

Setting up a MALL/CALL Tracked Self-study Component to a Course

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Abstract

A tracked MALL (Mobile Assisted Language Learning) / CALL (Computer Assisted Language Learning) component to a course could help ESL students to review vocabulary regularly outside of class, because it offers students the convenience of studying in a enjoyable way at any time and in any location. This paper explored the possibility of introducing such a component for first year students at Toyo Gakuen University. The results of a survey and a short trial show that this would be a feasible project, but not a 'magic bullet' for learners with motivation problems. Teachers will need to provide considerable support and monitoring.

1. Introduction

For language programs to be effective, students need to spend time outside of class reviewing and memorizing vocabulary on a regular basis. Students at Toyo Gakuen University have responded positively to the use of online flashcards to learn English vocabulary items (Taylor & Birchley, 2008), and we have created a website for our students with links to a range of language learning activities, including vocabulary flashcards and games tailored to our required Freshman English courses. However, most students do not use these resources regularly. Lack of access to the Internet, lack of time, and lack of motivation seem to be the main issues. I anticipated that our students might study outside of class more regularly if they could work through the study material on their mobile phones as well as on their PCs, and if this study was tracked and monitored by the teacher. I wanted to explore how feasible it would be to set up such a system for our Freshman English program.

MALL (Mobile Assisted Language Learning) is increasingly popular in Japan, because students without a PC at home can still access study material through their cell phones, and the portability factor means that learners can study in any location and at any time. This makes cellular phones an effective tool for foreign language vocabulary practice (Chinnery, 2006). A recent large-scale survey of Japanese university students indicated that the infrastructure for

mobile learning is in place in Japan, with the majority of students paying a flat rate for unlimited use of the Internet on their cell phones (Goda *et al.*, 2008). The survey also indicated that students would like to make use of their commuting time to learn. Already, other universities in Japan are having some success dispatching EFL learning materials via mobile phones (MacLean & Elwood, 2008) and setting up MALL vocabulary programs (Kawana, 2008). Before attempting to set up a system for the Freshman English program at our university, it makes sense to first establish the situation, needs, and interests of our own particular body of students regarding computer and mobile assisted out of class learning.

This research has two parts. In the first part, I surveyed our first year students to get a clearer picture of their needs. In the second part, I trialed one CALL/MALL application with a second year elective class, following the students' progress and seeking their feedback through a survey in order to find answers to the following research questions:

- * What problems might arise as teachers set up a CALL/ MALL required, tracked, self-study component to a course?
- * Do our students prefer to study on cell phones, on a PC, or a mix of both?
- * Does this mode of learning motivate our students to study regularly?

In the following section, I outline briefly the methods used. I then present and discuss the results, before summarizing the main findings in the concluding section.

2. Methods

2.1 First Year Survey

I surveyed 178 of our first year students. To make sure all departments and all levels of students were represented, I selected one false beginner class, one elementary class, one pre-intermediate class and one intermediate class from the department of International Communication, one of each level from the Human Sciences department, and one from each level from the department of Business Administration. Currently, there are no intermediate level classes in the Human Sciences or Business Administration departments, so only three classes of students were surveyed in each. The short, bilingual survey was administered and collected during class time.

2.2 The Trial

I asked my mixed-ability class of second year 'Vocabulary' elective students to register with

iKnow! [<http://iknow.co.jp/>], a free application which allows students to study vocabulary sets using their PCs or cellular phones, and tracks their progress. I helped the students find a course which was appropriate for their level, and set them a minimum requirement of learning 200 words in two months; either completing two 100-word courses, one 200-word course or working through most of a longer 250-word course. For the following eight weeks approximately 20 minutes of each weekly class was spent working through the **iKnow!** courses, as I circulated, assisting with technical problems and giving encouragement. Students were asked to complete the rest of the study outside of class, on their cell phones or computers. At the end of the two-month period, the students were given a survey to fill out during class time, asking for their feedback. The data showing each student's progress were retrieved from the application and collated. The results from both parts of this study are presented below.

3. Results and Discussion

3.1 First Year Survey

The first three questions on the survey relate to the students' access to technology off campus (see table 1). The class level is indicated at the top; false beginner (FB), elementary (E), pre-intermediate (PI) and intermediate (I). There were no significant differences between departments or levels on these items. The survey responses indicate that 86% of first year students, overall, have a cell phone plan which allows unlimited Internet access. This means that they could use their cell phones to study English outside of class without incurring any extra charges. 80% of first year students, overall, have a PC at home with Internet access. However, only 25% of the students have a MP3 player, suggesting that we should focus our efforts on setting up a system which allows students to study on their cell phones and PCs.

