

Preliminary Exploration About Teaching Method on Duolingo

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This thesis critically examines the effectiveness of Duolingo as a language learning platform. Duolingo is one of the most popular language learning platforms online worldwide that offers language teaching in a free and fun way on mobile apps. It serves as a provider for autonomous learning, namely allowing users to learn languages independently, and is used by language learners of all levels who want to be multi-lingual, or who have the need to learn a foreign language in time for academic or social requirements, and so on. Meanwhile, the effectiveness of teaching method offered on Duolingo has been overestimated, and many problems during learning are ignored. The study methods in the thesis are content study method and contrast study method. The problems will be demonstrated by analysis of the content of Duolingo in many aspects and comparison of another well-known platform called “Innovative Language Learning”. This thesis aims to analyze the downsides of Duolingo in regard to foreign language learning in many aspects in both comprehensive and detailed way, and point out suggestions and solutions for improvement.

Keywords: Duolingo, teaching method, foreign language learning, autonomous learning

Introduction

Duolingo is a prevalent learning platform that offers free language lessons on mobile apps in a fun way, which serves as an organizer for autonomous learning. Learners can learn as many languages as they want on Duolingo, because it offers more than 30 languages. It applies a unique teaching style: Breakthrough, which is just like playing a game by running through all the levels set by the platform, that is why it makes learning fun and easy. The teaching ways and methods are mainly texts and audios and a line covering expressions of unlearned words and phrases, then one needs to do the exercise given and submit the answers, and finally breakthroughs are done when he has every exercise right. The platform gives learners motivation on language learning, and no books are needed for instruction.

Compared with the traditional textbook-based learning, online learning apparently seems more attractive. Duolingo is an app which offers learning through a cellphone. Free-time learners are enormously benefited. It also suits children who lack the interest to learn language.

However, despite its popularity, criticisms based on personal experiences of learner are quite a few. Here are some summarized surface limits of learning on Duolingo: the lack of learning consciousness. Due to its gaming learning style, the focus on games is much more than learning, and the sense and consciousness of learning a language are in shortage. A special community is children; language learning consciousness needs to be cultivated as early as possible. Limited suitability: Because of the unique teaching style and the intriguing App design, Duolingo mainly suits, children, young people, while the middle-aged, and elders cannot fit themselves or adapt to that learning style. Furthermore, it may be more suitable with free-time learners and enthusiasts, but less with learners

with strong skill objectives, for example, one needs to learn English from start to Common European Framework of Reference for Languages (CEFR) B2 for business. Unstable learning pace: One only needs to spend some minutes on one lesson, and thus the learning contents are highly limited. One may learn several lessons one day, and it belongs to autonomous learning which the learning outcome and progress highly depend on a person's self-discipline. One may learn five lessons today, three lessons tomorrow, six lessons the day after tomorrow, and therefore the learning pace is relatively unstable. Taking an example of Innovative Language Learning (Pod101), lessons are arranged in orders and each lesson contains content acceptable to most of the learners, each lesson lasts about 10 minutes, but there are more practice and more language materials after the lesson. This makes learners more sure and clearer about their learning plans, one lesson a day or two lessons a day. Low eventual level objectives of learning: Game-like learning style can only teach beginner contents and everyday communication contents, mainly CEFR A0-A2.1. If the learner wants to be specialized in a language, Duolingo is far from enough. So, the learner produces limited utterances and is not capable of expressing fully his intention. That can be explained that when a learner wants to learn immediate level contents, he joined Duolingo and did a test, and he could do nearly all questions right, but the difficulty of learning contents unlocked is well under his acquired competence. Amount of language limited: Though Duolingo offers language lessons of the mostly spoken languages, some languages that are not so well-known worldwide are not offered. In the Uralic languages, Finnish and Hungarian are provided for learning, but another language which belongs to the same language group—Estonian is in vacancy.

So, this thesis aims to explore the potential problems of learning on Duolingo by analyzing the teaching methods in an all-round way, and compare it with other successful websites to make a solution and advice for more effective learning of the learners.

Exploration Method

The exploration method used in this paper is content study method and contrast study method. The study will be focused on the following ways:

Topic for Exploration

The potential drawbacks of learning on Duolingo as a language learning tool concerned with its effectiveness.

Content Gathering, Analyzing, and Comparing

The contents related with Duolingo and another language learning platform are gathered through Apps and websites for the analysis of the topic—the teaching content and the criticism content, and some observations and findings. The analysis will continue based on the contents itself and the comparison between.

