

Developing an Alternative Approach to Language Learning in the United States: Introducing Peripheral Participation Techniques to Duolingo.

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Introduction:

Though not officially designated, the de facto language of the United States is English. Having an assumed language in this way is not in itself a problem, however the lack of emphasis placed on multilingualism, coupled with an English Centric view, greatly impacts the nation's progress as individuals become less and less motivated to even attempt to learn a second language. As a result of a wide range of issues associated with devaluing multilingualism, including reduced motivation and accessibility to language programs, the United States is currently at the top of the list of countries struggling to adopt new language practices. According to the American Academy of Arts and Sciences, "foreign language classes are becoming scarce" with only about 20 percent of public schools offering classes likely due to the absence of national requirements for language, a basic requirement of most European and Asian countries. English is the most widely spoken language (including both native and non-native speakers) ; it serves as a bridge to an ever-globalizing world.

Historically, the United States has been a country of great linguistic diversity. This is largely due to large waves of immigration. But what about the rest of its inhabitants? Although the United States is linguistically diverse, it is relatively culturally and linguistically isolated. In Europe and Asia, and many other communities around the world, there is a need for foreign language acquisition as countries are tightly packed together. For instance, the European Union contains 24 official languages and in order to stay economically competitive, the nations must be able to intelligently communicate and interact with each other. This immediate reality of geographical proximity not only encourages multilingualism but promotes it as an inherent necessity. As such, countries outside the United States, in their actions, voice the value of multilingual proficiency and provide structures to achieve this.

Unfortunately, the message the United States conveys regarding language diversity is that languages outside of English (and perhaps Spanish) are of little importance as evidenced by the lack of structured opportunities and accessibility and the high dependence on individual motivation.

As the world continues to globalize, this issue becomes more and more a global issue impacting everyone around the world. Historically even the simplest of cultural miscommunications have led to war and inexcusable injustices. If the United States does not begin to address the English-centric view now, there is a chance that the nation will collapse under economic instability and the perpetuation of injustice. As technology advances so does the need for communication. Unfortunately, current translation apps are still in the early stages of development and do not account for cultural awareness. These seemingly small misunderstandings could lead to the United States losing its seat at the global economic table. Additionally, the lack of variety of language approach could be seen as linguistic injustice with government representation (varying both federally and state by state) typically focused in English (and sometimes Spanish) resulting in inaccurate representation.

As a consequence, core nations could destabilize as wealthier countries will be potentially impacted as technology grows and relations between poorer nations subside. Similarly, peripheral nations will have fewer opportunities as poorer countries begin to see declines in global representation and technological infrastructure.

As the world becomes increasingly globalized, our economic and cultural space becomes smaller. With countries competing for space on the world stage and technology becoming more efficient we must look to alternative methods of communication and translation.

Current focuses are on developing alternative methods of communication through technological development of applications such as google translate, a modern-age specialization strategy, however, these methods are extremely inefficient and do not seek to resolve the problem at large. Reliance on these practices misses the importance of understanding a foreign culture and therefore does not encourage the creation and maintenance of long-lasting global relationships.

Duolingo is a relatively new online learning application that allows users to acquire new languages. Currently, Duolingo is the most widely used language learning platform with over 300 million users worldwide. The software accesses vast online language lexicons created internally by multitudes of users and developers. These databases are combined to construct sentence structures for various languages. There are over 18 languages available including English, Spanish, Mandarin, Russian, and even constructed languages such as Klingon (most notable from the Star Trek Universe) and Esperanto. The software also offers many native languages besides English as a primary base language (e.g. a native speaker of Spanish can learn German without learning English as a default). Duolingo is used in public and private schools,

job training programs, and government. The software offers users an easy to use interactive interface incorporated with engagement activities such as rewards and leader boards to keep learners immersed. The software also has recently introduced social media aspects as part of its platform called event hosting. Event hosting for the purpose of language practice and acquisition exchange allows users to connect online via (Zoom, Skype, Facebook, etc.) to sharpen their skills. Duolingo's curriculum consists of grammatical memorization techniques combined with speech recognition and image identification.

Research Questions:

1. How can Technical Communicators effectively create alternative learning curriculums using Peripheral Participation to create more bilingual speakers in the United States?
2. What learning methods can be used to design competent strategies to ensure language acquisition success within online communities?

[Key Terms] - *Self Learning; Situated Learning; Peripheral Participation; Motivation.*

Literature

The study would be based upon models of Situational Learning methods combined with Peripheral Participation. Jean Lave's, "Situated Learning: Legitimate peripheral participation," describes Situated Learning as a theory that explains an individual's acquisition of professional skills from first becoming an "Apprentice." This Apprenticeship eventually leads to becoming a full-fledged member of the community (Lave Wenger 29). After the learner has established themselves within the community of practice, they then become experienced members, this is known as Peripheral Practice (49). In this curriculum, the beginner (or newcomer) to Duolingo must act as an Apprentice. During the user's Apprenticeship, they will learn valuable elements of the software, language, and culture from older users (or Masters). This method would ensure that subjects would not only be able to speak and understand the language more effectively but also be able to reteach and reinforce new curriculums.

