iDilo en Inglés! Say it in English!

A software to support learners of English as a second language

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Statement of Need

Families of immigrants to the U.S. with low level of language skills in English, or not skills at all, have a need to be proficient in the language for finding jobs, assimilating to the culture, and developing social relationships with the members of the community, among other benefits as members of the society.

Children of immigrant families usually acquire proficiency in English as a second language faster than their parents. Still, parents must to be involved and actively participate in their children education, especially in their new language development, for their children and for their own. This ESL program or language educational tool will help to build a partnership between parents and children in acquiring and developing their necessary language skills in the new language.

Social Impact & Learning Goals

Social Impact

- Better English language skills to communication
- Increase engagement and social integration of immigrant families
- Better adjustment to a new culture

Learning Goal

Proficiency in spoken English as a second language

Target Audience

Our target audience is first generation of immigrant families to the United States. For the purpose of this design, we have chosen among the group with the largest number of immigrants in the U.S. According to Social and Demographic trend report, released by PEW Research in 2013[1], the largest populations of immigrants to the U.S. since 1965 to the present are coming from Latin America countries (22 million).

Usually, these families have a poor level of English. While the children are having special instruction in English as a second language at their schools, parents don't have the time to dedicate themselves to learn the language as promptly as their children. The other language challenge these parents encounter has to do with their active participation on their children's education. It has been demonstrated the positive effects of parent's active participation on their children's learning for their future academic success: "Children whose parents are involved with them in family literacy activities score 10 points higher on standardized reading tests (Sénéchal, 2006)."[2]

[1] Pew Research. Second-Generation Americans: A portrait of the Adult Children of Immigrant, Feb. 7, 2013. http://www.pewsocialtrends.org/2013/02/07/second-generation-americans/

[2] Sénéchal, M. (2006). The effect of family literacy interventions on children's acquisition of reading from kindergarten to grade 3: A meta-analytic review. Developed by the National Center for Family Literacy. Washington, DC: National Institute for Literacy

Personas

PRIMARY PERSONA



Language skills

 First generation immigrant from Dominican Republic

Teresa Guzmán, 35

- Primary language: Spanish (61% 1st. generation Hispanic immigrants are Spanish dominant).
- 5 years living in Queens, N.Y.
- Married, 2 children (9 -13 years old).
- Attained a High School degree in Dominican Republic.
- Works as junior chef in a restaurant
- She came to the U.S. looking for better economic opportunities and a good education for her daughter.
- Her parents live in Dominican Republic.
- Love watching telenovelas (soap operas).
- Likes to play cards and board games.

I know that to move ahead in the United States, I need to learn English very well, everybody says that.

My daughter is in school, she is learning English fast, I'm so proud of her! But I'm afraid one day I will not be able to communicate well to my own daughter!

- Desires and motivations
- Teresa wants to attend college to become a professional chef and to own a restaurant.
- She wants her daughter to obtain a higher education degree.
- She expects her daughter will be successful and happy with her life in the U.S.
- · Wants to travel around the world.
- English skills limited to solving
 Total po
- basic communication tasks
 She has attended community-free English classes in the past
- She says she can understand English well, but can't speak it properly
- Her major concern is to talk with her daughter's teacher as he doesn't speak Spanish.
- She doesn't have much opportunities to speak in English in her community.

Computer skills

- Owns a desktop computer, which shares with her daughter.
- Reads the news online in Spanish, and uses Skype to communicate with her relatives in Dominican Republic.
- Likes to watch cooking videos in You Tube, (English and Spanish)
- Owns a smartphone and sends and receives work related text messages

Statistical Data (1) (2)

- · Total population: Dominicans 1.5 million (All Hispanics 51 million)
- · 56% Dominicans in U.S. are foreign born (36% Hispanics)
- 150 thousand Dominicans arrived to the U.S. after 2006 (2 million Hispanics)
- · Median age: 28 (Hispanics 27, U.S. 37)
- 44% Reported speaking English less than very well (34% Hispanics)
- Educational attainment 25 and older: 16% at least bachelor degree (13% Hispanics)
- 78% live in the Northeast (1 million), 48% in New York (700 thousand)
- Household annual income median \$32,000 (Hispanics \$39,000)
- Unemployment rate 14.6% (Hispanics 12.4%, U.S. 10.2%)
- · 86% Hispanics own a cellphone, 49% a smartphone
- 76% Hispanic adults access internet in mobile devices
- 72% Hispanic adults own a desktop or laptop computer
- 78% Hispanic adults go online at least occasionally
- 53% Hispanic adults say they came to the U.S. to make a better life for their children
- Pew Hispanic Center. (2013). Hispanics of Dominican Origin in the U.S., 2011
- 2 Pew Hispanic Center. (2013). Closing the Digital Divide: Latinos and Technology Adoption

Personas (cont.)

Jorge Martinez (Secondary persona)



•	retrieved from http://pages.cs.wisc.edu.
	-david/westhockey/2006/players.html

Profile	DATA	Features
Age	13	
Gender	Male	
Occupation	Student	Middle School
Location	New York	Sunset Park
Tall/ Weight	170 cm/ 70kg	
Skills / interest	Sports	baseball
Nationality	American	Immigrated in 2009
Siblings/ family	one younger sister	living with both

About his circumstances

- 1. Father is working at a restaurant as a chef
- Mother is working as a waitress at a restaurant and she has limited English proficiency
- 3. Martinez has to finish mandatory ESL classes
- 4. He feels more comfortable with speaking Spanish
- 5. He likes sports and hanging out with friends on Facebook or Twitter

"I need to study hard, especially English, because I want to go to college with a scholarship."

Biography

John is 13 year-old and studies at Sunset Park middle school in New York. He lives with mother and father in New York, and he has younger sister, 9 year-old (U.S. Census Bureau, 2009). He loves sports, especially baseball. Since he immigrated to the United States four years ago (U.S. Census Bureau, 2009), he has to take regular classes as well as ESL classes at the school every day for 3 to 4 years (Thomas & Collier, 2002). However, he is not comfortable to speak with people in English and he prefer to speak Spanish. He prefers to talk in Spanish with friends or send instant messages or chat on Facebook or Twitter (Livingston, 2011). But he does not spend much time on talking with parents and they use only Spanish at home (U.S. Census Bureau, 2009).

Complementary Persona



My name is Valeria and I am a certified English and Spanish teacher. I have taught all levels of Spanish and English, and have helped native Spanish speakers prepare for the Alternative High School Assessment.

I am friendly, outgoing and patient, and always bring new ideas and materials into the classroom.

- Valeria Ortiz Reyes, 32

About Valeria

- Second-generation Latin American.
- Moved to USA with family from Puerto Rico when she was 3 years old.
- "2nd from top" in a family of 5 children, so teaching comes naturally.
- Lives in Morganville, NJ* with husband (George Reyes, IT consultant) and two sons.
- Currently tutors her 6 year old son in Math and English.
- Loves cooking, photography and running.

Qualifications

- Holds Master's Degree in ESL and Bachelor's Degree in English from NJCU.
- Freelance Private Tutor for English, ESL and Spanish.
- Tutored middle and high school students (K-8 to K-12) in Communiversity program.**
- Used to teach religious education at R.C. Church in Brooklyn, NYC*
- Presented in several workshops at the NJEA Teacher's Conference in Atlantic City.***

Beliefs, Motivations and Frustrations

- Having grown up in the US all her life, she initially sensed a conflict in relating to her Hispanic ethnic identity. With time and age, she has grown more comfortable of her ethnic identity. However, acculturation is still "slightly anglo-oriented bicultural"*****
- She has strong family values and visits her parents in Newark, NJ quite often. She is also a Catholic and attends St. Thomas More Church regularly.
- She is not completely satisfied with her salary of \$49,260, which led her to also freelance as a private tutor. *****
- However, she volunteers at the church to teach the neighborhood children 3 days in a week, due to her strong religious and moral upbringing.

