Introduction

This chapter addresses the topic of how to teach and learn vocabulary effectively inside the classroom. Given the time constraints faced in most classroom learning contexts, this is a question of identifying instructional priorities from among a myriad of options. Fortunately, as discussed in the first half of this chapter, second language (L2) vocabulary research provides plenty of evidence on which to base decisions about instructional design for vocabulary learning. But, however strong the research evidence for particular vocabulary learning and teaching (henceforth, VLT) strategies, implementing them in real classrooms is seldom a straightforward process. Teaching decisions are always local and contingent. Thus, the second half of the chapter focuses on VLT research in real classroom contexts and on the mediating impact of teachers and learners on affordances for VLT.

Critical Issues and Topics

Classroom Vocabulary Learning: A Conundrum

The job of teaching and learning vocabulary inside the classroom faces a conundrum. On the one hand, the size of the vocabulary learning task is considerable. It is estimated that for learners to participate in conversational English, knowledge of the most frequent 3,000 word families is required (Webb & Rodgers, 2009), although as Schmitt and Schmitt (2014, p. 490) suggest, this may be too few words to enable full comprehension and enjoyment. For listening, van Zeeland and Schmitt (2012) found that to achieve a reasonable level of comprehension, 95% coverage of the vocabulary of informal spoken narratives was needed, and that this in turn also required a vocabulary of 2,000 to 3,000 words. Nation’s (2006) analysis of a corpus of spoken texts suggested a higher figure of 6,000 to 7,000 words to attain 98% coverage. To read academic texts with some ease (i.e., again, 98% known words), learners will need a vocabulary size of around 8,000 to 9,000 words (Laufer & Ravenhorst-Kalovski, 2010). In addition to size, we need to also consider the depth of vocabulary knowledge required. Depth includes dimensions such as sensitivity to collocational frequency, register...
constraints on use (e.g., colloquial vs. formal uses), the range of meanings a word can convey, how a word is used in multiword units such as formulaic sequences and idioms, and so on (Nation, this volume; 2013). These are not issues to be taken lightly; vocabulary knowledge (both size and depth) has been shown to be a strong (if not the strongest) predictor of proficiency (Qian, 2002; Qian and Lin, this volume).

It is clear therefore that, given the scope of the vocabulary learning challenge, considerable investment in learning time is required to meet this challenge. And yet, and here is the conundrum, in many second language classrooms around the globe timetabled classroom hours for language learning fall well short of what is needed to achieve the required vocabulary learning. For example, a study by Webb and Chang (2012) found that EFL learners in Taiwan had between two and four hours of instruction per week. Consequently, they achieved vocabulary size gains per year ranging between 18 and 282 words. These figures are derived from scores on the Vocabulary Levels Test and so, given the extrapolation involved, need to be treated with some caution. However, even at the highest rate, it is clear that after five years of study, gains in vocabulary size were modest. As Gao and Ma (2011, p. 345) express it, “Students typically need to know words measured in thousands, not hundreds, but receive language instruction measured in months, not years”.

Of course there are other contexts in which learners have much more exposure to taught second languages in their schooling. In many countries worldwide, English and/or other second languages are not just taught as subjects but are used as the language of instruction to teach other subjects in the curriculum. Naturally, in such contexts, students are exposed to many more hours of English in schooling, and their vocabulary size is likely to reflect this. But overall, the point stands; for many learners – and for the majority in foreign language contexts, the time available in the classroom to learn vocabulary falls short of what is required. What then can be done to maximize vocabulary learning opportunities inside the classroom in the context of limited classroom hours? Clearly, the answer will require some prioritization from among the many teaching and learning options available, and it is to the issue of setting priorities that we turn in the next section.

Priorities for VLT Inside the Classroom

An extensive research literature exists to guide instructional planning with respect to VLT, and no shortage of guidelines for teachers have been derived from it – see, for example, Barcroft (2013, 2015), Boers (2015), Laufer (2016), Nation (2008, 2013), Schmitt (2008), Siyanova-Chanturia and Webb (2016) and Webb and Nation (2017). In this section I have attempted to synthesize from this literature a set of six priorities for VLT. These are presented in Table 17.1 and discussed in more detail in following sections. The six priorities first address the issue of what lexical items to teach (priority 1) and then, as the main focus of the chapter, how to teach them (priorities 2–6).

