### Measuring Babbel's Efficacy in Developing Oral Proficiency

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### **Executive Summary**

This study investigated the effectiveness of Babbel, a commercial language learning app, for gaining oral proficiency in Spanish. More than seven hundred Babbel users and sales leads responded to the call for participation to learn Spanish using Babbel over a period of approximately 12 weeks. Of these initial respondents, 351 signed a consent form and began using Babbel. Ultimately 117 U.S.-based participants were included in our analysis as these learners met all the requirements for the study. The inclusion criteria included being absolute beginner learners of Spanish, having access to a smartphone, tablet or computer, completing four of Babbel's Beginner's Courses (or, 76 lessons<sup>1</sup>), taking a final speaking test, the ACTFL Oral Proficiency Interview Computer-version (OPIc), and completing pre- and post-surveys. In addition, participants completed four self-assessments during the learning process.

Since this study was open to the larger population and not limited to college students, compared to Loewen et al. (2018), it reached across a range of different learners who represented different age groups and who reported varied motivations. Out of the 117 learners, 34 (29%) were between 55 and 65, and 27 (23%) were over 65. Thus, 52% of the study group were over 55. Some older learners, while not strictly speaking absolute beginners, were seeking to reactivate their knowledge of Spanish they had studied decades earlier. Many learners were retired and were studying languages to improve their mental fitness. This is a population that is rarely included in current research on second language acquisition.

As expected—and in line with the hierarchical model of second language acquisition whereby initial language learning increases dramatically at first—most of the OPIc scores clustered around the ACTFL Novice levels (i.e. Low, Mid and High) and relatively fewer outliers in the Intermediate range. Most participants agreed that the Babbel app facilitated this learning and statistical results confirmed a correlation between use of the app alone and effectiveness of learning Spanish.

### **Key Findings**

- Participants
  - A total of 117 participants were considered eligible for this study.
  - Though participants were requested to complete Babbel's first four Spanish Beginner's Courses, a total of 76 lessons, they were also free to do additional lessons from Babbel's vast library of Spanish content.
  - The number of Babbel lessons completed ranged from a minimum of 51 to a maximum of 375. The most frequently occurring number of lessons completed was 76, whereas the average among this population was 110 completed lessons. The median number of lessons completed was 92.
  - On average, participants used Babbel for 48 hours over the duration of the study; the median number of hours was slightly lower, at 42 hours.

<sup>&</sup>lt;sup>1</sup> In the end, 13 participants completed fewer than 76 lessons before taking the final test, however most participants did more than this minimum suggested number.



- The total amount of time spent learning with the app over the duration of the study ranged considerably from 10.3 hours to 274 hours, with considerable individual variation.
- Age range
  - $\circ$  75% of the learners in this study were over the age of 40.
  - 52% were over the age of 55, a population rarely included in second language acquisition research.
- After studying with Babbel for approximately three months, eligible participants were invited to take the Oral Proficiency Interview-computer version (OPIc) on their home computer. The OPIc is a recorded web-based assessment which simulates a live interview; the candidates' performance is rated by certified and trained assessors according to the criteria outlined in the <u>American Council on the Teaching of Foreign Language's (ACTFL) Proficiency</u> <u>Guidelines 2012 Speaking</u>.
- ACTFL OPIc ratings provide a metric for describing spoken functional ability in a foreign language (L2). Ratings are divided into the following major levels: Novice, Intermediate, Advanced and Superior. ACTFL levels can be further broken down into sublevels (e.g., Novice Low, Novice Mid and Novice High) for more granularity in describing language proficiency.
- OPIc scores by level
  - All participants were self-reported complete beginners in Spanish at the outset of the project. After 12 weeks of Babbel study, 79.5% of participants (N=93), studying an average of approximately 76 lessons, scored at the Novice (Low, Mid, High) levels of proficiency.
  - 20.5% of participants (N=24) scored at the Intermediate (Low, Mid, High) levels of proficiency.
- Motivation
  - Many learners were retired and were studying languages to improve their mental fitness.
  - Some older learners, while not strictly speaking absolute beginners, were seeking to reactivate Spanish skills they had studied decades earlier.
- Learner experience (based on exit survey responses)
  - The majority of learners (91%) enjoyed using the Babbel app.
  - Most of the learners (75%) felt that they had met their goals (definitely, mostly, or somewhat).

### Measuring Babbel's Efficacy in Developing Oral Proficiency

#### Introduction

There has been an increasing interest in learning foreign languages in informal settings through webbased solutions or mobile learning apps that allow learners to proceed at their own pace and target their learning to specific personal goals, such as going on vacation abroad or communicating better with friends and relatives. In recent years, a range of products—both commercial and noncommercial—have been developed for online language learning. A recent *Perspectives* section of the *Modern Language Journal* (Tarone, 2015) sought to address the question of proficiency outcomes in such learning environments. The contributions to this scholarly discussion all pointed to gaps in the research and lack of robust data on proficiency outcomes, suggesting the need for further research.

The purpose of this project was in part to address this gap by assessing the efficacy of one online language learning tool, Babbel, with respect to the potential oral proficiency outcomes of native (and proficient) English speakers learning Spanish. According to its website, Babbel is an online language learning platform that is available as both a web-based and mobile application, which allows learners to access the material on their computers, smartphones, or tablets.<sup>2</sup> Babbel currently offers 14 foreign languages (L2s) and reported more than 1 million subscriptions sold in the U.S. alone in 2018.

Babbel positions itself as preparing learners for real-life conversations and communication, encouraging learners to "start having practical, everyday conversations."<sup>3</sup> It features bite-sized, 10-15-minute lessons focusing on authentic dialogues and situations, like ordering food, making travel plans and arrangements and speaking about one's hobbies and personal life.

