Visualizing Vocabulary:
Student-Driven Visual Vocabularies[1]

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ABSTRACT

This article explores the use of visual vocabularies created by students on Padlet as a tool for enhancing students' engagement with Greek and Latin vocabulary. Given that vocabulary may be undervalued by instructors in favor of more complicated grammatical concepts, this article claims the necessary focus that instructors should put on vocabulary exercises. Informed by research in cognitive psychology on dual coding (i.e., encoding information in memory both visually and lexically), this article also argues that instructors can enhance student retention of Greek and Latin vocabulary through the use of visually rich, student-driven visual vocabularies. By providing students with vocabulary lists of frequently used Greek or Latin words and asking students to find images that illustrate the meaning of those words, instructors enliven the learning process for students, helping students to make meaningful connections with these words in the target language. Using visual vocabularies, instructors help students move towards a greater level of language fluency, processing lexical entries more in terms of concepts and images.

As a child, I remember very vividly flipping through Richard Scarry's *Best Word Book Ever*. As an emergent reader, this book helped me decode the textual squiggles into meaningful words, and my commitment to finding Gold Bug on each of the visually rich pages kept me immersed in this subtle interplay between words as lexical items and representative of concepts.[2] By "meaningful" here, I mean both the simple sense of what the letters represent in the real world, but also a sense of the word as it relates to a real, lived experience, i.e., a word that I might have wanted to use in expressing myself through writing. Herein lies one of the key challenges for us as instructors in encouraging our students to take the study of Latin or Greek vocabulary as seriously as they should – the need to convince students of the relevance of these words

2 Books like Brown's *Goodnight, Moon* can achieve a similar effect where emergent readers can point to the graphic depictions of the keyword highlighted on each page.

for real communication. When delivering new words to students, we generally provide students with a simple listing of words in the target language across from their English meanings. While this provides an ample tool for decoding the lexical meaning of these words, they may potentially be less meaningful because they lack the rich visualization we experience when thinking about these same words in our native language.

While the approach outlined in this article can work at whatever level of instruction, I am particularly interested here in vocabulary instruction at the intermediate and advanced levels, where instruction shifts more and more toward reading selections of continuous text. With example sentences that are common in introductory texts, all the needed information is neatly contained in a small space, and students can simply discard that information when moving on to the next, unrelated sentence that illustrates the same key grammatical concept. With continuous text, students are trying to follow a narrative. They need to pull out key bits of information from one sentence and carry that forward in order to think about the larger point that the author is trying to make. I have found that students get so focused on looking up each word that they jettison the information provided by endings, making up a meaning for the sentence based on the definitions of the words that they have looked up. The bandwidth for thinking about Latin gets taken up by vocabulary, leaving little energy for thinking about the way that authors create meaningful expressions.[3] As a result, they are not well positioned to think about the key information from the first sentence that they need to carry forward as the thought progresses. If students know their vocabulary well, they do not need to devote working memory space towards thinking about the meaning of those words.[4] They will be in a better position to think about the key information being presented in a sentence and, by extension, be better able to follow a continuous

3 Cognitive psychologists debate how much information can be retained in working memory. Cowan and his colleagues (see Cowan 2010 for a review) have shown that humans can typically retain four items at most, but others (see Jonides et al. 2008 particularly) suggest that we can only focus on one item at a time. Miller (2011) suggests that instructors really need to think about the nature of the information and the kind of interaction it requires of learners in order to assess students' cognitive capacity adequately. From a comprehensible input standpoint, Nation (2001) suggests that "lower vocabulary size means that: there are more words to guess; there is less comprehensible context to support the guesses and learners bring less background knowledge to the texts they read." (248)
4 See Martin and He (2004) and Potter and Lombardi (1990) in particular.

narrative.[5] Utilizing engaging visuals as part of the vocabulary learning process provides students with a more enriching learning experience that also has positive impacts on vocabulary retention.[6]

To this end, I have made use of [Padlet](#) to create a space where students can create engaging visual vocabularies and subsequently think about Greek and Latin vocabulary in more meaningful and stimulating ways.[7] Through a more vibrant community of learners, my students have shown signs of greater interest in studying vocabulary as a truly essential part of improving their language abilities. The study of vocabulary has transformed from something I largely left for students to do outside of class to a vital part of our work in class.

POWER OF THE IMAGE: STUDIES ON VISUAL MEMORY AND PROCESSING

While the transition from the beginning to intermediate level is a perennial point of tension for Greek and Latin teachers, a significant part of the problem, from my

5 Researchers in second-language learning have highlighted the great importance of vocabulary acquisition. Muccigrosso, Coady, and Huckin's (1997) volume of review articles provides a useful starting point. Laufer (1997) argues that vocabulary mastery is the single greatest predictor of reading success, suggesting minimal reading competence happens when the reader understands roughly 95% of the words in a text (23-24). Research suggests that words that are known are not processed in working memory, but sent directly to other components of memory (see Martin and He 2004) or incorporated smoothly into overall sentence structure (see Potter and Lombardi 1990) without the need to review the meaning of a particular word.

6 Nation (2001) argues that "vocabulary learning from extensive reading is very fragile. If the small amount of learning of a word is not soon reinforced by another meeting, then that learning will be lost." Intentional vocabulary instruction, especially that utilizing visuals, provides one means for reinforcing this learning. On using visuals, see particularly Yeh and Wang (2003), Jones (2004), and Carpenter and Olson (2011).

7 [Padlet](#) provides an online bulletin board where contributors can post text, images, and links to websites asynchronously. Once a board has been created, instructors simply need to provide students a link to add their own material. As of this writing, students do not need to sign up for a Padlet account in order to modify the boards, an aspect of the site that makes it more attractive given the inundation students face when using multiple online tools for educational purposes that each require their own login. This being said, the site has unfortunately undergone an update that greatly limits the free use of the site to 3 boards with a 10mb file limit per post. The site does offer subscription services specifically for educators with more advanced features, including an option that can be used across an entire school.

perspective, is that we teachers send the wrong message when we fail to continue to assess students on vocabulary. As Eyraud, Giles, Koenig, and Stoller suggest about language learning in general, "Most vocabulary growth takes place through incidental learning, that is, through exposure to comprehensible language in reading, listening discussions, bulletin board displays, videos, and so forth" (2).[8] While we may assume that students will continue working to acquire words that they do not know as they read complete texts, there are two real problems here. First and easiest to remedy, students may look at the lack of assessments of vocabulary as a sign that it is no longer essential as it was when they were at the beginning level. Low stakes quizzes are an easy way to remind students that vocabulary is an important aspect of their continued development.