Priorities 1 through 5 cover similar ground to Nation’s (2008) list of the four jobs of the vocabulary teacher. These are (in descending order of importance): (1) plan what vocabulary is to be taught and how; (2) guide learners in the use of vocabulary learning strategies; (3) assess learners’ vocabulary knowledge and size, and their progress towards learning goals; and (4) teach lexical items. These priorities involve teachers and learners working together on the vocabulary learning challenge. As Schmitt (2008) notes, “students need the willingness to be active learners over a long period of time, for without this, they are unlikely to achieve any substantial vocabulary size, regardless of the quality of instruction” (p. 333). Elaborating on this point, Nation (2008) sees the three main jobs for the learner as (1)
Table 17.1 Priorities for vocabulary learning and teaching inside the classroom

**Priority 1. Set vocabulary learning attainment targets**
Learn lexical items which have been selected with reference to (1) learner needs and current vocabulary knowledge, (2) word frequency, and (3) relevance criteria. (See Read in Part IV and Vilkaitė-Lozdienė and Schmitt in Part I of this volume.)

**Priority 2. Develop learners' vocabulary learning strategic competence**
Provide opportunities to learn about and develop expertise in using vocabulary learning strategies. (See Gu in Part II of this volume.)

**Priority 3. Audit, curate, and link vocabulary learning opportunities inside and outside the classroom**
- Identify and co-curate (with learners) opportunities for VLT that link learning inside the classroom to learning beyond the classroom.
- Foster autonomous vocabulary learning.

**Priority 4. Maximize vocabulary learning opportunities in classroom activities**
Adopt a principled approach to incorporating VLT into classroom activities across the four skills and four strands in a program.

**Priority 5. Assess progress**
- Regularly assess progress towards vocabulary learning goals. (See Kremmel in Part III of this volume.)
- Use assessment to inform VLT decision-making.

**Priority 6. Embrace technology-mediated vocabulary learning**
With reference to evidence-based best practice, select and utilize technology to enhance vocabulary learning and teaching across the four strands in a program. (See Ballance and Cobb, and Meunier in Part II of this volume.)

putting language to real use; (2) deliberately learning lexical items; and (3) developing an autonomous orientation to vocabulary learning, including deciding which words to learn, and managing vocabulary learning beyond the classroom. We return to a focus on the learner later in this chapter.

The following sections elaborate on each of the VLT priorities presented in Table 17.1 with the aim of providing a broad conceptual framework for understanding vocabulary learning inside the classroom. The reader who wishes to pursue any of these topics in greater depth is encouraged to refer to the citations in Table 17.1 and to other chapters in this volume that address each priority area in detail.

**Priority 1. Set Vocabulary Learning Attainment Targets**
Careful planning is needed to ensure that learners spend time on lexical items that are relevant to their needs and that provide the best return for the effort invested in learning these items (Webb & Nation, 2017). Such planning is likely to involve four main steps. The first is a needs analysis in which information is gathered on the lexical component of learners’ language learning needs and purpose for learning. Of course, in many classroom contexts the lexical items to be learned at each curriculum level are pre-set in the curriculum and/or textbook. Here, needs analysis can focus on critically evaluating the alignment of prescribed vocabulary learning goals with learners’ needs and with the frequency principle (see below).
A second step in needs analysis is diagnostic assessment of learners’ current vocabulary knowledge, focusing on gathering information on vocabulary size and on what lexical items relevant to learning needs are known, at what depth, and where the main gaps in knowledge lie.

Pooling these two sets of information provides the starting point for a third step: setting attainment targets. The frequency principle (Nation, 2013) provides one source of guidance on how to set and sequence attainment targets. In simple terms, it states that higher frequency lexical items (both words and multiword phrases) have more utility and therefore should be learned first. On this basis, Nation (2013) argues that learners should spend time on high-frequency words, including high-frequency formulaic sequences such as idioms and phrasal verbs, but not spend time on learning low-frequency words unless they have particular utility.

Schmitt and Schmitt (2014) argue that the 3,000 most frequent word families justify inclusion within the set of high frequency vocabulary. Kremmel (2016) further proposes that for high-frequency vocabulary, the traditional 1,000-item frequency bands are too broad and that 500-item banks are more informative, especially for diagnostic purposes.