The app offers personalized vocabulary revision via the Review Manager feature. Using the method of "Spaced Repetition," (cf. Goossens et al., 2012; Miles & Kwon, 2008), the Review Manager aims to transfer vocabulary from short-term to long-term memory – helping learners recall and use the vocabulary from Babbel lessons. New words learned with the app are automatically added to the Review Manager and tested at increasing time intervals adapted to learners' confidence with the material. To model correct pronunciation and intonation, all audio examples and dialogues are recorded by native speakers. To this end, the app also features automated speech recognition (ASR) technology that models the accuracy of learners' spoken pronunciation.

Thus far, two previous studies (Loewen, Isbell & Sporn, 2018; Vesselinov & Greco, 2016) have investigated Babbel with respect to its effectiveness as a language learning platform. Vesselinov & Grego (2016) found that learners generally progressed in their language learning, but they used a written, grammar and vocabulary-based placement test (WebCAPE<sup>4</sup>), not a proficiency test. Their results thus do not reflect oral proficiency but rather measure achievement of curricular goals with the purpose of placing learners in specific course levels. A more recent study by Loewen, Isbell & Sporn (2018) also addressed the efficacy of Babbel as a learning tool. While it did include a

<sup>&</sup>lt;sup>2</sup> https://about.babbel.com/en/

<sup>&</sup>lt;sup>3</sup> Ibid.

<sup>4</sup> https://perpetualworks.com/

proficiency test (a pre-and post-OPIc), it also included achievement measures, such as vocabulary and grammar and did not focus solely on proficiency outcomes. Furthermore, their sample size of 54 participants was much smaller than Vesselinov & Grego's and represented only a control group of a narrow age range of college-aged participants on which a within-groups mixed methods quasiexperimental study was carried out.

The present study aims to contribute to understanding the effectiveness of online language learning platforms such as Babbel, for meaningful development of oral proficiency in Spanish for native speakers of English. It focused specifically on measuring the oral proficiency gains of absolute beginners using the ACTFL OPIc as an objective standardized instrument. Participants were required to complete Babbel's first four Beginner's Courses, which included 76 total lessons. In addition, the learners were able to access other lessons and supplementary materials, such as the Review Manager, and content-specific lessons, such as lessons focusing on travel or business.

This study was funded by Babbel, but the researchers analyzed the data independently. Learners who successfully completed all the study requirements were given a lifetime free subscription to Babbel and a \$100 Amazon gift card. The data were collected by Babbel and coded for confidentiality so that the researchers did not have any access to participants' names or other personal information.

#### **Research Questions**

The study was designed to address the following research questions:

- 1. To what extent is Babbel's Spanish course effective in developing oral proficiency for native speakers of English learning Spanish?
- 2. What is the impact of the Babbel app on Spanish learners' use of the target language, motivation, and persistence in learning?
- To what extent do the oral proficiency gains attained through the use of the Babbel app correlate with external proficiency standards, such as the 2012 ACTFL Proficiency Guidelines?<sup>5</sup>

#### Methodology

The study used a mixed-methods approach which combined results from participants' survey responses with their OPIc scores.

<sup>&</sup>lt;sup>5</sup> The original project had initially included a fourth question: "To what extent is the Babbel app Spanish course effective in building vocabulary in line with external proficiency scales, such as ACTFL?" However, due to concerns about the instrument to be used to test vocabulary acquisition, this question was left off the protocol.



#### Instruments

The following instruments were used for data collection:

- 1. An eligibility survey to determine whether prospective participants met the inclusion criteria for the study. This survey also included questions about their age, language background, and reasons for wanting to study Spanish.
- 2. Four self-assessments in the form of Can-do statements (adapted to Babbel's Beginner's Course lesson content from ACTFL Can-do statements) from Novice to Intermediate levels (see Appendix A).
- 3. An ACTFL OPIc test (to be taken no later than 2 weeks after completion of the Babbel courses) (see Appendix B).
- 4. An exit survey to assess their learning experience with Babbel.

#### Pre-and post-surveys

The initial eligibility survey included twelve questions about the prospective participants' age group, employment status, language background, prior experience in learning Spanish, which state in the US they were from, and their motivation for studying a new language. The exit survey consisted of twenty-three questions designed to evaluate the learners' experiences in using their app and their overall assessment of their language learning progress.

#### Self-assessments

During the participants' approximately 12 weeks of study, they were asked to complete four brief self-assessment surveys that were linked to the ACTFL proficiency guidelines at the Novice and Intermediate levels. They submitted these self-assessments, spaced at regular intervals, to evaluate their learning of Babbel course content in relation to the ACTFL scales. The surveys ranged from 5-8 questions and were intended to motivate the participants and make them aware of their own learning as they continued their language studies. The participants were asked to indicate whether they felt that they could perform the authentic oral task represented by the statement well, fairly well, or whether it was a goal.

One of the major issues with online learning is the increased rate of attrition compared to face-toface learning. Self-assessment statements may help to retain learners as they can monitor their progress and thus be further motivated to continue their learning experience. Furthermore, they take agency of their learning by understanding the goals in meaningful and authentic scenarios (Black & Wiliam, 1998; Black et al., 2002; Stobart & Gipps, 1997). The statements can also help language educators to tailor the curriculum to learning paces and styles and inform stakeholders on the effectiveness of the program.