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Details



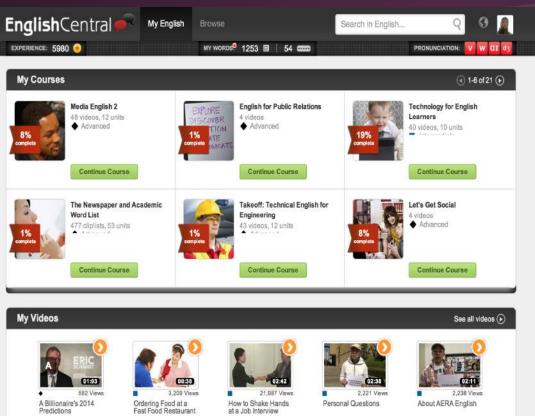


1. SpeakingPal (URL: http://www.speakingpal.com/) SpeakingPal is one of the most popular English learning applications on Apple store (2014).

Strengths:

- Instant feedback on students' pronunciation
- Provide rich multimedia, vivid visual and sound aids.
- Topic-based dialogue
- Highly Interactive

- Cheesy dialogue and less practical expressions (not authentic) e.g.) In the topic of job interview, the interviewer asks "why do you want to work for this company?" the interviewer responses, "I herd that the company is a great place to work."
- The app provides interactions, but since they are not interactions with students or instructors, students may feel they are talking with robot.
- No function or sections for socializing/ group activities by interacting with other users or learners



2. EnglishCentral (URL: http://www.englishcentral.com/)
EnglishCentral has a very similar function of what
RosettaStone has, which is voice record and immediate
feedback. But, EnglishCentral provides videos, instead of
pictures. This is a big difference from RosettaStone.

Strengths:

- Support a hybrid-learning environment. This is because some offline schools, such as ETS English institute, use the website as their teaching materials. Students can study the target language by themselves at home and discuss their topics and get specific feedback from teachers at offline schools
- Diverse videos resources and topics, such as news, commencement speeches, and animations.
- It provides tailored online curriculum for students based on their levels and interests. For instance, if student is beginner level and interested in technology, the website suggests IT or science related topics, which is easy and shorter videos than upper levels. Also students can see their progress to achieve their learning goal to go upper levels
- Provide functions like comparing their pronunciation with native speakers.

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SOUNDS PRONUNCIATION LESSONS STORE BLOG ABOUT RESOURCES

Online Course with Rachel's English

Announcing the next Rachel's English course!





3. Rachel's English URL: http://www.rachelsenglish.com/)
Rachel's English is a website to teach English pronunciation
(2014)

Strengths:

- Since Rachel, the teacher, only teach English pronunciation, students can focus on learning pronunciation in-depth
- Provide authentic content
- Immediate or quick feedback and Q&A via email or on online bulletin board is available

- Online forum and discussion are available, but only for students who take paid classes
- It provides interesting videos, but they are not interactive videos, which is different from EnglishCentral. So just watching videos could be boring to some students.
- Less motivation, no rewarding and gamification elements
- No offline classes or face-to-face conversation are available
- No mobile application. It is only available on the web-based platform



Duolingo.com: Why it's relevant and inspiring to our design: Duolingo is a very interactive, simple and engaging website for learners of English as a second language. Our design is targeting the immigrant families (parents and children) in order to teach them English, and we are also looking to build something simple and engaging for the users. Strengths:

- -Takes a different take on learning a new language: It allows the user to learn a new language, by translating lines from the web.
- -Peer-review: One can see how sentences were translated by others, and can also rate the effectiveness of someone's translation of your native language.
- Visual imagery It uses simple, yet effective images, to help you relate a word to an image or object, in order for you to memorize better. It also uses the dualcoding theory effectively, wherein text and images are not together in bulk, but rather in parts and it's mostly based through silent animation.

- Text focused: The website is good for learners wanting to learn how to browse the web better, and how to read better, but is not the best place for learners of a spoken language.
- Handful of languages: It only offers translation services in 5 languages Spanish, French, Italian, German and Portuguese which is comparatively lesser than its counterparts.

TOP LANGUAGES

SPANISH (LATIN AMERICAN)

FRENCH

ITALIAN

GERMAN

CHINESE (MANDARIN

JAPANESE

SEE OVER 50 MORE LANGUAGE

FREE LESSON



30 MINUTES A DAY

ONLY 30 MINUTES TO LEARN THE PIMSLEUR WAY

Give us 30 minutes a day and we'll have you speaking a new language in no time. Thirty minutes a day is all it takes to develop a near native accent and become proficient in your new language. Plus, Pimsieur's portability makes it easy for you to find

ANYWHERE, ANYTIME

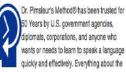
PIMSLEUR IS PORTABLE TO FIT ANY LIFESTYLE



Pimsleur digital lessons play on your device of choice computer, tablet, iPod or smartphone, If you're more

SCIENTIFICALLY PROVEN

PIMSLEUR'S EXPERIENCE BREEDS SUCCESS



Pimsleur Method has improved with age, making it the most reliable way to learn a language.

Pimsleur Method

Strengths:

- Audio based rather than text based: One of the main problems for immigrants is understanding how English words are pronounced, and the focus of this tool is on spoken English, from the perspective of a native speaker. This makes learning more easy and relatable for the learner.
- Portable and 24/7 accessible: It can be downloaded as MP3 tracks, and can be listened to during normal commute too. This saves time for learners. It even comes with apps to complement one's lessons.
- Reading aloud and learning: It helps learn a language by not just reading it alone, but also reading and speaking aloud.
- Listening to a native speaker makes the tool much more engaging than listening to a robotic voice in one's native language.

- It's paid, and quite expensive for someone looking to learn a language fully and can cost \$100 or more to actually complete the lessons.
- Not an effective website: I tried to log in and take a free lesson for ESL for Hindi speakers, and it kept crashing. I was rather disappointed and it made me rethink whether all the languages are accessible or not.



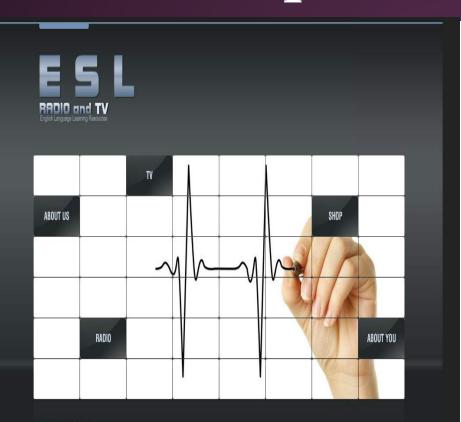
Livemocha com

Why it's relevant and inspiring to our design: Livemocha is quite along the lines of our design, since it relies on over 12 million native speakers from over 200 countries to form a community of learners and teachers.

Strengths:

- New and relatively free
- Live classes: Livemocha, as it's name suggests, is entirely web-based and offers live classes, conversations with native speakers and tutorial videos which are very helpful.
- Private tutoring: Although it's a relatively expensive option with regard to the competition,
- Assessing learner's levels: I liked the way it asks the learner about their current level, without confusing the learner in English words.