In a fourth planning step, the results of these analyses need to be mapped onto a program of study so that daily and weekly vocabulary learning goals can be set and monitored, either for each individual student, groups of students, or whole classes. Kremmel’s proposal for smaller frequency bands is certain to make this job easier. (For more information on measuring vocabulary size, see the chapters in Part III, and the chapter by Read in Part IV of this volume.) Setting goals requires planning of how best to achieve these goals. This is the focus for instructional priorities 2 to 6, which follow.

Priority 2. Develop Learners’ Vocabulary Learning Strategic Competence

Helping learners become more effective managers of their vocabulary learning is important for at least two reasons. First, it is clear that the teacher cannot teach all the lexical items learners need to learn. Second, even accounting for extensive language input outside the classroom, for the vast majority of language learners, too little time is available to rely on incidental learning as the main source of vocabulary growth (Schmitt, 2008). Strategy training provides the most efficient way to address both these limitations. It uses small amounts of classroom time to maximum effect by equipping learners to more effectively use time outside the classroom for vocabulary learning (Nation, 2008). Strategic learners are better able to make judicious decisions about which lexical items they will invest learning effort in, and what form that effort will take (for more information on vocabulary learning strategies, see Gu, this volume).

Logically, for learners to develop this expertise, they will first need to know what to learn. This involves the teacher collating and sharing information with learners about their vocabulary size along with information about the nature of vocabulary, including, in particular, the frequency principle. This may not be straightforward since many teachers are likely to have limited knowledge of vocabulary size and frequency-based principles of vocabulary learning (Schmitt, 2008).

A strategic orientation also involves reflexive awareness of one’s self, including reflection on one’s preferences, past learning experiences, beliefs about VLT, self-efficacy, and so on (Murray, Gao, & Lamb, 2011). Learners may also benefit from being made aware of the accelerated learning gains they can achieve through strategic and well-informed independent learning effort. Not least, learners need training in specific strategies such as guessing words
in context (Webb & Sasao, 2013), learning words on word cards, and imaging strategies. Such training should be accompanied by guided opportunities to practice these strategies (Nation, 2013). As this brief list shows, strategy training involves three main types of strategies: cognitive, metacognitive, and affect strategies (Zhang & Li, 2011).

Let me illustrate this topic with reference to the strategy of guessing the meaning of unknown words. This strategy involves five steps: (1) identify the part of speech of the unknown word; (2) ask “What does what?” in the sentence (i.e., what is the subject of the sentence, what does the subject do, and to what/whom does it do it); (3) look for wider context and textual cues (for example referential chains, conjunctions); (4) make a guess; (5) check the guess with reference to the meaning of word parts (Nation, 2013). There has been some debate over the effectiveness of this strategy. For example, Bensoussan and Laufer (1984), claim that the strategy is counterproductive since, more often than not, it leads learners to guess incorrectly. However, Nation (2013), points out that the Bensoussan and Laufer study and others like it fail to take into account the learners’ vocabulary size and the density of unknown words in surrounding text. These studies thereby set up conditions that make successful guessing unlikely. Further, Nation (ibid., p. 352) makes the point that, “it may be that training in guessing helps vocabulary learning simply because it encourages learners to give deliberate thoughtful attention to vocabulary items”. So yes, if you want durable knowledge from one guessing attempt at a word regardless of text difficulty and a learner’s vocabulary size, then guessing is not well supported by research. If, however, you more reasonably give credit for partial knowledge and consider vocabulary learning to be a cumulative process, then guessing – and by inference, training in guessing words in context – is well supported by research. Training is a particularly viable option for the guessing strategy because the sequence set of steps in the strategy require structured practice and guidance (Webb & Sasao, 2013).

The value of training in vocabulary learning strategies is well attested by research (see chapters by Gu, Nakata, and Sasao in this volume) and so deserves to be allocated classroom time.

Priority 3. Audit, Curate, and Link Vocabulary Learning Opportunities Inside and Outside the Classroom

As noted earlier, many L2 learners have too little time and opportunity for the extensive exposure to language input and meaningful language use needed if incidental encounters with vocabulary are to meet their vocabulary learning needs (Nation, 2013). Neither can this gap be filled by the limited time available in class for deliberate VLT (Schmitt, 2008). What is achievable within these limitations however is for teachers and learners to strategically manage the learning opportunities found in and beyond the classroom so as to build synergistic links between deliberate teaching, independent vocabulary study, and incidental learning. This requires the teacher, in collaboration with learners, to take responsibility for auditing and curating vocabulary learning opportunities rather than leaving them to chance. The need for teacher guidance is confirmed in a study by Ranta and Meckelborg (2013) who used learner diaries to track the extent to which young adult ESL learners in Canada used English beyond the classroom. Overall, they found that the learners made relatively light use of English outside of class. They concluded that:

The relatively limited exposure to spoken English either through interaction or watching movies or TV for some of the participants is of particular concern since it is generally believed that L2 proficiency development requires both input and output opportunities.