Conclusion

The effectiveness and disadvantages will be concluded finally. Duolingo is still underdeveloped compared with other websites in the methods of teaching, and still needs further to be improved, for example, in aspects like explanation of vocabulary and grammar, cultural insights, and so on.

Autonomous Learning and Duolingo

Definition of Autonomous Learning

Autonomous learning is the learning approach that students can regulate their own learning activities. Autonomy denotes literally self-government, when it comes to learning, and then it is autonomous learning which refers to the autonomy to control one's own learning process.

Holec defines autonomous learning as the learners' capability to self-direct their own learning. A recent definition states that the learner monitors his own learning process from start to finish with his conscious endeavor, such as critical thinking, planning, evaluating.

Autonomous learning is not without a teacher, but the learners are not so reliant on teacher since they have their self-management ability. The teacher is capable of creating opportunities for autonomous learning through their approach (for example, enquiry method) to their teaching.

Benefits of Autonomous Learning

Identifying goals. The learner himself should set the goals for himself in order to know where to begin the learning process.

Identifying learning styles. Two autonomous learners cannot be the same on their style of learning: Some may take reading as their main style and learn vocabularies, phrasal verbs, sentence structures, tense, and aspects through reading a passage and others may be prone to the audio-lingual method and listen to audios from broadcasts or listen to songs. Some may be more focused on written language and take notes more often, and others may be more likely to speak and express out orally by using the language acquired.

Focusing on progress. Different from learning with a teacher, which grades are, unavoidable, autonomous learners can focus more on their own goals to see if they have achieved progress. The former concentrates on peer contrasting, that means, by comparing one's grades with another's and ranking to check one's total learning outcome, but the later concentrates more on whether one has reached the goal he set according to his own learning abilities, time of concentration, pace of learning, etc. This is more individualized and makes the learning less stressful.

Application of Autonomous Learning on Duolingo

As mentioned before, autonomous learning enables students to regulate their learning activities, Duolingo sets a variety of lessons with exercise and tasks, and there is no requirements of the how many lessons should be taken every day. Learners control their own learning process. This can be shown by other's sharing of studying results on Duolingo. One says that he studied for a year half and completed all the lessons.

The progress made can be checked out by the final exercise lesson in a unit. Learning goals and plans are already set by the App, which make autonomous learning more convenient.

What is important is that there should be a teacher, but this cannot be done on Duolingo. There is no teachers available for answering learners' question aroused through studying, and confusion, such as sentence structure, word formation, and pronunciation cannot be solved until the learner finds the answer himself, but it is very inconvenient and wastes time. Beginners are sometimes incompetent of finding language knowledge they do not understand. They may feel self-doubt and very tired, which lessens their motivation and interests.

The only way to achieve effective autonomous learning on Duolingo is to find a teacher. For those whose teachers recommend Duolingo as their learning tools in leisure time, learning is more effective autonomously, because they can make enquiry in a more convenient way.

Teaching Methods of Duolingo

Teaching Content Structure

The contents are taught by written texts and audios on Duolingo. Learners learn through accessing language by doing exercises, such as word-matching, gap-filling, word selection, dictation, and translation.

Written language. The written language is taught on Duolingo through single sentences and words without paragraphs and passages having a theme. Unlike ordinary teaching, full texts with a main idea cannot be vacant in teaching, no matter it's constructed in the form of dialogue or in common organization. The platform considers sentence as the main source of language learning from non-native speakers as we can see many exercises on Duolingo consisting only of sentence, which lacks the cultivation and leadership of the cognitive system of another language. The only simple sentences limit learner's access to notional language and actual use. A culture of a foreign country can be understood through language learning by mass access to language materials with themes covering economic, social, cultural aspects. But, Duolingo focuses too much on the behaviorist way of teaching—so much practice of the same language knowledge. Learners recite the sentences learned from Duolingo, because it is the only way they can prove that they can speak a language, and will use in certain situations where the sentence fits. At the same time, they are unable to organize and produce large amounts of sentences unheard or unlearned. By creativity, we argue that language is resourceful because of the duality and recursiveness, so learners can combine the linguistic units to produce an infinite set of sentences. The language teaching method offered by Duolingo allows learners to perform severely limited sentences.