- Inability to see translation of text, if required: Since the mode of delivery is mainly videos, one cannot see the translation of the text or the caption, in one's native language. This feature makes it a little less engaging for a completely new user, who would like to have something familiar around
- Can become costly along the way: If one needs to learn a language fully using livemocha, it will become expensive as more lessons can cost upto \$100 per year.



ESL Radio and TV – English Language Learning Resources (http://www.eslradioandtv.com/)

Strengths:

- Learners can practice for short periods every day.
- Learners can use the internet to communicate with people
- Not only learn English, but also memorize some songs or poems
- Have a weekly plan, change with the times
- Learners and teachers can find listening materials form a variety of sources.

- The TV shows and Radio do not have a subtitle or a text paragraph of the show, it is hard for learner to review and get answer of the quiz.
- The video does not have a high quality, and cannot be full screen that is hard to follow.
- No class to talk about the Radio and TV programs, learners have to learn by themselves



It is more fun to talk with someone who doesn't use long, difficult words...

English Club: Learn English: ESL Forums

© Board index

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Please note that these ESL Forums are NOT part of MyEnglishClub. To post at these ESL Forums please register † first.

▶ Listenina English

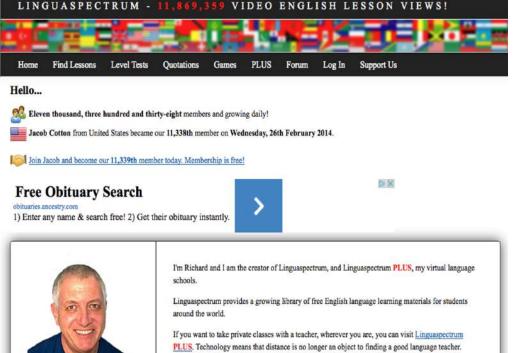
Free English Test

EnglishClub Home page - (http://www.englishclub.com/)

Strengths:

- Learners can interact with other learners and teachers about their English learning questions and share their materials.
- Facilitate learning
- Sources for listening, speaking, reading, writing, grammar, pronunciation, vocabulary, ESL games, ESL quizzes, ESL articles

- Both web pages and materials are disordered.
- Not put learners in levels
- Not lots of people participation
- Learners can get feedback from other learners, may not be a right answer



our students.

We make the best use of the latest technology to deliver a valuable Online Learning Experience to all of

Linguaspectrum.com a virtual language school

This product is focused on developing speaking and listening skills to English learners, specifically pronunciation and accent developing, listening comprehension, and lessons and exercises on common grammatical errors. These are presented as interactive activities in video-audio, text-audio, eBook, and some downloadable formats, also word games as hangman, podcasts, and an option for private classes. All lessons and activities are performed in its website, I found no mobile products options. Most videos are labeled according to a difficulty level: Elementary through Advanced, and students can perform a leveling test directly in the website. Video topics classified according to language uses, as "everyday language", "transport language", "cultural language", etc.



A complete and efficient solution to Learn English speaking

Speaking

Listening

Extra English Lessons

Pronunciation Lessons

English Grammar Basics

English Vocabulary - NEW

English Speaking Articles
5 Rules for Speaking Fluency

Grammar for Speaking

Intonation and Speed

TalkEnglish.com developed the "Click, Listen, and Repeat" functionality. In most of the lessons, you read the sentence, click on the sentence to listen to the sentence, and then you can practice speaking by repeating after the audio file provided by a native English speaker. This proven method strengthens your reading, speaking, and listening all at the same time and makes learning English speaky. You will improve your English speaking using this method.

Step 2: Understand

Step 3: Integrate

TalkEnglish.com

Strengths:

- -Excellent and focused organization of the information in the website that makes an easy and coherent navigation.
- -Simple and functional design, pleasant to look at.
- It explains the learning method and provides guidance to make it effective for learners.
- The offering of lesson's content is diverse, while keeping the focus on speaking and listening skills.

- -It is only presented in audio and text formats, and all interactions are limited to learner's writing or listening.
- -It doesn't provide instant feedback.
- -It doesn't provide any form of video in any lesson
- -Instructions and explanations are too long

Charhill, A., Suáres-Orozco, C., Páez, Mariela. Explaining English Language Proficiency Among Adolescence Immigrant Students. In American Educational Research Association. *American Educational Research Journal*. December 2008, Vol. 45, No. 4, pp. 1155-1179

"The circumstances and demands of language learning contexts are closely linked to successful academic English language acquisition. The substantial difference between the language used in school and language used in conversation with friends and family is especially pronounced for adolescent students (Bailey & Butler, 2003; Cazden, 2001; Cummins, 1991, 2000). The oral and written language skills necessary to succeed in the academic context of middle and high school is complex and includes the capacity to summarize texts by inferring unstated meanings, analyze texts by explicitly commenting on the author's use of language and genre features, critique argumentation and underlying assumptions, explicitly define concepts, assess the grammaticality of complex sentences, and write and discuss long, coherent texts that conform to implicit genre expectations and reference other texts (Bailey & Butler, 2003; Gibbons, 1998; Johns, 1997; Schleppegrell, 2001)." (p. 1157)

Han, W.J. Bilingualism and Academic Achievement. In Society for Research in Child Development. Child Development, January/February 2012, Volume 83, Number 1, Pages 300–321

"Lack of English proficiency is a salient issue among schools serving children of immigrants. Approximately 5.1 million English-language-learner (ELL) students from more than 350 language backgrounds are enrolled in pre-K to 12 in U.S. public schools [...]. In actuality, only 35% of all ELL students are foreign born and 80% of them have been in the United States for more than 5 years. Latino and Asian children have been and are projected to be rapidly growing racial and ethnic groups in the United States and often do not speak English at home." (p. 300)

The NGA Center for Best Practices, The Council of Chief State School Officers, and Councell of Chief State School Officers. (2010). Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects. http://www.corestandards.org. U.S.

Vaala, S. (2013). Aprendiendo Juntos (Learning Together): Synthesis of a cross-sectorial convening on Hispanic-Latino families and digital technologies. New York: The Joan Ganz Cooney Center at Sesame Workshop.

[...] Brenda Dann-Messier, Assistant Secretary for Vocational and Adult Education at the U.S. Department of Education, charged the group to research and create personalized learning environments that include or focus on parents as well as youth. The parents' success has been linked so often to the achievement of their children, particularly given the increased opportunities and positive role modeling that are associated with having parents who are able to fully participate in the economy." (p, 10) "Many Hispanic-Latino youth describe discrimination from peers as well as teachers and other members of society, which is elicited by their English fluency, low family affluence, skin color, status as immigrants, and due to negative stereotypes (Edwards & Romero, 2008; Lee & Ahn, 2012)." (p. 22)

School Reform and Standards-Based Education: A Model for English- Language Learners

(http://edfs200ell.pbworks.com/w/file/fetch/54561001/EchevarriaShort-SchRefSBEELLs.pdf)

Learning English can help immigrants survive (http://www.denverpost.com/ci 22750397/learning-english-can-help-immigrants-survive)

These articles are analyzing reasons that Spanish immigrant students/ families in the United States has some problems with English and lack behind their counterparts. Based on the article, our team can have clear ideas how we can solve the problems so that Hispanic immigrants middle school students and their family can follow their academic performance and adjusting to the country. One of the reasons the article, "School Reform and Standards-Based Education: A Model for English- Language Learners," points out that in suburban or rural areas since there are a few ESL schools, immigrants students cannot receive proper education to follow up their peers due to their limited proficiency in English. So, our team will support students in small towns to learn English by taking our online lessons and mobile educational software. Also, some states, such as California states, do not allow ESL students to study in ESL classes no longer than a year. Our team will help students keep studying English after moving to regular classes by using our materials, if they need.

