Preliminary conclusions after the design and implementation of mobile learning apps for professionals

María Dolores Castrillo¹, Elena Bárcena², and Antonio Pareja-Lora³

Abstract. According to a recent research carried out by Aruba Networks (2014) in the US, the UK, France, Spain, Germany, Sweden, South Africa, Saudi Arabia and UAE, 86% of all respondents have two or more devices that can connect to the internet, and nearly two thirds (64%) already own three or more mobile devices with this feature; another 39% own four or more (p. 4). We live on the move, and this includes mobility, as well as working anytime, anywhere and lifelong learning. Thus, research on language teaching and/or learning should focus on the ways to get adapted to the specific new needs of our modern society (e.g. mobility). Accordingly, for instance, mobile-assisted language learning (MALL) activities should be app-based; “this is not a trend language educators can ignore” (Godwin-Jones, 2011, p. 8). In this paper, we present some preliminary results and conclusions after the design and implementation of some MALL apps carried out by the ATLAS research group. They have been developed in the context of the SO-CALL-ME project, in order to enable the members of ATLAS to explore the way in which students can improve their oral language skills “on the move”.

Keywords: MALL, second language, foreign language, languages for special purposes, apps.

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1. Introduction

Recently, Aruba Networks (2014) undertook an analysis of the use of mobile devices in a number of countries from all over the world (USA, Spain, South Africa, Saudi Arabia, etc.), which gave rise to overwhelming data supporting its increase, such as the fact that 86% of all participants have two or more such devices connected to Internet, 64% have three or more, and 39% have four or more (p. 4). The fact is that the majority of us live ‘on the move’: mobile devices and our own mobility are part of everyday life, which allows us to work, learn, interact with each other and engage in entertaining activities almost anytime, anywhere. Regarding learning in particular, de Waard (2014) pointed out that “[m]obile learning (mLearning) is in perpetual beta” (p. 114). This observation, no doubt, applies to languages, since research on MALL is progressing at a good pace on the best practices around mobile devices as learning tools (Castrillo, Martín-Monje, & Bárcena, 2014; Wong, Chin, Tan, & Liu, 2010). Also, applications (apps) are viewed as an effective language learning formula as they can be used in a highly flexible way (individually or collaboratively), incorporating the user’s own preferences and environment into the learning process and capturing their full undivided attention (Godwin-Jones, 2011). Although MALL is far from being mainstream in educational institutions at the moment, the authors agree with Godwin-Jones (2011) in that app-based learning “is not a trend language educators can ignore” (p. 8).

Taking this into account, the purpose of this paper is to present some preliminary results and conclusions driven from the design and implementation of some mobile-assisted language learning apps by the ATLAS research group. All these apps have been developed in the context of the SO-CALL-ME project (see the Acknowledgements). As presented in EUROCALL 2013 (Pareja-Lora et al., 2013), the SO-CALL-ME project was established to explore the way in which students can improve their oral language skills “on the move” by means of the MALL apps designed and developed within the ATLAS group. Hence, we present some initial conclusions following the implementation of some of the apps already developed.

The rest of this paper is divided into four sections: Section 2 outlines a general overview of SO-CALL-ME and the previous work done, presenting the methodological and pedagogical framework applied to develop the apps. Then, the main app features are described in Section 3. Section 4 discusses some relevant implementation details of these mobile learning apps, exploring the issues and problems faced, as well as other remarkable results. Finally, Section 5 provides a brief conclusion and sketches our planned future work.
2. **MALL app development: a methodological and pedagogical framework**

Previous work of the ATLAS research group, in which a number of English as a Foreign Language (EFL)-teaching apps were evaluated, has identified the need to strengthen the pedagogical framework of this kind of educational resource, that is, MALL apps (Arús, Rodríguez-Arancón, & Calle-Martínez, 2013; Martín-Monje, Arús, Rodríguez-Arancón, & Calle-Martínez, 2013; Pareja-Lora et al., 2013). The research goal of this assessment focused on the examination of the technical features and limitations of the most salient EFL MALL applications available, as well as on the evaluation of their pedagogic suitability.

To that end, a number of rubric-based evaluations of such apps were conducted (Arús et al., 2013). The most remarkable conclusions obtained after these evaluations are that (i) some apps that are attractive to students do not have a sound linguistic content and, hence, should not be used for language learning (or, at least, not autonomously), and (ii) most apps lack theoretical and methodological underpinnings. This represented a challenge that our group decided to face by engaging in the development of second language learning apps that are interesting, attractive and pedagogically sound at the same time.

In this light, the ATLAS group undertook the creation of a number of MALL applications in the broader context of language for specific purposes apps. These apps should (i) not be a mere mobile version of traditional online courses, (ii) provide quality teaching and practice, and thus, (iii) have a sound pedagogical, linguistic and methodological base. Therefore, a suitable methodology had to be chosen for their development. For this purpose, we decided to use the conceptual framework and methodology presented in Kukulska-Hulme (2012). This methodological framework was supplemented from a linguistic and pedagogical point of view with some suitable linguistic theories, such as the Systemic Functional Grammar (Arús, 2008; Halliday & Matthiessen, 2004) or the socio-linguistic theory (Canale & Swain, 1980), with an emphasis on meaning and communication, and a goal to develop learners’ communicative competence.