Secondly, students may have difficulty prioritizing words that they should focus on first. While it is the case that students do learn vocabulary incidentally through reading, it is equally important to keep in mind, as Nation has argued, the need for direct vocabulary learning as the two processes are complementary.[9] While intermediate and advanced textbooks usually provide a glossary in the back that covers words in the text that one does not expect students to have mastered at the beginning level, there is no sense of what words occur more frequently since these lists are typically a simple, alphabetical listing. As Major (2008) notes, in their native language, English speakers typically have a vocabulary of 10,000 to 15,000 words but only use a subset of this vocabulary in any given conversation. Even then, they are likely to use certain words with much greater frequency than others, and it would behoove students learning English to focus on those words most commonly used in conversations first. The same is true for students of Greek and Latin.[10]

Instructors can help by providing students with keywords from each week's reading. While instructors might simply choose words that they feel appear often, it would be better for instructors to draw lists informed by work such as the Dickinson College Core Vocabularies or Major's "Core Greek Vocabulary for the First Two Years of Greek."[11]

8 In their study, Laufer and Sim (1985) found that vocabulary was a more pressing need for foreign language learners than knowledge of the subject matter or a language's syntactic structure.
9 See Nation (2001), especially Chapter 7.
10 In a study on vocabulary acquisition through listening activities, Elley (1989) found a positive correlation between vocabulary acquisition and the importance of the words to the plot of the story.
11 The Dickinson College Core Vocabularies can be found at http://dcc.dickinson.edu/vocab/core-vocabulary and Major's list in Major (2008). Major's list focuses on Greek words that make up 80%

For students who plan to continue in the languages beyond college language requirement courses, studying words with greater transferable value would be of particular value. Using a tool such as [Logeion](#) or [The Bridge](#), which give both a sense of the word frequency in the entire Greek and/or Latin corpus as well as the frequency within a given author, instructors can similarly compose thoughtful vocabulary lists that have in view the grand scope of the program's language curriculum.[12] Students who have achieved familiarity with the words on lists such as these are then in a position to push into less commonly used words in either language.

However, vocabulary lists have their limitations. Taken out of context from the ancient text, they are not very dynamic, and apart from people with an innate curiosity about words, these lists seem less likely to appear to students as something worth investing any more than a minimal amount of time looking over.[13] Vocabulary acquisition, as Nation argues, is a cumulative process, necessitating multiple encounters with any word (296). As such, language teachers need to help students find reasons to engage with keywords again and again. By helping students see the living language beneath the words written on the page, we can help students take these lists of "meaningless" Greek or Latin words and turn them into "meaningful" ones. We want students to be able to move words from short-term working memory (an item they encountered as part of a class assignment) into their long-term memory. When students can recall vocabulary from long-term memory, they are in a better position to see these words akin to ones they know in their native language, i.e., words that actual people use to communicate their desires, fears, anxieties, or hopes.[14] We

of the lemmata found in surviving Greek texts. Greek is surprisingly small in terms of its core vocabulary that makes up 80% of text, fewer than 1100 lemmata compared to 2200-2300 in English. The Dickinson College Latin vocabulary is informed by Delatte, et al. (1981) and Diederich (1939). Their Greek vocabulary builds upon Major's work as well as information from the Thesaurus Linguae Graecae. For a fuller listing of Latin vocabulary lists from the early 20th century onwards, see Muccigrosso (2004).

12 Haverford's The Bridge includes vocabulary lists for popular textbooks as well as the AP sections of certain authors. It does, though, lack lists for some authors (e.g., Plautus and Terence).

13 As language instructors, we can make the mistake of thinking that our students are naturally as intrigued about every aspect of a language as we tend to be. Patrick (2015) suggests, "When we [Latin instructors] limit our classes to those who share our interests we enhance the false notion that Latin cannot be learned by the average person. This practice has kept our programs small." (109)

14 This should be our ultimate goal for students in our language classes. As Gruber-Miller (2018) suggests, "Language learning is not just about grammar and vocabulary, reading and translating, or practicing forms, but it is about communicating meaning." (21) Patrick (2015) outlines one process for helping students see Latin as a system of sharing meaning using the principles of comprehensible

humans are notoriously fond of engaging with our world through both visual and verbal representations, and increased familiarity with a concept or process, as Mayer and Sims have found, enables people to easily create visual representations from a simple verbal narration.[15]

Our understanding of the world becomes richer through our ability to move back and forth between visual and verbal ways to conceptualize it, and we can see this through differences in the translation process for bilingual speakers. Researchers have found an interesting split in the verbal and visual representation process for bilingual speakers translating from their native language (L1) to their second language (L2) and vice versa. Kroll and Stewart have shown that the process from L2 to L1 is primarily a lexical process, (e.g., looking at a Latin word, and then picking the right English word to go with it), whereas from L1 to L2 translation is primarily done conceptually (e.g., envisioning an object and thinking about the word in the other language that represents the same idea) (Kroll and Stewart, 1994). Adapting Kroll and Stewart's model, Yoshii suggests that images stand alongside languages in relation to concepts as an additional cue for language learners (Yoshii, 2006). So in trying to decipher a word in L2, one might rely upon a lexical link with L1 (as in Kroll and Stewart's model), or they may be able to rely upon the link between image and concept without the aid of L1. This second step, though, depends on the learner having established a strong enough link between concept and L2 word for the image to provide a substantial enough cue. Thus, for early-stage learners, in Yoshii's model, learners will more readily navigate L2 words through an equivalent translation into L1 along with a visual representation. This suggests that the ability to navigate concepts in the back and forth, between visual and verbal, represents a higher level of comfort and fluency with a language.

I would argue that we can see this a bit when we think of very common words in Latin or Greek versus less commonly used words. Words such as *rosa, nauta,* and *gladius* will probably generate an image in a student's head much more readily than words such

input in order to connect Latin vocabulary to students' lives. As this article will show, having students create visual vocabularies provides another pathway for the same process.

15 Mayer and Sims (1994), 391. Looking at the scanned brains of language learners studying German vocabulary, Fliessbach, Weis, Klaver, Elger, and Weber (2006) found increased activity in the area of the brain associated with processing visual content, especially with words representing concrete items which suggest that an image-based section of the brain might be involved in processing vocabulary.

as *perna, picus, or ericius* (ham, woodpecker, and hedgehog, respectively). Technical terms for parts of ships or chariots may be uneasily visualized for students in Greek, Latin, or English, barring firsthand experience. While a student may learn that the Greek word σκαλμός means [thole pin](), they are unlikely to have any sense of what that looks like unless they have experience in rowing. The students can see the letters that makeup either the Greek or Latin word – and the English word for that matter – but the meaning stops there.[16]

We, as instructors, play a crucial role at this stage of the learning process in order to help students begin to think about Greek and Latin words through the richness of visuals combined with lexical /representations. Presenting Greek or Latin vocabulary through compelling stories along with visuals, teachers can help students develop more meaningful representations of technical terms. If students have unexpected experiences with a lesser-known word (e.g., someone with a pet hedgehog), instructors should encourage students to apply that expertise to recurring classroom assignments (e.g., the adventures of the adorable *ericius*). Over time, instructors can help students shift responsibility for developing these picture links on to the students in order to capitalize on what Carpenter and Olson refer to as the "picture superiority effect."[17] When pictures and words are used in conjunction with one another, the dual encoding effect is doubled, as Snodgrass, Wasser, and Finkelstein have shown.[18] That is, the words are encoded both as lexical text and conceptual image at the same time that the picture is encoded both conceptually and as lexical text. Such encoding does help student learning and retention of words.[19] As Nation has suggested,

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16 I am focusing on concrete nouns here for the sake of simplicity. Abstract nouns, while more difficult to visually illustrate, are visualizable if we think about the various depictions of goddesses such as Nike and Dike or, to bring the idea into a modern setting, the various emotions of Pixar's Inside Out. Verbs follow a similar trajectory from more physical, concrete actions (e.g., lifting, running, pulling, etc.) to more abstract (e.g., contemplating). Adjectives are fairly visualizable, but conjunctions and adverbs are notoriously more difficult to illustrate visually. With these, context is more helpful, and so a brief narrative description accompanying the visuals may be needed. The emergence of GIFs provides the possibility of a wordless narrative.

17 Studying recall of items, both lexical and pictorial, Carpenter and Olson (2012) have found that, in instances of free recall, students were able to remember significantly more items from the pictorial list (92).