Words. Words are what is the first presented during learning without first instruction of pronunciation, alphabets, glide, diphthongs, triphthongs (if a language has). Learners first learn the words, and listen to the audio played automatically to learn how the word is read out. The words are presented with an explanation through images or translated meaning. Then come exercises like word-matching, for example, matching of a word with a translated meaning, matching of a word with a picture. Training, such as dictation and word selection exists too. Important training, such as brainstorming and vocabulary expanding is not included. Vocabulary amounts are limited and practice ways insufficient. Furthermore, morphological formation of words is not taught clearly; taking an example of English, inflection might be easy to understand as it is just mixed of rules, but derivation makes language more productive. Some derivational affixes also contain rules, like insufficient (in-), inability (in-), unstable (un-), and uncomfortable (un-).

Sentences. The sentences displayed mainly come from the words already learned. The words learned are underlined for learners who did not remember the meaning click and review the meaning. Exercises related with sentences include gap-filling, translation. No grammatical rules are explained. Sometimes, grammatical rules could be shown during practice. For learners, it is not always easy to infer the grammatical rule through mechanical input and output. Syntactic structures are not analyzed. Semantic ambiguities, if any, are ignored.

Spoken language Pronunciation of letters is not taught alone in one lesson. One must learn it through listening to the audio while learning an unfamiliar word. The audios are formed with a synthesized voice, which is unnatural. TTS, namely, text-to-speech technology, which belongs to the artificial intelligence field, is used to combine text into speech; it is also called "Speech Synthesis". Inhuman machine voices serve as the main source of sounds. Listening to the synthesized voices makes learners incapable of understanding native speakers easily. Features in spoken language—stress, tone, and intonation cannot be perceived by the hearer. A difference in culture can be known through the difference of phonetics. By hearing the machine voice of pronunciation, the learner knows just how to pronounce, the articulation of the meaningful phonetic segments by the learner may seem stiff in the long run, and it is not beneficial to further studies, because the tones and intonations are already internalized, which may lead to a phenomenon of fossilization.

Language Skills Progress

It is very important that language learning must be accomplished with results and progress in language skills. Language skills include the following four aspects: listening skills, reading skills, writing skills, and oral/speaking skills. Any teaching material must have the aim of improving language skills, or learning can be ineffective. Here discusses the skill progress made by studying on Duolingo.

Listening. The accessible listening material on Duolingo is the audio. The audios are mainly used for learning how to read. There is a button beside for slow speed turning. Learners imitate the machine voices before they complete the exercises.

Comprehensive listening and analytical listening. Comprehensive listening puts discourse as the main unit for learning, and emphasizes the understanding of the main idea of the entire context. Apparently, this is not available on Duolingo, because Duolingo only puts sentence as the main unit of teaching. Therefore, the learner's comprehensive listening skills are not trained. Rather, Duolingo focuses on the analytical training, which puts words, phrases, and sentences as the main material for learning, and emphasizes on the detail knowledge of each sentence uncorrelated with one other. The learner may feel more difficult when facing large amounts of texts. Because he is accustomed to analyzing sentences, he may focus more on the detail and ignore the coherence of discourse, and he may lavish time more on the understanding of each sentence, unfamiliar words and phrases, unfamiliar structures forces him to first understand them.

The combination of listening skills teaching with other skills. When training listening skills, it is important to train speaking, reading, and writing at the same time potentially. Exercises on Duolingo related with listening are like listening and matching, listening and writing what is heard. Although it increases the accessing chance of written language and somehow improves the reading and writing skills, the speaking chance is always unprovided.

Reading. The reading materials are the basis for the listening materials, because it is a text-to-speech combination. There is no passages available for reading, only some sentences associated with daily life, but these sentences do not form a meaningful passage and are separated, so every sentence appears on the screen-letting learner read and understand the meaning, and sometimes the structure of formation, without the necessary reading training process as pre-reading, while-reading, and post-reading.

Writing. Forms of exercising. The forms of training writing are mainly controlled writing exercises, guided writing, and expressive writing. Controlled writing exercises include copying, blank filling, sentence completion, and so on. Guided writing includes passage writing and writing based on survey or questionnaire. Expressive writing includes dairy, which requires the description of details. It can also be the description of a person.

The exercises offered on Duolingo—gap filling, sentence completion, and translation are controlled writing exercises, which focuses more on structure than on meaning and function. There is no guided writing and expressive writing, and highly restricts learner's field of language use thought related to the language. Learners are unable to organize their own thought into language. Instead, the only way they can produce a complete sentence is through dictation and translation.

