to my students in China, our CEP students came from varying academic backgrounds, had a high level of English proficiency, and needed field-specific low-frequency vocabulary.

From our coursework at Teachers College, my co-teacher and I were aware that extensive reading could be an important source of vocabulary input for second language (L2) learners (Hedgcock & Ferris, 2009). We hoped that extensive reading could provide our students with the ability to self-select materials in their field, which would be interesting to them and provide individualized vocabulary learning opportunities. For those reasons we implemented an extensive reading program in our Advanced Studies course. In addition to reading a class-selected novel, the students were encouraged to read articles in their academic fields throughout the duration of our course. However, the concept of extensive reading was met with extreme student resistance. Several of our students said they did not have enough time to do extensive reading at home. Others claimed that because they already had so much reading for their graduate school classes that they did not want any more reading. Still others claimed that extensive reading, especially reading novels, was at odds with their academic goals.

As a response to our students' complaints, we suggested they also try listening to audio books or podcasts. Although we were not sure what the L2 literature said about extensive listening as a means for incidental vocabulary acquisition, we hoped that input, regardless of the mode, would be beneficial for our students. We introduced our students to several podcasts that we personally enjoyed. Our students seemed to enjoy the ease and flexibility of listening to podcasts, even if the vocabulary was difficult at times, and several students independently sought out additional podcasts in their fields of interest.

Research has shown that the average EFL college student knows anywhere from 1220-2300 word families, with a word family consisting of the base form of a word plus its inflected and derived forms (Barrow, Nakashimi, & Ishino, 1999; Nurweni & Read, 1999). In comparison, their native-speaking classmates know on average 20,000 word families (Nation, 1999). This discrepancy is discouraging in light of the small number of contact hours most ESL/EFL teachers have with their students. As a language teacher, this underscores the challenge I face to provide sufficient input within the time constraints of instruction and the need to extend learning beyond the classroom.

My teaching experiences also identify a need to provide individualized vocabulary input for students studying English for Academic Purposes (EAP), but also that learners can be resistant to extensive reading for various reasons. With all this in mind, I cannot help but wonder: Does extensive listening offer the same benefits for vocabulary acquisition as extensive reading? Could I use podcasts as a way of encouraging students to self-select material and take charge of their own vocabulary learning outside of class?

LITERATURE REVIEW

Extensive listening is generally defined as learners "doing a lot of easy, comprehensible, and enjoyable listening practice" (Chang & Millett, 2013). Modeled on the practice of extensive reading, extensive listening typically involves large quantities of aural target language input that

interests students and is within their linguistic competence (Renandya & Farrell, 2010; Yeh, 2013). Extensive listening can range from teacher-directed dictations or read-alouds to self-directed listening for pleasure at home. Unfortunately, L2 vocabulary acquisition through extensive listening has received relatively little research attention. Most of what is assumed stems from research on first language (L1) and L2 child vocabulary acquisition from listening to stories or studies on L2 incidental vocabulary acquisition from extensive reading. Consequently, this paper will first explore what is known about how vocabulary is learned through extensive reading. Subsequent sections will review the literature on vocabulary acquisition through listening and podcast use for vocabulary learning. This paper will conclude with a discussion of practical applications that stem from this research in light of my teaching issue described above.

Incidental Vocabulary Acquisition Through Extensive Reading

In L2 pedagogy, few practices are as universally accepted as beneficial and necessary, but extensive reading is one of them. It has been shown to increase sight vocabulary, lead to vocabulary acquisition, facilitate learner autonomy and motivation, and provide contextualized and linguistically rich input for learners, especially those in EFL settings where access to authentic input may be lacking (Huckin & Coady, 1999; Zahar, Cobb, & Spada, 2001). According to Huckin and Coady (1999), outside the first few thousand most common words, vocabulary learning occurs incidentally, where the learner infers unknown words from context. This kind of incidental vocabulary learning can be "pedagogically efficient" (Huckin & Coady, 1999, p. 182) in that it enables two activities at once: vocabulary acquisition and reading.

