DUOLINGO: A MOBILE APPLICATION TO ASSIST SECOND LANGUAGE LEARNING

(App Review)

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Application Details:

Publisher: Duolingo

Product type: Smartphone Application Software

Language(s): Multilingual

Level: Any

Media format: APK/IPA

Operating systems: Android/iOS

Hardware requirements: Smartphone/Internet Connection

Supplementary software: None

Price: Free

1. Introduction

Technology is changing the way we teach and learn languages; it has provided teachers with new facilities and approaches to teaching that can stimulate learners' interest while challenging their intellect (Blake, 2013, 2016; Stanley, 2013). Likewise, it has provided learners with plenty of creative and authentic resources that can facilitate the process of acquiring a new language (Walker & White, 2013). Similarly, Larsen-Freeman and Anderson (2011) state technology contributes to language learning in two important ways – it provides teaching resources such as podcasts, vodcasts, online dictionaries, weblogs, WebBoards etc. as well as enhances learning experiences, that is, increases access to the target language and opportunities for learners to work at their own level and pace, and choose when and where to learn. They add that technology has the potential to engage learners in grammaring, an important process in second language acquisition. Larsen-Freeman (2003) defines grammaring as "the ability to use grammar structures accurately, meaningfully, and appropriately" (p. 143). Technology gives learners the chance to see grammar as a skill, not merely as a set of abstract rules, and use that skill to choose the appropriate language form for particular contexts and meanings.

Among the technological innovations, devices such as smartphones, tablet computers, laptops, MP3 and MP4 players, iPads, occupy a special niche since they offer learners the possibility to study anytime, anywhere and at their own convenience, an experience called 'ubiquitous' learning (Ogata & Yano, 2004; Yang, 2006). In fact, more than a decade ago, Keegan (2003) believed that M (mobile)-learning, a subset of e-learning, would fashion the future of learning. Similarly, Wagner (2005) stated that "the mobile revolution is finally here. Wherever one looks, the evidence of mobile penetration and adoption is irrefutable.... No demographic is immune from this phenomenon," (p. 40). Mobile-assisted language learning (MALL) is indeed a rapidly growing field, one that promises to have an enormous impact on second language teaching and learning (Pachler, Bachmair & Cook, 2010; Thornton & Houser, 2005). Smartphones are a prominent example of ubiquitous learning devices, and they are now a crucial part of many people's lives. They have characteristics in their DNA that make them particularly useful for language learning purposes; they are portable, socially interactive, context-sensitive, connective and individual to language learners (Klopfer, Squire, & Jenkins, 2002). These features are constantly evolving and new features are being added to meet user needs. For instance, new smartphone applications are being developed that make the task of learning ever more exciting and personalized. This paper narrows the focus down to one mobile language learning application of Duolingo, and explores the possibilities this app offers for learning a second language.

2. Description

To use the app, learners must download it from Google Play/iTunes and install it on their Android/IOS devices. English speaking learners can choose from a list of 16 languages from French through Irish to Esperanto. Speakers of other languages, however, do not have as many options. An English speaker can choose out of 15 complete courses, four Beta courses (with eight languages being "hatched"), whereas a Spanish speaker can choose out of only six languages (with two being hatched) and a French speaker has the opportunity to learn only 4 languages (with only one other language being hatched). However, compared to similar apps on the market, such as Babbel and Busuu, this is a very wide range of languages that is still growing, mainly due to its unique and broad community of learners and the platform provided for them to contribute to Duolingo.

After the learners have selected which language they wish to learn, the app asks them to "pick a daily goal" from the list appearing before them. The daily goals range from *Casual*, through *Regular* and *Serious* to *Insane*, denoting respectively 5, 10, 15, and 20 minutes of practice per day (see Figure 1).

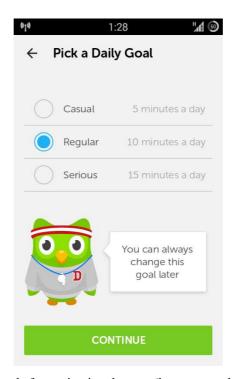


Figure 1. A screenshot of the settings before going into lessons (learners see these options to determine their pace and they can swipe down to see the "Insane" mode).