18 Snodgrass, Wasser, and Finkelstein (1974), 32. See also the foundational work for dual coding by Paivio (1969, 1971, and 1986).

19 Lado, Baldwin, and Lobo (1967) had students who had completed 6 credits of college Spanish study a list of 100 infrequent Spanish words with English translation and pictures. These students were able to recognize 95% and recall 65% of the words after one meeting with the word.

"A suitable picture is an instantiation of the word and this may result in a deeper type of processing than a first language translation which does not encourage the learner to imagine a real instance of the meanings of the word." (305) I would argue that it is possible for us to leverage images to better help our students make Greek and Latin vocabulary more meaningful to them, and by extension, to help them retain words better.[20]

Before getting into a more detailed description of the assignment and student learning results, one word of caution is warranted here. When deciding how to implement technology into the classroom, instructors need to weigh the benefits of the technology against the learning curve for using said technology.[21] Padlet is a straightforward platform for students to use. Example Vocabulary Boards can be found here and here.[22] With a simple click, students can add a new sticky note to the board. Another click allows them to upload a photo from their computer or link to a GIF, and they can simply cut and paste the Greek or Latin word as it appears on the course vocabulary list to complete their post. Through this process, students can create visual vocabularies driven by their imaginations and interests, adding their own sense of how the Greek or Latin word has meaning in the students' world. The ability to contribute asynchronously also allows students to contribute to the collective learning of the class at their convenience.[23] Altogether, Padlet provides an easy entry into the creation of a rich arena for meaningful visual vocabularies.[24]

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20 Chochola and Sprague's (2017) Latin picture dictionary may be a useful tool for students. As I will argue in the rest of this article, student-driven visual voccabularies have the added benefit of students injecting their personal sense of meaning into the Greek or Latin words.

21 Here I am trying to keep in mind the warnings of researchers such as Thrush and Thrush (1984) who highlight the problems that emerge when "programs are developed from a practical or technical bias and lack sufficient educational planning." (23)

22 These boards come from an intermediate Latin course on Caesar and a combined intermediate-advanced level course on Cicero. As I reuse the boards by deleting previous posts whenever I teach the courses, the contents will vary.

23 Given the asynchronous quality of this tool, it may be of particular use for instructors teaching to distance students or teaching online courses. It provides a visually rich and ever-changing opportunity for students to continually engage with the material and the thoughts of their classmates. That being said, instructors may need to ask students to choose new images if the connection between the image or GIF and the Greek or Latin word is less apparent to those unfamiliar with a particular aspect of popular culture.

24 For those wishing to avoid the use of technology, a similar effect can be achieved through the use of hand-drawn images or printed pictures that students would bring to class, but doing so would lack the easy reviewability of the visual vocabularies generated on a site like Padlet.

SEEING THE WORDS: EVOLUTION OF THE VOCABULARY BOARD

For the past five years, I have used some version of this visual vocabulary assignment in my intermediate and advanced level Latin courses. Before delving into the particulars of the assignment, some brief words about the dynamics of my courses are warranted. At my institution (a private, predominately-white, master's comprehensive school with an emphasis on the liberal arts), only students majoring in a field within the College of Liberal Arts and Sciences and the College of Communications are required to take any language courses. Students must complete at least two courses at the intermediate level or higher. While they can test out of the beginning level courses, they cannot test out of the language requirement. As such, the vast majority of students (typically 66% or more) in the beginning and intermediate levels are neither majors nor minors in the language. Some of these students are in these courses because they had Latin (less so Greek) in high school or had always wanted to take an ancient language but could not because their high school did not offer any. Others are there as part of the usual mix of students looking to take a non-speaking language or those with aspirations of medical or law school. Some will decide to declare a minor or major as a result of their time in these courses, but most will end their study of Greek or Latin after the second semester of the intermediate level.

In the initial iteration of the assignment in my intermediate Latin course on Caesar, I simply created two boards on Padlet that were organized thematically (e.g., Roman army terms and verbs of movement).[25] I asked students to post Latin words that they felt would be useful to learn as we came across them in the reading. The students also needed to provide an image illustrating the meaning of the Latin word. At this stage, I had given the students very little instruction about the nature of the images they would use or how to find them. Participation was entirely voluntary, and I did not provide students with vocabulary lists for study. As a result of the voluntary participation and the lack of focused contributions, the usefulness of these boards was relatively low. It became apparent that I needed to provide students with greater motivation to engage with this kind of assignment actively.

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25 In talking about the use of word walls in class, Eyraud, Giles, Koenig, and Stoller (2000) emphasize the importance of vocabulary words chosen because of the need for students to use them in the comprehension of "a reading, a chart or graph, a video, a lecture, a bulletin board display, or a guest speaker." (10)

The next year, I made regular contributions to these boards a part of the course's participation grade. Students were asked to select a word that they did not know and found interesting or useful. This significantly improved the number of contributions to the Vocabulary Boards connected to each week's readings, but the caprice of individual students still drove the word selection. There was great variability among the posts in terms of whether one might find the words on a list like the Dickinson College Core Vocabulary. Additionally, since the students did not have a collective sense of what words were important to study, they were not always sure what they should focus on in the image for thinking about the meaning of the Latin word.[26] For example, Figure 1 adequately illustrates Roman *galeae.*

Figure 1 © Jonathan Zarecki

But there is so much going on in the picture (the swords, daggers, siege equipment, standard, etc.) that students might not accurately focus their attention on the helmets of the two soldiers pictured here. Figure 2 provides a clearer illustration of the word, though such specificity is not always possible depending on the nature of the word.

26 Nation (2001) usefully observes the double-edged nature of pictures for vocabulary learning: "An advantage of using actions, objects, pictures or diagrams is that learners see an instance of the meaning and this is likely to be remembered ... Because objects and pictures contain a lot of detail, it may be necessary to present several examples so that learners can determine the essential features of the concept or accompany the object or picture with focusing information."

Figure 2 © Christopher Bungard, Roman legionary helmet from the Butler Ancient Mediterranean Cultures and Archaeology Lab

Starting the following year, I began to use the Vocabulary Boards as a supplement to vocabulary lists provided to students for each week's readings (see Appendix A for an example from a combined intermediate-advanced Latin course on Catullus), and I plan to continue doing so for reasons outlined in the next section of this article. I encouraged the students first to look over the traditional, text-only vocabulary list (typically about 20 items per week).[27] I wanted the students first to familiarize themselves with the keywords for each week. After they had done that, they then would post one to three words (depending on the total number of students in the course) to the Vocabulary Board on Padlet. Ideally, this forces the student to think about the nature of the image that they have chosen carefully to illustrate the idea inherent in the Latin term best. It also should help students, who use the Vocabulary Board as a review tool for regular vocabulary quizzes, have a stronger sense of where to focus their attention in thinking about the meaning of the Latin term illustrated through the image.

Moving forward, I plan to dedicate more time early in the semester to talk about the process of image selection. I want the students to be thoughtful in their choice of images, not simply choosing whatever comes up first in a Google image search. I also want the students to avoid images that contain text with the English definition of the word, a

problem more likely to come up if students are using memes or GIFs. Given the prevalence of the GIF in students' social media life, I am disinclined to restrict their use on the boards precisely because I want the students to see this study tool as a way to think about Latin and Greek as living languages. To avoid copyright issues, I will require that students restrict themselves to the use of images in the public domain or that are part of the Creative Commons license. Icons may be of great use, especially for nouns, and there are several platforms that provide free icons.[28] Google image searches currently provide a filter that limits results to images labeled for reuse in a noncommercial setting. I also plan to suggest that students may create their own images if they so choose to post to the boards.

