



## *Global perspectives on Computer-Assisted Language Learning*

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### **Improving learners' reading skills through instant short messages: a sample study using *WhatsApp***

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#### **Abstract**

This paper focuses on the results of a project conducted with university students in Spain to explore the benefits and drawbacks of using instant short messaging systems such as *WhatsApp* to improve learners' reading skills in English as a foreign language (EFL). The authors will report on the rationale underlying the project, the pedagogical criteria applied, the methodology used and the overall results.

**Keywords:** e-learning; m-learning; reading comprehension; SLA teaching methodology; SLA motivation; text-messaging; university students.

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#### **1. Introduction**

This study is contextualized within recent theories dealing with ubiquitous learning and the idea of using a mobile phone as a support tool for working alone on assigned tasks, as sustained by researchers such as Lu (2008), Kennedy & Levy (2008), and Cavus & Ibrahim (2009). Based on Gu et al.'s (2011) guidelines, the study was organised according to the following design principles regarding (a) content, (b) activity and (c) usability. The content (a) has to be practical and micro; that is, it has to address a learner's practical needs. These self-contained learning objects have to fit into small slots of time. The activity (b) has to be micro and simple; that is, each activity should be made through one action "such as listening, reading or pushing a button to input feedback. The usability (c) of the mobile activities has to focus on the needs to keep learners' attention and to keep content fresh in their mind" (Gu, 2011:4).

The guiding hypotheses were the following: i) learners find using a mobile phone for language learning motivating; ii) learners have a sense of on-going language acquisition when working on assigned tasks using their smartphones; and iii) using a smartphone does not necessarily imply an increase in cost compared to other methods.

## 2. Method

These hypotheses were partly based on the conclusions of a previous study (Gutiérrez-Colon Plana et al., 2012) to analyse the advantages and disadvantages of using mobile telephone short messages (SMS) as a learning tool. This study concluded that students found the experience engaging and innovative. There was evidence that the subjects preferred receiving short, direct exercises (contained in one SMS), which could be answered immediately and did not require them to use any other additional reference materials. The study also looked into the optimal frequency of SMS reception and concluded that 3 weekly messages met student expectations without an increase in workload. The limitations of the study were related to the use of SMS, basically because it implied an additional cost, and to how time-consuming the methodology was for the teacher, who, despite being able to send bulk messages, received learner responses to exercises individually.

This, together with the fact that there is an unquestionable need for Spanish university students to improve their reading skills in English for academic purposes, led us to believe that there was a need to provide learners with additional reading practice aimed at reinforcing their reading habits and to encourage a taste for reading in the L2. Because intermediate level learners find the task of reading long specialized texts daunting, we decided to use the model in the above-mentioned study and provide students with short reading texts that could be accessed from their mobile devices, with quick reading comprehension checks to reply to. In order to overcome the problem of having to pay to respond to messages encountered in the previous study, we decided to use *WhatsApp*, a popular instant messaging programme that is free for the first year.

The group of participants was made up of 95 learners studying English language as part of their degree at two universities in Catalonia. Their target level was B2 according to the Common European Framework of Reference for Languages (Council of Europe, 2001). To this end, the micro-activities were designed using texts belonging to the *Quantum LEAP* online learning environment and Macmillan's *One Stop English* website. Both of these sources had already been pedagogically tested with EFL learners. The 12 texts used were then segmented into 3 parts and a reading comprehension question designed for each of these. Exercises included a balanced number of typologies: 12 multiple choice, 12 gap-filling, 12 True/False, plus 1 open ended question, adding up to a total of 37. During the 12-week period, 3 exercises were regularly sent each week –on Mondays, Wednesdays and Fridays. Approximately 50% of the texts delivered included 2 different exercise types.