Speaking. The teaching contents of speaking are language form, language content, function, cultural knowledge and strategies. There is no speaking exercises on Duolingo. Some users may have access to the follow-up reading function. So, the teaching method and possible output results are analyzed here.

Language form. Language form is the usage of vocabulary and grammatical rules in speaking focusing on the tone and intonation. Because of its synthesized machine voice, tones are very stable and there is no obvious intonation. An interrogative sentence will be articulated not by a rising tone but falling tone. Without the written language and clear identification, nobody knows it is an interrogative sentence. At the same time, its vocabulary teaching system is limited; learners are not able to access to a variety of words. Although Duolingo focuses on the structure when exercising, the grammar points and use of words are not taught carefully, which leads to fossilization if the confusion and errors caused by unclear input are not solved in time.

Language content. Language content is the meaningful and logical content for utterance based on broad knowledge backgrounds and experiences. The structure and field of language materials for input are restricted; for example, when learning the words about clothing, the learning material can be a situational context like purchasing in the clothes store by analogy with the real life, so contents such as numbers, and sentence structures “How much does it cost?”, “It costs.../The price is...” can be added together for learning, rather just being based on restricted words and sentences. Actually, there is no such discourse input on Duolingo, so the language contents output by the learners on Duolingo are restricted.

Language function. Communicative activities are the application of language function, for example, apologizing, inviting, expressing thanks, and greeting. Basic sentence and phrasal structures are taught on Duolingo, as these aspects are important contents in language use, but the application of those structures into situational context in real use requires full knowledge of the language related to the situation in which linguistic communication is taking place which is broad and infinite, or the output will be limited if only producing utterances based on the structures learned without considering the real situation. Because of the shortage of vocabulary, one may result in communication failure.

Behaviorism and Duolingo

Behaviorism. Behaviourism is the earliest language learning theory, which is propounded by J. B. Watson (1878-1957) in 1913. Behaviorist approaches to language learning focus on teaching students’ specific language skills through repetition and reinforcement. The behaviorist approach is also called “Reinforcement Theory”. It is based on the belief that human beings cannot know anything they have not experienced. Behaviorism is a theoretical approach to psychology that emphasizes the role of learning and observable behaviors in understanding human and animal actions. Behaviorists believe that all behaviors are learned through interaction with the environment. Some of the most common behaviorist language learning methods include:

1. Drills and repetition: Students are asked to repeat words, phrases, or sentences over and over again until they are able to produce them accurately and automatically.

2. Reinforcement:

Positive reinforcement: Students are rewarded for correct responses, such as with praise, stickers, or points. For instance, if the student gets right, the teacher will give him a star as a reward.

Negative reinforcement: Students are given negative consequences for incorrect responses, such as having to re-do an exercise or losing points, or even being scolded by the teacher.

3. Error correction: Teachers provide feedback on student errors to help them learn from their mistakes.

Language learners learn through a chain of “stimulus-response (SR) reinforcement”. The formula goes as follows: S (practical stimulus) → r (substitute reaction of speech)... → s (substitute stimulus) → R (external practical reaction).

The behaviorist approaches have also been criticized for being too focused on rote memorization and for not emphasizing communication skills, but it is still being used widely today in classrooms.

Behaviorism on Duolingo. Duolingo can be said as a learning platform that applies the most behaviorist approach in learning. It uses a variety of techniques to reinforce correct behaviors and discourage incorrect behaviors.

A wide range of dictation practices, gap filling, and word choices focuses all on the same language content. In one lesson, the words, sentences, and phrases are practiced over and over again until no mistakes are found. It also provides the review practice, which learners need to do the exercises done before again in order to reinforce the linguistic competence.

The reinforcement method on Duolingo is mainly positive. When users answer the question correctly, they are awarded with praise like “Nicely done!”. When users complete a lesson or exercise correctly, they are rewarded with points, badges, and other milestones. This positive reinforcement encourages users to continue practicing and learning. Compared with the positive one, negative reinforcement still exists however. After a lesson, learners will be able to acquire their learning record with learning time and accuracy percentage rate. Negative reinforcement comes when a learner is given negative feedback for completing drills and exercises incorrectly, and he is forced to repeat the exercise, and have his final result of accuracy rate dropped.

