



Case Study of an Educational Innovation

Project Overview

Publisher: EPS 431 New Learning (2015)

Start: Feb 16, 2015

Due: Mar 9, 2015

Produced with  Scholar



duLingo For Schools

Version 3

A Look at the Free Foreign Language Learning Application

Rebecca Frank

Mar 7, 2015 at 5:17 PM



Duolingo. From Wikipedia, 2015.

As an interlibrary loan librarian, I spend the better part of every day working with students who are requesting materials for class papers, theses, and dissertations. To create the most authentic work possible, these students seek primary sources, and many of these sources are in a language other than English. On any given day I may receive requests for materials in Spanish, French, Dutch, and German, and Hebrew. Recently I have even begun receiving requests for materials in Cyrillic languages. As someone who only has a few years of high school Spanish, it can be challenging to ensure that I am requesting the correct materials for my students. I have stated several times in the last few years that I would really like to begin learning another language, and would love to eventually know at least the basics of some of the languages I work with regularly. Finding time to enroll in language courses or finances to purchase software such as [Rosetta Stone](#) has been prohibitive and my goals have never been able to see reality.

That is, until I found [Duolingo](#). Duolingo is a free language learning platform. Designed so that users progress through lessons by reading, writing, listening, and speaking activities, English speakers can learn 9 languages, and American English can be learned by over 15 other language speakers. New languages are constantly being added, so if there is a language you want to learn that is not offered now, it may be offered in the near future. Additionally, Duolingo just added a way for teachers who use Duolingo in their classrooms to track their students' progress, Duolingo for schools.

What is the best part about Duolingo, though? Duolingo, while completely educational, doesn't feel like an educational tool. Rather, it feels more like a game that one is playing, and you just happen to be learning a new language at the same time. There are levels to progress through, and you unlock a new level by completing the previous one. You can earn coins

(lingots), you have lives to save you from mistakes, and keeps track of how many successive days you have completed lessons to encourage you to continue coming back. As you progress, it becomes something of a challenge to see if you can get through each lesson without making a mistake, and getting extra lingots. Finally, at least in my experience, you find yourself going about your daily life speaking random phrases that you've recently learned, and translating everything around you without even really thinking about it. This gamification of learning is especially helpful when you realize that traditional language learning in a classroom faces so many challenges.

Educational Challenge of Learning a Second Language in a Traditional Classroom

“Foreign language learning differs in degrees of success, in the character and uniformity of the resulting systems, in its susceptibility to factors such as motivation, and in the previous state of the organism: The learner already has a knowledge of one language and a powerful system of general abstract problem-solving skills,” (Gass & Schachter, 1989, p. 41).

In a language learning classroom, how can a teacher transform learning into an individualized process for each student, while still maintaining accountability for each student and constant tracking of their progress? Most traditional classrooms consist of the student repeating phrases back to the instructor and/or filling out worksheets to assess learning. This process makes it hard for each individual learner to make sure s/he is getting personalized content, and when they are struggling or weak in certain areas it is difficult for the instructor to address these issues in a one-on-one format. Individual differences in learning styles are not taken into account. Additionally, traditional classrooms assume all students are starting from the same point. Students may find their class a waste of time if they already know the material, and will be much less involved in the learning process. Motivation may be a key element in the learning of a language. If a learner is not motivated to continue learning, what is the likelihood that they will achieve the desired result? What types of motivation do students have to ensure they are learning the key vocabulary and sentence structure in a traditional classroom, other than being able to receive a good grade?

Addressing the Challenges

The above challenges are not the only issues a language learning classroom faces, but they may be some of the largest hindrances to learning a new language fluently. Duolingo, developed by Carnegie Mellon University professor Luis von Ahn, along with a team of developers, addresses these issues in a fun and engaging way.

Gamification of Learning: If the core of gamification of learning is the design of instruction, as opposed to merely incorporating technology or actual games into lessons,” (Read, 2015, para. 2), then Duolingo is the example one would find in a dictionary. It is used to improve student motivation and engagement by creating a low-stress environment with immediate feedback for its users. Each lesson presents a challenge for users to get through (learning the new definitions or skills), a goal (to complete each lesson without running out of hearts), and immediate feedback (users find out whether a response was correct or incorrect before moving on to the next question). In gamified learning, there should be goals and progress bars (Keyes, 2015, para. 7). Duolingo allows a learner to see his/her progress at the top of every question within a lesson, as well as a clear roadmap in between lessons that shows overall progress.