(Ranta & Meckelborg, 2013, p. 25)
This finding highlights how important it is for teachers to know what opportunities are available to learners beyond the classroom, and how well these opportunities are being taken up. A useful heuristic to help with auditing and curating these opportunities is found in the four strands framework developed by Nation (2007, 2008). Nation argues that for effective vocabulary learning, target vocabulary should be met in each of four strands: meaning-focused input, meaning-focused output, language-focused learning, and fluency. In meaning-focused input, the learner’s primary attention is on the ideas and messages conveyed by the language and met in listening and reading (i.e., the receptive skills). In meaning-focused output (i.e., speaking and writing; the productive skills), the learners’ attention is on conveying ideas and messages to another person. The fluency strand is made up of opportunities to develop fluent use of known language items. To complement these three meaning-focused strands, the fourth strand, language-focused learning, involves deliberate attention to learning language items, structures, and features. As Nation (2007) points out, these strands should be seen as long continuous sets of learning conditions that run through a whole language program.

The auditing job involves identifying vocabulary learning opportunities in each of the four strands, and identifying how these opportunities can be linked together across the strands. The curating job involves selecting and marshaling resources that provide for learning opportunities in each strand. This might involve, for example, providing resources for extensive reading for pleasure, setting extension tasks linked to classroom learning, and providing links to appropriate viewing/listening resources online. The massive expansion of free, accessible online materials for using and enriching vocabulary learning beyond the classroom makes the curator role more critical than ever.

Priority 4. Maximize Vocabulary Learning Opportunities in Classroom Activities

Teachers and researchers alike are interested in how vocabulary learning opportunities can be enriched in the many activities and tasks that constitute classroom teaching and learning. The pivotal question in this regard is:

Which tasks, involving which ways of information processing, lead to better attainment of which types of vocabulary learning?

Three frameworks have been proposed to answer this question: the Involvement Load Hypothesis (ILH) (Laufer & Hulstijn, 2001), the Technique Feature Analysis (TFA) (Nation & Webb, 2011) and the Type of Processing – Resource Allocation (TOPRA) model (Barcroft, 2002). All of these frameworks seek to model the ways language learning activities in which learners encounter unfamiliar lexical items determine how these items are processed and the likelihood that they will be learned (see Laufer, this volume). Examples of activities which have been researched using these frameworks include reading comprehension activities, writing sentences to practice using new words, and written composition activities.

The first of these frameworks, the ILH, hypothesizes that the likelihood of lexical items met in an activity being learned is predicated on the degree to which three components – need, search, and evaluation – are present. Together, these three components make up the involvement load of the activity. “Need” refers to the extent to which learners need to know the meaning of a word; search to the nature of retrieval involved, including the effort involved in finding the meaning and whether retrieval is receptive or productive; and evaluation to the effort involved in matching the meaning that has been retrieved to the context. Each component has three levels: weak (0), moderate (1), or strong (2) allowing for activities
to be coded for their involvement index on a scale of 0 to 6, with tasks rated higher on the scale claimed to be more effective for language learning. In general, research on the ILH has shown tasks with a higher involvement load to lead to better vocabulary learning outcomes, although results have been somewhat mixed across studies, and the differential gains for activities with higher compared to lower involvement loads have been modest (Keating, 2008; Kim, 2008).

Nation and Webb (2011) point out that the ILH fails to sufficiently account for the range of factors that determine how effective a technique will be for vocabulary learning. To address this gap, they developed a more elaborate framework called Technique Feature Analysis (TFA) which identifies five main features: motivation, noticing, retrieval, generation, and retention, and breaks each of these down into sets of sub-features. The TFA framework is presented in Table 17.2.