#### ACTFL Oral Proficiency Interview-Computer (OPIc)

The ACTFL LTI OPIc® is a digital Oral Proficiency Interview (OPI), in which the test-taker answers prompts delivered via computer (both in written form and spoken by an Avatar). It provides valid and reliable oral proficiency testing on a large scale. The computer-delivered assessment emulates the "live" OPI, but questions are delivered through a carefully designed

computer program, and via a virtual avatar. Thus, the test can be taken on demand, and at a time convenient to the candidate and proctor. The goal of the instrument is the same as the OPI: to obtain a ratable sample of speech which a rater can evaluate and compare to the ACTFL guidelines in order to assign a rating. <sup>6</sup>

ACTFL OPIc ratings are a valid and reliable assessment of oral proficiency and are highly correlated with OPI ratings for Spanish (Thompson et al., 2016). The ratings are reported using the ACTFL 2012 Guidelines and start with Novice Low, Mid and High. The hierarchical scale then progresses to Intermediate Low, Mid and High, to Advanced Low, Mid and High. The highest, measurable proficiency level is Superior which has not been divided into sublevels and is succeeded by the Distinguished level of which there is, to date, no assessment.<sup>7</sup>

According to ACTFL, "the levels of the ACTFL Guidelines describe the continuum of proficiency from that of the highly articulate, well-educated language user to a level of little or no functional ability" (www.actfl.org). As the ACTFL pyramid below<sup>8</sup> visualizes, the amount of language needed to move from the lower levels of proficiency to the higher levels increases significantly and exponentially with each level, reflecting that progress from the Novice to Intermediate level occurs more readily than progressing from Advanced to Superior, the ranges of which are much greater.



#### Figure 1: The ACTFL pyramid<sup>9</sup> Participants

<sup>&</sup>lt;sup>6</sup> The current version of the OPIc rates the full range of the ACTFL scale, from Novice through Superior. Official ACTFL OPIcs are currently available in the following languages: Arabic, Bengali, English, French, German, Indonesian, Korean, Mandarin, Pashto, Persian Farsi, Russian, Spanish and Tagalog. Source: www.actfl.org (last accessed 02/13/2019)

<sup>&</sup>lt;sup>7</sup> See Appendix A for ACTFL descriptors for the Novice and Intermediate levels of proficiency.

<sup>&</sup>lt;sup>8</sup> ACTFL Proficiency Guidelines 2012 | American Council on the Teaching of Foreign Languages, ACTFL, www.actfl.org/publications/guidelines-and-manuals/actfl-proficiency-guidelines-2012.

<sup>&</sup>lt;sup>9</sup> www.actfl.org

Participants were recruited randomly by Babbel via email and selected according to the following criteria:

- Able to use Babbel's mobile or web browser version to learn Spanish for at least 2.5 hours/week for 12 weeks and complete at least the first four beginner's courses (76 lessons);
- 2. Be absolute beginner learners of the Spanish language;
- 3. Own a mobile device (tablet or smartphone), laptop or desktop computer with regular access to Wi-Fi;
- 4. Complete pre-and post- surveys;
- 5. Take an ACTFL OPIc within two weeks of completing the minimum required lessons.

As this study aimed to reach a broad range of beginning learners, an initial call for participation by Babbel yielded 700 preliminary responses. Of these, 351 signed a consent form and redeemed a Babbel voucher code that enabled them to join the project. The researchers felt that the initial number of participants recruited needed to anticipate the typical attrition levels of up to 50% encountered in similar research projects (cf. Vesselinov & Greco, 2016; Despain, 2003; Van Deusen-Scholl, 2015; Lord, 2015). It was also determined that a minimum of 75 participants was needed for a statistically significant sample and to be able to draw tentative generalizable conclusions. Participants were asked to complete Babbel's first four Spanish Beginner's Courses, which consist of 76 individual lessons. Those participants who had completed a minimum of 50 lessons within 12 weeks of the project's beginning were invited to take an OPIc speaking test.

Participants who claimed to have studied Spanish early in their life, but nevertheless considered themselves at this point to be beginning learners of Spanish were allowed to participate in the study provided that they were over the age of 40. The researchers felt that participants with this profile had completed their studies sufficiently long ago to indeed be considered beginners. A final cohort of 117 participants was ultimately selected who met all of the study criteria outlined above. The age range distributions of participants were as follows:



Table 1 (modified SPSS output): Age ranges of eligible participants

As Table 1 shows, in this study the age group with the fewest participants was the 22 – 25 age range (N=4), whereas most participants belonged to the 55 – 65 age group (N= 34 or 29%). Most participants' ages clustered around ranges from 40 to over 65 (75%, cumulative N = 88 out of a total number of 117 participants). This group is thus older than that reported in Vesselinov & Grego (2016) where 48.9% of participants in the final study sample were over the age of 40 (p. 18).

Our study participants differed even more significantly from Loewen et al. (2018) who reported an average age of 24 (median of 22). While that study primarily targeted university students, our study reached across a broad range of learners representing different age groups and varied motivations for learning. The participants in our study, nearly 52% of whom were over 55, are more representative of the average United States Babbel learner, who is age 45 or older. This is a population that is rarely included in current research on language acquisition (cf. Mackey & Sachs, 2012). Their participation yielded interesting insights into, for example, their motivation for studying a language. Mackey and Sachs (2012) note that "the aging elderly population is the fastest growing segment in the United States" (p. 705) in their study, which focused specifically the learning aptitudes, processes, and outcomes of older adults aged 65-89.

In our study, a significant percentage of the older learners mentioned mental fitness as a motivating factor for starting language learning (59, or 50% reported this as their initial goal on the exit survey). They also articulated this in their comments; for example:

- "As part of my retirement, I planned to learn new things, including languages."
- "I had a medical issue and my doctor suggested that I try to learn a new language in order to challenge or improve my mental capacity."

This type of motivation is generally not mentioned in the literature and may be more representative of the type of learners who seek out apps or other online resources to learn a language later in life.