		K (International Communication)						N (Human Sciences)					G (Business Administration)					All
		Number of students					%	Number of students				%	Number of students				%	
		FB	E	PI	I	All		FB	E	PI	All		All	FB	E	PI		
1. Does your cell phone plan give you unlimited Internet access?	Yes	15	17	13	18	63	85	12	17	18	47	90	14	17	12	43	83	86
	No	4	0	5	2	11	15	1	2	2	5	10	3	3	3	9	17	14
	Total	19	17	18	20	74	100	13	19	20	52	100	17	20	15	52	100	100
2. Do you have a PC at home with Internet access?	Yes	13	15	15	17	60	81	10	15	19	44	85	10	16	12	38	73	80
	No	6	2	3	3	14	19	3	4	1	8	15	7	4	3	14	27	20
	Total	19	17	18	20	74	100	13	19	20	52	100	17	20	15	52	100	100
3. Do you have an iPod / mp3player with video?	Yes	7	5	3	6	21	28	4	5	3	12	23	4	5	3	12	23	25
	No	12	12	15	14	53	72	9	14	17	40	77	13	15	12	40	77	75
	Total	19	17	18	20	74	100	13	19	20	52	100	17	20	15	52	100	100

Table 1: Access to Technology

The next question asked students about their commuting time. Since commuting time may be ‘dead’ time, which students could use for study, it is helpful to know how long a typical student spends on trains and buses each day. This survey indicates that it is rare for students to spend more than two hours per day commuting, and that most students will spend between 30–60 minutes traveling every day. A third of the students have a very short commute, with less than 30 minutes of commuting time to spend on MALL study per day.

4. How much time do you spend commuting on buses / trains every day in total?

Time	All (number)	All (%)
0-30m	52	29
30m-1h	65	37
1-2h	59	33
2h+	2	1
Total	178	100

Table 2: Commuting Time

The students were asked if they had any experience with MALL. Almost 60% of the students have not had any experience of this kind of learning, so it may be a novel, positive experience for them. Interestingly, few of the false beginner students have experience with MALL, and most of the intermediate students have some experience with MALL. This indicates some correlation between the use of tools for out of class study and success in English.

	K (International Communication)						N (Human Sciences)					G (Business Administration)					All %	
	Number of students			%			Number of students			%		Number of students			%			
	FB	E	PI	I	All	All	FB	E	PI	All	All	FB	E	PI	All	All		
5. Have you ever used your cell phone or iPod for learning English?	Yes	5	10	10	14	39	53	5	8	6	19	37	4	7	4	15	29	41
	No	14	7	8	6	35	47	8	11	14	33	63	13	13	11	37	71	59
	Total	19	17	18	20	74	100	13	19	20	52	100	17	20	15	52	100	100

Table 3: MALL Experience

Finally, the students were asked to indicate how often they might use their cell phones to learn English. Over 70% of students indicated that they would use their mobile phones to support their English learning. This is a positive result, suggesting that it would be well worth setting up such a system. Study expectations varied from class to class, but in general more students in the International Communications department anticipated studying regularly (35%), followed by Human Sciences majors (23%), with Business Administration majors least likely to state that they planned to study regularly (13%). Since ‘occasional’ study is not as effective for vocabulary learning as regular study and review, these responses confirm that a system that allows for self and teacher tracking of progress would be a good choice, to encourage students to maintain regular study habits.

	K (International Communication)		N (Human Sciences)		G (Business Administration)		All	
	Number of students	%	Number of students	%	Number of students	%	%	
6. If your teacher introduced you to some games/activities for learning English words on your cell phone, how often do you think you would use them?	NEVER	4	5	5	10	5	10	8
	OCCASIONALLY	31	42	26	50	25	48	46
	REGULARLY (e.g. 5 minutes a day)	26	35	12	23	7	13	25
	DON'T KNOW	13	18	9	17	15	29	21
	TOTAL	74	100	52	100	52	100	100

Table 4: Study Expectations

There was also a space for students to write their comments. 36% of students wrote a positive comment, with most leaving no comment. Most of these were simple words of encouragement such as ‘大賛成 [All for it!]’ and ‘いいと思います [I think it’s a good idea]’. The more elaborate comments suggested that students were enthusiastic about using ‘dead’ time (such as commuting time) to learn, and appreciated the convenience of MALL. Some students specified the kind of content they would like to study on their cell phones, with one stating a preference for ‘everyday’ language rather than language from the textbook. Only six students wrote negative comments, and two of these related to not owning cell phones with Internet access, and a preference for using PCs to learn. These comments showed that many first year students would appreciate being introduced to an application which allowed them to study outside of class, using their cell phones (and PCs). The following section discusses how the trial group of second year students responded to a two month period of tracked self-study using their PCs and mobile phones.