Within my classes, I have developed a predictable routine to help students get the most out of these boards. For a Monday, Wednesday, Friday course, I post a list of vocabulary for the following week tied to reading assignments on Wednesdays. As part of their assignment for Friday classes, students need to select one to three unique word(s) to post to the boards. At the start of class on Friday, we open up the board on the screen in the classroom, and we begin our review of the words students posted. It is possible, given the number of students in class, that not all words may be used that week, and students understand that they are still responsible for learning all of the words from the vocabulary list for their weekly quiz, which we do on Mondays. The students will then encounter words from the weekly list in the readings throughout the week, including the day of the quiz. Because I am interested in students learning high-frequency words, word-selection is driven primarily by the 20 or so words that will appear more frequently in a particular author or Latin in general, rather than a roughly even distribution of words appearing in each day's readings.

It is essential for students, as I will discuss in more detail below, to have time to begin with the lexical list and reinforce their understanding of the words through the visuals of the Vocabulary Board. As noted in the discussion above about *galeae,* students may, if they simply start with the board, connect the meaning of the Greek or Latin word with the wrong element of the picture or, in the case of more abstract concepts, completely misunderstand the meaning that the original poster had attached to the visuals.

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28 In particular, I am thinking about the Noun Project and FlatIcon.

The 5-minute, weekly quiz is similarly a crucial part of this process.[29] Students need to encounter words through multiple repetitions in order for them to stick in memory. As Nation has argued, "If too much time has passed between the previous meeting and the present encounter with the word, then the present encounter is effectively not a repetition but is like a first encounter." (67) When students have begun their study of the vocabulary through the lexical list (Wednesday), reinforced it through the Vocabulary Board (Friday), and shown their ability to identify the meaning of the word on the quiz (Monday), they should be ready to encounter the words in the passages for the week's readings. Ideally, they are spending less time looking up words as they work through the passages.[30] This should help the students devote more mental energy to thinking about the way that the author builds meaning in the passage, taking in information left to right instead of juggling the meanings of a bunch of words that they just looked up in order to slog through the passage.[31]

POWER OF THE IMAGE: IMPACT ON STUDENT LEARNING

To assess the impact of the Vocabulary Boards in Greek and Latin courses, students, who were enrolled in intermediate and advanced levels of Latin courses in Fall 2016, Spring 2017, Fall 2017, and Spring 2019, voluntarily filled out surveys. I sent out the initial surveys approximately 5 weeks into the Fall 2016 and 2017 semesters with subsequent

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29 See Nation (2001), especially Chapter 10, for useful suggestions on best practices for testing vocabulary. Of importance here is Nation's assertion of the need for the testing format to test the kind of use of vocabulary students will be expected to perform (372). Students who will be using vocabulary primarily for reading purposes should not be asked to create sentences with vocabulary words. In a course where students regularly will be producing Latin or Greek sentences, such a vocabulary test would be very appropriate.

30 This progression also follows Nation's (2001, 72-74) three components for effective vocabulary learning – (1) an activity designed to help students notice a word for learning (i.e., the vocabulary list); (2) an activity to encourage retrieval (i.e., review of the Vocabulary Board as a way to reinforce the initial encounter); and (3) an activity to encourage generation (i.e., exposing students to the word in a different format, here pictures).

31 As instructors, we may heed the advice of colleagues in the modern languages who have long wrestled with the importance of comprehensible input as advocated by Krashen (1980 and 1985) and those who have followed him such as Long (1980, 1983, 1985) or more recently Asher (2009) and Ray and Seely (2008). Patrick (2015) provides a list of comprehensible input principles directly tailored to the concerns of Greek or Latin instruction. Patrick suggests a lower vocabulary threshold for reading fluency than Laufer, putting the crucial percentage at 90% of the words in a passage.

rounds sent out about the 10th and 15th weeks of Fall 2016 and the 7th week of Spring 2017. Only one round of follow up surveys was sent in Fall 2017 around the 15th week. Due to some technical issues, surveys were only sent out in the Spring of the 2018-2019 school year. Unfortunately, the enrollments in these courses were generally small (about 15 students in Intermediate Latin and 5 in Advanced Latin in any given semester), and survey response rates were somewhat hit and miss. Only one student completed enough surveys to provide complete longitudinal data. Thus, the results from these surveys are largely limited in usefulness to qualitative markers of the impact of the boards.

Students were asked to rank the size of their English vocabulary on a 5-point scale. Student reports on this item did not change significantly throughout the various surveys, and so I report only the results from the initial surveys. These results are summarized below.

Figure 3

Size of English Vocabulary	5	4	3	2	1
Fall 2016					
Intermediate Latin	4	7	0	0	0
Advanced Latin	1	2	0	0	0
Fall 2017					
Intermediate Latin	2	4	0	1	0
Advanced Latin	2	2	0	0	0
Fall 2019					
Intermediate Latin	0	4	1	0	0

Based on these results, students in Latin courses show clear confidence in the perceived size of their English vocabulary with the vast majority reporting 4s or 5s, and this makes sense given the somewhat self-selecting nature of Latin students, especially as many are in the language as part of a career trajectory that will take them to medical and law schools.

In contrast to high confidence in the size of their English vocabulary, these same groups of students reported modest confidence in their mastery of Latin vocabulary (again on a 5-point scale), as summarized in the table below.[32]

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32 Numbers may vary within a given class due to varying response rates. Since only one student provided enough responses for any kind of longitudinal analysis, I am more interested in general trends within the data.

Figure 4

Confidence in Latin Vocabulary	5	4	3	2	1
Intermediate Latin					
Fall 2016 - Initial	0	0	4	5	0
Fall 2016 – Follow Up 1	0	0	4	5	0
Fall 2016 – Follow Up 2	0	0	3	1	1
Spring 2017 – Follow Up 3	0	2	2	0	1
Fall 2017 – Initial	0	0	2	0	1
Fall 2017 – Follow Up	0	0	3	1	2
Spring 2019 - Initial	0	0	1	3	1
Advanced Latin					
Fall 2016 - Initial	0	0	2	0	1
Fall 2016 – Follow Up 1	0	0	2	0	1
Fall 2016 – Follow Up 2	0	0	1	0	0
Spring 2017 – Follow Up 3	0	0	0	1	0
Fall 2017 – Initial	0	1	3	1	0
Fall 2017 – Follow Up	0	0	2	0	0
Totals:	0	3	29	17	8

Students' level of language does not seem to have any significant impact on their confidence in Latin vocabulary, with most students reporting 3s. Given the significant number of students reporting 2s and 1s, vocabulary is an area that needs work in Latin courses. One point of particular interest in these results comes from students in Intermediate Latin in the round of surveys administered in Spring 2017, the students' second semester of Intermediate Latin, a point where some longitudinal comparison is possible between Fall 2016 – Follow Up 2 and Spring 2017 – Follow Up 3. These students had been using Vocabulary Boards throughout the Fall semester, and there was a definite shift upwards for three of the five students returning surveys.

Finally, students were asked to rate their sense of the helpfulness of the Vocabulary Boards on a 5-point scale. The results are summarized below.