Motivation: By creating a game out of language learning, Duolingo addresses the motivation factor in two ways: For users who prefer to learn solitarily, Duolingo presents itself like an old-school video game. The user has “hearts” which act like extra lives. If, during the course of a lesson, a user makes a mistake, a heart is lost. Run out of hearts, and it is “Game Over” and you have to begin the lesson again. There is a map of lessons available, and you cannot progress to one area of the map before completing the previous lessons. Users can earn “Lingots,” which are like coins in a traditional video game, for completing lessons, and additional lingots for completing lessons without losing any hearts. These lingots can be used to pay for items in the app’s store, such as clothing items for Lingo, your Owl guide who walks you through the program, or users can purchase bonus skills to learn, such as how to flirt in Spanish. Finally, users gain experience points after completing each lesson, ensuring that they are able to stay on track each day. Secondly, Duolingo addresses motivation by creating a competition, if desired. Users who appreciate the social aspect of today’s society will appreciate the fact that they can add friends- other users of the app who can be found by searching for friends, inviting through email, or searching for Facebook users. Once you have added friends, your progress is ranked against the progress of your friends- so if a little competition is what motivates you, Duolingo has you covered.

Previous Knowledge: Users who have already studied the language before and are looking to build on previous knowledge have the ability to test out of skills. They can take a placement test before beginning, and based on their correct and incorrect responses the app will determine where the user should begin. The user can also, at a later point, attempt to test out of various skills, so if they were unsure during the initial placement test, but as they dig in find their knowledge

returning, they can choose to attempt to test out and skip various skills. In a traditional language learning program, prior knowledge of the students is not accounted for. Each student will learn the same material at the same pace as any other student in the classroom, but with Duolingo, students can learn at their own pace and skip lessons that they do not need to learn again.

Individualization: “Duolingo’s free software gamifies the learning process. As the language learner answers short questions, the software picks up on his or her pace, strengths, and weaknesses, and tailors the questions accordingly,” (Kokalitcheva, 2015, para. 3). By learning about each individual user, Duolingo creates a completely customized learning experience for each and every user, which is a huge asset when teachers are looking to bring this program into their class

Implementation in the Classroom

Duolingo is an incredibly versatile product. It is completely free: Free to download, free to use, and there are NO in-app purchases or advertisements. The only barrier to using this product in ensuring that users have access to the technology; Duolingo can be used by anyone with a smart phone, tablet or web connection. This is not something available to everyone, but with more and more school districts assigning their students iPads or Google Chromebooks, this barrier seems to be less and less of a hindrance.

Teachers have been using this app in their classroom, allowing students to progress through lessons at their own pace, and providing a personalized learning experience for each student. For those teachers who already use Duolingo in the classroom in an informal manner, Duolingo for Schools will make it easier for teachers to integrate the service into their lessons plans, assign it as homework, or give students extra credit for using the service outside of class (Lardinois, 2015). “This can free up teachers’ time to concentrate on difficult concepts, answer questions, and assist students falling behind,” (Woods, 2015, para. 4).

To further assist teachers, Duolingo has recently launched Duolingo for Schools. This new offering enables teachers to use the app as part, if not all, of their curriculum. Students will complete lessons at the direction of their teachers. A built in dashboard allows teachers to track their students’ progress and collects data on where students may need assistance. “If a student is struggling with, say, conjugation, the dashboard can alert the teacher that the student might need a little more practice with verbs,” (Leswing, 2015, para. 4). Additionally, Duolingo for School can tell if a student hesitates before answering a specific question.

Duolingo for School, like the app, is still completely free, so the budget concerns that would normally prevent implementation in a typical classroom are completely avoided. If the technology is available (ie, if students have access to a smart phone, tablet, or another web connection), Duolingo can be implemented immediately, without having to ask administrators for additional funding. The ease of the program ensures that all can use it, whether elementary classrooms, college courses, or English as a Second Language program for adults.

Pros of Using Duolingo

- Free to use. Always.: Duolingo makers believe everyone should have access to education of the highest quality - for free. Duolingo does not charge students to learn a language. New languages are added through crowd sourcing, where users are the ones who translate content into new languages. Duolingo for schools is also available free of charge for all users.
- Clear roadmap and progress markers for your learning path: As you progress from one lesson to the next, you can revisit old lessons, and see what lessons you still have to complete.
- Duolingo for School allows teachers to track student progress: Teachers have access to their classroom dashboard, where they can view what lessons a student has completed, what questions they had difficulty answering, and which questions took longer to answer than others.
- Study more than one language at a time: Want to learn French, Spanish, and German? It's easy to do- users can select any number of languages to learn at the same time, with just a few simple clicks of a button.