Duolingo users are provided with feedback on their errors, which helps them learn from their mistakes, and the mistakes are collected for multiple reinforcement.

But application of this approach is not without problems. For example, mistakes are not corrected with explanations of where the problem arises from or why they are corrected in the target for like this, so learners given only the correction of correct answer may not be able to apply the same rule into another sentence, which they have not seen before, or they may misuse, for example, when they see a structure very similar with the exercises done before but in fact these are differences beginners are not able to tell, they might combine and misuse, which is called hypercorrection.

Comparison of Duolingo With Other Learning Platforms

Duolingo and Innovative Language Learning

Innovative Language Learning, like Duolingo, is a language learning platform with over 30 languages available that provides language learning around the world to anyone who is interested in language. It is also a way of autonomous learning that learners regulate their own learning activities with no requirements limited with time, and there are study statistics provided for students for reference of their efforts. One of its shining characteristics in the list of language courses is that it provides dialect for learning. There are two courses in Chinese: One is the standard Chinese, and another is Cantonese. It also offers languages that are not learned so widely worldwide, such as Finnish, Hungarian, and Romanian. It uses a variety of methods to help learners develop their language skills, including audio and video lessons, interactive exercises, and Q&A service. Take an example of one of the offered languages—Finnish (FinnishPod101).

When entering into the FinnishPod101, requirements for selection of level appear as it offers absolute beginner, lower beginner, intermediate, upper-intermediate, and advanced.

Here is the CEFR standard for each level on FinnishPod101 (see Table 1):

Table 1

CEFR Standard for Each Level on FinnishPod101

Absolute beginner	CEFR A0 (start)-A1 (goal)
Lower beginner	CEFR A1-A2
Intermediate	CEFR A2-B1
Upper-intermediate	CEFR B1-B2
Advanced	CEFR B2-C1

Pre-learning skill evaluation. There is no language diagnostic test on FinPod (abbreviation of FinnishPod101 of Innovative Language Learning). Rather, it allows learners to select for their own based on the metrics given, e.g., absolute beginner: having no access to Finnish, or knowing just a few words; lower beginner: knowing some of the cases: nominative, accusative, genitive, partitive, illative, ablative, essive, inessive, and so on.

Duolingo has a diagnostic test with exercises regarding teaching objectives in the syllabus, but the language skill objective in Duolingo is so low so that exercises are with simple language content not being capable of evaluating the language skills of advanced learners. The learning content unlocked will be too simple for these learners.

Motivation work. Duolingo offers text message reminding and app notifications. When learning on Duolingo, it gives options about learning goal—like seven days, 30 days, and provides notifications based on the goals that language learners choose. The reminding text will be like “It is time to take three minutes for your Finnish lesson”, “Your Finnish lessons won’t take themselves”, “You cannot learn Finnish if you do not work at it”. Despite ordinary reminders, these discouragements seem to create reverse incentives for learners who do not have much motivation.

FinPod stimulates learners in ways other than Duolingo, it is more comprehensive and gives learners an atmosphere of studying just like studying in a university platform with studying statistics, which includes total time studied, and studying time detailed in months and even days; the results include amounts of lessons completed, flashcards reviewed. Students are able to have a more comprehensive view of their studying results and performances; they might be anxious of breaking the goal record.

FinPod also provides email notifications according to the choice of the learner’s preference; if the learner does not have the need or want to receive e-mail notifications, then the platform will not spam or disturb. E-mail notifications include word of the day alerts, assessment alerts and news, updates and promotions for their product, such as sale for e-books. There are also courses and learning materials included in the e-mail suitable for beginners but not fit for students studying in absolute beginner level.

Source language. The languages available for learning offered are target languages. The source language is the language said and communicated for the purpose of target language learning.

When discussing about source language, Duolingo applies Chinese, English, German, French, Spanish, Russian, and so on. English, as a source language, is used by Duolingo to fit largest amounts of language lessons. However, Innovative Language Learning only applies English as the source language; for the non-native speakers of English, they usually have to achieve a high level first in the second language—English, and accustom to third language learning by second language. This is a very hard task, especially for those who do not have enough skills to understand the lessons taught in English. The process of L2 learning was accomplished by L1. In most schools, students learn the third language, or even the fourth language all by the native language, because their

L2 and L3 have not reached the required level. They have already been used to the language learning through L1 and might not adapt to the new source language; for example, they may have to react for a long time to figure out what is taught first by the help of the L1, and then try to understand the target language taught by L2. Duolingo benefits learners by offering many source languages available for the native speakers or the proficiency learners who want to reinforce their language skills, at the same time, learning new knowledge of a new language.