Stephen Krashen's Theory of Second Language Acquisition (URL: http://www.sk.com.br/sk-krash.html)

This article defines ESL student's level of English based on their proficiency. Our team will focus on intermediate level of English learners and according to the article our target audience is learners typically have a vocabulary of as many as 6,000 worlds. Second language can be improved by speaking it.

According to Stephen Krashen's the second language acquisition theory (1987), there are five stages: silent, early production, speech emergence, intermediate fluency, and continued language development. First, in the stage of silent, language learners typically spend time learning vocabulary and practicing pronouncing new words. While they may engage in self-talk, they do not normally speak the language with any fluency or real understanding. Second, in early production stage, learners usually acquire an understanding of up to 1,000 words. They may also learn to speak some words and begin forming short phrases, even though they may not be grammatically correct. In the third stage, speech emergence stage, learners acquire a vocabulary of up to 3,000 words, and learn to communicate by putting the words in short phases, sentences, and questions, but those may not grammatically correct. In the next stage, language learners can be in an intermediate fluency stage in a year, learners typically have a vocabulary of as many as 6,000 worlds. Second language can be improved by speaking it. Lastly, it takes most learners at least two years to reach continued language development stage, and then up to 10 years to achieve full mastery of the second language in all its complexities and nuances.

Imberti, Priska. (2007), Exploring and Understanding the Language Experience of the Non-English-Speaking Immigrant, Families in Society: The Journal of Contemporary Social Sciences, 88(1), doi: 10.1016/1044-3894.3593

This article delves deeper into the issues behind the difficulty that non-English-speakers face while learning the language, such as importance of native language in practice and the immigrant's worldview. The author uses her own experience and informal accounts of other immigrants to analyze the subjective experiences of immigrants who are required to learn and speak in English in the United States.

Through the literature review, the author talks about the psychological implications of immigrants having to express themselves in a second, non-native language. She observes that while the second language remains intellectualized and distant from a person's feelings, the first language is the medium of expression of feelings and cognitive memories acquired. The author also points out that the acculturation process, through different for each immigrant group, has certain factors like frustration, anger and hurt which are common.

We found this article to be particularly helpful due to its focus on immigrants and the intricacies of how learning a new language affects their perception, self-confidence and behavior.

Nuggets for us: "Even when immigrants attain a desirable standard of fluency and confidence in the new language, there is often a degree of uncertainty and dissatisfaction that goes along with their conversations. There is an inner sense of ambiguity between what they have gained and what they have lost in the process of acquiring a new language in a new culture." (p.70)

Gabriel, Arana. (June 19, 2013); Marco Rubio's Broken English Requirement, http://prospect.org/article/broken-english-requirements, Retrieved on 26th February 2014.

Although this article is primarily focuses on Florida's Senator Marco Rubio's proposal to add requirement of English proficiency to obtain a green card (by an immigrant), it also provides a background of the economic and English language proficiency of first-generation immigrants in USA. It states that while this may seem like an obvious and simple requirement, for a first-generation immigrant, it poses a big question of whether he/she can afford the hundreds of hours of instruction needed to gain proficiency. Firstly, the author dispels the myth that immigrants do not *want* to learn English. Today's immigrants are as well versed as their European counterparts, and second and third-generation immigrants are mostly monolingual. However, the author delves deeper into the problem with the amendment of English speaking requirement, which is that an immigrant must achieve "level 3" proficiency for which it takes 330 hours of instruction (or \$3300 minimum). This high cost is a problem for low-skilled, poor immigrants – which make up the bulk of undocumented ones.

This particular cost analysis is extremely helpful for us in validating our objective for designing a tool that teaches English to first-generation immigrants, at less or no cost. This article clearly establishes the increasing need to provide language-learning support to the low-skilled immigrants, and gives us focus for designing our solution.

Nugget for us: The article also includes a simple infographic, which provides valuable information such as - the estimated cost for meeting demand of English-language instruction would be around \$11.5 and \$23 billion for the government.

Ybarra, Renee; Green, Tim. (2003), Using Technology to Help ESL/EFL Students Develop Language Skills, The Internet TESL Journal, 9 (3), Retrieved from: http://iteslj.org/Articles/Ybarra-Technology.html

The authors of this article believe that technology can be used as an effective teaching tool for English Language learners, and discuss a variety of research that illustrates how teachers can use technology to develop language skills of learners. A brief summary of the significant research articles mentioned (relevant to our project) are listed below:

Vocabulary Development – The authors talk about a study done by Kang and Dennis (1995) in Seoul, South Korea, to determine whether or not the use of computers facilitate the vocabulary development in beginning English language learners. Fifth grade students were assigned to three different groups: definitions, picture and context. The first group was given an English word with it's definition in Korean, the second group was given a picture with the definition, and the third was given a situational context employing the English word first and then given the definition and picture. Initially, the first two groups (definition and picture) did better, but over time, the contextual group's scores increased rapidly. The researchers concluded that the contextual group needed more time to get adjusted to the instructional approach, but it was more effective in long-term memory recall.

Reading – The author talks about a study by Landerholm, Karr, and Munshi (2000) in Chicago, with four specific goals to help parents: a) become involved in the school community and become comfortable on campus, b) enjoy reading and writing alone and with their children, c) understand science and computer technology, d) and improve their own literacy. This was founded on the belief that technology can be used to improve parent involvement in their child's education while improving the parents' literacy as well. Although the program initially used computers, later on it also used technology such as photographs taken at field trips and other activities, to create a memory book for parents and children. It also developed into students creating book reports with their parents on the computer, which improved the literacy skills of both parents and teachers.

Examples of such active use to technology in the field of English language learning, are immensely helpful to us in our project. The example of the "reading" project hits closest to the goal and envisioned layout of our project, and it thus a great inspiration to begin with.

Concept Brief • Theoretical Rationale

The instructional design applied to *Dilo en inglés* language software is mainly based on the theoretical principles of Situated Cognition Theory, Cognitive Theory of Multimedia Learning, and the integrated model of second language acquisition.

The theory of situated cognition claims for the inclusion of the individual's context as part of the cognitive information processing. It argues that context has an effect on how people learn and build knowledge beyond their individual experience, "because what people *perceive*, how they *conceive of their activity*, and what they *physically* do develop together" (Clancey, 1997). Therefore, situated cognition theory centers its attention on the sociocultural context from where knowledge is acquired in a lived practice. Under this point of view and according to Lemke (1997) knowledge increases among individuals of a society through meaningful actions that have relations of meaning to one another and as function of a cultural system. Our design has taken into consideration this theory by presenting a learning content that directly relates to the sociocultural context of our learner that will facilitate their integration to a new society.

In our design we have also applied what is known about how human mind works when acquiring new knowledge. Within this context, we have applied the main principle derived from the cognitive theory of multimedia learning which sustains that people learn more deeply from words and pictures than from words alone (Mayer, 2005). The theory is based in the broad assumption that a multimedia message designed under the knowledge of how human mind functions will more likely to lead into a meaningful learning than that that are not (Mayer, 2005).