In the first study to empirically compare these two frameworks, Hu and Nassaji (2016) assigned 96 Taiwanese university students to four different task conditions, each of which they categorized based on ILH and TFA indexes and in which 14 unknown words appeared. The results of pretest and posttest comparisons of knowledge of the 14 words showed that the TFA was a significantly stronger predictor of learning than the ILH. Interestingly, the task which led to the best retention of words on the posttest was the one which included a productive dimension in which participants were required to reword sentences using the target words in an appropriate form and without changing meaning. Hu and Nassaji conclude

<table>
<thead>
<tr>
<th>Table 17.2 Technique Feature Analysis</th>
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<tbody>
<tr>
<td><strong>Motivation</strong></td>
</tr>
<tr>
<td>• Is there a clear vocabulary learning goal?</td>
</tr>
<tr>
<td>• Does the activity motivate learning?</td>
</tr>
<tr>
<td>• Do the learners select the words?</td>
</tr>
<tr>
<td><strong>Noticing</strong></td>
</tr>
<tr>
<td>• Does the activity focus attention on the target words?</td>
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<tr>
<td>• Does the activity raise awareness of new vocabulary learning?</td>
</tr>
<tr>
<td>• Does the activity involve negotiation?</td>
</tr>
<tr>
<td><strong>Retrieval</strong></td>
</tr>
<tr>
<td>• Does the activity involve retrieval of the word?</td>
</tr>
<tr>
<td>• Is it productive retrieval?</td>
</tr>
<tr>
<td>• Is it recall?</td>
</tr>
<tr>
<td>• Are there multiple retrievals of each word?</td>
</tr>
<tr>
<td>• Is there spacing between retrievals?</td>
</tr>
<tr>
<td><strong>Generation</strong></td>
</tr>
<tr>
<td>• Does the activity involve generative use?</td>
</tr>
<tr>
<td>• Is it productive?</td>
</tr>
<tr>
<td>• Is there a marked change that involves the use of other words?</td>
</tr>
<tr>
<td><strong>Retention</strong></td>
</tr>
<tr>
<td>• Does the activity ensure successful linking of form and meaning?</td>
</tr>
<tr>
<td>• Does the activity involve instantiation?</td>
</tr>
<tr>
<td>• Does the activity involve imaging?</td>
</tr>
<tr>
<td>• Does the activity avoid interference?</td>
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</tbody>
</table>

*Source: Adapted from Nation & Webb, 2011, p. 7*
from this finding that the requirements to use a word generatively and to deliberately focus on form (Laufer, 2005) are key factors that contribute to better word learning (see Laufer in this volume for a contrasting evaluation of Hu and Nassaji, 2016). To date, no other studies of which I am aware have subjected the TFA to empirical testing.

The third framework, the TOPRA model (Barcroft, 2002, 2013), accounts for how different types of processing (i.e., semantic processing, form processing, and processing for mapping) lead to different kinds of learning. It has close parallels with the transfer-appropriate processing (TAP) model of memory (Goldstein, 2015), which posits that the way we process information determines the facets we will remember/get better at. Central to the TOPRA model is the problem of limited attentional capacity. That is, because attentional resources are necessarily finite, and because processing L2 input is cognitively demanding for learners, allocating attention to one facet of the input will necessarily reduce the resource available to attend to other aspects. For example, Barcroft (2004) found that when learners were required to write novel sentences using words they had just learned, their ability to recall these words was significantly poorer than for learners who did not do a productive task but instead did an activity that focused their attention on the form of the words. In a summary of the research findings relevant to TOPRA, Barcroft (2013) identifies five key implications for vocabulary learning:

1. Exposure to repeated occurrences of new words is beneficial for word learning.
2. Variability in aural aspects of spoken input (e.g., speaker style and speech rate) enhances learnability.
3. During the initial stages of learning lexical items, tasks that require semantic elaboration detract from learning.
4. Requiring learners to produce new words without recourse to meaning can be detrimental to word learning.
5. Word retrieval (i.e., productive retrieval) is beneficial for learning after the initial stage of form learning.

To sum up, all three models share the goal of establishing a principled basis on which to select and design learning activities in order to improve the effectiveness of L2 vocabulary learning in the classroom. However, three qualities of the TOPRA model distinguish it from the other two. First, it makes specific predictions about sequencing, namely that the processes of attending to form and establishing form-meaning mappings should precede opportunities for deeper semantic encoding. Second, it makes predictions about the impact of input features on vocabulary learning. Third, it accounts for the multifaceted nature of vocabulary learning by distinguishing between three dimensions of word learning: memory for new words, the ability to create form-meaning mappings, and memory for known words.