For ease of delivery, the texts and comprehension questions were administered through *SurveyMonkey*. Students received the link to the reading comprehension texts in a *WhatsApp* instant message usergroup and merely had to click on the link to view the text and click once again to answer the comprehension question and check if the answer was correct, thus keeping learner input quick and simple to avoid discouragement (Gutiérrez-Colon Plana et al., 2012).

An initial questionnaire was sent to participants to gather information on their reading habits in English. A final survey upon completion of the experiment was also carried out to explore student satisfaction. In the following section we shall discuss some of the findings.

## 3. Discussion

As can be seen in Figures 1 and 2 below, according to the results of the initial questionnaire, at the outset of the project nearly 60% of the students reported that they sometimes read in English and approximately 55% of these said they felt at ease when doing so. We were surprised that their disposition toward reading was higher than initially anticipated.

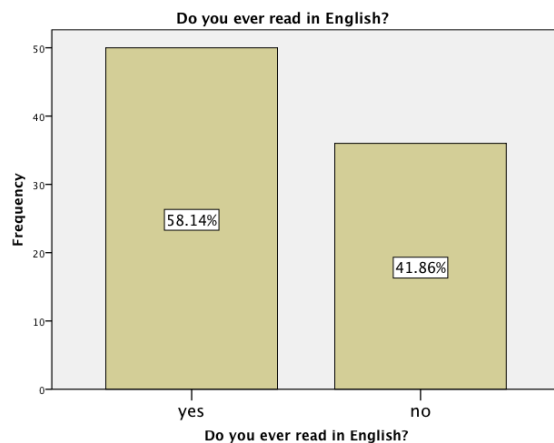


Figure 1. Question on reading habits in English.

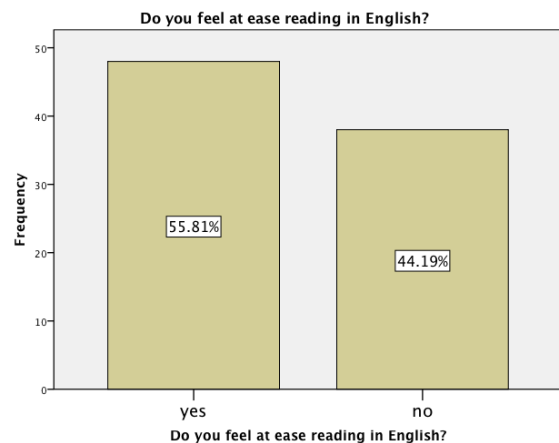


Figure 2. Question on ease of reading in English.

Upon concluding the project, however, 90.63% of the respondents acknowledged that their participation in the project had increased their motivation towards reading in English (see Figure 3). Consequently, this added-motivation had led to a higher disposition to approach written English texts for academic purposes.

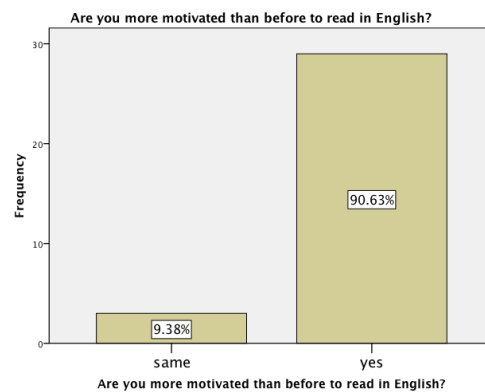


Figure 3. Question on increased learner motivation.

The final survey, which consisted of an open-ended questionnaire in order not to gear students toward specific aspects, also depicted the areas in which the learners perceived that they had benefitted the most. This is summarised in Table 1 below, together with the number of students who pointed out each of the positive aspects of participating in the experience.