The app then inquires whether the learner already knows anything about the language, and if so, it provides the learner with a placement test. If the learner is new to the language, they start with the basics. It is safe to say that Duolingo is a very straightforward app and very simple to use. Without any more questions or even registration for the course, the learner can go right into their first lesson by tapping *Start*. The exercises are of many types:

- A) **translation exercises**, in which the learners translate from the language they know to the language they want to learn or the other way around (see Figure 2);
- B) **matching exercises**, in which learners see a photo and match it with the words given or the other way around (see Figure 3);
- C) **pairing exercises**, in which learners are given an even number of equivalent words from both languages and are asked to pair them (see Figure 4);
- D) **listening exercises**, in which learners listen to a short phrase in the second language and have to type it correctly (see Figure 5);

E) **speaking exercises**, in which learners have to say what they hear (see Figure 6).

Each lesson contains 10 to 15 exercises, a few from each of the categories mentioned above, and learners have a progress bar on the top of their screens. Every time they get an answer right, the bar moves a little bit forward. Every time they get it wrong, the bar does not progress, Duolingo points out the mistake and repeats the question at the *end* of the exercises until the progress bar is completed. Duolingo also allows the learners to go back to whichever lesson they want, whenever they want, even if they have gotten all the answers right.

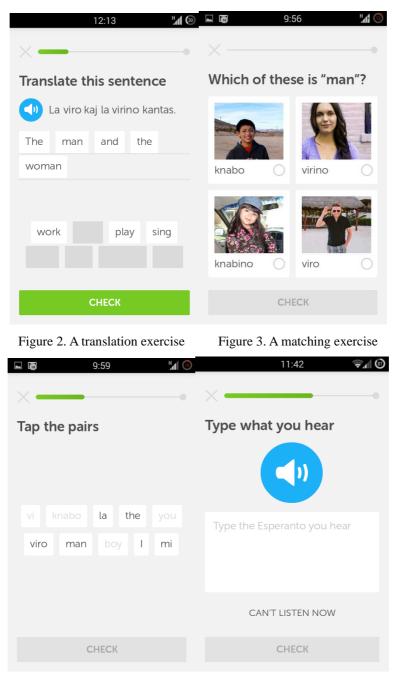


Figure 4. A pairing exercise

Figure 5. A listening exercise

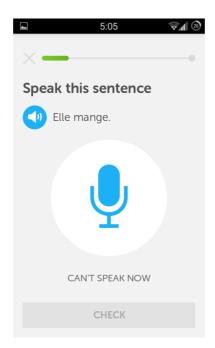


Figure 6. A speaking exercise

When the learners accomplish a daily goal, Duolingo rewards them with surprising and upbeat sounds and pictures, making the learners feel like they have accomplished something big (see Figure 7). If the learners don't sign into their Duolingo accounts to complete their daily goal, Duolingo sends a push notification to their phones and reminds them to do their exercises and meet their daily goals; usually these daily practice reminders are accompanied by promotional statements such as 62.5 million people are learning languages using Duolingo to spur the learners into action. Duolingo does this by notifying learners at a specific time every day; however, if the learners are busy during that specific time every day (are at work, running errands, sleeping, etc.), they can tell Duolingo when to remind them, for example 07:00 PM, and if by 07:00 PM they still haven't reached their daily goals, they receive these daily practice reminders.



Figure 7. A screenshot of what comes after you have completed your daily goal

Duolingo is a very smart app. For example, if in a translation exercise, learners type "Im not a teacher" instead of "I'm not a teacher", the app will know this is a typo and not a mistake. The learners pass the exercise but are reminded of the typographical error in their answers. Another interesting characteristic of the app is the *Dumbbell* button that learners can use from the home page of their course. Through this feature, Duolingo offers personalized exercises for each learner, focusing on their weaknesses and improving their skills.

To Duolingo, learners can add friends, and use this feature to communicate and/or compete with them. By finishing a lesson successfully, they gain (10) XPs, and can see the number of XPs their friends have scored. Moreover, Duolingo users can make the app notify them when someone has more points than them (setting>someone passes me) which can be very motivating.

It must be noted that Duolingo does not provide any grammatical explanations. It only immerses the learner in the target language by offering exercises centred on new vocabulary. To learn the grammar, learners must deduce the principles of grammar on their own and through trial and error. Even though Duolingo penalizes the learners for the tiniest of mistakes and points out the most insignificant typos, it does not present the learners with any grammar notes or rules of any kind. Should learners make a mistake in the new language, Duolingo shows them where they have made the mistake, but they will have to work out the rule on their own.

3. Evaluation

Duolingo is a free mobile app (there is also a web version) and, statistically, is the most popular in the category of Education in Google Play. Studies have shown statistically significant improvements in language abilities as a result of using the app (Vesselinov & Grego, 2012). The app also leads to increased levels of confidence in learning a new language (Vesselinov & Grego, 2012).