Table 2 summarizes the general motivation mentioned by participants in the initial eligibility survey in answer to Question 11, "Why do you want to learn Spanish?"

Q11: Why	do you want to learn Spanish?	Yes	%	No	%
11.1	I need Spanish in my current job	15	13%	103	87%
11.2	It will be an asset on my CV	31	26%	87	74%
11.3	My significant other speaks Spanish	4	3%	114	97%
11.4	I want to travel to a Spanish-speaking country	74	41%	44	59%
11.5	I want to move to a Spanish-speaking country	9	8%	109	92%
11.6	I have a heritage background	3	3%	115	97%
11.7	I have always loved hearing the Spanish language	35	30%	83	70%
11.8	I like the Spanish arts (books, movies, songs, etc.)	26	22%	92	78%

#### Table 2: Motivation for learning Spanish

As the table shows, travel was the most frequently mentioned reason for wanting to study Spanish (41%), followed by enjoyment of the language and career-related motivations. In contrast with language programs offered at postsecondary institutions which have seen increasing numbers of heritage learners, heritage motivation was negligible in our sample. In their additional comments to this question, quite a few participants also mentioned that they lived in a state or community where Spanish was spoken and pointed out the benefits of being multilingual. Many participants expressed their interest in engaging Spanish-speaking members of their local communities for personal and professional reasons:

- "I've always wanted to learn a second language and Spanish is spoken everywhere in Colorado where I am from."
- "[My goal was] To communicate with people in the local Hispanic community and at work."
- "I wanted to be able to express myself in Spain or here locally in Southern California."
- In California, there are many native Spanish speakers. I'd like to be able to speak in their language, rather than force them to speak English."
- "I prepare taxes, for a living, and I want to be bilingual in order to serve Spanish-speaking clients."
- "I would like to engage in simple conversations. We live in a community on the southern border with many Spanish speakers."

As Figure 2 below illustrates, our participants represented 33 different states across the US, but by far the largest percentage of participants (25, or 21%) came from California, which would explain the motivation to interact with bilingual friends, relatives, or co-workers and employees. The next largest number came from Massachusetts (8, or 7%), followed by Texas, New York State, Pennsylvania, Florida and Colorado. Out of the 117 learners in this study, 92% (N= 108) claim that English is their native language whereas 98% (N= 116) claimed to also speak it at home.

The chart on the following page visualizes the geographic distribution of the participants.



Figure 2: Participants by state

#### Results

### Oral proficiency testing and self-assessments

The main objective of our study was to assess the proficiency gains of learners of Spanish using Babbel. Since we only included complete beginners in our sample, we did not conduct any pretesting. In addition, as our study was focused specifically on proficiency gains, we did not include any achievement testing in our study protocol. This differs from the Loewen et al. (2018) study, which included both grammar and vocabulary tests with content that was linked to the Babbel curriculum, i.e., achievement, in addition to proficiency data.

Complementing the OPIc, which was used to assess proficiency levels, our study included four selfassessments that were linked to the ACTFL proficiency guidelines. The participants submitted these surveys at regular intervals during their approximately 12 weeks of study to align in principle with

their progress through the lessons. While the response numbers varied<sup>10</sup>, the general trend indicates—not surprisingly—that the learners became less confident in their abilities as their lessons progressed. In the first survey, for example, the respondents were very confident at being able to say hello and goodbye to someone they knew (80%), but they were much less secure about asking someone how they feel (25%). By the end of the fourth survey, the knowledge domains surveyed became more challenging (such as, "Talk about health issues and pains"), and the responses indicated that very few participants felt that they could do this well. These are all oral tasks at the ACTFL Novice level. For each survey, we see similar trends, and the overall confidence level decreased as the lessons progressed. This is, of course, to be expected, particularly as the learners had few opportunities for oral interactions with others, as they might in a face-to-face classroom, although some learners reported in their exit surveys that they had sought out opportunities for practice with native speakers. Self-assessments can be a useful additional tool in the learning process, allowing learners to reflect on what they know and set specific, personal learning goals (Moeller & Yu, 2015). Appendix B summarizes the self-assessment responses for each survey.

A total of 134 participants took the OPIc examination within 2 weeks of completing the required components of the study. Figure 3 below shows the score distributions of OPIc ratings among the study population of the final 117 participants included in the study:



Figure 3: OPIc Score Distribution

<sup>&</sup>lt;sup>10</sup> Please note that the total responses exceed the number of participants in the study. Some participants submitted multiple surveys, but these responses also reflect some participants that were not included in the final pool of 117 participants. However, the surveys give an indication of the overall learning trends over the course of the study.



Unsurprisingly, and in line with second language proficiency progression<sup>11</sup>, most participants achieved scores clustered in the major proficiency level of the Novice range (80%, or 93 out of 117) on the ACTFL scale, with close to one third (N=36 out of 93) in the sublevel of Novice Mid. The ACTFL Novice level describes the ability of the learner to use formulaic languages, utilizing chunks of language memorized in highly predictable contexts such as talking about oneself and very limited surroundings provided that the interlocutor is used to this non-native's attempts to speak.<sup>12</sup>

A total of 24 (or 20.5%) scored at the Intermediate level, with the majority of this group clustering in the sublevels of IL and IM (cumulatively, 21 out of 117). The three participants scoring at the IH level were considered outliers. Nevertheless, it was surprising to see such results after a relatively short period of language study, particularly given the lack of personal interaction that is typical for language learning apps. As mentioned earlier, other factors, such as prior experience in learning a related language or using additional resources may have played a role in these results as well.