Concept Brief • Theoretical Rationale

The cognitive theory of multimedia learning builds on three theoretical assumptions involved in the processing of incoming information:

- Dual channel assumption: The human mind processes information through dual channel systems, one for non-verbal information and other for verbal information.
- Working memory capacity assumption: Each channel has a limited processing capacity.
- Active processing assumption: Active learning entails carrying out a coordinated set of cognitive processes during learning. It also can be understood as the process of model building.

There are several instances where this theory has informed our design. For example, the vocabulary word activity presents each word in three integrated modalities: auditory, written, and illustrated.

The integrated model of second language acquisition, on which our instructional design also finds support, is based on elements of Ellis (1997) model of second-language acquisition, elements of the interactionist perspective of second-language acquisition, and on elements of the cognitive theory of multimedia learning (Plass and Jones, 2005). The main assumptions of this model sustain that language is used to communicate ideas, establish and maintain social relations, and to create discourse (Plass & Jones, 2005). Multimedia presentations have demonstrated to be effective in engaging learners into three major functions that are essential to second language acquisition and learning: comprehensible input processing (Krashen, 1982), meaningful interaction processing (Long, 1985) and comprehensible output processing (Swain, 1985; Swain and Lapkin, 1995).

Concept Brief • Theoretical Rationale

Comprehensible input refers to the presentation of visual and verbal materials that are relevant to learners and aligned to learning objectives. Meaningful interaction refers to learner's cognitive activity of organizing and constructing mental models from the verbal and visual materials, and comprehensible output refers to using the language in meaningful contexts that will result in improving learner's communicative competency in the language (Plass & Jones, 2005). According to Swain (1985) and Swain and Lapkin's (1995) studies, comprehensible output, such as conversational exchange, permits learners to interact with the language while testing their understanding of the language with others. In our design all three functions are most likely to occur since the material is presented to facilitate the construction of mental models through the simulated situations that are relevant to learners, as well it provides opportunities to interact with the language in a virtual scenario. This i first stage interaction will help learners to generate a comprehensible output in an actual situation of their everyday life, which is critical for their language skills development.

References

Plass, J.L., Jones, L.C. (2005) Multimedia learning in Second Language Acquisition. In Mayer R. E. (Ed.) *Cambridge Handbook of Multimedia Learning*. New York: Cambridge University Press.

Swain, M. (1985). Communicative competence: Some roles of comprehensive input and comprehensive output in its development. In S. M. Gass, C. G. Madden (Eds.), *Input in second language acquisition*. (pp. 235-253). Rowley: Newbury House.

Clancey, W. J. (1997). Situated cognition: On human knowledge and computer representations. Cambridge University Press.

Mayer, R. (2005). Cognitive Theory of Multimedia Learning. In Mayer, R. (Ed.) The Cambridge Handbook of Multimedia Learning. New York: Cambridge University Press.

Concept Brief • Technology Rationale

What technologies does your design uses and why?

Speech recognition: This is a fundamental aspect of our design, as it will help in voice recognition of the user and identifying nuances of spoken English, such as pronunciation.

Gamification: By using elements of game design in our structure and sequence, the design will appeal to both the primary user and their children, secondary users.

Simulation: Since the users need guidance on how to transfer the learning into real-life scenarios, simulations will give a good springboard to do so.

Virtual reality: This technology will assist in designing better role-play modules

Website and mobile: Our application will be designed for accessibility through websites and mobiles, for greater permeability into the users' daily schedule.

Scenario

- 1. Teresa's day starts early at 5 AM every morning. As she gets ready to go for her job and serves breakfast to her family, she talks to them about what she has just cooked using new vocabulary, they join the conversation also sharing their new words learned.
- 2. Teresa and her children have access to the language application in a shared family account. There they can watch together a video for 45 minutes of a movie or a short documentary video, which during the screen, it prompts them with questions or reflections to check or reinforce understanding. Usually, they do this activity on Sunday afternoon.
- 3. After dropping her children off to school at 8 AM during weekdays, Teresa takes the subway downtown to Greenwich Village, where she works at a restaurant. While on the subway, Teresa opens the *Dilo en Inglés* mobile app on her phone, plugs in her headphones and starts listening her daily lesson about English general + cook vocabulary and short sentences of common use. (Scaffolding activity: English with Spanish translation)
- 4. During the day at work, Teresa can take a break for 1/2 hour to practice her morning lesson by listening and repeating after the vocabulary words and short sentences. Once in a while, one of her co-worker joins and helps with her pronunciation.
- 5. During nights, Teresa log in into *Dilo en inglés* website to the daily online virtual English class with two other students and a simulated instructor. The class lasts for 1/2 hour during which a pre-established conversation about a generic topic takes place. Since Teresa is in a beginner's level, she turns on the option with subtitles in English, so she can relate the sounds with written words. During the lesson, each student is prompted with questions from the instructor and he or she will answers aloud. A voice recognition system records her speech and prompted to repeat her answer if necessary (feedback). The last 8 minutes of this class are dedicated to wrap up that day lesson and present the topic for next day.
- 6. The *Dilo en inglés* program gives learners optional topics for individual simulated lessons that are adapted to the student's interests. Teresa has a meeting in her job with the chef and the restaurant's staff to discuss the specials of the week. She selects the scenario on the site titled "Working at the restaurant" that is related to her work and is set in a restaurant's kitchen. For 15 minutes she is interacting with animations at answering and making questions.

Requirements Listings - Hardware

Hardware Requirements:

- Laptop or Desktop, with the following features:
 - Macintosh OS or Windows
 - Set of speakers at home to play audio that can be heard by children also
 - Microphone
 - Stable internet connection
- Smartphone with the following features:
 - Wifi / 3G wireless connection
 - Headset with microphone
 - Spanish and English language support

Requirements Listings - Software

Software Requirements

- 1. Introductory Home Page
- Provides an option to users upfront if they want the website language to be in Spanish or English
- Users have option to login or sign up
- Sign up is the option for new users, where they need to enter mandatory information. Sign up is free. Login is for returning users.
- 2. Login & Sign up Details
- Sign up page will provide options to sign up using Gmail, Facebook or Google +
- Based on user response, sign up page will sync and connect "Dilo en Ingles" account to user's Gmail, Google + or Facebook account. This will provide flexibility to user when trying to share content to social media options later in the process
- Login page will need to accept user data in the fields of "Full Name", "Username" "Email" and "Password"
- If users sign up, they will be proceeded to a preliminary test to ascertain current knowledge level of spoken English. The user's responses need to be analyzed using the rubric provided, and based on number of correct responses, the application will determine the current level of the User. This is a very important step as it determines the number and quality of lessons the user will henceforth have access to.