Figure 5

Usefulness of the Vocabulary Boards	5	4	3	2	1
Intermediate Latin					
Fall 2016 - Initial	0	6	2	0	1
Fall 2016 – Follow Up 1	0	6	2	0	1
Fall 2016 – Follow Up 2	1	1	2	0	0
Spring 2017 – Follow Up 3	1	0	4	0	0
Fall 2017 – Initial	1	2	1	0	0
Fall 2017 – Follow Up	3	0	1	1	0
Spring 2019 - Initial	0	1	3	1	0
Advanced Latin					
Fall 2016 - Initial	1	1	0	0	1
Fall 2016 – Follow Up 1	1	1	0	0	1
Fall 2016 – Follow Up 2	1	0	0	0	0
Spring 2017 – Follow Up 3	1	0	0	0	0
Fall 2017 – Initial	2	1	0	1	0
Fall 2017 – Follow Up	2	0	0	0	0
Totals:	**14**	**19**	**15**	**3**	**4**

Certain trends emerge when analyzing the above data. At the start of the year, upper-level students are more likely to find the Vocabulary Boards beneficial study tool based on the frequency of returning 5s on the surveys, but it is clear that the majority of students at the intermediate and advanced levels find the board a helpful study tool (reporting 4s or 5s).

Given the discussion at the beginning of this article about the transition in language fluency from lexically to visually dominant, I would suggest that this tendency of upper-level students to report 5s more frequently reflects their increased ability to visualize Latin vocabulary not as words on a page, but as representing conceptual ideas. As one advanced Latin student noted in a comment on the surveys,

> *Pairing words with pictures helps get past the hurdle of memorizing the definition. When I see a word from the board in the text, I don't slow down by trying to remember an English word to associate it with, I just jump*

directly to understanding what the word means. I also remember the words longer.

When coupled with a review of the Vocabulary Board in class, this added value for students gets amplified. On an initial survey, the same advanced Latin student noted,

I've found that association with a picture or concept helps cement definitions more than memorizing words and synonyms. The exercise of going over them in class and determining how people's chosen pictures relates to the word also helps. I remember those moments weeks later when I would have otherwise forgotten a simple pair of words on a page. It's also a big help that the vocab boards are created by us from the current reading.

While instructors could create visual vocabularies for the students to use as a study tool, there is a clear added benefit for the students in selecting an image for themselves that reflects their conceptual meaning of the word. The chance to discuss how the image reflects that conceptual meaning provides students with additional opportunities to affix the Latin word and the image in their mind, associate it with a social moment with classmates, and thus, ideally, convince their brains that this piece of information is important for them to retain.

Student comments on end-of-course evaluations also suggest that students do gain quite a bit from using the Vocabulary Boards, and these comments have become increasingly positive as I have further honed the use of these within the context of my own Latin courses. In the early years, when students had not studied words through a lexical list first, they reported that images on the boards were sometimes misleading or confusing. It became clear that students needed some rudimentary instructions on how to use the tool so that they could better focus their eyes on the part of the image that was important for the meaning of the word. Without such training, students may have benefited just as much, if not more, from simply looking up words in the back of their textbook.

When I provide students with vocabulary lists to study before making their posts to the Vocabulary Boards and also encourage them to use the boards as a way to review Latin vocabulary in advance of regular vocab quizzes, the student engagement with the boards fundamentally shifts. Students begin to compete to try to find the most interesting image

that captured the meaning of a Latin word, and this makes our weekly review of the boards more engaging. In an end of course survey, one intermediate Latin student commented, "Sometimes there would be words that I just couldn't remember the definition, but by having a picture it was able to help more than expected." Another noted, "Vocab boards have helped as they force me to look and study the vocab, but also given a more fun and interesting reference to use to study and remember the vocab for the tests." Because the students have invested themselves into the creation of these boards, they are thinking about the vocabulary in a more engaging fashion. Laughing and joking about the cultural references students that work into their submissions amplify the enjoyment of studying vocabulary.[33]

There were still, on occasion, moments when a student selected an image that was less than ideal. Here is where sharing the Vocabulary Boards as part of class becomes essential. When no one else in the class is able to identify the meaning of the word through the selected picture, I turn to the student to tell the class the meaning of the word, and I ask them if they can talk through their own understanding of the connection between Latin word, image, and English meaning. I find this helpful in two ways. On the one hand, it helps the rest of the class see the Latin word's meaning clearly. On the other hand, it forces the student who posted the problematic picture to slow down and process their own understanding of their choice. For the whole class, the process, as one student commented on an end of class survey, "keeps the [vocabulary] practice regular and enforced," and I would emphasize that it does so in a way that students find helpful and enjoyable. As another student from the same semester commented on the end of course survey, "I greatly appreciated looking at the images because it helped me think about the vocab terms in the ways that I understand English words (by images, etc.)

I also looked forward to going over the vocab boards each week." The boards are not simply another hurdle to jump in a Latin class, but rather an engaging aspect of learning that students look forward to.

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33 It is possible that the use of the Vocabulary Boards helps reduce student stress about vocabulary acquisition as well, and, as Partrick (2015, 111) discusses, stress is a major obstacle to language acquisition. The opportunity to personalize Greek or Latin vocabulary can help lessen the distance between students and the target language, reducing the stress caused by anxiety around that distance.

More recently, I have begun to talk to students early in the Fall semester of my Latin courses about my precise reasoning for using the Vocabulary Boards. I talk to them about the research noted above concerning the ways that native speakers access vocabulary in fundamentally different ways than those still acquiring the language (primarily visual versus primarily lexical). Ideally, students take to heart the message that they must learn to visualize Latin words as a crucial marker of a deeper level of fluency in the language, and comments from end-of-course evaluations have reflected this way of thinking. One student explicitly noted that this discussion made them see the boards as more valuable for their study of Latin. Another student wrote, "[The boards have] been extremely helpful when I begin studying for vocab quizzes. When I am studying on Quizlet sometimes the pictures associated with each word from vocabulary boards pop into my head and helps me remember the word better." This suggests to me that the boards have a positive impact. These students are seeing Latin words, coupled with visually meaningful images for them drawn from their worldview. They have begun to make the Latin language a living language in their minds in ways that I do not think they would do as readily if they were thinking about the language primarily through the lexical lens.

While the surveys provide a window into students' perceptions of the value of the Vocabulary Boards, they are limited in that they are just that, students' perceptions of the value. As a way to test the ongoing impacts of the vocabulary boards, I gave students a quiz covering the first seven weeks of vocabulary (roughly 150 words). The quiz contained twenty items. Of these, five items were from the current week's list that students chose to post to the board, two were from the current week, but not on the board, eight were from previous weeks that students had posted to boards, and five were from previous weeks that were not on the board. I broke student results apart based on whether a majority of the students gave the correct English definition, gave the incorrect definition, or were split 50/50. The results are summarized below.

Figure 6

	Majority Correct	**Split**	**Majority Incorrect**
Current Week - Board	5	0	0
Current Week - Not	0	2	0
Older - Board	5	1	2
Older - Not	2	1	2

Of these twenty items, ten of the twelve items that the majority of students answered correctly appeared on a vocabulary board at some point, including all of the items from the most recent board. Of the items which at least eighteen out of twenty students answered correctly, all four items were words that appeared on a board, including at least one item from the 2nd week of class. Of the thirteen items that had appeared on a board, the majority of students answered ten correctly where the majority only answered correctly two of the seven items that never appeared on a board (*fides* and *bellus*).