Duolingo reassures learners that they can achieve their learning goals and relieves their fear of doing something so demanding as learning a language. Even with 5 to 10 minutes of daily practice, Duolingo helps learners feel they have accomplished something, a feeling that keeps them motivated. By "gamifying" learning, Duolingo has been able to keep the learners interested and less self-conscious of learning. Once a person is "addicted" to the games of this extremely user-friendly app, they are bound to spend time on it when they are bored on the bus ride home from work.

Despite these good features in Duolingo, there are a few cautionary notes. First, the unnaturalness of Duolingo's sample sentences are very obvious (and ridiculous at times). In the very first sessions, learners may come across sentences such as *I am not you*, *Their elephant drinks milk*, *We come from that woman*, which only leave them confused. One more unnatural thing about the app is the computerized voice it uses; the learners are never introduced to how a native speaker sounds like as long as they are using this app as their only source of learning.

Another major downside to Duolingo is how it uses one language to teach another one. If you want to learn English, for example, first you must know another language which *has* the English course in your language. However, if the learner's mother tongue is, say Persian, and they do not know any other languages, they will practically not be able to learn any other languages. This will limit the number of the app's users. In addition, if learners learn the target language through a second language, they are always prone to be dependent on the second language and may never be fully able to express themselves in only the language they have learned (Carreres, 2006).

Thirdly, there are times when the learners are introduced to a new word only by seeing the letters and the word's shape, and not by hearing it spoken. In many languages (such as English and French), having the same letters and the same pronunciation is not the case for all words and this can cause difficulties. In standard learning, when introducing new vocabulary, the teacher must always accompany the shape of the word with its pronunciation. Having

ignored this rule, Duolingo has made it possible for learners to fall into the trap of the many exceptions and pronunciation variations.

Finally, the lack of human interaction and real conversation in the app needs to be mentioned. Duolingo may give learners the illusion that they know the pronunciation of a word and its meaning, but since they have not used the phrases or the sentences they have learned, their lexical knowledge will only be passive and hard to retrieve. Learners must know that these computerized listening and speaking exercises provided in the app are not at all enough and comparable to what native speakers might sound like.

4. Conclusions

Self-study is obviously important in language learning and Duolingo is a useful language application that can provide learners with practical and systematic steps to learn a new language on their own. Duolingo has a sleek design, is user-friendly, and can be used by learners of different ages and cultures. The app teaches English to millions of people for free, although some have criticized the developers' method of making money by getting people to translate texts for free as a by-product of learning a language. What sets Duolingo apart from other free language learning applications is its methodology: teaching its users a foreign language via translation. Translation as a pedagogical technique fell out of favor with the advent of communicative approaches to language teaching in the late 1960s on the grounds that it creates a sense of false equivalence between the two languages and acts as an impediment to automatic and fluent language use. However, many second language researchers (e.g., Cook, 2010; Liao, 2006; Newmark, 1991) maintain that it is not the very translation but they way it is used for pedagogical purposes that counts. Cook (2010), for instance, argues translation helps learners to relate new knowledge to old knowledge, reduces learning anxiety, promotes noticing and metalinguistic awareness, and provides a means to assess learning. Moreover, being in line with the prevailing constructivism paradigm in second language learning, Duolingo encourages peer-to-peer collaboration, with learner's friends being able to challenge one another (Carneiro, & Simao, 2011).

Despite its merits, the app has a number of drawbacks. First, while it can go somewhat well with regular classroom instruction, with learners using it for extra practice, its approach and principles can collide with the currently popular language teaching approaches such Communicative Language Teaching and Task-based Language Teaching. Duolingo's boldest method for teaching a new language, as mentioned before, is through direct translation in another language. Now, if a student is learning a language in a classroom in which using that

translating language is forbidden or at least frowned upon, but they use Duolingo as an extra tool, it might have negative consequences for them to be familiar with the translation of what he has learned in the classroom with a real teacher. Second, conversations used in the app do not sound natural and learners may end up speaking a second language in a manner that would sound weird to the native speakers of that language. Moreover, introducing a language through short phrases and sentences may not get learners to a conversational level in that language. Third, learners do not receive explicit explanations on grammatical structures and this may leave them wondering why plural nouns in French, for instance, are used with the article *les* only, no matter what the gender.

On a final note, we would like to remind users that although technology does affect the language learning process, it does not provide the silver bullet for that process. What matters, on the other hand, is what use we put technology to.

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