3. **Description of some ATLAS MALL apps developed so far**

Here, we describe some of the apps developed so far by the ATLAS research group following the methodology presented above, namely (i) ANT, for oral comprehension practice through the news, (ii) FANCLUB, for the same skill, but through audio-books, (iii) Business App, focusing on listening comprehension
and on teaching how to develop and perform successful business presentations, (iv) VIOLIN, for the audiovisual comprehension of videos, (v) VISP, for oral production, and (vi) Eating Out, a teaching resource for listening comprehension and communicative practice.

The following tables summarise the main characteristics of these apps. Firstly, Table 1 contains a brief description of the skills involved in each app. Secondly, Table 2 presents both (i) the resources used within each app in order to present and/or develop its different activities and (ii) the CEFR language level of the target users of the app. Finally, Table 3 shows the activities that each app includes.

Table 1. Skills involved in the use of the ATLAS apps

<table>
<thead>
<tr>
<th>APP NAME</th>
<th>SKILL INVOLVED</th>
<th></th>
<th></th>
<th></th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Oral</td>
<td>Reading</td>
<td>Writing</td>
<td>Oral</td>
<td></td>
</tr>
<tr>
<td>ANT (Audio News Trainer)</td>
<td>YES</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>FANCLUB Business App</td>
<td>YES</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>VIOLIN</td>
<td>YES</td>
<td>YES</td>
<td>ADDRESSED</td>
<td>ADDRESSED</td>
<td>Audiovisual</td>
</tr>
<tr>
<td>VISP (Videoclips for Speaking Production)</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>Audiovisual</td>
</tr>
</tbody>
</table>

Table 2. Resources used within each ATLAS app and their corresponding CEFR language level

<table>
<thead>
<tr>
<th>APP NAME</th>
<th>RESOURCES USED</th>
<th>USER’S CEFR LANGUAGE LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT (Audio News Trainer)</td>
<td>News provided by Internet radio issuers through RSS connection</td>
<td>A1-C1</td>
</tr>
<tr>
<td>FANCLUB Business App</td>
<td>Prose fiction (free audiobooks) videos</td>
<td>A1-C1</td>
</tr>
<tr>
<td>VIOLIN</td>
<td>E-voice simulator / YouTube video links</td>
<td>B1 Business people and students</td>
</tr>
<tr>
<td>VISP (Videoclips for Speaking Production)</td>
<td>Video extracts from the TV-series &quot;Friends&quot; (length of the videos: 1'-3')</td>
<td>B1</td>
</tr>
<tr>
<td>Eating Out</td>
<td>Audio clip, performed by some ATLAS group members (length: 4'-20)</td>
<td>A2-B1</td>
</tr>
</tbody>
</table>
4. Results and discussion

As shown in Table 1, Table 2 and Table 3, only two of the applications focus on a particular domain (i.e. Eating Out, Business App), whereas most of them focus on a particular skill, in a domain-independent way. Besides, most of the applications provide some form of self-evaluation activities and focus on oral comprehension. Only some of them address oral and/or written production, for example. This last issue is mainly due to the fact that assessing and/or automatically correcting activities regarding these other skills is much more complicated than assessing oral comprehension. Since mobile apps are intended to provide autonomous learning (at least to some extent), it is important that MALL apps provide this function.
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(automatic correction and/or evaluation of activities and exercises). This helps the users of the apps be aware of their own learning improvements and, hence, also keep them motivated. However, this does not mean that we are neglecting the production of apps that help practice these other skills with some appropriate self-evaluating and automatically corrected exercises. In fact, some preliminary research is being carried out towards this end. Finally, unfortunately, no statistics about the assessment of these apps by their users can be presented thus far either. Even though the apps have already been tested by the members of the research group, a large-scale evaluation of the apps (by a real set of users) is still pending. This evaluation will be carried shortly and will be published in the near future.

5. Conclusions

In this paper, we have presented some MALL applications developed within the ATLAS research group in the last months, in the context of the SO-CALL-ME project. Unlike most of the MALL applications developed so far by the members of our research group, the ATLAS mobile applications have been designed following solid sociological, pedagogical and linguistic methodologies and theories. We believe this makes these applications most convenient for the practice and learning of the elements (vocabulary, grammar) and skills (mainly oral comprehension) they deal with. However, unfortunately, this issue has not been assessed yet, since a formal evaluation of the apps presented in the paper is still pending (but will be carried out in the coming months). Besides, this set of applications is expected to grow in the future as well, since some research on other potential and supplementary applications is already being undertaken, in order to extend the types of skills covered by the applications developed until now.

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