3.2 The Trial

3.2.1 Problems

The trial highlighted a number of potential problems with setting up a CALL/MALL program of out of class study. The trial began well, with students showing real enthusiasm for using *iKnow!*, and needing very little assistance using the application. Students were asked to register with the username they use to log onto the computers on campus (their student numbers) and the same password. Yet even so, some students had difficulty with registering or logging on in subsequent sessions. Many students did not know their own email addresses, or had not followed these instructions and failed to remember the usernames and passwords they had used, and class time was wasted trying to retrieve passwords. These students had few keyboard and Internet skills and felt stressed. This (free) application does not allow for schools to set up multiple accounts for students, but that feature would be useful, and allow students to concentrate on learning.

The next area of difficulty proved to be setting up the study on the students' cell phones. To download the *iKnow!* application, the students need to input their cell phone email addresses. In the second week, I suggested that students do this, asking students to raise their hand if they needed assistance. Some learners were helped, and some managed without assistance. Three learners found their cell phones were not compatible with this application. Even more disappointingly, the feedback survey showed that 17 of the students did not even try to download *iKnow!*, and thus failed to benefit from the advantages of mobile learning. This result suggests that our students would benefit from very direct instruction which takes the whole class step-by-step through the process of setting up the study program on their cellular phones.

The last problem was that it proved to be difficult to track the students. This application is designed for individuals learning independently, and so does not offer teachers any way of forming a group and tracking a whole class, seeing the results on one screen. This feature would be convenient, especially if teachers were using the application with a number of classes.

Generally, though, the students were able to work independently and comfortably. With an application designed for use by teachers and their students, and with clear instructions, it would be possible to set up mobile learning with our first year students. The next section looks at students' experiences and preferences.

3.2.2 Preferences

Only six of the students studied using their cell phones. This is a very small group from which to generalize, but the feedback provides some information about the students' experiences of MALL.

The students reported that they studied using their cell phones at home, at school, on the bus/train and at their places of work, with the bus/train being the most popular location. This shows that they were able to make use of 'dead time' to study.

The students were asked how frequently and for how long they studied on their cell phones, and on their PCs. I had expected that students would use their cell phones for short bursts of study when they had a few spare moments, and to sit down at the larger screened PC for longer blocks of time, yet this small group did not show these clear patterns. Two students studied 'occasionally' on both their cell phones and PCs, yet for one the study sessions on the cell phone were

shorter than the sessions on the PC. One student studied ‘regularly (1-4 times a week)’ on both, for the same amount of time. Another student studied ‘regularly (1-4 times a week)’ on the cell phone, for fairly long chunks of time (‘over 15 minutes’) but only once on a PC (for ‘10-15 minutes’). One studied ‘occasionally’ on the cell phone for very short bursts (‘1-5 minutes’), and once on the PC for a short period (‘1-5 minutes’). The last student failed to complete these survey items. Individual preferences and circumstances must influence learners study patterns.

Students were asked whether they preferred using their PCs or cell phones to work through the material. Three students preferred to use their PCs. Two preferred using their cell phones. The last student did not complete this survey item. The students preferring their PCs each gave a different reason. The first was familiarity — the student had got used to using the PC in class. The second preferred the larger screen size, finding the small screen size of the cell phone de-motivating. The last felt that the cell phone offered limited learning activities (flashcards, example sentences, and multiple choice questions). Working with the *iKnow!* application on a PC, the student could also enjoy keying in the English words in response to a prompt, and typing whole sentences as dictation practice. The two students who preferred using the cell phone liked the convenience of studying at any time and in any location. Clearly, there are advantages to having a system where students can choose to work through the study material on either their PCs or cell phones. The next section addresses how far this mode of learning motivated students to study regularly outside of class.

3.2.3 Motivation

The students retained their enthusiasm for using *iKnow!* during class time throughout the two month period. However, most of the students simply did not study enough out of class. Their progress, or lack of progress, (shown in table 5) was disappointing. The figure shows the percentage of a course the student has covered, so that if a student has completed 100% of a 200 word course, they have learned and reviewed all of the 200 words in it. Only six of the students (shaded gray) actually achieved the minimum — and very modest — set target of 200 words learned over the two months.