However, some second language acquisition (SLA) research has challenged the efficiency of incidental vocabulary learning through extensive reading, citing several limitations. First, in order for incidental vocabulary acquisition to occur through reading, learners must be able to infer the meanings of unknown words in context. Hence, learners must know most of the surrounding words in a text. Hu and Nation (2000) found that in order for learners to accurately infer unknown words they must know at least 98% of the words in a text. For an authentic novel, this means a learner must know between 8000-9000 word families in order to achieve a high enough level of comprehension to be able to correctly infer the meaning of unknown words (Hu & Nation, 2000). However, this number varies according to text type. For example, a vocabulary of about 3000 word families is sufficient to achieve 98% lexical coverage for most graded readers (Hu & Nation, 2000).

Another limitation of incidental vocabulary acquisition through reading is that it assumes learners attend to all unknown words in a text. According to Pigada and Schmitt (2006), learners do not always bother with guessing unknown words. If a text is rich in information and learners can understand the meaning without the unknown words, learners often will ignore the unknown words (Zahar et al., 2001). Thus, reading for meaning will not automatically lead to acquisition of vocabulary. Learners must notice and put attention towards finding the meaning of unknown words in order for learning to occur (Huckin & Coady, 1999).

Additionally, there is disagreement regarding how many times a learner must encounter a word in context for incidental vocabulary acquisition to occur. Saragi, Nation, and Meiser (1978) have maintained 10 exposures sufficient for acquisition. Nation (1990) proposed anywhere from 5-16 exposures necessary. Still others suggest that repetition alone is insufficient for acquiring

new words and more focused attention on the part of learners would lead to greater vocabulary gain (Kobayashi & Little, 2014; Min, 2008; Paribakht & Wesche, 1997).

In light of these limitations to incidental vocabulary acquisition, an extensive reading approach that has garnered some support among researchers and practitioners is reading-while-listening (RWL), which is reading while simultaneously listening to an audio recording or to the teacher read aloud (Day & Bamford, 1998). Proponents of RWL cite benefits such as improved listening comprehension and vocabulary knowledge, as well as the ability to better recognize speech rhythm, pronunciation, and intonation (Chang, 2009, 2011; Day & Bamford, 1998). Stephens (2011) acknowledged the benefits of extensive reading for L2 learners, but suggested that extensive reading without listening is counterproductive because L2 learners lack the aural foundation in the language that L1 learners have. These critics of extensive reading alone advocate instead for integration between extensive reading and extensive listening for L2 learners, especially with regards to vocabulary acquisition (Brown, Waring, & Donkaewbua. 2008; Chang, 2009, 2011; Stephens, 2011).

In two similar studies by Chang (2009, 2011), the author compared vocabulary learning through reading, listening and RWL to audiobooks among university EFL students. While participants were able to learn vocabulary through all three modes of input, the RWL students outperformed the reading-only and listening-only groups in all vocabulary measures. The RWL groups also consumed a larger quantity of audiobooks and reported higher levels of confidence and satisfaction in their learning gains. These studies suggest that for EFL learners, who tend to be more proficient in reading than listening, RWL may be an especially beneficial approach for incidental vocabulary acquisition because it "helps learners recognize acoustically what they can already comprehend in print and instills satisfaction and confidence in listening" (Chang & Millet, p. 32).

There seems to be general agreement that L2 vocabulary can be learned incidentally through extensive reading, yet due to limitations such as lexical coverage, learner noticing, and number of exposures it is acknowledged that learning vocabulary through reading can be a slow and time-consuming process. The research on vocabulary acquisition through listening points to similar themes, but also highlights additional variables, which will be considered below.

Vocabulary Acquisition Through Listening

Early research on vocabulary acquisition through listening was primarily concerned with native speaker populations. In an oft-cited study, Elley (1989) found that oral storytelling was a significant source of vocabulary for L1 children. The author conducted a classroom-based study of 157 seven-year-old primary students with English as their L1. Prior to the study, a meaning-based vocabulary pre-test was administered in which half of the 20 target words were presented as pictures and half as lower-frequency synonyms. During the study, the students listened to a story read over several days containing the target words. No definitions or explanations of the target words were given, though the text did contain pictures that were briefly shown during the reading. The same vocabulary pre-test was administered as an immediate post-test, which showed a 15% gain in vocabulary knowledge. This led the author to conclude that oral storytelling constituted a significant source of L1 vocabulary acquisition.