Syllabus. Syllabus are designed based on different views of language and language teaching and learning.

FinnishPod. The syllabus applied on FinPod is communicative syllabus, which is a type of syllabus that focuses on teaching learners how to communicate effectively in real-world situations. It is based on the idea that language is a tool for communication, and that learners should be able to use the language to achieve their communicative goals. The communicative syllabus emphasizes the process of communication and teaches the language to express and understand functions. The communicative syllabus on FinPod is represented by the following holistic teaching content:

Take Lower Beginner Season 1 as example (see Table 2):

Table 2

Communicative Syllabus on Finpod

Content category	
Dialogue language	Finnish, English (as translation)
Language skill contents	Vocabulary, sample sentences, vocabulary phrasal usage, and grammar
Culture	Cultural insights about Finland
Content theme examples	
Lesson 1	Talking about yourself in Finnish
Lesson 2	Asking for directions in a Finnish City
Lesson 3	Welcome to our Finnish Office
Lesson 4	Where in Finland did I put my phone?
Lesson 5	Where in Finland can I find a pencil?

According to the summary of 10 components of communicative syllabus by Yalden (1983), FinPod gives a full consideration of the purposes of learning the target language Finnish, it makes learners not a stranger when facing the real situations in Finland, and the content theme examples above are all the possible situations that learners need to experience when they go to Finland. The communicative events that learners participate in such as vocational situations and everyday situations are well demonstrated in the content theme examples as in Lesson 3, Lesson 4, and Lesson 5 which are very concrete situations regarding working in a company. It is similar as situational syllabus, because the language materials are introduced in dialogues.

The language function is also introduced. In Lesson 10, the affective function, also called “the emotive or expressive function”, is introduced and learned by the learners; this function helps us interpret emotions, feelings, desires, and moods of the subject. The phrasal structure “tuntuu/vaikuttaa-lta/ltä (ablative case)” means something or someone makes me feel like...; an example sentence given is “Kokous tuntuu turhalta (The meeting makes me feel useless)”. Lexical and grammatical knowledge are taught at the same time with the function of language.

Duolingo. The syllabus on Duolingo is similar as on FinPod, which is shown in the content theme examples below (see Table 3):

Table 3

Syllabus—Content Theme Examples on Finpod

Content theme examples	
Unit 1	Introduce yourself, use common phrases
Unit 2	Talk about people, describe things
Unit 3	Discuss your pets, talk about places
Unit 4	Use the present tense, talk about possessions

Compared with the content category, it has far less. The guidebooks of every units are almost identical—exploring grammar tips and key phrases. There is no dialogues or passages and the language skill contents are inadequate with those of FinPod. According to the comment under the question “What are the drawbacks to Duolingo?”, Nikhil answers “You won’t get enough practice of communication skills. You just get exposed to many words and sentences”. Vocabulary and phrasal usage exists on Duolingo, the sample sentences all serve as the main teaching material instead of as an additional material, and grammar points are often inferred by the learner without systematically and definitely explained.

Furthermore, the addition of the cultural material is an important motivation aspect for language learning. Many people learn the language because they want to travel, live, or reside in the country. It is better to provide them materials focusing on the culture of the target country for the comprehensive understanding. Some people can even find similarities and relations between the language and culture by associating, and this is a great help in the process of language learning. It cultivates the cognitive mind of learners too, instead of just focusing on language learning. Another point is that cultural learning raises interest. If learners get tired during learning, let them acknowledge the target culture is a fun way for them to relax themselves, and at the same time, learn something about the target language and target country. This is absent in Duolingo, only present in FinPod.

Autonomous learning. As mentioned before, learners control their own learning process and there are also goals and plans on Duolingo. On FinPod, learners cannot only control their learning process but can also get a practice result and an achievement test score every three or four lessons. But autonomous learning requires a teacher, and cannot be fully done without a teacher. FinPod is able to realize. In the audio course, the teacher tells what the learner is expected to learn and guides them, but it is of learners’ own freedom to stop and think if they cannot understand what needs to be learned just now, and there is enquiry service offered for teachers to solve what students do not understand or give response to students’ feelings and opinions about the course.