When OPIc scores were correlated with age distribution, the results were as follows:

Count							
		OP	Ic sco	re			
	IH	IL	IM	NH	NL	NM	Total
Q1. Age							
18 - 21	0	1	0	3	1	0	5
22 - 25	1	0	1	1	0	0	3
26 - 29	0	0	1	1	1	2	5
30 - 34	0	3	0	2	2	3	10
35 - 39	0	0	1	3	0	2	6
40 - 45	1	1	1	2	1	2	8
46 - 54	1	1	0	5	4	8	19
55-65	0	2	3	8	11	10	34
Over 65	0	4	2	3	9	9	27
						•	
Total	3	12	9	28	29	36	117

Count

#### Table 3 (SPSS output): cross tabulation of OPIc ratings against age groups

<sup>&</sup>lt;sup>11</sup> While there is a peak in language learning in the initial stages, progressing along the lowest proficiency levels (Novice and Intermediate levels) learners then reach a plateau in more advanced levels where they tend to remain longer. See the ACTFL pyramid-Figure 1, p. 7

<sup>&</sup>lt;sup>12</sup> See Appendix XX for more detailed descriptors.

Clusters of OPIc scores occurred most frequently in the Novice range as follows: NL (N=11) and NM (N=10), and NH (N=8). These scores were all achieved by participants in the age range of 55-65. Three participants achieved an OPIc rating of IH which the ACTFL Guidelines describe as the ability to create with the language by combining and recombining learned phrases, in connected sentences which at times peak into skeletal oral paragraphs of the next level (Advanced), using primarily present tenses although past narrations can be used most of the time. This sublevel is very close to the Advanced level considered to be an independent speaker who can report facts in all major time frames comprehensible to any type of interlocutor. The age groups where these IH ratings were recorded were 22-25, 40 - 45 and 46 - 54. Two of the three participants that obtained this score had studied related languages (French and Italian), however, and, in addition, one participant was a native speaker of Portuguese, which is closely related to Spanish.

Nevertheless, many other participants at lower levels also had studied Romance languages, and thus this variable alone cannot explain the high oral proficiency rating. As mentioned earlier, a number of participants over 40 were included in the study who had taken Spanish back in high school, and while it is not possible to draw specific correlations with proficiency outcomes, it is nonetheless interesting to note that Babbel may be a helpful tool for learners seeking to reactivate their language competence.

The most significant variable with respect to the OPIc scores appears to be the total number of lessons completed, as shown in the boxplots in Figure 4 below:



Figure 4 (R output): OPIc ratings correlated with the number of lessons completed

The *boxplot* displays on the horizontal axis the range of the number of lessons completed and compares this with the proficiency level achieved on the ACTFL OPIc on the vertical axis. The *boxplot* for NL (the lowest proficiency rating) indicates an average of just under 100 lessons which were necessary to achieve that sublevel (the outliers are indicated by the blue dots between 250 and 300 lessons). The same average number of lessons is needed to achieve an NM whereas a slightly higher number, averaging 110 lessons, is needed for a score of NH. On average, 108 lessons were completed for those who attained a Novice proficiency level (Low, Mid or High) whereas an average of 116 lessons were needed to attain an Intermediate level (Low, Mid or High). Thus far, these findings are very much in line with expected language learning progression theories. It should be noted that these all exceeded the minimum recommended number of lessons for the study, which had been established at 76.

Surprisingly, however, the most frequently recurring number of lessons that was needed for this test population to reach a proficiency level of IL was approximately 85 whereas and a lower number for an IM (approximately 76). However, the range of the outliers for an IM are much narrower than any other correlation between OPIc score and number of lessons completed. As would be expected, the highest number of lessons was needed to achieve the highest proficiency level of IH with no outliers detected. It is interesting to note that two-thirds of all participants who scored in the Intermediate range (16 out of 24) also reported having studied another Romance language (e.g., French), which may have played a role in these outcomes.

Other factors that could have contributed to the results are the effects of prior learning experiences: 99 learners, or 84%, had studied another language before), the fact that the exam was not proctored, and use of other learning resources. Forty-four of the participants (37%) mentioned that they had used additional learning materials and resources, which included other online apps or web sites, grammar books, dictionaries or textbooks, podcasts, movies, or interacting with native speakers. These are effective learning strategies that can help self-directed learners achieve greater proficiency gains in addition to the sole use of the app.

Figure 5 below shows the vertical plane of the six proficiency levels which have been measured through ACTFL OPIc, from Novice Low to Intermediate High correlated with the tools they used, i.e. the Babbel mobile app alone, the web browser version or a combination of both:





Figure 5 (R mosaic plot output): correlation of OPIc scores with uses of Babbel

The horizontal plane shows the participants who claimed to have learned Spanish with Babbel, either using both the app and the web model, or exclusively one or the other. The mosaic plot shows the use of the three modalities with the probability of expected levels of proficiency a learner can achieve in relation to the modalities. The width of the columns represents the size of the sample under consideration and is based on self-reported uses of the modalities on behalf of participants. Specifically, for this sample cohort (117 learners), using the Babbel app or using the browser version of Babbel yield the same probability of attaining at least a Novice Mid level (57% or 22% for Novice Low and 29% for Novice Mid) compared to 50% when using both the app and the browser version. This advantage of using one or the other modality then decreases when reaching Novice High where using both the app in conjunction with the browser version yield a greater probability (33%) compared to using one or the other modality (slightly over 27%). The web version of Babbel plays a significant difference when attaining proficiency levels in the Intermediate range.