More recent research has addressed incidental vocabulary acquisition through listening in L2 populations. Vidal (2003) found that listening to academic lectures led to vocabulary

acquisition for university students. The study included 116 students studying English for specific purposes (ESP) in Spain. The author selected three 15-minute videotaped lectures on topics related to the students' majors. A total of 36 technical, academic, and low-frequency target words were selected from the lectures. In addition to vocabulary pre- and post-tests, a listening comprehension test was also administered to determine the degree to which comprehension affected vocabulary gain. The results were illuminating. Not only did the author find that participants gained on average 84% of the vocabulary items from listening to academic lectures over four weeks, but vocabulary gain and retention appeared to be influenced by language proficiency as well as the degree to which participants comprehended the lectures. Higher proficiency participants initially gained more vocabulary, but they also lost more vocabulary one month after the treatment. The author surmised that this could be due to the fact that less proficient students may have had to make more effort to process and understand the vocabulary and therefore were more successful in retaining the vocabulary.

This role for comprehension in vocabulary acquisition through extensive listening suggests that lexical coverage is important in spoken texts as well. As previously mentioned, Hu & Nation (2000) found that knowledge of 8000-9000 word families was necessary to achieve 98% text coverage in written texts, an ideal condition for incidental vocabulary acquisition. For spoken texts, which make greater use of high frequency vocabulary, Nation (2006) suggested that 95% coverage, or 3000 word families, would be sufficient to understand everyday spoken discourse. However, to understand academic or technical discourse well enough to infer unknown words and learn vocabulary incidentally, knowledge of 6000-7000 word families would be necessary (Nation, 2006).

Taking this into account, Vidal (2010) sought to compare the effects of listening and reading proficiency on incidental vocabulary acquisition and retention in a university ESP course. The participants were 230 university students ranging from intermediate to advanced proficiency. The participants were divided into three groups. The first group read three academic texts, the second watched three academic lectures, and the third received no input and only took the vocabulary assessments. The author administered meaning-based vocabulary pre-tests, immediate post-tests, and delayed post-tests to each group. The results showed that both reading and listening to academic input resulted in vocabulary gains across all levels of proficiency, but the reading group made greater gains at all levels of proficiency. The difference between vocabulary gains from listening or reading was especially large for lower proficiency students and tapered off for higher proficiency students. With regards to retention however, the author found that less vocabulary was lost from listening than from reading overall. Higher proficiency students made greater gains, but their gains from reading decayed more than from listening. The author interpreted these results to suggest that as learner proficiency increases, the difference in vocabulary gains between reading and listening decreases, suggesting that the greater vocabulary knowledge learners have, the more effective listening becomes for vocabulary acquisition.

Together, the studies by Elley (1989), Nation (2006), and Vidal (2003, 2011) suggest similar limitations to incidental vocabulary acquisition through listening as through reading in lexical coverage and word frequency. With regard to the latter, Brown et al. (2008) compared the effect of word frequency on incidental vocabulary acquisition in three conditions: listening only, reading only, and RWL. The participants were 35 university students studying EFL in Japan. Graded readers with 96-99% lexical coverage were used to ensure comprehensibility and the number of occurrences for the 28 target words was held constant; seven words occurred between 2-3 times in a given book; seven words occurred 7-9 times; seven words occurred 10-13 times;

and seven words, 15-20 times. Meaning-based vocabulary pre- and post-tests were administered. Like Vidal (2003, 2011), the results showed that incidental vocabulary acquisition can happen from reading only and listening only, however they found the RWL condition to be the most successful. With regard to word frequency, the authors found that more frequently occurring vocabulary was more likely to be learned, but the frequency differed based on input mode. For the reading-only and RWL conditions, encountering a word 7-9 times was sufficient for some words to be acquired. Yet, for the listening-only condition, very few words were learned even after 15-20 occurrences. This led the authors to conclude that a word would most likely need to be encountered far more than 20 times to be acquired through extensive listening.

The studies reviewed heretofore point to a weakness in the literature on vocabulary acquisition in general: the assumption that knowing the meaning of a word is the same as acquiring a word. However, a recent study by van Zeeland and Schmitt (2013) took a dimension approach to vocabulary acquisition through listening, and examined acquisition of form, grammar, and meaning separately. The study included 30 postgraduate advanced ESL learners from 17 different L1s. Unlike Vidal (2003, 2011) who only used academic lectures and Brown et al. (2008) who used graded readers, the authors used four listening passages from four different genres united by a common theme: crime. Lexical coverage was held constant at 95% and target word frequency was also held constant at three, seven, 11, or 15 occurrences. The participants' knowledge of target vocabulary was measured in the three dimensions of form recognition, grammar recognition, and meaning recall. The results showed that learners start developing knowledge of word form and grammar long before they master meaning. After only a few exposures to the target words, learners could recognize form and grammar, though more than 15 exposures were needed for that knowledge to be retained. On the other hand, the authors found knowledge of meaning not to be affected by frequency since very few word meanings were acquired even after 15 occurrences. These findings seem to corroborate Brown et al.'s (2008) suggestion that more than 20, 50, or 100 repetitions may be needed to fully acquire a word. Still, if learners can gain knowledge of vocabulary form and grammar after only a few exposures, extensive listening could serve as a beneficial first step to developing new vocabulary.