As a follow-up, I gave a second quiz covering the last 7 weeks of vocabulary (roughly the same amount as was covered by the first quiz), and the proportion of items from the current week versus previous weeks as well as proportions of items that appeared on boards to not appearing on boards was the same. The results are summarized in the table below.

Figure 7

	Majority Correct	**Split**	**Majority Incorrect**
Current Week - Board	4	0	1
Current Week - Not	1	0	1
Older - Board	4	0	4
Older - Not	1	1	3

These results align with those from the previous quiz. On this quiz there were five items (*cognoscere, eripere, gaudium, nasus,* and *pectus*) that sixteen of eighteen students answered correctly. Of these, three were items from the most recent list of vocabulary that students had posted on a board, and the other two were from previous weeks that had been posted to a board. Again, the majority of students answered correctly only two of the seven items that had never appeared on a board (*crudelis* and *gratus*).

These results are consistent with the various studies summarized by Xu that look at the impact of various kinds of annotations on incidental L2 vocabulary acquisition through reading (Xu 315). With the exception of Al-Seghayer's study, in which all annotations used either simple L2 text or a combination of L2 text with video or picture, the combination of text and picture, regardless of the language of the text, proved superior to the use of text or

picture alone.[34] Of particular interest for this paper, Yoshii and Flaitz tested subjects using annotations with either L2 text and picture, simple L2 text, or pictures. The results of the annotations that used only text or pictures were similar, but the annotations that combine L2 text and pictures outperformed. Keeping in mind the results of the two quizzes, as limited a study as they are, the combination of Latin text with image seems to provide a clear benefit for students, one echoed by a student comment from one of the Vocabulary Board surveys:

> *Since we started doing the vocab quizzes, one way I've been studying has been to go through each picture on the board and read out the word and its parts. After doing that multiple times, I try to do the same thing, trying to recite the words by just focusing on the picture. It's incredibly helpful for remembering definitions; I still remember words from several months ago because of the picture and our exercise of going through them at the beginning of class, compared to words I looked up last week in a dictionary and already forgot.*

If we as instructors want students to improve in their language abilities, then we need to give them effective tools for studying vocabulary so they can achieve a high threshold for making reading comprehension an easy process. Based on the results of the studies noted above and the limited results of my study on the use of Vocabulary Boards in my classroom, these boards show great promise.

For all the positives of the Vocabulary Boards, there is one crucial limitation that I should note. Students need to post the entire dictionary form of the Latin word above the image, and they need to provide the principal parts of words on the vocabulary quizzes. One student noted, "I like finding a word for the vocab board, and they are helpful when studying for the weekly vocab quizzes. I do not think they are helpful in learning the principle parts of a word, but they are helpful in remembering the meaning." The student clearly finds the exercise of posting to the boards interesting and useful for learning the

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34 Xu (2010) summarizes the results of Chun and Plass (1996), Kost, Foss, and Lenzini (1999), Al-Seghayer (2001), Yoshii and Flaitz (2002), Yeh and Wang (2003), and Yoshii (2006). Jones and Plass (2002), looking at vocabulary recognition following a listening exercise accompanied by annotations, similarly found that students receiving dual-mode annotations outperformed those receiving single-mode or no annotations.

core meanings of words, and so I read their point about the principal parts not as a lack of effort in studying the words through the Vocabulary Board. If the student simply disliked the exercise in general, then it would stand to reason that this same student was not paying close attention to the finer features of the boards, but here there is a student who actively engages in the creation and use of these boards, one whom one might expect would benefit from all of the information available on them.

Looking to the Future

While I have focused my discussion on the use of Padlet as a platform for asynchronous creation of visual vocabularies by students, other platforms that I have not had a chance to explore in-depth might achieve similar results, especially given the increased limitations of the free version of the Padlet platform. Here I will briefly explore three particular tools and attempt to articulate my sense of the strengths and limitations of these for effective vocabulary instruction. I am particularly interested in the balance between ease of generating visual vocabularies outside of classroom time and the ability to create visually engaging materials.[35]

Pear Deck shows great promise here. As a Google extension, it allows for teachers to make use of all the asynchronous collaboration that the Google platform enables. An instructor could create a Google slide deck with clear instructions for students to develop slides that feature an image and the principal parts of a word from the vocabulary list. When presenting the slides, instructors can use a feature in Pear Deck that asks students to post answers, whether open-ended or multiple choice. This feature creates space for all students to answer simultaneously while hiding the class' answers until all have had enough time. Students can then assess their own personal vocabulary retention in comparison to others in class so as to, ideally, adjust study habits accordingly.[36]

Pear Deck has also created a feature, Vocabulary Factory, that could be of great use for instructors willing to dedicate class time to the creation of the visual vocabularies. The feature is full of fun animation throughout the process, providing subtle positive

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35 As I am particularly thinking about vocabulary instruction for intermediate and advanced language students, creating visual vocabularies outside of class preserves class time for vocabulary review and reading/discussion of Greek and Latin texts.

36 Of less importance from a student learning perspective, Pear Deck also allows the sharing of slide shows that enables instructors to tag the presentation based on content area, grade level, and where appropriate Common Core standards that the presentation hits.

reinforcement. Instructors preload a tab-delimited vocabulary list featuring a term and definition. The program then divides participants into teams in order to turn the vocabulary list into a series of flashcards. In pairs, students need to use the word in a sentence and to draw on their device an illustration of the meaning of the word. Once students have created their cards, they send them to the "Quality Control" room where instructors can display submissions for the class to decide whether the card provides an accurate illustration and example sentence. If approved, the card is sent into a file that can easily be exported to Quizlet for student use in studying vocabulary.

All of these Pear Deck features rely on the assumption that all students in the course have access to a device that can efficiently utilize the platform. Here, I find two main problems. We all know the challenge of keeping students, and admittedly sometimes ourselves, on task when accessing a device during a presentation. More importantly, while it is my experience that the great majority of students bring such devices to classes regularly, I am always sensitive to the ostracization that happens for students who do not have access to such tools. This is especially important as we seek to expand engagement with Classics, reshaping the field from one that privileges a certain kind of student.

[GimKit](#) allows instructors and students to collaboratively create a bank of questions, called a "kit." An instructor can then set up a game in which students race to answer as many questions correctly. Students earn "cash" for use on the GimKit platform when answering questions correctly and lose cash for incorrect answers. Races can either be set up to last a certain amount of time or until the class collectively has reached a certain cash threshold. Kits can be shared, leading to the potential creation of a community of teachers sharing resources.

While GimKit enables collaborative creation between students and teachers, I have a few significant reservations. First, the platform seems to preference text, but as the studies explored in this article have shown, the combination of text and image is of great pedagogical value. Second, the competitive aspect of GimKit, which looks and feels much like Kahoot, is double-edged. While some students might revel in the race, competitive activities in classrooms do routinely disfavor female students, as Niederle and Vesterlund have shown.[37]

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37 See Niederle and Vesterlund (2011) for a general discussion of gender and competition.

Adobe Spark Post strikes me as a potentially great tool for the creation of visual vocabularies. The online program allows for easy searching of free images that are visually engaging. Students and instructors can then layer text onto the image itself, positioning the text wherever they feel most appropriate. Doing so could help students draw attention to the most pertinent aspect of the image itself, lessening the guesswork that is sometimes necessary when using the Padlet format. Finally, the instructor can go through the slides and add an audio recording of the words themselves. In doing so, instructors would provide three points of reference for the students to think about the word (lexical, conceptual, and aural). One can then play the slideshow, saying the English meaning of the word out loud following the reading of the Greek or Latin word.