Methodologies and Terms

Situated Learning - a theory that explains an individual's acquisition of professional skills. This concerns research of apprenticeship and how legitimate Peripheral Participation leads to membership of community practice.

Peripheral Participation - describes how newcomers become experienced members and eventually "Masters" of community practice - or learning as a contextual social phenomenon achieved through participation in community practice.

Apprentice - A newcomer (in this case a language learner) seeking to acquire a new skill from a designated Master.

Master - Someone who has acquired the language by way of Apprenticeship.

Self-Directed Language Acquisition:

- *Instructional Manuals & Media* - Instructional materials (both manual and digital became extremely popular in the early 2000s. Perhaps the most popular methods were Rosetta Stone, a software program focused on language acquisition via image retention, and The Pimsleur method, which focused on learning languages by listening and writing exercises.
- *Online communities* - As technology grew faster online language learning communities in the early 2010s began to emerge. Services like Babbel perfected language learning applications by creating a platform-specific to online tutoring via video conferencing.
- *Gamification & Applications* - Currently, advancements in technology have created a major cultural shift. In the United States and around the world, people are more connected than ever. Social media is now the dominant factor when considering online language learning applications. Duolingo, an interactive learning application currently dominates the online space with over 300 million users. The platform uses a basic memorization technique composed of specifically targeted grammar drills. The online giant also utilizes social techniques that are uniquely human. These techniques include Competition through leagues and badges or merits when completing each lesson in order to keep user engagement. Duolingo has also created forums and outreach programs to gain more information about their audiences and usability.

Research Design

Design Study Strategies and Criteria

This Study would identify the overall effectiveness and scholarship of Duolingo and utilize situated learning techniques to build upon existing strategies. Candidates participating in this study would also be selected based on the following criteria: United States citizens, monolingual, and generally interested in learning a second language. Motivation (preparing for university study, occupational work, traditional study, and or general curiosity) would ideally be a key factor in determining participant eligibility.

Necessary Prerequisites

To speak and interact in another language only and a rudimentary understanding of basic skills are needed. After the subject learns the basic linguistic modules within the curriculum of Duolingo they will be assigned a Master. By understanding basic speech, the Apprentice will have achieved competency and will be able to converse with the Master, thus building a foundation for elemental future instruction. An Apprentice will meet with a Master after every module (about 20 lessons) are completed. Such meetings will contain questions about the completed module referring to grammar, idioms, and culture.

Understanding Software and Usability

By now the Apprentice should have a good grip on the target language. They are now able to speak and understand instructional applications and directions set forth by the Master. At this point, the Apprentice is now acclimated to the software. This is important for building valuable technical skills for the Apprentice and the software as it evolves.

Repeat

The Apprentice will repeat these actions until they reach favorable fluency. This fluency will be determined by the Master.

Guided Application

Once an Apprentice has completed a certain percentage of higher-level modules, they will meet again with a Master to discuss possible proficiency certifications. These certifications will eventually lead to a permanent Mastership. Certifications will consist of an interview conducted by the Master to determine peripheral participation.

Mastership

Once the Apprentice has become a Master, the cycle continues as more newcomers will join in attempts to reach their language goals.

Proposed Overview of Research Procedure

Overview:

This study will consist of 2 participants with relatively similar cultural backgrounds pertaining to life in the United States of America. Subjects will be over the age of 18. The study will be composed of two different curricula. The Language of choice will be Spanish. Subjects are to have no prior knowledge of the Spanish language. Subject 1 will receive the updated version using peripheral participation techniques, while Subject 2 will receive the standard edition of Duolingo. The study will consist of daily exercises (lasting approximately 1 hour) using the application at the subject's leisure. Should the applicant not be able to complete a daily task they must note why they were not able to do so within an online shared document. Upon completion

of the study, subjects will take the “webCAPE” (Spanish Language Placement Exam) examination.

Research Study Timeline: 5/1/2021 - 5/31/2021

Task	Date(s)
Subject Selection: The population will be chosen by myself from a pool of university students. Subjects must not have prior knowledge of the Spanish language or the Duolingo application.	5/1 - 5/7
Module 1: This module will consist of basic language skills composed of lessons one would find within the curriculum of a first-year Spanish Student (greetings, basic sentence structure, grammar exercises, and vocabulary building skills). Subject 1(recipient of updated version) will receive help from a designated “Master” of the Spanish Language. The Master will address any concerns and evaluate the subject.	5/8 - 5/15
Module 2: Subjects will begin learning the preterite, past, and present/participles. Subject 1 will meet again with Master	5/16 - 5/21
Module 3: Module 3 will consist of lessons in culture, Spanish idioms, and future tenses. Subject 1 meet with a Master to address and concerns with the language.	5/22 - 5/29
Examination: Subjects will be given 1 day to prepare for the webCAPE examination. Subject 1 will meet with the Master to prepare for the exam.	5/31

References

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