Cons of Using Duolingo

- Limited number of languages available: Though more languages are always being added, there are still only a relatively small number of languages available for users to study.

- No live interactions with other users or teachers: Though vocal lessons are an integral part of the program, it still does not replace a true live interaction with a proficient speaker.

Conclusions and Recommendations

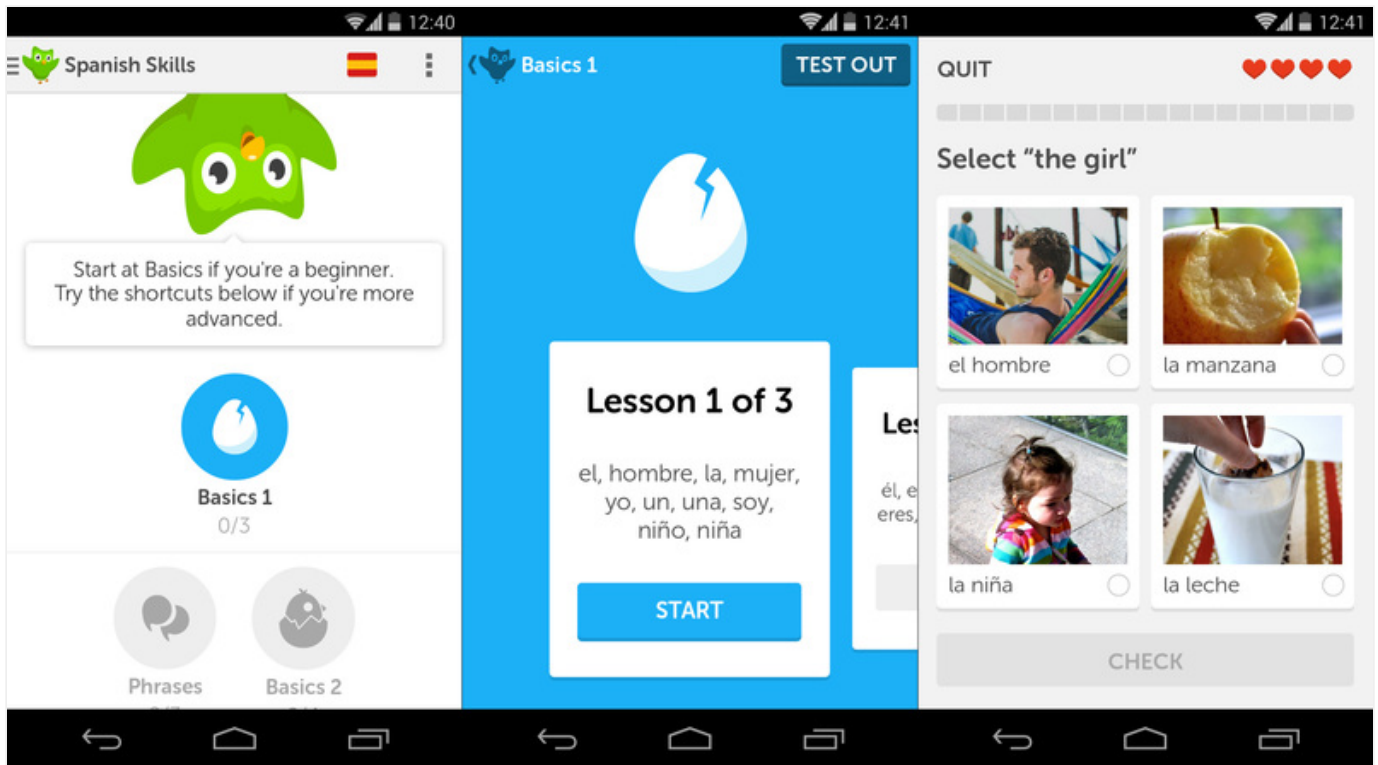
A study conducted by researchers at Queens College in New York and the University of South Carolina has found that 34 hours of practice with Duolingo was roughly equivalent to one semester of a college level Spanish class (Vesselinov & Grego, 2012, p. 14). Since most college level courses consist of far more than 34 hours of study (class time, homework and study time, etc), one might say that Duolingo is a far more effective approach to learning a second language. “Duolingo for schools offers a window into the future of education technology. It shows us how interactive digital technologies can be used to create a more equitable educational landscape, not just in the U.S., but globally,” (Shapiro, 2015, para. 1).