Requirements Listing - Software

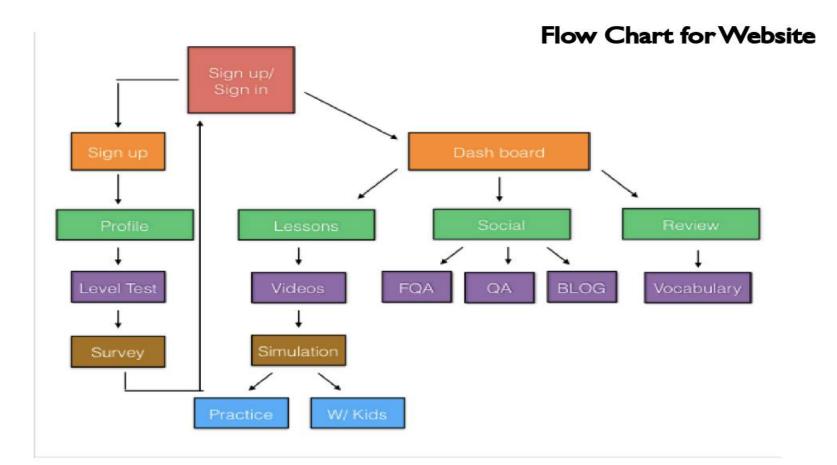
3. Returning Users:

- Returning Users will be able to see Dashboard of their progress. This dashboard will need to be linked to data from the lesson plans and will need to represent, in a visual and concise manner, statistics regarding the users "Lessons Completed", "Lessons Remaining" and "Total Lessons" for the particular level
- Users can either start or continue a lesson. If they choose to start, the application will go to the next lesson on the list. If they choose to start, the application will need to resume from the last saved point.
- Users can also navigate to the social media page to share their progress, or to the review section to see mobile application for vocabulary.
- If users choose to share via social media, and they have signed up using a social media account i.e. Facebook or Google +, the application will immediately provide a portal in the desired social media website layout. Users will be able to share images, text and video and also write messages.
- If users have not signed up using social media accounts, application will leave Dilo en Ingles website and go to the desired URL of the social media website.
- If users choose to review their mobile application, the website application will open a new mobile application window. This window will verify username and password again, and will then extract data from users connected mobile.

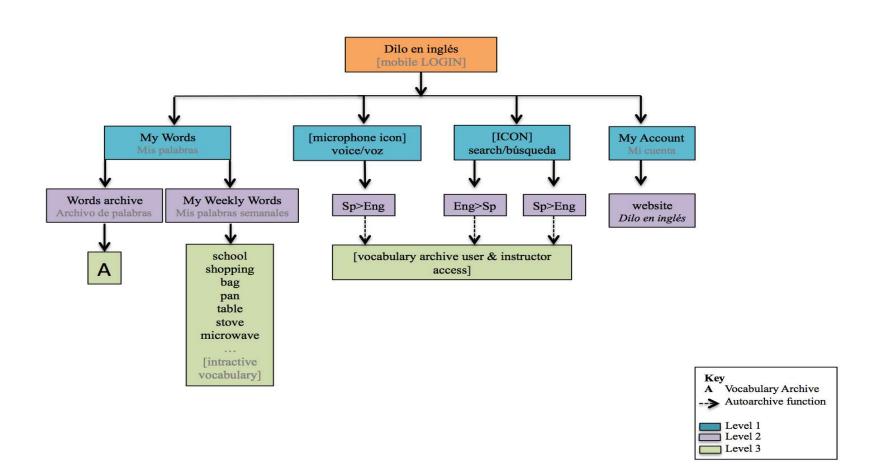
Requirements Listing - Software

4. Lesson Plans

- When user opts to start or continue lesson from their account summary page, the application will open a new lesson or the previously saved lesson from the user's current level, whichever is applicable.
- Lesson will be in the form of a video, which will cover a particular topic from the content as will be provided to the developers.
- Users can choose to listen to the video, or skip to go to a simulation activity, if they are already familiar with the concept being taught.
- 5. Simulation Activity
- Once users skip to Simulation activity, application will go to the Simulation exercise.
- There needs to be an option for a single player or multi-player exercise. By default, option selected will be single-player and a button asking for entering names of other player will be provided, in case there are more than one.
- The simulation exercise shall begin only when the user clicks on the Start button. It should not play automatically.

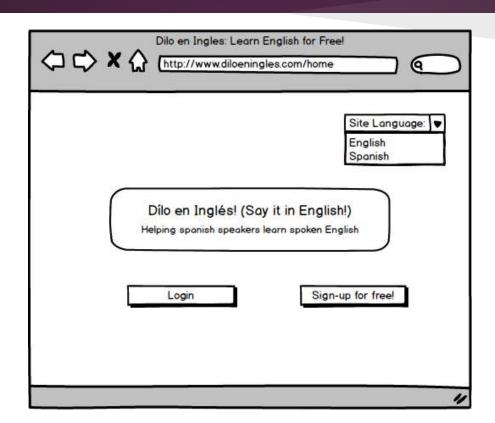


Mobile Flow Chart



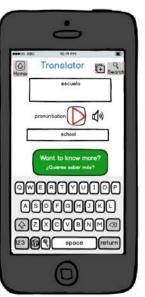
Wireframes (website)

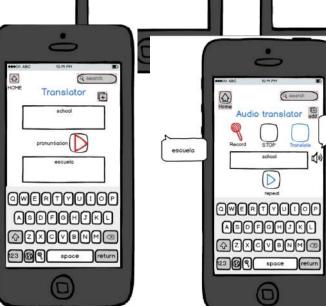
Click image:



Wireframes (App)

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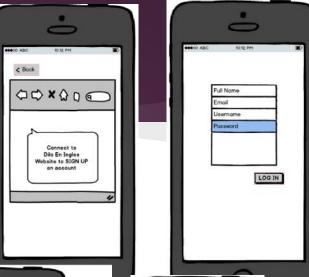


Language: •

Dilo en inglés

LOG IN

SIGN UP



school

Q search

My word book

Word one

Word two

Word three

Word four Word five

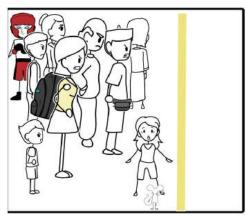


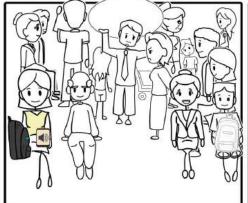
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Storyboard

Storyboard: Teresa in her daily routine with Dilo en inglés, her language supportive application.

In the subway - 8:15 am







Mornings are a little hassle for Teresa in the subway, any distraction will let her out!

Once in the subway, Teresa plugs her earphones and start reviewing the new vocabulary. She listens and repeats to herself, she's embarrassed to do that aloud The app presents in form of audio and text a list of vocabulary words, one at a time, along with a simple sentence(s) and a related picture. She can hear them as many times as necessary.

Storyboard

Storyboard: Teresa in her daily routine with *Dilo en inglés*, her language supportive application.

At the restaurant - 11:00 am



Teresa is at work in the restaurant. She just finds out that they are short of carrots for the lunch special. She runs out to the grocery store next door to get some extra carrots.

Inside the store he is struggling, because she can't find fresh carrots where they usually placed them! Then, she remembers that Dilo en inglés can help her with that question. She launches the translation feature and tells the question in Spanish.

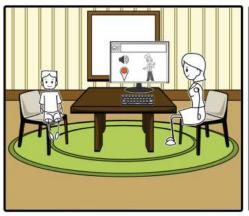
The app responds with the question translated in English for her. Teresa plays the answer several times and repeats it until she is confident enough, about 2 times.

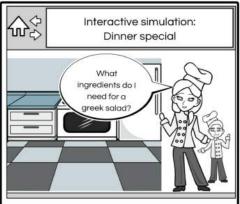
She walks to the nearest attendant and finds out what she needs.

Storyboard

Storyboard: Teresa in her daily routine with Dilo en inglés, her language supportive application.

At home - 8:30 pm







During some weeknights or weekends, Teresa launches a simulation exercise of her preference. Today she chooses "Dinner special" to play with her son.

She plays the role of a cook assisted by her son, who likes also cooking.

During the simulation, both work on selecting the right ingredients from the given list, while listening and repeating after the visual/text prompts.