A slightly larger percentage (probability) of achieving an Intermediate High, the highest proficiency level attained in the study, is detected when using only the web browser version compared to both modalities. However, using the app alone is certainly more highly correlated with higher proficiency levels (6.24% at IH) whereas the chance of achieving Intermediate Low and Intermediate Mid is the same regardless of which modality is used (8.89% + 11.53% compared to 16.8%). Concluding, from the plot, it appears that using the app alone may be better correlated with the effectiveness of learning Spanish. It might very well due to the versatility and mobility of using the app compared to a more structured approach when using the web browser version alone or a combination of both. Using the app also affords more flexibility in the time learners can dedicate to learning. This result would lead us to believe that the more spontaneous approach that the app version can provide is more conducive to language learning.

#### Contextualizing study participants' oral proficiency outcomes

"Oral proficiency" is a measure of functional spoken language ability, i.e., how well a learner can converse and interact with native speakers of a foreign language. Since Babbel's pedagogical method centers on real-life conversations, it is worth considering what practical speaking abilities participants in this project gained. The two instruments employed in this study, the ACTFL OPIc and the "Can Do" statements used in the self-assessments, were chosen to provide an objective measure of the participants' oral proficiency. It has been argued in recent research (Rubio & Hacking, 2019) that proficiency tests may not be optimal at the Novice level (at which most of our participants scored) because learners "only have the ability to use the language in rehearsed, highly predictable situations and in essence, therefore, they can only show performance rather than proficiency" (p. 139). While we had considered using performance-based assessments (e.g. grammar or vocabulary tests) as a possible measure of the specific Babbel curriculum content, this would not have allowed us to make more objective generalizations about the learners' proficiency levels. We opted, therefore, to utilize the ACTFL proficiency assessments to gain insight into whether Babbel users might attain some measure of oral proficiency rather than master specific lesson content.

The most common learning outcome in this project was Novice Mid (N=36, or 30.7% of the study cohort). The median study time necessary to achieve this was approximately 40 hours over the duration of the study. As depicted in ACTFL's inverted pyramid (see Figure 1 on page 7 of this report), participants who scored higher than Novice Mid on the OPIc would also in principle master the same skills.

The self-assessments included in the study were based on the 2017 NCSSFL-ACTFL Can-Do statements.<sup>13</sup> They are organized according to the Interpretive, Interpersonal, and Presentational modes of communication and guide "language learners to identify and set learning goals and chart their progress towards language and intercultural proficiency." Since the majority of the participants scored in the Novice Low-Mid range<sup>14</sup>, they would in principle be capable of the following:

- I can introduce myself and provide basic personal information.
- I can tell someone about my family.
- I can tell someone the time and location of an event.
- I can communicate basic information about myself and people I know.
- I can give times, dates, and weather information.

Twenty-eight learners (23.7%) scored at the Novice High level. An ACTFL score of Novice High is equivalent to level "A1" of Common European Framework of Reference for Language (CEFR)<sup>15</sup>. The median study time necessary to achieve a score of Novice High was approximately 46 hours. Overall, 44.4% of the participants in the final sample achieved level Novice High or above.

L2 speakers rated Novice High level of spoken proficiency can generally be expected to accomplish the following tasks:

- I can exchange personal information.
- I can ask and talk about family members and their characteristics.
- I can ask for and give simple directions.
- I can talk about health issues and aches and pains.
- I can order a meal and make a purchase

Unlike at the novice level of proficiency, learners at the intermediate level of proficiency are able to "create with language when talking about familiar topics related to their daily life" (ACTFL, 2014). They can also "recombine learned material to express personal meaning." This represents a fair leap in functional ability above the novice level. In this study, only 20% of participants (N=24) achieved OPIc scores in the intermediate range: Intermediate Low, Intermediate Mid or Intermediate High.

At the intermediate level of proficiency, learners are able to recombine learned material in order to express personal meaning (ACTFL 2012). At the Intermediate level of proficiency, learners are generally able to do the following:

- I can participate in conversations on familiar topics using sentences and series of sentences.
- I can handle short social interactions in everyday situations by asking and answering a variety of questions.
- I can ask for information, details, and explanations during a conversation.
- I can talk about my interests and hobbies.

<sup>&</sup>lt;sup>13</sup> <u>https://www.actfl.org/sites/default/files/CanDos/Can-Do%20Introduction.pdf</u> (last accessed April 16, 2019).

<sup>&</sup>lt;sup>14</sup> <u>https://www.actfl.org/sites/default/files/CanDos/Novice%20Can-Do\_Statements.pdf</u> (last accessed February 26, 2019)

<sup>&</sup>lt;sup>15</sup> <u>https://www.actfl.org/sites/default/files/reports/Assigning\_CEFR\_Ratings\_To\_ACTFL\_Assessments.pdf</u> (last accessed February 27, 2019)

- I can give some information about something I plan to do.
- I can talk about my favorite music, movies, and sports.

In addition to assessing the proficiency outcomes, we also looked at the results of the exit survey to gain insights into the learners' experiences. A summary of these results is discussed below.

#### Exit survey results

The exit survey, which contained 23 questions, was intended to assess participants' experience learning Spanish using the Babbel app. Out of the 117 learners included in the study, 115 completed this survey. We discuss some of the relevant responses below.<sup>16</sup>

While the initial eligibility survey had asked the prospective participants about their learning goals at the start of the project, the final survey addressed the issue of whether the participants felt that they had met their goals. The responses are summarized in Figure 6 below:



### Figure 6: Goals (exit survey)

Out of the 62 responses to this question, 25 participants (40%) responded that that had somewhat met their goals, and 16 (or 26%) indicated that they had mostly had their goals. A total of 16 (or 26%) felt that they had not met their goals (either mostly or not at all). Overall, almost 75% of the respondents felt that they had met their goals (definitely, mostly, or somewhat).