Collectively, the body of literature on extensive listening and reading seems to suggest that while incidental vocabulary acquisition occurs through both modes of input, it tends to be a lengthy process due to a variety of factors such as lexical coverage, proficiency, learner attention, and number of exposures. However, if learners begin to develop knowledge of vocabulary form and grammar after only a few exposures, as van Zeeland and Schmitt (2013) suggested, then using extensive listening as a jumping off point for vocabulary learning could be worthwhile, particularly when combined with all the other benefits that extensive language approaches offer, from facilitating learner autonomy, confidence, and motivation, to providing contextualized and linguistically rich input for learners, especially those in EFL settings where access to authentic input may be lacking (Huckin & Coady, 1999; Yeh, 2013; Zahar et al., 2001). Furthermore, the majority of studies on vocabulary acquisition from listening have tended to focus solely on teacher read-alouds, audiobooks, or recorded lectures. The following section will consider an alternative method of delivering listening content, podcasts, and their use in L2 listening and vocabulary acquisition.

Podcasts for Extensive Listening in Second Language Learning

In recent years, as portable media players such as the iPod and smartphones have become popular, access to extensive listening materials has become even easier for students and teachers wanting to increase linguistic input outside of the classroom. Of the media available on iPods and smartphones, podcasts are some of the most popular. Podcasts are audio or video programs on the Web that can be listened to on a computer or downloaded to an mp3 player or iPod. The difference between traditional audio or radio programs and podcasts is that the latter contain a Really Simple Syndication (RSS) feed, allowing users to subscribe to their favorite podcasts so that new episodes are downloaded automatically to their listening devices (Sze, 2007).

Podcasting has been adopted in a wide variety of educational contexts, from delivering lectures and speeches, to enriching distance learning, as well as for self-paced learning outside of class time (Yeh, 2013). Proponents of podcasts for language learning cite the biggest benefit as providing an unlimited amount of authentic target language input in a variety of subjects accessible portably for an "on-demand and on-the-go learning approach" (Yeh, 2013, p. 135). The SLA research on podcasts highlights the benefits for developing not only learners' listening comprehension and pronunciation, but also suggests listening to podcasts can lead to grammar and vocabulary acquisition (O'Bryan & Hegelheimer, 2007; Hasan & Hoon, 2012).

There are two main categories of podcasts available for language learning. The first is podcasts created in the target language by native speakers for native speakers, such as news or storytelling programs. The second category is podcasts created specifically for language learners or teachers. Some of these language-learning podcasts stand alone as language courses, while others are meant to provide supporting material for classroom instruction (Rosell-Aguilar, 2007). The first category of podcasts offers authentic, unmodified input more suited to advanced proficiency students, while language learning podcasts tend to utilize modified or simplified language. One benefit of all this available material is the seemingly limitless supply of input for learners to access outside the classroom. Yet, in a taxonomy of available podcast resources, Rosell-Aguilar (2007) suggested this wealth of resources can pose challenges for learners and teachers because podcasts, especially those created for native speakers, are not typically organized according to proficiency level, meaning that it can be difficult or time consuming to find materials appropriate for learners' language levels.

Because there is such a wealth of material available via podcasts, it may first be necessary to teach learners how to be smart consumers of podcasts. Yeh (2013) investigated how learners go about choosing podcasts, with an eye on helping them to be strategic, independent learners. The author implemented a podcasting project with a university EFL class to promote extensive listening and foster independent learning. Throughout the study, students kept listening journals, which served to help develop students' independent learning skills, language skills, and help the teacher evaluate the students' progress. They had complete freedom to choose which podcasts they listened to and how long or often they listened. Because of this freedom, the role of the teacher in training students how to choose podcasts was important. Throughout the two-month project, the teacher led several in-class podcast sessions where students were exposed to a wide variety of podcast resources as well as online activities and tasks they could do before, after, and while listening.