Priority 5. Assess Progress

Formative assessment, or what is known as assessment for learning, is an integral part of effective learning and teaching (Hattie, 2012; Wiliam, 2011). It not only provides information on what has or hasn’t been learned over the short term (i.e., daily or weekly), it is part of the process of this learning. As such, formative assessment stands in contrast to summative assessments such as standardized tests of achievement or proficiency (e.g., the VLT and VST), which typically take place outside of classroom learning and teaching.
For VLT, formative assessment involves regularly assessing learners’ attainments and their progress towards vocabulary learning goals. Information on how well students are learning vocabulary and how effective the curriculum is in this area is an important guide for future decision-making by both teachers and learners. As Grabe and Stoller (2018, pp. 38–39) argue,

the concept of assessment for learning . . . is one that all teachers should embrace as part of their ongoing efforts to improve students’ learning. Assessment for learning focuses on students’ performance “at the moment,” most commonly through informal measures of progress. This form of assessment should result in teacher feedback that helps students:

• become aware of their learning progress,
• engage in self-assessment (i.e., self-reflection) to improve learning outcomes, and
• work with the teacher and peers to improve their performance.

Despite a great deal of interest and research on assessing vocabulary knowledge and learning, little of this scholarship deals with formative assessment of short term vocabulary learning achievements. And yet for classroom teachers, this is likely to be a major concern. Recognizing this concern, Nation (2013) suggests that formative tests need to be easy to make and mark, and should fairly reflect what can be expected from a short learning time. Examples of test formats that meet these criteria are translation, matching, gap-filling, and true/false items (Nation, 2013, p. 521). Formative tests can also be used to guide strategy training. Sasao (2013) report on the development of a series of tests designed to guide and assess learners’ facility with the guessing words in context strategy and with learning the form, meaning, and function of word parts (prefixes and suffixes) (see also Mizumoto, Sasao, and Webb, 2017; Sasao, this volume).

An important principle of formative vocabulary assessment is that the information it provides needs to be integrated into a feedback process so that today’s assessment informs tomorrow’s learning. This requires that learners understand the feedback they are given and apply it to their ongoing learning. It also requires that teachers work with students to develop (1) an appropriate disposition towards the feedback process, and (2) the skills to take on an effective agentive role in this process (i.e., knowing what the appropriate standards are, being able to compare one’s learning to these standards, and knowing how to close the gap between the two (Sadler, 1989). Feedback processes such as these are valuable for helping learners develop a strategic disposition towards vocabulary learning. It is worth noting that feedback has been shown to be among the highest ranking of any single factor that influences learning (Hattie, 2009). It is not unreasonable to assume that feedback is also important for vocabulary learning.

Priority 6. Embrace Technology-Mediated Vocabulary Learning

More than any other single area of language learning, digital technologies have been developed to cater for vocabulary learning, which also happens to be one of the most extensively researched topics in relation to mobile-assisted language learning (Ma, 2017). The impressive range of digital resources available for vocabulary learning include corpora-based learning programs, lexical profiling programs, concordancers, online vocabulary tests, and mobile apps, to name a few. This raises the challenge for teachers and learners of how to
select appropriate technologies from amongst the bewildering array of options available, and how to incorporate these technologies into classroom instruction.\textsuperscript{2} Three starting points can help teachers address this challenge.

First, Nation’s advice that target lexical items should be met across the four strands in a program (Nation, 2008) can be applied to technology. This involves checking that technology is being harnessed effectively in each of the strands, and especially that it is used for a balance of implicit and explicit vocabulary learning opportunities. For example, the digital resources available through the Extensive Reading Foundation\textsuperscript{3} cater for the meaning-focused input and fluency strands; digital word cards\textsuperscript{4} cater for the language-focused learning strand; and computer mediated communication (e.g., Skype, text chat, Twitter) caters for the meaning-focused output strand.

Second, Ma (2017, pp. 46–47) proposes that technology should be harnessed to help learners with four key stages of vocabulary learning: discovering new words, obtaining word meanings, mapping the word meanings with forms, and consolidating the words. She argues that, left to their own devices, learners will tend to use technology for the first two of these processes, i.e., using digital dictionaries, translation software, or article hyperlinks to find the meaning or pronunciation of words they encounter. But they are much less likely, unless guided by the teacher, to use technology for mapping meaning and form, and consolidating word meaning. To address this issue, Ma offers strategies such as encouraging learners to record words they look up using the record function in e-dictionaries, and then spending time reviewing these words. Alternatively, important lexical items can be added to a learner’s inventory of digital word cards.