Several questions in the exit survey were intended to assess the participants' learning experience with Babbel.

<sup>&</sup>lt;sup>16</sup> The number of responses to each of these questions may vary. They are listed as number of responses, not percentages.

Question 6 asked to what extent the learners agreed with the following statement: "Babbel makes it convenient for me to learn Spanish because I can decide when and where to learn" (Figure 7 below).



Figure 7: Convenience

The majority of respondents (81, or 70%) strongly agreed with this statement, while 29 (25%) agreed. Four respondents were neutral, and only one disagreed.

Question 7 asked whether "Babbel's Spanish courses teach conversational skills that are useful in real-life situations" (Figure 8).



Figure 8: Conversational skills

Again, most of the respondents agreed with this statement, with 35 (30%) agreeing strongly and 53 (46%) agreeing. Nineteen responses were neutral and eight disagreed with this.

Question 10 asked learners to compare Babbel with other language learning methods:

	earning Spanish with Babbel was comparable to the following ge learning methods. Select as many as you feel apply.	Yes	No
10.1	Taking a Spanish class	26	88
10.2	Learning with a private tutor	8	108
10.3	Learning with other language apps or digital tools	29	87
10.4	Learning with a book	20	96

#### Table 6: Babbel vs. other learning methods

The responses indicate that the app was mostly perceived as different from the other learning tools, although for a small number of respondents it was comparable to other apps or even taking a Spanish class.

Question 11 was aimed at evaluating the participants' experience in using the Babbel app.



#### Figure 9: Enjoyment

The participants appeared to overwhelmingly have enjoyed their experience in using the app: out of the 115 responses to this question, 63 (55%) strongly agree, and 42 (37%) agreed, while only 10 (9%) were neutral, and no one disagreed with this statement. Thus, 91% were positive about their learning experience with Babbel.





### Figure 10: Ease of use

Here also, the majority of responses were positive. Out of a total of 115 responses, 59 (or 51%) strongly agreed, and 47 (41%) agreed. Only 5 (4%) were neutral and 4 (3%) disagreed.

With respect to the organization of the lessons (Question 13), the participants were also overwhelmingly positive:



Figure 11: Course organization

Fifty-three out of 116 responses (46%) were in strong agreement, 52 (45%) in agreement, and only 10 (9%) were neutral or disagreed with the statement.

We finally asked specifically about the participants' perceptions about their vocabulary and grammar learning, although we did not include any achievement testing in the research design.



Figure 12: Vocabulary and grammar

While our study did not specifically address vocabulary or grammar learning, the majority of the participants felt that they had made gains in these areas. Their responses indicate agreement with this statement (65, or 57%), while 15 (13%) strongly agree. Twenty-eight (25%) were neutral, and only 6% disagreed (one strongly).

### Limitations

Although the final number in the cohort was significant (N= 117), the number of participants per single proficiency level rated was not statistically significant. For example, there were only three participants who achieved IH. The variability of the range of OPIc scores (2 major levels with 6 sublevels) yielded a dispersed distribution of the 117 participants' scores. Additionally, all participants included in this study claimed to be absolute beginners of Spanish. Those over 40 years of age who had learned Spanish in the past but felt they were still beginners were also admitted in the study. It was felt that since many years had passed since those over 40 (the majority of participants' age was between 40 and over 65) had learned Spanish that they were probably beginners.

However, pre-ACTFL OPIcs were not conducted as the baseline assumed complete beginners of the language. Inexplicably, there are outliers in the Intermediate level who have completed as many

lessons as those who have only reached Novice sublevels. According to empirical studies<sup>17</sup>, even learners with the lowest aptitude for studying languages, would reach Intermediate Low in languages such as Spanish after at least 240 hours of face-to-face instruction. On average, participants in this project used Babbel for 48 hours over the duration of the study. There was, however, considerable variation in the total amount of time invested, with a range of 263.7 hours. The discrepancy in the Intermediate levels in this study might be due to unrealistic self-evaluations on behalf of participants when prompted to be complete beginner learners of Spanish. For example, it might very well be the case that some participants self-evaluated lower in order to be included in the study.

The profiles of the three IH ratings are not comparable as they are from three different states (North Carolina, Texas and New York). Two of them claim to have had previous language learning experience in French and/or Italian, both of which are related to Spanish. Additionally, both New York (City?) and Texas may provide opportunities for exposure to the Spanish language which may be advantageous for these learners. All three claim to be complete beginners of the language and they are all three from different age groups. Given the nature of the study and the above limitations, there are many variables which were difficult to control thus rendering the results of this study sample-based for which any attempt at generalizability would be at best, tentative. Furthermore, the OPIc test was not remotely proctored nor was it proctored in person. This might introduce a potential variability and contamination in the study.

#### Conclusion and future directions

Given the growing interest in using online applications to study foreign languages, it is worthwhile to explore the possible benefits of such approaches. This study focused specifically on the Babbel app and looked at oral proficiency as an objective measurement of language gains independent of specific curricular content. Despite the fact the app is not designed for interactive oral practice, our findings nevertheless indicate that the app can be effective in developing the Novice (and its sublevels) proficiency level in learners who commence the study of Spanish for the first time. This is very much in line with language learning theories that predict that a limited amount of time is needed in the beginning stages to progress through the Novice proficiency level. A total of 93 learners (80%) scored in the Novice (Low, Mid, and High) range, and although some inconsistencies in scores in relation to the number of lessons were found, there is nevertheless a pattern that a minimum number of lessons completed (approximately 100) correlates with this proficiency level.