There were several reasons for this. In the case of three pre-intermediate level students (21, 22 and 23), the learners attempted material that was too challenging. The application does not allow students to ‘finish’ a lesson until they get the answers correct, and these students became ‘stuck’ on the same lesson for long periods of time, making mistakes with the challenging material. Too late, the students realized that despite their long periods of study, they would not

Student and level		Core 2,000 words					Other courses			
		Step 1 100 words	Step 2 100 words	Step 3 100 words	Step 4 200 words	Step 6 250 words	Business 100 words	TOEIC 250 words	Collocation 200 words	Travel 100 words
1	FB	79	99	99	97					
2	FB		100	100	41					
3	FB			100	100					
4	FB		100	99					11	
5	FB	89		99		100	25			
6	FB	6	100							
7	FB	87								
8	E	100	100	63	4					
9	E	100								
10	E	100								
11	E	50	21							
12	E		70							
13	E		65							
14	E		61							
15	E	38								
16	E	25								
17	E	13	6	5						
18	E	14								
19	E		3							
20	E	2	1							
21	PI	50			55					
22	PI	1	3						36	
23	PI			18				39		
24	PI			3				7		
25	PI	11								
26	PI	1					1			

Table 5: Vocabulary Learned

achieve the required minimum, and began attempting an easier set of vocabulary. In the case of one elementary level student, vision difficulties and eye strain made this kind of study very difficult and the student gave up. The main reason for most of the students, though, was that they either did not or could not use their cell phones for learning, and lacked the time or motivation to study on a PC outside of the class period.

However, six students did meet - and in some case far exceed - their target, and the weakest students, at false beginner level, seemed to have responded most positively to this mode of study. Moreover, five of the six students who made use of their cell phones to study managed to meet their target, suggesting that mobile learning does benefit students. Had the other students been led more explicitly through the process of downloading the application software onto their cell

phones, there may have been better results. The results also suggest that students need much closer monitoring if they are to keep up with regular out of class study, including measures such as one-to-one interviews to discuss their rate of progress. Clearly, though, a MALL/CALL tracked program is no 'magic bullet' which can address the motivation problems of all our students.

4. Conclusions

Based on the information from the first year survey, it would be possible to set up a tracked component to the Freshman English program which students can complete using computers or their cell phones, since almost 90% of first years have cell phones with unlimited access to the Internet, 80% have PCs at home, and any remaining students can make use of the PCs on campus. Such a component would be well-received by most students, and the average student has approximately one hour of commuting time which could be used to work through some of the study activities.

The trial suggests that such a self-study CALL/MALL component has the potential to engage students and to motivate or help some learners to study regularly outside of class, but it is not going to be a 'magic bullet' to solve all motivation problems.

The trial showed that such a component would require a great deal of supervision and support. Passwords and log on identification ideally need to be set up by the school and known by the teacher. Use of a mobile device needs to be strongly recommended, and students should be guided through the steps to set up the study program on their mobile devices during class time. Contact time with students is needed to ensure that students are keeping up with the study requirements.

Finally, students should be able to complete this CALL/MALL component on computers as well as mobile devices, partly for reasons of access, partly because there may be compatibility issues with some models of mobile phone, and partly to meet different learning needs and preferences.

References

- Chinnery, G. M. (2006). Emerging Technologies. Going to the MALL (Mobile Assisted Language Learning). *Language Learning & Technology* 10 (1), 9-16.
- Goda, Y., Kogure, Y., Shimoyama, Y., Kimura, M. & Obari, H.(2008). Survey Research on Mobile Phone Market for Mobile-Learning in Japan. *Wireless, Mobile, and Ubiquitous Technology in Education, 2008. (WMUTE 2008)*, 194-195.
- Kawana, N. (2008). Ubiquitous Way to Learn Vocabulary: Mobile Phones for Vocabulary Learning. *JALTCALL 2008*. Nagoya, 31 May - 1 June, 2008.
- MacLean, G. & Elwood, J.(2008). Anytime-Anywhere: Mobile Phone Applications for Modern Foreign Language Instruction. *JALTCALL 2008*. Nagoya, 31 May - 1 June, 2008.
- Taylor, C. & Birchley, S. L.(2008). Virtual Cards: An Action Research Project Exploring How Far Online Flashcards Can Invigorate Vocabulary Learning For Students. *The Toyo Gakuen Daigaku Kiyo [Bulletin of Toyo Gakuen University]* 16, 47-56.