In presenting technology as a separate priority area I have perhaps run the risk of siloing it. But while technology is important enough to deserve being singled out in this way (Chapelle & Sauro, 2017; Ma, 2017), even more importantly, it warrants being an integral component of every aspect of VLT, and of each of the six priorities discussed in this section.

**Future Directions: Accounting for Teachers and Learners**

The question of how teachers make sense of VLT and what factors shape or constrain their decision-making has, to date, been under-researched. The messy reality of language classrooms in all their rich diversity calls for an approach which values the local and contingent over the generalizable. From this perspective, the question may be less one of what approaches to vocabulary learning should be adopted in the language classroom and more a question of how classroom factors shape affordances for VLT, or what effect classroom ecologies have on VLT. The answers to these questions offer a valuable bridge between the work of researchers and the daily VLT decision-making of learners and teachers.

Among the classroom factors that determine how VLT is realized in practice are the classroom setting, the teacher, the learners, the curriculum, materials and resources, and whatever language teaching methodologies are in play. A more nuanced, empirically based understanding of the relationship between these factors and VLT is likely to make a valuable contribution to the VLT research agenda. In this section, we focus on two of these factors: teachers and learners.

**Teachers**

At the risk of repeating a somewhat tired trope, the quality of teachers has been shown in a large body of educational research to be a key determinant of variation in student learning (Darling-Hammond, 2000; Hattie, 2012). In EFL contexts, in which learners may not have
opportunities to use English or be exposed to rich English input beyond the classroom, the teacher’s expertise and proficiency is an even more critical factor for vocabulary learning. Teachers bring to the classroom a wide range of experience, training, proficiency, commitment, and many other personality variables which impact on learning. Importantly, they may or may not be first language speakers of the target language, and may or not be bi- or multi-lingual, sharing or not, the language(s) of their learners. In the area of VL, a small study by Wode (1999) found that in the context of English immersion programs in German schools, the teachers’ oral use of English appeared to be a not insignificant source of incidental vocabulary learning, that is, of lexical items that were not included in word lists or in teaching materials.

Teachers also bring to the classroom a variety of beliefs, attitudes, identity constructions, perceptual frames, and knowledge about VLT, all of which shape their decision-making and classroom practice (Borg, 2006; Darvin & Norton, 2015). Given the importance of teachers, and the large body of research on language teacher cognition, it is remarkable that, to date, so little of this research has addressed teacher cognition in relation to VLT. The research that is available has focused on what teachers know about the structure of the English lexicon, and the relationship between teachers’ classroom vocabulary teaching practices and their beliefs about effective vocabulary teaching and the contextual factors which inform their decision-making. The following points summarize findings from a selection of studies that have investigated these topics.

1. The accuracy with which native-speaker English teachers were able to judge the frequency of low and high frequency words was no better than university graduates. Neither group was successful in judging the frequency of words in the middle frequency range (McCrostie, 2007).

2. In a survey of 201 ESL and EFL teachers, Nassaji (2012) found that the second most frequent priority for SLA research identified by the teachers was how to teach grammar and vocabulary effectively, although most of the teachers reported rarely reading research articles.

3. In a qualitative study of the vocabulary teaching practices of four university EFL teachers in two Chinese universities, Xie (2013) found the teachers drew on a very restricted range of vocabulary teaching strategies. They overwhelmingly chose a heavily transmission-oriented stance which involved presenting information in English first and then in Chinese about words, mostly in the form of explicit definitions without examples. In addition, they deliberately and explicitly taught every word they thought to be difficult.

4. In an interesting contrast to Xie’s findings, Folse (2010) observed one week (25 hours) of classes in an intensive English program at a North American university. He found a low occurrence of episodes with an explicit vocabulary focus, and an especially low number of student initiated episodes. In the reading class, where he expected to see a stronger emphasis on vocabulary, vocabulary episodes were notably few and far between.

5. Coxhead (2011) used a questionnaire to identify the approach taken to the teaching of specialized vocabulary by 66 secondary school mainstream and ESOL teachers in New Zealand. A common impetus for teaching vocabulary as reported by the teachers was student initiated vocabulary enquiries. In other words, VLT was reactive rather than planned, and when it did occur, it was focused on defining or explaining single lexical items.