Several important findings emerged from Yeh's (2013) podcast listening project. The first was that close integration of the project with the course syllabus was essential. According to the author, the periodic in-class podcast sessions, peer experience sharing, journals, and

presentations seemed to integrate the extensive listening with the classroom and help students recognize the benefit of extensive listening to language learning. Second, the study helped identify what kind of rationale students employ when self-selecting podcasts. The most salient factor was availability of transcripts, which suggests that text support may play an important role for learner listening comprehension and learning through extensive listening. Podcast length and teacher recommendation also played significant roles in student choice. Most students chose podcasts between five to six minutes long to facilitate repeat listening and the majority of students selected podcasts that were recommended by the teacher. Furthermore, the study found that nearly all of the students reported an initial period of difficulty finding podcasts that were suitable for their linguistic competence. Together, these findings suggest that teachers can set students up for listening success by integrating extensive listening podcast projects into the course syllabus, taking an active role in recommending podcasts, and helping learners know what to look for when selecting podcasts, such as availability of transcripts and length.

Turning to podcasts for the purpose of vocabulary acquisition specifically, the research is encouraging. In an L1 study, Putman and Kingsley (2012) found that students were able to learn science vocabulary from listening to podcasts. The participants were 58 fifth graders with English as their L1. Half of the students received access to the podcasts to supplement in-class learning and the textbook while the other half did not. Target vocabulary was selected based on their importance to understanding the content of each course unit. Each week, instruction in class began with an introduction of the new vocabulary and definitions. All of the participants were also asked to read passages containing the target words. The podcast group would then listen to researcher-created podcasts for homework. Even though students were not able to self-select podcasts, every effort was made to make the researcher-created podcasts as entertaining and engaging as possible by using songs, telling jokes, and asking listeners to supply missing vocabulary or respond to questions so as to avoid passive listening. The results showed that students who listened to the podcasts improved their vocabulary knowledge by seven words compared to five in the non-podcast group. Furthermore, the learners found the podcasts to be helpful and interesting, as discovered through surveys and interviews with the students. Although the podcasts used in this study were more of a supplement to instruction, the results highlight the potential for students to learn vocabulary through interesting podcasts.

With regard to L2 vocabulary learning from podcasts, Lu (2007) conducted a case study of a 23-year-old ESL learner from Taiwan who listened to one podcast per week for four weeks. The learner listened to portions of podcasts about current events that interested him. Because the learner was of relatively low English proficiency, the podcasts were kept to no longer than three minutes to avoid cognitive overload. While listening, the learner transcribed the podcasts. He was told he could listen to the podcasts as many times as necessary. The researcher collected and marked the transcription errors and asked the participant to listen again to the podcast and correct his own errors. Afterwards, the learner attempted to understand the content and language of his transcription before recording his own reading of the transcript in a fashion similar to the original podcast. This procedure was repeated for four weeks, with different podcasts each week. The results of the learner's first and final drafts of the transcripts showed an increase in listening accuracy and vocabulary knowledge.

One of the more interesting aspects of Lu's (2007) study was the information she gleaned from the participant's journal. Throughout the process, the participant kept a reflective journal where he reported typically listening to the podcasts three times for understanding before transcribing the material. Once he started transcribing, he first transcribed the words he knew,

and then he looked up unknown words in a dictionary or inferred their meaning from context. The participant's process underscores the role for learner attention in incidental vocabulary acquisition through listening and corroborates the findings of Huckin and Coady (1999), Pigada and Schmitt (2006), and Zahar et al., (2001).

As a tool for delivering extensive listening materials and vocabulary learning, podcasts have the potential to not only extend learning outside the classroom, but also provide a near endless amount of authentic and meaningful input to help students personalize their language learning. However, as the literature reviewed here suggests, these benefits can easily become challenges if students cannot find appropriate podcasts or if teachers do not successfully integrate podcast projects with the course curriculum. The final portion of this paper will consider the reviewed literature in light of my teaching issue described in the introduction.