Here, I see two potential drawbacks. Firstly, Adobe Spark Post seems best suited for an individual to create the whole presentation. While the platform does allow collaboration, only one person can edit the file at a time. With a group of 15-20 students, timing conflicts may cause undue frustration with the creative process, diminishing the enjoyment of the learning activity. Instructors could assign different students in different weeks to create a slideshow, distributing the work across the class, but this would lack the personal touch of the whole class contributing to one common project. As I have found in my discussions with students, they often appreciate seeing how others conceptualize a Latin word, and they find value in seeing what others have produced.

Secondly, the pacing of the slides is fixed. If a slide has a voice narration, the length of the narration determines how long the slide will be presented. For each slide, the viewer first sees simply the image. The text then scrolls onto the screen as the voice comes in, disappearing again at the end of the recording. Instructors thus need to leave a few seconds of silence at the end of the recording in order to create time on the slide for students to read the Greek or Latin word and vocalize for themselves the English meaning. Without a narration, creators can adjust how long each slide will appear, but when viewing the presentation, the only way to advance slides more quickly is using the slider bar under the video. Students might find the deliberate pacing frustrating for words that they easily know, and reordering items in the list is not possible without changing the presentation.

Whatever the platform, we as instructors of Greek and Latin need to make intentional vocabulary instruction a routine part of courses at all levels. While students' grammatical challenges are real and important for us to help them navigate, we can easily get too focused on these. If we can lessen the mental bandwidth that vocabulary takes up

as students try to navigate Homer's description of the death of Hector, Caesar's arguments about who was responsible for the Civil War, or Catullus' ruminations about whether to love or hate Lesbia, then we put them in place to focus more on the way these authors organize their thoughts. Students can focus more on how the endings on nouns and verbs help them see the roles of various words within the thought, and ideally, they can then approach the passages more at the level of thoughts, rather than loosely joined words or sentences. They can read with greater ease, and this, ideally, opens more classroom time for thoughtful engagement with the ideas presented in these texts, not just making sure they can slog through a translation.[38]

Combined with vocabulary lists thoughtfully constructed through analysis of frequently used words, the Vocabulary Boards outlined in this article have proven very useful for my own teaching.[39] They provide the instructor with a student-driven learning

38 And we, as language instructors, do well to heed the advice of Major (2018) in reimagining our curricula to capitalize on the opportunities to help students find meaningful connections between courses in their studies, especially connections to areas of studies outside of Classics. Similarly, Gruber-Miller (2018) emphasizes in his evaluation of Latin education in light of the Standards for Classical Language Learning the need for those of us in Classics to think more broadly about the liberal arts. As he suggests, "This ability to make connections— across languages, across cultures, and across disciplines—and to apply what one has learned to authentic tasks is critical for preparing students (and future citizens) to understand the complexity of real world challenges and to bring multiple approaches to bear on solving them." (20)

39 As noted above, lists such as the Dickinson College Core Vocabularies or Major's "Core Greek Vocabulary for the First Two Years of Greek" provide useful vocab lists for the languages in general. While Logeion can provide a full sense of the use of a word, looking up each word used by a particular author, may be cumbersome. Thanks to an advanced student of mine, Mark Kimpel, I have also begun exploring ways to make more meaningful vocabulary lists assisted through computer technologies. On his own in preparation for a course on Catullus, Mark introduced me to a process he used to start building a vocab list for himself. He downloaded the texts available through the www.thelatinlibrary.com into Classical Language Toolkit (CLTK). He then used CLTK methods with Python to perform the following on the whole Latin corpus available at The Latin Library and Catullus' corpus in particular: normalizing the corpus (e.g., making sure that consonantal *i* or *u* were consistent); writing all words in lower case; removing non-alphabetic characters; removing enclitics; lemmatizing words to their dictionary form; and finally exporting the document as text files. He then imported both corpora in a computer program called *R* to do the following: eliminate Roman numerals; make a table of all lemmata in the Catullus corpus by the number of the poem the lemmata are found in; make an ordered, decreasing table of the total occurrences of each lemma in the Latin corpus; identify lemmata that occur in at least X poems of Catullus and are NOT in the top Y lemmata of the Latin corpus; and finally make a table by poem number of the lemmata that remain from the sorting in the previous step. Instructors may choose based on students' level of language proficiency how much recurrence across poems (X) would be appropriate as well as

tool. They create a space for students to share the ways in which they make meaning of Greek or Latin words, utilizing the memes and images from popular culture that students immerse themselves in on a daily basis. The boards leave the students with memories of the experience of reviewing the words in class as well as the images themselves. For students, I believe, the words have become more than simply a lexical list that they need to learn for just another class. Instead, they have taken on significance for the students, imbued with the kinds of dynamics that they had for those ancient native speakers who deployed them to talk about politics, war, the good life, and love. In other words, they have recaptured some of the life they once had.

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how much base vocabulary students might be expected to know. For example, with intermediate students, one might choose to only look at words that recur in 3-4 poems that are not among the top 500 most common Latin words across the corpus used as a baseline. This will produce more words for instructors to choose from for manageable vocabulary lists, but it also would leave room for that band of words that are not hyper-abundant nor hyper-rare. With more advanced students who should have a broader vocabulary base, the same process might look to words that recur in at least 2-3 poems that are not among the top 1000 most common Latin words.

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Appendix A
Catullus Vocabulary

32, 50, 69, 71, 76, 77

amīcitia –ae	f.	friendship
dīvus –ī	m.	god
nāsus –ī	m.	nose
ops opis	f.	wealth; power
pectus pectoris	n.	chest
pestis pestis	f.	plague, affliction
vestis vestis	f.	clothes
crūdēlis crūdēle		cruel
dulcis dulce		sweet
iūcundus –a –um		pleasant
sanctus –a –um		holy, sacred
aspiciō -spicere -spexī -spectum		look upon
caveō cavēre cāvī catum		beware
ēripiō -ripere -ripuī -reptum		take away, steal
exerceō exercēre exercuī exercitum		exercise, ply
iaceō iacēre iacuī iacitum		lie, recline
ōrō ōrāre ōrāvī ōrātum		pray, beseech
pereō perīre periī peritum		perish, die
tegō tegere texī tectum		cover; protect
cur		why
nequiquam		in vain, to no avail

57, 74, 80, 89, 90, 91, 93

fās (indeclinable)	n.	divinely right
fās esse (+inf)		to be right
gaudium –iī	n.	joy
hōra –ae	f.	hour
macula –ae	f.	stain, blemish
patruus –ī	m.	uncle
verbum –ī	n.	word
albus –a –um		white
ambo –ae –ō		both

ater atra atrum	black
fīdus –a –um (+dat)	faithful, loyal
grātus –a –um	pleasing, favorable
hībernus –a –um	wintry
mirus –a –um	marvelous, wonderful
mollis molle	soft, mild
nēfandus –a –um	unspeakable, abhorrent
urbānus –a –um	of the city
valens valentis	sturdy, healthy

cognoscō cognoscere cognōvī cognitum	get to know; (in the perfect) know
nesciō -scīre -scīvī -scītum	not know
quiescō quiescere quēvī quētum	rest, be still
rēsideō -sidēre – sēdī —	persist; remain seated
spērō spērāre spērāvī spērātum	hope
vōrō vōrāre vōrāvī vōrātum	devour, gobble up

