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Creativity and Mobile Language Learning

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1 Introduction

In this paper, we explore the ideas of mobility and creativity through the use of a mobile app for situated language learning, LingoBee, and how language learners in several European countries have used this app over the last year. LingoBee is designed to support collaborative learning, using ideas from crowdsourcing and social networks and the users create language learning content that can be shared by all users.

Mobile Learning was originally defined as learning through the use of mobile devices [1]. However, more recent views of Mobile Learning have introduced notions other than technology and define it as learning anytime and anywhere, e.g. [2]. Similarly, the concept of creativity also encompasses several notions; the one that is of particular interest to our work is "connective, social activity" [3]. In particular, the framework for fostering creativity in higher education proposed by Jahnke highlights a number of elements that have been central for researchers in situated and mobile learning such as learner-centered approaches and enabling students to work autonomously, and content creation by learners supporting critical thinking and reflection. In addition, mobile learning fosters a new culture of thinking and learning and encourages the breaking through of old habits and routines [4]. The aim of this paper is to discuss how situated mobile language learning could support creativity using the results of user studies that have been conducted on the LingoBee mobile app.

2 Language learning with LingoBee

LingoBee is a mobile app to support situated mobile language learning and to help the learners in linguistic and cultural diversity. Based on the ideas of situated learning [5]

and contextualized learning, e.g. [6], it is designed to capture language elements that learners come across in their everyday lives, whenever and wherever. Ideas of crowdsourcing and social networking have been used to collect, share and annotate the contributions of all learners in a shared online repository as shown in Figure 1a). Users are able to add entries, which may be words or phrases, to the LingoBee repository; see Figure 1b) which shows a description of a word. Learners are also able to add new descriptions to existing entries, e.g. the words "loch" and "marmite" have three descriptions. Entries can be flagged and rated by learners; e.g. in Figure 1b). Each entry can contain multimedia elements such as a picture, audio as well as web links. LingoBee has been developed as part of an EU LLP project SIMOLA (http://itrg.brighton.ac.uk/simola.org/).

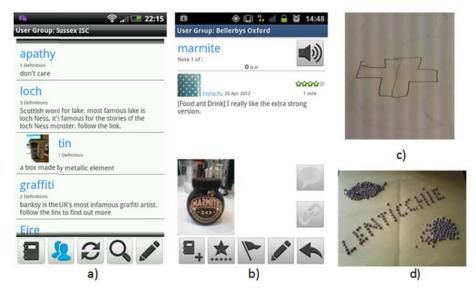


Fig. 1. LingoBee functionality: a) LingoBee's shared repository, b) description of an entry, c) & d) creative descriptions

3 Creativity in language learning with mobile technologies

One of the questions that are central to this workshop is "How to design learning to be creative when the problem is not defined?" Mobile learning activities have encouraged learning to be more learner-driven rather than teacher-led, fostering the ability for students to work more autonomously. In particular, language learners are often faced with language and culture-related challenges, often unforeseen, outside of their formal learning environments. The capability to share one learner's experiences or learning challenges with other learners in LingoBee can be a step towards answering this question. In this section, we consider briefly how situated mobile language learning can contribute to creativity. By browsing through the crowdsourced content of the

LingoBee repository (available from [7]), we have tried to identify examples where we see creativity, which can be considered from different perspectives:

- Creativity spurred by the situated context or spontaneity. Language learners are able to capture learning content such as new words and expressions that appear in everyday conversations in a situated context. The ability to capture something as it happens may prompt learners to explore that path and the cultural aspects of it as seen in the example in Figure 1a), where a learner has entered the word "loch" into the LingoBee repository and in addition to the meaning of the word, s/he continues to provide an example of a loch and the famous story of Loch Ness.
- Creative construction of content. The possibility to describe the content using multimedia can stimulate creative ways of describing the content. A study conducted with school children learning maths terminology using the predecessor to Lingo-Bee, Cloudbank, reported imaginative ways to visually describe maths terms [8]; e.g. one of the children decided that it was more precise to create a drawing of the term "symmetry" and add a photo of that, see Figure 1c). Similar imaginative descriptions were also seen among the adult learners, e.g. Figure 1d) shows a description by a Spanish student learning Italian. Similarly, the possibility for contributions by several people increases the chances for different ways of describing something which may lead to a better, perhaps a creative outcome. The word "marmite" had three descriptions in the LingoBee repository where it was initially described using a photo only and then the text as shown in Figure 1b) and a later descriptions stated that it "was great on toast".
- Creative use of the language. The ability to capture language content from every-day life and conversations, possibly with native speakers, exposes language learners to the colloquial language as well as expressions that are strongly linked to the culture. This may encourage language learners to acquire a rich vocabulary, enabling them to use language creatively in their descriptions and conversations. For example, the descriptions of the word "mint", described in [9] as a "conversation between a learner and a teacher" includes several definitions of the word such as "to make a coin", "a fortune, a large amount of money" and "if something is mint, it's good". The collaborative construction of the learning content, in this case, the definitions and explanations of words and phrases, provide the opportunity to define creative use of the language.

As discussed above, mobile language learning can stimulate creativity among the learners, an important aspect of which is the support for spontaneity and the possibility to capture the moment. However, the learning process often requires the learner to return back to the content and reflect upon that. In Mobile Learning, not all learners may always come back and browse the content. Similarly, since mobile learning happens "on the go" when the learner has not dedicated a time and a place for learning, s/he may be interrupted, in which case the stimulus to capture a moment or learning content may be hindered.

4 Summary and Future Work

In this paper, we have discussed how Mobile Language Learning could support creativity, based on the results of user studies conducted using the mobile app LingoBee. We plan to conduct a study to explore further the synergy of mobile language learning and creativity. Students from the Cooperation Technology course at the Norwegian University of Science and Technology (NTNU) will act as a target group. The study will consist of several exercises where the students will work together in small groups and LingoBee will be used for some of the exercises. The study will explore how they have collaborated, how the tools they used, LingoBee in particular, have promoted or hindered creativity, and how the nature of the process influences the result in term of creativity and quality. This study will be a collaboration between the two EU projects SIMOLA and CoCreat.

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