At the offset, we began by considering some of the potential risk factors that we considered to be critical in our design. Our concerns were:

- 1. Users have little experience on learning with digital devices like their phones or working with online resources (proposed solution: tutorial, pre-training)
- 2. Users are unable to transfer and apply learned skills in their daily life (proposed solution: summative and user experience evaluation)
- 3. Users family members / children don't engage in the learning experience as expected for any reason (proposed solution: built-in simulation and adding more interactive features that appeal to all ages)
- 4. Users don't understand how the software functions, which could result in user's lack of interest and motivation to learn with our app (proposed solution: tutorial, pre-training, bilingual interface buttons)

Research Plan

The objective of our research was to collect user experience data from a sample target audience, to assess if our design was effective in addressing our goal of helping Hispanic immigrants learn spoken English. We did so by following the guidelines below:

Sample Target Audience: We targeted a convenience sample of people whom we knew fit our target audience profile and who could provide us with useful feedback on our design. Of the sample we reached out to, 7 individuals responded to our survey. The features of the respondents were:

- All respondents were First generation Spanish speaking immigrants. 5 respondents had children who are considered 2nd generation immigrants.
- Range of family members: 2-6 members
- Most respondents were living in the Greater New York City area. However we also had 1 respondent from California, and 1 from Florida
- Device Ownership: All respondents owned a laptop and a smartphone
- Range of Age: 30 Years to 65 Years (Average would have been skewed)
- Number of Male respondents: 3, Number of Female respondents: 4

Methodology of Research: User experience online survey developed on "Survey Monkey" and sent to target audience via email. (Link to research survey: https://www.surveymonkey.com/s/HHKVL6H)

Research Process: A sample target audience was sent an email containing the link to the online survey, along with a PDF of the prototype of our website design.

We decided to send the website design prototype because it contained most of the essential features of our design, such as the simulation, lesson plans and dashboard. We did not send the mobile application prototype since this was the first user experience survey and we wanted make it easy for our audience to evaluate one prototype and give feedback accordingly.

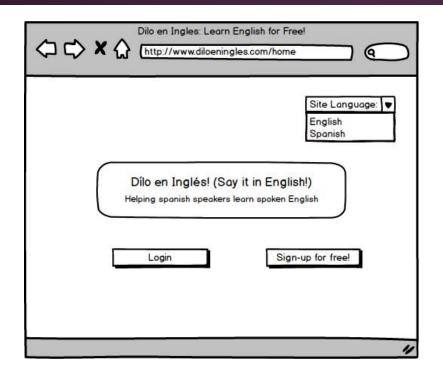
Materials Used: We shared our website design prototype with our sample target audience. Given below are some screenshots of the prototype we shared:

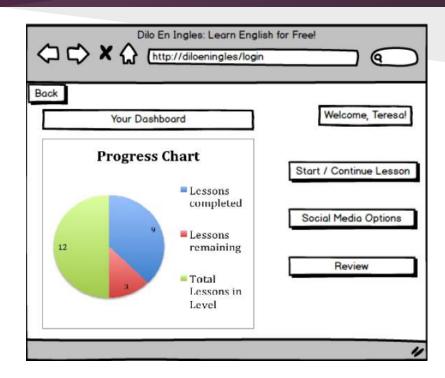
Screenshot 1: Home page of our website application, "Dilo en Ingles!"

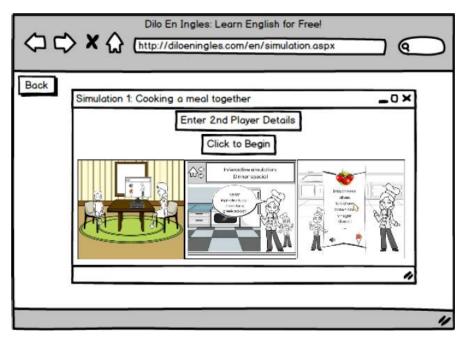
Screenshot 2: Dashboard of user, which appears after Login

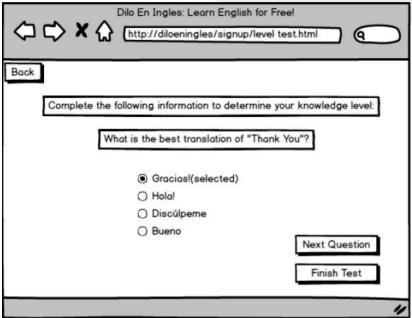
Screenshot 3: Example of simulation within the application

Screenshot 4: Preliminary test to assess knowledge level of new users









Research Protocol

Email to sample target audience:

Hi ABC,

Hope you are doing well. As I had mentioned previously, I'm sharing one of my class assignments with you and it would be great if you could participate in the survey for it.

As part of the assignment, our team has created a website application for Hispanic immigrants (preferably with families), who wish to learn spoken English. Our website's name is "Dilo en Ingles (Say it in English!)"

Attached here is a prototype (rough working model) for our application. After you download the attachment, please follow the steps below:

- 1. Open the PDF, and navigate through the pages using the buttons within the images
- 2. Once you have viewed all pages, please take the survey by clicking on the following link: https://www.surveymonkey.com/s/HHKVL6H
- 3. Enter your feedback on the survey to tell us about your experience of using the prototype (PDF)

If you have any questions or problems, please do let me know so I can help. I would appreciate if you could complete this survey within the week. Many thanks in advance!

Regards,

Sandra / Yilin / Dohyun / Shalini

Page 1: Introduction to Survey:

Please explain why?

"Dilo en Ingles" is a website designed for immigrant families of Hispanic origin, who want to learn how to speak English. Our website involves features like a simulation game, which allows families to interact and learn together.

We are at the initial stages of our design. Looking back at the demo we shared with you, please answer the following questions to rate your experience while you went through the demo.

Q3.	What other	features	should	we add	to our v	vebsite?	

Q4. Evaluate the following statements:

	Very Satisfactory	Satisfactory	Neutral	Somewhat Satisfactory	Not Satisfactory
Layout of website					
Overall flow of					
website					
Ease of Navigation of					
website					
Clarity of purpose of					
website application					
features (simulation &					
lesson plans)					

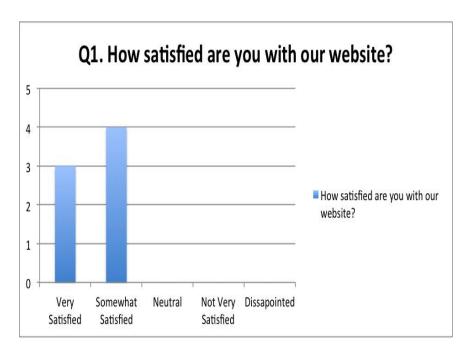
Q5. How do you see yourself using the website? (Multiple response activated)
Need-based (To only translate Spanish sentences into English)
Basic Learning (To help me learn how to ask specific / common questions in English)
Advanced Learning (to learn how to speak English fluently in day-to-day life)
All of the above
Q6. Would you recommend our website to a friend?
Yes, I would recommend it because:
No, I would not recommend it because:
Q7. Do you use any other website / mobile application to learn English?
Yes
No
If yes, please explain what you like best about them?