16, 21, 94, 105, 114, 115

arvum –ī	n.	(tilled) field
divitiae –ārum	f.	riches
fīnis fīnis	m.	end; (pl.) territory
fructus –ūs	m.	crops, produce; profit
insidiae –ārum	f.	trap, ambush
lepos lepōris	m.	char, grace, wit
mare maris	n.	sea
palūs palūdis	f.	swamp
prātum –ī	n.	meadow
saltus –ūs	m.	country estate
sumptus –ūs	m.	cost, expense

minax minācis	threatening
praeceps praecipitis	headlong; sudden
pudicus –a –um	modest

dēsinō dēsinere dēsiniī dēsinitum	cease, stop
experior experīrī experitus sum	try out
fallō fallere fefellī falsum	trick, deceive, mislead
haereō haerēre haesī haesum	stick, cling
taceō tacēre tacuī tacitum	be silent
superō superāre superāvī superātus	surpass

frustrā   in vain, to no avail

63

furor furōris	m.	madness, rage
līmen līminis	n.	threshold
lītus lītoris	n.	shore
nox noctis	f.	night
silva –ae	f.	forest
sinus –us	m.	breast; bosom, refuge; bay, gulf
somnus -ī	m.	sleep

indomitus –a –um		untamed; violent
nimius –a –um		excessive
niveus –a –um		snowy

canō canere cecinī cantum	sing
cieō ciēre cīvī citum	move, set in motion, rouse
decet decēre decuit (+inf)	be suitable, be fitting
doleō dolēre doluī dolitum	suffer pain, grieve, hurt
fugiō fugere fūgī fugitum	flee
furō furere — —	be crazy, rage
lībō lībāre lībāvī lībātus	pour a libation
pateō patēre patuī —	lie open
soleō solēre solitus sum	be in the habit, be accustomed
tango tangere tetigī tactus	touch
vagōr vagārī vagātus sum	wander

prope   near, nearby

66

coma –ae	f.	hair
fluctus –ūs	m.	wave
gaudium –iī	n.	joy
lītus litoris	n.	shore
medulla –ae	f.	marrow
sanguis sanguinis	m.	blood

castus –a –um   pure, chaste

clārus –a –um	bright, clear; famous
dulcis dulce	sweet
jūcundus –a –um	pleasant
maestus –a –um	sad, gloomy
saevus –a –um	savage, wild

ēripiō -ripere -ripuī -reptum	snatch away
iungō iungere iunxī iunctum	join
oblīviscor oblīvī oblītus sum (+gen)	forget
optō optāre optāvī optatum	wish for
restituō restituere restituī restitūtum	restore
sedeō sedēre sēdī sessum	sit
tradō tradere tradidī traditum	hand down, hand over
tueor tuērī tutus sum	look at, observe

| *vix* | scarcely, hardly |

61.124-228

foris foris	f.	door
līmen līminis	n.	threshold
pūdicitia –ae	f.	modesty
senex senis	m.	old man
sīdus sīderis	n.	star
torus –ī	m.	bed, marriage bed

brevis breve	short, brief
cānus –a –um	greyish-white, whitened
iners inertis	lazy, idle
tremulus –a –um	trembling

caveō cavēre cāvī catum	beware
iūvō iūvāre iūvāvī iūvātum	help
licet licēre (+dative and infinitive)	be allowed
lūdō lūdere lusī lusum	play
pergō pergere perrexī perrectum	proceed

heri	yesterday
hodiē	today
penitē	deep down inside

61.1-123

carmen carminis	n.	song
collis collis	m.	hill
complexus -ūs	m.	embrace
coniūnx coniūgis	m./f.	spouse
flōs flōris	m.	flower
genus generis	n.	kind, type, race
gremium –iī	n.	lap
iūdex iūdicis	m.	judge
marītus –ī	m.	husband
mēns mentis	f.	mind
mūnus mūneris	n.	duty; gift
rūpēs rūpis	f.	cliff
specus specūs	m..	cave

integer integra integrum		untouched, unblemished
laetus –a –um		happy
niveus –a –um		snowy
roscidus –a –um		dewy
tenerus –a –um		tender

cingō cingere cinxī cinctum		bind
colō colere coluī cultum		inhabit
implicō (1)		entwine, entangle
moror morārī		delay
pellō pellere pepulī pulsum		drive; strike
quatiō quatere quassum		shake
queō quīre quīvī		be able

39, 41, 43, 49

cūra –ae	f.	care, concern
dens dentis	m.	tooth
digitus –ī	m.	finger
grātia –ae	f.	good will, favor; (pl.) thanks
lingua –ae	f.	tongue; language
morbus –ī	m.	illness
nāsus –ī	m.	nose
nepōs nepōtis	*m.*	grandson
pēs pedis	m.	foot
quisquis quidquid/quicquid		whoever

bellus –a –um	pretty, handsome
pius –a –um	dutiful, upright
arbitror (1)	observe, judge, reckon
attingō -tingere -tigī -tactum	touch upon, mention
lavō lavere lāvī lautum	wash
lūgeō lūgēre luxī luctum	mourn
maneō manēre mansī masnum	remain
moneō monēre monuī monitum	warn
nōlō nōlle nōluī	not wish
poscō poscere poposcī ——(+double acc)	demand (X from Y)
soleō solēre solitum	be accustomed
nimis	too much

84, 85, 86, 92, 104, 107, 109

amicitia –ae	f.	friendship
auris auris	f.	ear
lux lūcis	f.	light
sāl salis	m.	salt; wit

ambo –ae –ō	both
assiduous –a –um	constant, persistent
candidus –a –um	bright, brilliant, gleaming
cārus –a –um	dear; expensive
commodus –a –um	convenient, timely; beneficial
fēlix fēlīcis	fruitful; lucky, prosperous
formōsus –a –um	good-looking, buxom
grātus –a –um	pleasing
iūcundus –a –um	pleasant, delightful
venustus –a –um	lovely, attractive, charming
fiō fierī factus sum	happen; become, be made
metuō metuere metuī metūtum	fear; (w/ abl.) fear danger (from)
nesciō -scīre -scīvī -scītum	not know
optō (1)	wish
spērō (1)	hope
taceō tacēre tacuī tacitum	be silent
fortasse	perhaps

| *postquam* | | after |
| *umquam* | | ever |

51, 70, 72, 75, 87

| *fidēs fideī* | f. | faith, loyalty |

beātus –a –um		blessed
cupidus –a –um		desirous, eager
dulcis -e		sweet
levis -e		light, insignificant
molestus –a –um		troublesome, annoying
tenuis -e		slim, slender, slight

dīligō dīligere dīlexī dilectum		love, cherish, be fond of
nūbō nūbere nūpsī nūptum (+dat)		get married
perdō perdere perdidī perditum		squander, ruin, destroy
rideō ridēre rīsī rīsum		laugh
tegō tegere texī tectum		cover; protect

1, 2, 3, 5, 7, 8, and 58

bāsium -iī	n.	kiss
dēliciae –ārum	f.	delight
gremium –iī	n.	lap
ocellus –ī	m.	eye
nepōs nepōtis	m.	grandson
saeclum –ī	n.	age, generation

| *lepidus –a –um* | | charming |

audeō audēre ausus sum		dare
cernō cernere crēvī crētum		distinguish; perceive
fleō flēre flēvī flētum		weep, cry
invideō -vidēre -vīdī -vīsum (+dat)		envy
lūdō lūdere lusī lusum		play
mordeō mordēre morsī morsum		bite
pereō perīre periī peritum		vanish, perish, be gone
requīrō -quīrere -quisīvī -quisītum		look for, ask about