PRACTICAL APPLICATIONS

The literature reviewed in this paper suggests a potential for L2 incidental vocabulary acquisition through extensive listening to podcasts, yet it also identifies certain limitations that I will consider in light of my teaching context. As previously described, I have struggled throughout my experience teaching ESL and EFL to provide my students enough meaningful input within the constraints of time and class size. Furthermore, in teaching EAP and preparing students for graduate study in English-speaking universities, I searched for ways to provide individualized vocabulary instruction. In light of the preceding literature review, I believe that an extensive listening podcast program, if thoughtfully implemented, could help me tackle these two issues. In this section I will summarize the most relevant findings from the literature review and suggest how I might apply them were I to implement an extensive listening podcast program for incidental vocabulary learning.

First and foremost, the literature suggests incidental vocabulary acquisition is a slow process. With regard to listening, at least 20, and perhaps even 50 or 100, exposures may be necessary for learners to acquire vocabulary incidentally (Brown et al., 2008; van Zeeland & Schmitt, 2013). However, this assumes a definition of acquisition as knowing the meaning of a word. If, as van Zeeland and Schmitt (2013) suggested, recognition of word form and grammar can occur after only a few exposures, then perhaps we need to alter our view of vocabulary acquisition from all-or-nothing to a gradual process. In this way, extensive listening could serve as a foundation for vocabulary learning. I believe that a conversation about the prolonged nature of L2 vocabulary learning could be undertaken with my students as part of training on how to use podcasts for extensive listening.

Just as learners would need to be educated on the benefits and limits of learning vocabulary through extensive listening, it would also be necessary to train them how to be smart consumers of podcasts. Undeniably, one of the benefits of using podcasts is the seemingly limitless amount of authentic listening material available for learners to access outside the classroom. However, as Rosell-Aguilar (2007) suggested, the wealth of podcast resources available on the Web can pose challenges for students and teachers to find materials appropriate for their level. Therefore, in implementing an extensive listening podcast program with my students, where students self-select podcasts, it would be necessary to train them how to identify appropriate listening materials. Based on the literature, there are four main factors I would teach

my students to look for when selecting podcasts for extensive listening: comprehensibility, word frequency, learner interest, and podcast length. Each of these will be discussed below.

One common thread running through the literature is that lexical coverage and level of comprehension facilitate incidental vocabulary acquisition. Specifically, it seems that learners must know at least 95% of the surrounding vocabulary to correctly infer the meanings of unknown words in spoken text (Nation, 2006). Thus, one of the first things I would ask my students to consider when selecting podcasts would be comprehensibility with regard to lexical coverage. To do this, it might first be beneficial to have students take a diagnostic vocabulary test, to find out their current level of vocabulary knowledge. The *Compleat Lexical Tutor* (Cobb, n.d.) website offers online diagnostic vocabulary tests to assess lexical knowledge up to 10,000 word families. Students could be asked to complete this at the beginning of a course for homework. Once students' vocabulary knowledge is established, we could assess lexical coverage of podcast transcripts by uploading them to a vocabulary profiler, such as the one on the *Compleat Lexical Tutor* website. Since this website is relatively simple to use, advanced proficiency learners in my context could easily be taught how to employ it by themselves.

The second factor students would need to be aware of when selecting podcasts is word frequency. As previously mentioned, new words that are encountered more frequently are more likely to be learned (Brown et al., 2008; Nation, 1990; Saragi et al., 1978; van Zeeland & Schmitt, 2013). Because of this, it would be necessary to help students select podcasts that are likely to repeat vocabulary over and over again. This could be done by choosing podcasts with a consistent theme, such as an economics podcast like *Planet Money* (http://www.npr.org/blogs/money), or through storytelling podcasts that tell a single story over multiple episodes, like *Serial* (http://serialpodcast.org). Students should be discouraged from listening to podcasts that may change topics or themes too quickly. This likely may involve some trial and error, for both students and myself, but as we find suitable podcasts we could create a classroom podcast directory that could be used by future students.

The easiest factor to make students aware of when choosing podcasts would most likely be learner interest. According to the definition of extensive listening, learners should be "doing a lot of easy, comprehensible, and enjoyable listening practice" (Chang & Millet, 2013). As the studies by Putman and Kingsey (2012) and Yeh (2013) highlighted, students were much more likely to continue listening to podcasts when the materials were interesting. In my context, this could mean initially recommending a list of podcasts that cover a wide variety of genres, but then also showing learners how to search for other podcasts that match their interests. Students should be encouraged to try out different podcasts to find ones that are interesting to them.