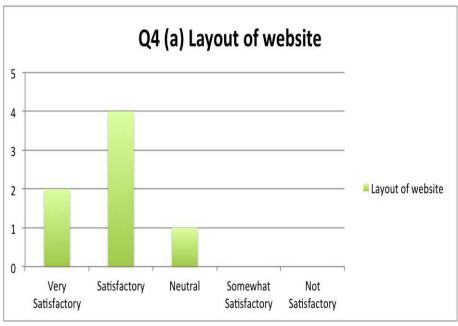
Q8. How would you rate our website on a scale of 1-10 (1 being "Very Poor" and 10 being "excellent")?

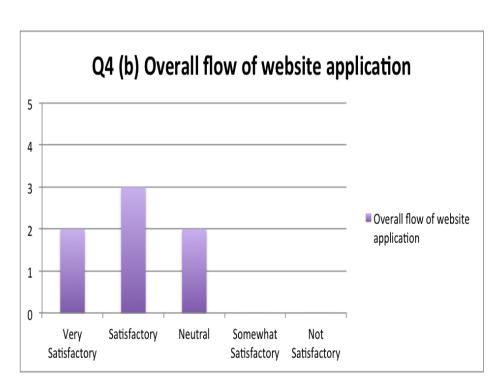
Q9. What do you like best / least about our website?

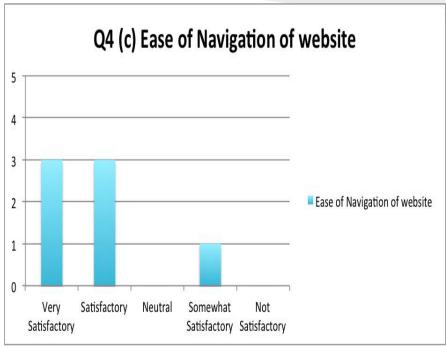
Results of Survey

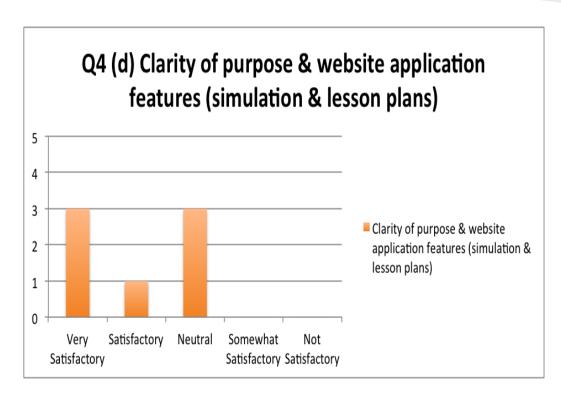
Given here are some graphs that portray the results of our user experience survey:

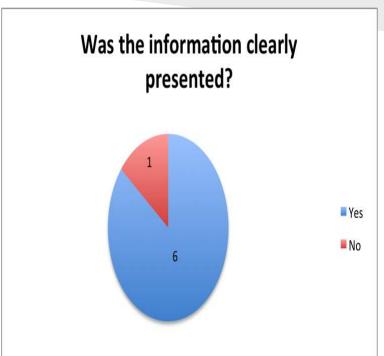


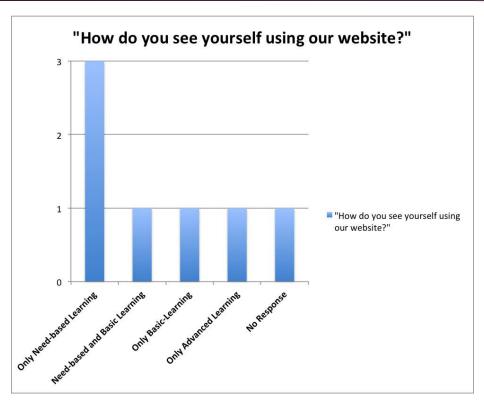


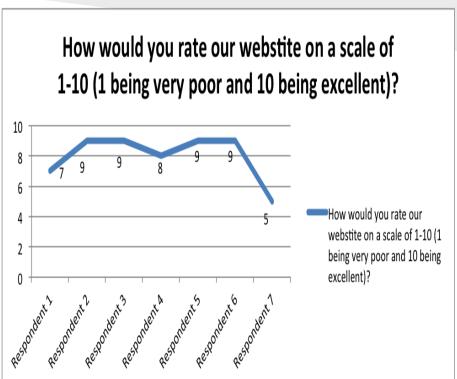












Analysis of Results:

As is evident by the screenshots above, we can safely say that we had an overall positive response to our survey. Certain **quantitative highlights** of our survey show that:

- · Average user rating for our website was 8.0
- · Almost all respondents agreed that the information on our website was clearly presented
- · More than 50% of respondents were satisfied with the layout, and nearly 50% of the respondents were satisfied with the ease of navigation and overall flow of the website application.
- 6 out of 7 respondents said they would recommend our website to a friend.

Highlights of the qualitative responses were as follows:

· When asked to explain whether the information was clearly presented, 2 respondents mentioned yes, saying that the design was "Very Intuitive" and "There was no confusion what to do next." However, one respondent mentioned that the information was not clearly presented as it was "presented only in English."

- When asked about what other features would they like to see in our website, the respondents gave us feedback saying,
 - o "Color, the ability to record voice."
 - o "Shouldn't survey be in Spanish?," and
 - o "Vocabulary"
- · When asked if they would recommend our website to a friend, almost all respondents answered "Yes", explaining their reasons as follows:
 - o "It's an easy and practical way to learn."
 - o "It seems to be a great resource that will teach people who speak Spanish how to learn English in a fun way"
 - o "To learn basic English"
- · When asked what respondents liked best / least about our website, they responded saying that:
 - o "The clean layout"
 - o "The ease of use"
 - o "I liked the idea of the simulations and the dashboard of the learner's progress"
 - o "It is visually simple, that is nice."
- · However, 2 of our respondents also mentioned that they did not like certain features, saying:
 - o "Best: Easy understanding, Worst: Graphic Design"
 - o "What I like least about your website is you don't have a translation in Spanish. For people who don't speak in English, it will be very difficult to navigate."

Discussion

Based on our findings and interpretation, we have inferred that:

- Most of the respondents liked the simplicity and ease-of-use that our website design offered
- Most respondents were satisfied with the layout and overall flow of the website. However, there were a number of respondents who were not sure or not satisfied with the clarity of the purpose of the website application features.
- Respondents expressed that they would like to see more color and the ability to record voice in our application
- Respondents also expressed that our website lacked the features of translation in Spanish and our survey communication should have also been in Spanish.

Recommendations for our design

After analyzing and interpreting the qualitative and quantitative data from our respondents, we will pursue the following recommendations for our website design:

- · In our home page, we do mention that the user has the option to change the language of the website to Spanish or English. However, it is evident that it is not clearly presented and needs to be inculcated in every aspect of the design. We will try to improve our prototype and design by including literal Spanish translations or examples for all sentences or even design the website in Spanish by default
- · We will add color coding features to the prototype also, which will make it more visually appealing to the user
- · Almost 50% of our respondents mentioned that they anticipate using our website for need-based translation only. We had endeavored to make our website appealing to Spanish immigrants so they can use it not just as a translation tool, but also as a medium to learn spoken English fluently. We will add more features to our design that makes it more appealing as a full-fledged tool to learn English

Our next step would be to survey the parents and children of the respondent families together, to understand if they are able to use the family-game simulation feature in our application and benefit from it as well. We hope to implement this survey in phase two of our project design.

Presentation Material

Presentation Slides link:

```
https://docs.google.com/a/nyu.
edu/presentation/d/1zenzturlLXUlcLgbTa_vPotKLs4hfaAWC4EYEPxaSok/edit#sli
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