Detailed analysis of lesson content. The detailed lesson content analysis of FinPod will be presented for comparison with Duolingo to make results and improvements needed clear.

Audio course on Finpod. The audio course is divided into the following parts: introduction, dialogue, post conversation banter, vocabulary list, key vocabulary and phrases, lesson focus and outro. The audio courses are recorded all by one teacher speaking English who guides listeners in learning the lesson and another teacher speaking in both Finnish and English; the later one is used for explaining a concept and the former one is used for talking examples based on a concept. Furthermore, what listeners can hear is a pure native speaker’s voice of the target language, except for the tones and intonations. It is more affective, instead of just a unnatural machine voice. After each lesson, learners can take a look at the written lesson notes for reviewing.

Introduction. The introduction part introduces first the theme of the lesson—A Finnish Job Interview (Intermediate Season 1 Lesson 1), which gives learners a direct topic about the content they are learning. Although Duolingo also puts the theme straight on each section, but seldom does language learners notice, they enter directly into the practicing lesson page. The second introduced is the learning objectives, “In this lesson, you’ll learn how to use the present tense to express your qualities as an employee, and to use the present perfect to explain your job history. The conversation takes place in a coffee shop”. This often makes listeners imagine the situation which promotes learning. In contrast, FinPod does better than Duolingo.

Dialogue. The dialogue is read once in Finnish and once in English. The reading in English makes the text for the learner more understandable if learner’s competence does not force them to understand the original text. So, the dialogue read in Finnish and English belongs to comprehensive listening; more grammatical structures, new phrases, and even cultural insights will all be taught through further analytical listening. However, Duolingo does not have dialogues or texts, only sentences with immediate analysis for learning.

Post-conversation banter. In this part, somethings about the Finnish job market are discussed, and a tip is given for listeners in the more detailed cultural insights. A new language function is involved then. Learners are taught what they will be able to do with or through the language as in “If you want to ask for a job directly by phone, for example, you would say Päivää! Nimeni on. Onko teillä mahdollisesti työpaikkoja vapaana?” These cannot be realized on Duolingo.

Vocabulary list.

Speaker 1: työhaastattelu (natural native speed)

Speaker 2: job interview

Speaker 1: työhaastattelu (slowly-broken down by syllable)

Speaker 1: työhaastattelu (natural native speed)

First, Speaker 1 talks in natural native speed for the first time reading the word, and Speaker 2 speaks out the meaning. By reading out separately the word and meaning between two different speakers, students get better in memorizing the word. Then, the word is read slowly by breaking down syllables, which is easier to memorize and better helps learners first pronounce the word. Duolingo also has this slower function in its audios, but the fact is that the audios are already synthesized by AI, the slower audios are more obscure, which might disturb beginners’ learning of pronunciation.

Key vocab and phrases. The key vocabulary and phrases are taught by explanation of meaning, ways, or situations to use, and example of using focusing on the questions: “What does it mean?” (denotative meaning), “When to use this word?” (language in use), and “How to use this word?” (sentence formation). The focus on three aspects of words helps more in students learning; they will memorize more with example sentences and situations of use, and become more reactive in actual situations, being more communicative competent, rather than only knowing the meaning of the word. Finnish is a language that consists of many poly-morphemic words; FinPod gives analysis of these words: The word ruokakauppa is made up of two words, “ruoka”, meaning “food”; and “kauppa”, meaning “shop”.

From the guidebook of Duolingo, the key phrases are all what exist in sentences. Take an example of Section 1 Unit 3, the key phrases are “Minulla on pupu”, “I have a bunny”, “Se on pieni ja kiltti”, “It is small and kind”, and so on. Only sentences and translations are listed without any explanation.

Lesson focus. The lesson focus is mainly on grammar and the examples using the grammatical rules. Expansions are made to expand students’ vocabulary and reinforce grammatical usage of other rules.

Speaker 1: Minä opiskelen yliopistossa.

Speaker 2: Meaning “I study at a university”. You can add the partitive to make the expression more precise.

Speaker 1: Right, you could say Minä opiskelen kirjallisuutta yliopistossa.

Speaker 2: “I study literature at university”. Or you can also add the essive case to express what you are doing or being currently.

Speaker 1: Yes, for example, you could say Minä työskentelen osa-aikaisena kukkakaupassa.