A potential issue that might arise from learners choosing podcasts based on interests is that their vocabulary knowledge may not be sufficient to listen to the podcasts that interest them. For example, EAP students might be interested in listening to academic lectures to prepare for studying abroad, but their vocabulary level may not yet reach the 95-98% lexical coverage threshold Nation (2006) determined to be beneficial for incidental vocabulary acquisition. As the teacher, I would have to emphasize the importance of ease of listening. If podcasts are too difficult for them, they will not be beneficial. There are dozens of pop culture podcasts that tackle academic subjects, such as the previously mentioned economics podcast *Planet Money* or *Star Talk* (http://www.startalkradio.net), an astronomy podcast. These podcasts are geared more towards the general public and would likely not only be more entertaining for learners, but also have a lower lexical demand. If learners are absolutely committed to listening to authentic

academic lectures, I could suggest they seek out lectures delivered via video podcasts, or vodcasts, which would provide visual support while they listen.

A final consideration students would need to be made aware of is podcast length. Several listening studies used excerpts from stories or podcasts lasting only three, five, or 15 minutes (Lu, 2007; Vidal, 2003, 2011; Yeh, 2013). These authors used the shorter recordings to help facilitate repeat listenings and decrease the cognitive load on students. For more difficult podcasts, such as those outside learners' comprehension and lexical levels, this makes sense. By shortening the duration of a podcast, the amount of language learners have to process would be decreased as well. However, in reality there are very few podcasts of such short duration; average podcast length can range from 20 minutes to an hour. Students could be instructed to only listen to a small portion of podcast at one time, which might be a solution for the students described above who are committed to listening to academic lectures beyond their vocabulary knowledge level. In this way they could limit the amount of input they must process at one time. On the other hand, several studies successfully utilized hour-long stories and lectures (Brown et al., 2008; Chang & Millet, 2014). These studies suggest that if the listening input is at or below students' lexical level, then the length of the recording should not matter. For most students, choosing longer podcasts within their linguistic competence might be more beneficial and result in more listening and language exposure hours outside of the classroom.

After selecting podcasts, what students and teachers do with them is also important. As the literature suggests, in order for incidental vocabulary acquisition to occur, just listening to a podcast will not automatically increase vocabulary knowledge (Kobayashi & Little, 2014; Min, 2008; Paribakht & Wesche, 1997; Pigada & Schmitt, 2006). Incidental vocabulary acquisition depends on learners noticing unknown vocabulary and interacting with it. The more processing on the part of learners, the more likely they are to remember a new word, therefore it is important that they are encouraged to take an active role while listening. One way that learners could do this is by transcribing portions or all of the podcasts they listen to, as Lu (2007) has suggested. Another way could be to employ a RWL approach, which some suggest may be especially beneficial for EFL learners who lack an aural foundation in the target language (Brown et al., 2008; Chang. 2009, 2011; Chang & Millett, 2014). Additionally, learners could be asked to keep listening journals and periodically report on their listening progress to classmates through discussions and presentations (Lu, 2007; Yeh, 2013).

In my context, I think a combination of the above activities could be integrated with my course syllabus to help students recognize the importance and benefits of extensive listening. Lu (2007), Putman and Kingsley (2012), and Yeh (2013) provided insight on how I might go about doing so. For example, students could be asked to keep a listening journal where they record which podcasts they listen to, how often they listen, new vocabulary they encounter, and perhaps even their own opinions or comments about the content or listening process. For large classes, I could collect these journals on a rolling basis, perhaps 10 students or so per week, and write comments or suggestions. For smaller classes, journals could be collected more often and more detailed feedback on language could be given. In addition to keeping a listening journal, I think it would be essential to have students discuss and report in class on the podcasts they listen to. This could be done as a quick warm-up pair activity or as a longer formal presentation, depending on the time constraints of my classroom.

As a result of reviewing the literature on incidental vocabulary acquisition through extensive reading, extensive listening, and podcast use in L2 learning, I believe that an extensive listening podcast program, if thoughtfully implemented, could help extend my students' learning

beyond the classroom and provide a method for individualized vocabulary learning. Still, there are limitations to such an approach. For example, although iPods and other portable listening devices are abundant in my present teaching context, this may not be true for all teaching contexts. The decision to implement an extensive listening podcast project would need to take into account the technology that students have access to. Furthermore, more research is needed on extensive listening and L2 incidental vocabulary acquisition. Specifically, longitudinal studies lasting longer than two months are needed to shed light on long-term effects of extensive listening on incidental vocabulary acquisition and retention.

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