This program combines elements of all three teaching methods- didactic, authentic, and transformative. In a didactic sense, the program is the one with the knowledge, imparting it to the user, in a somewhat traditional method (Translate this sentence, repeat this sentence, etc). It is authentic because it is individually driven- each student has control over how fast they progress through the lessons, and they have the choice to determine which language(s) they want to study. It is transformative because it meets students where they are, in a manner that most students are familiar with. Video games have become an integral part of society, and this game encourages users to become better citizens as they learn to communicate with other countries, as well as stick with a given plan until a desired outcome is achieved.

At the end of the day, Duolingo “is the best free online language-learning service. Unique features and a clear structure make it a compelling platform for learning or strengthening your skills in several languages,” (Duffy, 2014, para. 1). As an individual user, I think Duolingo is a fantastic resource. I find my Spanish speaking skills have improved dramatically, and I enjoy using the app on a regular basis. Though I do not teach foreign language classes, I can see this being an easy way to implement a fun, individualized way of learning into the classroom. Founder Luis von Ahn states that his hope is that this program will be like the equivalent of a one-on-one tutor (*The Future of One-on-One Education, with Duolingo’s Luis von Ahn*, 2015), and while it is not quite there yet, I think it certainly has the potential, allowing teachers much more time to address problems with individual students.

Duolingo in Action - Screenshots





Manage your students' progress

All students Jan 5, 2015 - Jan 12, 2015

Student	Course	Skill	Lesson	XP	Total
student@duolingo.com Greg	Spanish from English	Basics 1	1/3	10 XP	10 XP
student@duolingo.com Karin	Spanish from English	Basics 1	Practice	18 XP	18 XP
student@duolingo.com Sean	Spanish from English	Basics 1	2/3	10 XP	10 XP
student@duolingo.com Pam	Spanish from English	Common Phrases	1/3	10 XP	10 XP

teachthought

Example of Teacher Dashboard in Duolingo for Schools

References

Duffy, J. (2014, December 24). Duolingo. Retrieved February 22, 2015, from <http://www.pcmag.com/article2/0,2817,2402570,00.asp>

Duolingo. (2015, February 20). In *Wikipedia, the free encyclopedia*. Retrieved from <http://en.wikipedia.org/w/index.php?title=Duolingo&oldid=647978686>

Keyes, K. (2015, February 16). Gamification of Learning. Scholar: EPS 431: New Learning.

Kokalitcheva, K. (2015, January 8). Duolingo makes its language-learning software available to teachers with a dashboard to track students. Retrieved February 22, 2015, from <http://venturebeat.com/2015/01/08/duolingo-makes-its-language-learning-software-available-to-teachers-with-a-dashboard-to-track-students/>

Lardinois, F. (2015, January 8). Duolingo Launches Free Language Learning Platform For Schools. Retrieved from <http://social.techcrunch.com/2015/01/08/duolingo-launches-free-language-learning-platform-for-schools/>

Leswing, K. (2015, January 8). Language-learning app Duolingo introduces program for classrooms. Retrieved from <https://gigaom.com/2015/01/08/language-learning-app-duolingo-introduces-program-for-classrooms/>

Read, K. (2015, February 16). Gamification of Learning. Scholar: EPS 431: New Learning. Retrieved from <https://cgscholar.com/community/profiles/user-96549/publications/51496>

Shapiro, J. (2015, January 8). Duolingo For Schools Is Free, And It May Change The EdTech Market. Retrieved February 22, 2015, from <http://www.forbes.com/sites/jordanshapiro/2015/01/08/duolingo-for-schools-may-change-the-edtech-market/>

Vesselinov, R., & Grego, J. (2012, December). Duolingo Effectiveness Study: Final Report. Retrieved from http://static.duolingo.com/s3/DuolingoReport_Final.pdf

Woods, B. (2015, January 8). Duolingo for Schools Brings the Language Learning Platform into the Classroom. Retrieved February 22, 2015, from <http://thenextweb.com/apps/2015/01/08/duolingo-schools-brings-language-learning-platform-classroom/>

Rebecca Frank