6. While the studies discussed earlier are typically small in scale and focus, Gao and Ma (2011) undertook a larger scale study of beliefs concerning vocabulary instruction...
involving pre- and in-service teachers in Hong Kong and Mainland China. Using a
questionnaire (Likert-scale and open-ended questions) and follow-up interviews, the
research found general agreement among the four groups on the efficacy of learning
through memorization and the value of contextual use. Responses to the open-ended
questions also revealed general agreement on the need to explicitly teach lexical knowl-
edge. However, the groups differed on questions of strategy use and how much empha-
sis should be placed on putting words to use as part of the learning process. Perhaps
the most interesting finding from the study concerns the effect of the teachers’ own lan-
guage learning experiences on their beliefs. Teachers who as learners had experienced
an excess of copying and dictation as a primary form of vocabulary learning showed a
stronger preference for alternatives such as directly teaching word meaning.

Learners

How VLT is approached in the classroom will be determined to a large extent by not just
who the learners are and their purpose for learning but by a raft of other learner variables,
including how motivated they are to succeed, their beliefs about vocabulary learning, their
educational background and previous L2 learning experiences, their willingness and capac-
ity to engage with VL, by the other languages they bring with them to the classroom, and
whether or not learners in a class share an L1.

As with the state of research on teacher factors, L2 vocabulary research on the learner
variables and vocabulary learning is rare. This is despite the claim that acquisition of vocab-
ulary is typically seen by learners as a major hurdle. As Meara (1980, p. 221), noted, “learn-
ers themselves readily admit that they experience considerable difficulty with vocabulary,
and . . . most learners identify the acquisition of vocabulary as their greatest single source of
problems”. From a classroom perspective, this suggests that in addition to assessing learners’
vocabulary size and learning goals, teachers need to develop a pedagogy that is responsive
to the particular challenges learners face. To this end, more VLT research focused on learner
perspectives is needed and has a valuable role to play. As Folse (2004, p. 10) so aptly argues:

Perhaps the recent interest in second language vocabulary research will also mean a
rethinking of the way we approach the teaching of vocabulary – including the neces-
sity to teach vocabulary extensively – to our students. For too long, second language
teaching has been dominated by an emphasis on communication, but accurate commu-
nication depends largely on an extensive knowledge of vocabulary. A good curriculum
is based on student needs, and vocabulary is high on student priority lists. It is time to
listen not only to the data from these studies but also to our students who are all too
aware of their lack of L2 vocabulary knowledge.

Conclusions

Everything that goes on in the language classroom (or any other classroom for that matter)
involves vocabulary. Words are so ubiquitous that vocabulary learning opportunities exist
whether or not VLT is planned or deliberate (Wode, 1999). Assuming some level of percep-
tual processing has occurred, each encounter with a lexical item contributes, however incre-
mentally, to the neural pathways associated with recognition, learning, and mental storage
of that item (Ellis, 2012). However, in the absence of a planned and principled pedagogy
for vocabulary expansion, much of this learning is likely to be haphazard, superficial and,
consequently, inefficient, with learning gains easily lost. Indeed, as discussed earlier in this chapter, research suggests that certain approaches to teaching and learning vocabulary such as requiring learners to produce new words without reference to meaning can be detrimental to learning (Barcroft, 2004). There is good reason therefore to approach vocabulary teaching and learning in the classroom in a principled manner and with reference to empirical evidence, rather than assume it is taken care of through, for example, providing a language rich environment without deliberate planning for vocabulary growth. The aim of this chapter, as with this overall volume is to aid in this endeavor.

Further Reading


This is a highly practical book which addresses questions of direct relevance to classroom teaching, such as, how much classroom time should be spent teaching vocabulary, and what is the best way to group vocabulary for learning.


This book provides a comprehensive account of research on lexical input processing and of Barcroft’s TOPRA model. It is valuable both for its contribution to theoretical understanding of L2 vocabulary learning and for its implications for teaching and learning.


This is a practical and well-informed book chapter which discusses the range of technologies available for vocabulary teaching and learning.


This book chapter is a concise and highly informative discussion of instructional options for vocabulary learning and teaching.

Related Topics

Approaches to vocabulary learning outside the classroom, strategies for learning single-word items, evaluating exercises for vocabulary learning, key issues in teaching single-word items, key issues in teaching multiword items

Notes

2 For a useful resource on digital teaching see https://thedigitalteacher.com/framework
3 http://erfoundation.org/wordpress/graded-readers/
4 E.g., https://quizlet.com/

References


Learning Vocabulary Inside the Classroom