Adjustment Suggestions Concerning the Teaching Methods of Duolingo

After the analysis and comparison of teaching methods of Duolingo with Innovative Language Learning, some suggestions are made for improving the learning system.

Add Dialogues and Passages

When learning through dialogues and passages, one can improve his reading comprehension skills, which is necessary for foreign language learning. The new passages and dialogues make learners exposed to new words and sentence structures, so that vocabulary is expanded and communication skills are increased and grammar knowledge is improved. Dialogues and passages can cover a wide range of topics, so by reading passages, learners can learn about different aspects of the world and expand the knowledge base, especially children.

Concrete Explanation of Vocabulary and Grammar

A concrete explanation of vocabulary and grammar is one that uses real-world examples and examples that are easy to understand besides the straight denotative meaning. This type of explanation is beneficial for learners, because it helps them make connections between the new concepts they are learning and their existing knowledge. If errors occur from the learners, they might be more eager to see what problems they are facing, so concrete vocabulary and grammar explanation are very necessary.

Natural Native Voice

Natural native voice instead of a TTS synthesized one helps learners develop a more accurate pronunciation. This is because learners can imitate the way that native speakers produce sounds, including intonation and stress patterns. This is important especially for beginners. For them, they form a habit from scratch, and if the voices heard are all of machine voices, their incorrect way of speaking will be molded which plays a negative role in their learning and communication.

A Lesson Featured in Pronunciation Before Learning

When learners have a good understanding of pronunciation first before the learning, they are less likely to become frustrated when they are learning and speaking the language. They are more flexible to read out the written language and memorize in this way instead of first figuring out how to read the word, the syllable, and even the special letter. A lesson featured in pronunciation does not need to be complex. Learners can just listen to the audio, see the letters orthographically written, and imitate the sounds.

More Types of Exercises

Multiple choice questions can be more related to both the word or grammatical point itself and the understanding of the text. Duolingo can also add interactive exercises which promotes concentration and engagement. This is because interactive exercises require learners to actively participate in the learning process. What's more is that interactive exercises can be tailored to the individual needs of each learner, because learners

give out answers, which are most relevant to them and make the learning more personalized. Learners love to share things about their own; personalized learning makes the process more motivative. There does not need to be an active teacher. Like Innovative Language Learning, the students are guided to speak according to what is taught in recorded lessons, and there are no metrics about right or wrong. There will not be feedback given on what the learner really said but on the general contents that most learners may say.

Cultural Insights

The addition of cultural insights may reduce misunderstandings. Learners can understand the cultural norms and expectations of the target language. It may make learners appreciate more of the target country and have more motivation in learning. When talking about pets, more about pets kept in the target country can be provided as expansion knowledge.

Provide Enquiry

Learning cannot be done without a teacher. The role of teachers on FinPod is enquiry. In an enquiry-based learning, learners are encouraged to ask questions, to explore different perspectives, and to draw their own conclusions.

Except for the advices for teaching methods and teaching contents, another two points are crucial.

Make Accessible to Learners of All Levels

Duolingo learners can only access to the beginner level. Advanced learners who want to improve further their skills cannot be diagnosed the correct level and be given the corresponding lessons. It could be more accessible to learners of all levels by providing more challenging content and by offering more support for advanced learners.

Expand the Range of Languages

It could expand its offerings to include even more languages. This would make Duolingo more accessible to learners who want to learn less common languages, for example, Estonian. For Finnish lovers, Estonian is more easy to learn because of the similarity of words due to the same language family.

Conclusion

This paper makes an analysis of the drawbacks of learning on Duolingo to prove that the teaching method of Duolingo has the potential to improve the quality and effectiveness. Duolingo is used by learners to learn language by practising vocabulary, grammar in sentences by a breakthrough game playing way. Suggestions are given for progress, for example, the addition of passages, concrete explanation of vocabulary and grammar, more types of exercises.

The findings of this thesis suggest that learning only through direct sentence input and output and corrections of errors can never be enough for acquiring a new language. More should be involved for ensuring the effectiveness of learning. For example, learners need opportunities to develop their reading and listening comprehension skills, to learn about the culture of the language they are learning, and to practice using the language in a variety of contexts.

More research is needed to make contributions to the development of Duolingo. Future research should enter into the more detailed and deep aspects, and should aim to enhance the learning quality. Future research will also investigate deeply how Duolingo can be used to promote other aspects of language learning, such as the communicative competence.

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