Table 1. Positive aspects mentioned by participants

<b>Positive aspects</b>	<b>Number</b>
<i>I got into the habit of reading frequently in English.</i>	12
<i>The design of the project was simple.</i>	12
<i>I learned new vocabulary.</i>	11
<i>The project was motivating.</i>	8
<i>I could participate at any time.</i>	7
<i>I improved my reading comprehension.</i>	6
<i>You could answer the exercises quickly.</i>	6
<i>There was a good variety of texts to read.</i>	5
<i>I improved my English.</i>	5
<i>I liked the multiple-choice questions.</i>	3
<i>I liked the fact that there was feedback for most questions</i>	2
<i>The readings were interesting.</i>	1
<i>You can answer the questions from anywhere.</i>	1

Regarding the drawbacks encountered by the students, these are summarized in Table 2. There were comments relating to the frustration of not knowing the correct answer to a comprehension question and the fact that the actual reading texts sent were short excerpts of a whole text, which negatively affected comprehension. The exercise type reported to be the most difficult was the gap-filling one, possibly because it was the only activity where they had to write some text themselves to answer the comprehension question. Two students also suggested that each exercise should build upon the next progressively increasing the language level in order to increase the challenge of responding correctly to the questions. This comment could perhaps be seen to relate to the gaming culture, which is currently so popular among young students, where advancing is subject to achievements.

Table 2. Negative aspects mentioned by participants

<i>Negative aspects</i>	<i>Number</i>
<i>There was no feedback for the fill-in-the-blank questions.</i>	3
<i>Some of the questions were poorly formulated</i>	2
<i>The texts were too short.</i>	2
<i>The increase in difficulty of the texts was not progressive.</i>	2
<i>My mobile connexion was slow.</i>	2
<i>There were some periods without messages.</i>	2
<i>There were few exercises.</i>	1
<i>The period of the project was too short.</i>	1

Lastly, another aspect to bear in mind is the drop-out rate and the possible reasons for the decline in student participation as the semester progressed. In the following diagram, we can see that the initial 95 subjects decreased to less than 50%; that is, a remaining total of 37 students completed all the tasks, as well as the tests and final survey. As mentioned before, probably due to their voluntary participation. This naturally leads us to conclude that more learners would benefit from the methodology should the activity be an integral part of the syllabus.

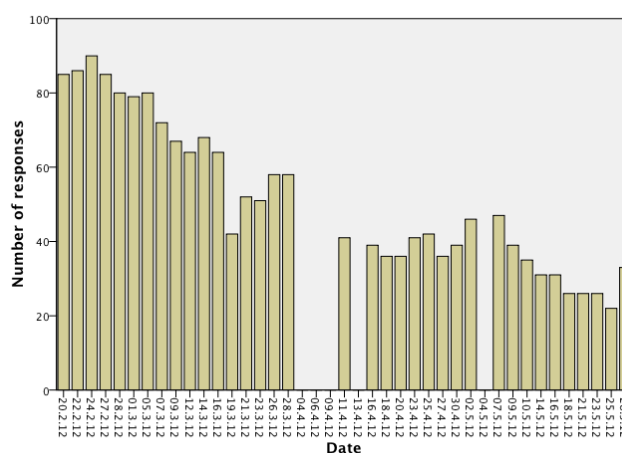


Figure 3. Rate of student participation in the 15-week project. The 0 participation weeks correspond to school holidays.

## 4. Conclusions

Regarding the actual process of implementing this reading comprehension reinforcement method, what prominently stood out was the need to create a teacher-independent application to automatically send all the text messages and exercises to avoid relying on a teacher's constant availability to send the messages according to a set schedule.

Concerning the use of the instant messaging system, in order to avoid creating a *WhatsApp* group with all the subjects (nearly a hundred users), which might have encouraged learners to divert from the focus of the method and interact amongst themselves regardless of the experiment, the learners were distributed into groups of 10 and the messages sent in sequenced bulks.

To conclude, despite the various limitations, a vast majority of the students reported a high level of satisfaction and agreed that not only had their willingness to read in English increased, but the experience had also had a positive impact on their reading habits, and had resulted in more regularity and confidence.

## 5. Acknowledgements

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