A goal of this survey was to gain a better understanding of the potential for using mobile learning with adult education students, and English language learners in particular. We wanted to know what mobile devices they use and what their attitude is toward using mobiles for learning. We further focused our questions on their attitude regarding learning vocabulary independently and the use of the Words 2Learn: Academic and Words2Learn: Health apps. Whether or not educators wish to adopt Words2Learn, the following information gathered will be valuable to those thinking about using mobile devices. In addition, the results below may give further insight into the value of a flipped learning approach, where students learn basic content for homework followed by teachers working on high-level skills in class with students.

Over 100 students participated in the Words2Learn pilot project. We did not survey students involved in the user testing phase in May and June of 2013. In the beta testing phase in the fall of 2013, 54 students from four classes were surveyed. The classes ranged from a pre-GED class to an ESL class within a college setting for English language learners. All the classes filled out the survey prior to receiving access to the app and immediately following the study of eight word lists consisting of five words each. Student absence and attrition made it challenging to ensure that the same students filled out the pre and post surveys, however, we feel the findings reflect the typical user and contribute to our understanding of how students’ attitudes and behaviors related to mobile learning have changed due to their participation in this project.
For the most part, students’ educational backgrounds ranged broadly, with the exception of students attending the college-level English Language Academy, tipping the “over 16 years of education” responses to 33 percent. It is not unusual, however, for English language learners with professional credentials from their home country to enroll in adult education classes to improve their English.
The mode is 22-30 years old. The relative youth of this group of learners may explain why the rate of mobile device use reported below is so high.
The usage of iPhones and other smartphones is 74% for this group. This does not account for the additional use of iPads and other tablets by students.
Attitudes Toward the Use of Technology

- I use a mobile device (smartphone, iPhone/ tablet/iPad, iTouch) at home.
- I use a computer/laptop at home.
- I use a computer/laptop for studying/learning outside of class.
- I use a mobile device (smartphone, iPhone/ tablet/iPad, iTouch) for studying/learning outside of class.
- I use my mobile device for study during work breaks or on the way to and from work/school.

Before Project
After Project

Technology use increased overall, with the use of mobiles for study during out-of-class time increasing over 10 percentage points from the start of the project to the end.
Attitudes Toward the Study of Vocabulary

- I am confident about learning information outside of class, without my teacher.
- I study vocabulary outside of class.
- I enjoy the process of learning vocabulary.
- I find it difficult to learn vocabulary.
- I like learning vocabulary definitions on my own, without my teacher.
- I enjoy using my mobile device for studying/learning.
- I am confident about using my mobile device for learning.
- I like learning on a computer more than a mobile device.

Before Project
After Project

Analysis of the Pre and Post Survey Results

1) **Words2Learn increased students’ sense of self-efficacy related to learning academic vocabulary.** Before the project, 31% said they had difficulty learning vocabulary. After the project, only 21% reported difficulty.

2) **Students’ confidence in using mobile devices for learning increased.** Before the project, 80% said they were confident learning on mobile devices, while at the end of the project, 88% reported they were.

3) **Students’ preference for learning using mobile devices increased.** Before the project, 73% said they liked learning on a computer *more* than mobile devices, while after the project this dropped significantly to only 40% said they liked learning on a computer while the preference for learning using mobile devices increased correspondingly. At the start of the project, 78% said they already enjoyed learning on mobile devices, now 83% say they enjoy it. This is a hopeful sign for future mobile learning projects.
4) **In-class instruction can be an important factor.** Following the project, there was only a slight increase from 18 to 21% of those who felt strongly that they are comfortable learning vocabulary on their own. We would have expected a larger gain after months of independent work. This lackluster improvement, paired with a response that indicates a significant change in students’ attitude toward working on their own, may indicate that students came to realize the value of and need for teachers collaborating in the learning process. In fact, results were strongly skewed by value students placed on the teacher in one class. 88% of students responded that they “strongly disagreed” with the question: I like learning vocabulary without my teacher.

**Outcomes in Relation to the Project Goals**

- Using Words2Learn word lists improved my vocabulary.
- I enjoy using technology for learning more since using Words2Learn.
- I like being introduced to new words before coming to class to practice.
- I think the word lists were too easy.
Analysis of Post Survey Results

1) **92% felt that Words2Learn improved their vocabulary.** This is a high figure considering results under d. below.

2) **Students liked using technology to learn vocabulary.** Since the start of the project 83% reported an *increase* in enjoyment in using technology for learning vocabulary.

3) **92% liked learning new vocabulary before coming to class to practice.** Although we cannot make a direct correlation, it is interesting to note that this percentage matches the results in point a.

4) **The words selected were a good choice for the average student.** In answer to whether the word lists were appropriate for students’ level, there was not agreement. The range of student academic preparation was wide, since our group included college level to pre-GED students. It is not surprising that the survey shows a bell curve that leads us to believe (along with teacher feedback) that for the most part, the words selected were a good choice for the average student. By and large, teachers felt that even those who found the words too easy had not mastered the varied definitions nor variant forms of the words.

Sampling of Student Comments

- “I am satisfy whit the word lists, for me it is a good thing.”
- “For me was very easy ,I new most of the words”
- “It’s easy and comfortable to learn new words through this programme. It also save time. It increase knowledge n vocabulary”
- “I like to use Words2Learn, however its functions are not enough for me to memorize new words.”
- “It has been very helpful. to have the opportunity to preview the lesson before we get to class it help me a lot.”