Our results also indicate that using the app is more conducive to effective learning compared to using the web version only, with the probability of achieving Novice Mid approaching 50%. As we noted above, this may be due to the greater versatility of the app compared with the web version, or it may promote more flexible access and thus more time on task for learning. An app such as Babbel appears to be particularly useful for independent learning, and our data point interestingly to older learners as a group that is particularly interested in pursuing language learning in this way. According to the survey responses, this may be due to several factors, including maintaining mental agility, but also an interest in travel, for which this group presumably has more time.

<sup>&</sup>lt;sup>17</sup> <u>https://www.languagetesting.com/how-long-does-it-take</u> (last accessed January 1, 2019)

Even though our study was designed to capture the learning gains of true beginners, the outcomes point to a number of variables that may have had an impact on the results. For example, profession, place of residence, prior learning experiences, or study of languages related to Spanish (such as French, Italian, Portuguese, etc.) all may have influenced the findings to some extent. Perhaps a future study could require a pre-test of oral proficiency along with post-tests of oral proficiency. In this way, a more objective baseline could be created against which differences in ratings would indicate how much learning had taken place, regardless of whether a participant was a true beginner or not. Although we had targeted the study at true beginners, for which a pre-test would be irrelevant, some of the participants may have benefited from prior exposure to the language at a much earlier age and may have reactivated that knowledge. Another interesting follow up to this study would be to correlate the self-assessment responses to the lesson content in the Babbel course; insightful observations might result in higher correspondence of the Babbel course content to a proficiency-based curriculum. Despite these limitations, our findings suggest that modest oral proficiency gains are possible for learners using the Babbel app provided that they complete a sufficient number of lessons.



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#### Appendix A: ACTFL Proficiency Guidelines Descriptors for the Intermediate and Novice levels (Source: ACTFL.org)

#### INTERMEDIATE

Speakers at the Intermediate level are distinguished primarily by their ability to create with the language when talking about familiar topics related to their daily life. They are able to recombine learned material in order to express personal meaning. Intermediate-level speakers can ask simple questions and can handle a straightforward survival situation. They produce sentence-level language, ranging from discrete sentences to strings of sentences, typically in present time. Intermediate-level speakers are understood by interlocutors who are accustomed to dealing with non-native learners of the language.

#### **Intermediate High**

Intermediate High speakers are able to converse with ease and confidence when dealing with the routine tasks and social situations of the Intermediate level. They are able to handle successfully uncomplicated tasks and social situations requiring an exchange of basic information related to their work, school, recreation, particular interests, and areas of competence.

Intermediate High speakers can handle a substantial number of tasks associated with the Advanced level, but they are unable to sustain performance of all of these tasks all of the time. Intermediate High speakers can narrate and describe in all major time frames using connected discourse of paragraph length, but not all the time. Typically, when Intermediate High speakers attempt to perform Advanced-level tasks, their speech exhibits one or more features of breakdown, such as the failure to carry out fully the narration or description in the appropriate major time frame, an inability to maintain paragraph-length discourse, or a reduction in breadth and appropriateness of vocabulary.

Intermediate High speakers can generally be understood by native speakers unaccustomed to dealing with non-natives, although interference from another language may be evident (e.g., use of code-switching, false cognates, literal translations), and a pattern of gaps in communication may occur.

#### **Intermediate Mid**

Speakers at the Intermediate Mid sublevel are able to handle successfully a variety of uncomplicated communicative tasks in straightforward social situations. Conversation is generally limited to those predictable and concrete exchanges necessary for survival in the target culture. These include personal information related to self, family, home, daily activities, interests and personal preferences, as well as physical and social needs, such as food, shopping, travel, and lodging.

Intermediate Mid speakers tend to function reactively, for example, by responding to direct questions or requests for information. However, they are capable of asking a variety of questions when necessary to obtain simple information to satisfy basic needs, such as directions, prices, and services. When called on to perform functions or handle topics at the Advanced level, they provide some information but have difficulty linking ideas, manipulating time and aspect, and using communicative strategies, such as circumlocution.

Intermediate Mid speakers are able to express personal meaning by creating with the language, in part by combining and recombining known elements and conversational input to produce responses typically consisting of sentences and strings of sentences. Their speech may contain pauses, reformulations, and self-corrections as they search for adequate vocabulary and appropriate language forms to express themselves. In spite of the limitations in their vocabulary and/or pronunciation and/or grammar and/or syntax, Intermediate Mid speakers are generally understood by sympathetic interlocutors accustomed to dealing with non-natives.

Overall, Intermediate Mid speakers are at ease when performing Intermediate-level tasks and do so with significant quantity and quality of Intermediate-level language.

#### **Intermediate Low**

Speakers at the Intermediate Low sublevel are able to handle successfully a limited number of uncomplicated communicative tasks by creating with the language in straightforward social situations. Conversation is restricted to some of the concrete exchanges and predictable topics necessary for survival in the target-language culture. These topics relate to basic personal information; for example, self and family, some daily activities and personal preferences, and some immediate needs, such as ordering food and making simple purchases. At the Intermediate Low sublevel, speakers are primarily reactive and struggle to answer direct questions or requests for information. They are also able to ask a few appropriate questions. Intermediate Low speakers manage to sustain the functions of the Intermediate level, although just barely.

Intermediate Low speakers express personal meaning by combining and recombining what they know and what they hear from their interlocutors into short statements and discrete sentences. Their responses are often filled with hesitancy and inaccuracies as they search for appropriate linguistic forms and vocabulary while attempting to give form to the message. Their speech is characterized by frequent pauses, ineffective reformulations and self-corrections. Their pronunciation, vocabulary, and syntax are strongly influenced by their first language. In spite of frequent misunderstandings that may require repetition or rephrasing, Intermediate Low speakers can generally be understood by sympathetic interlocutors, particularly by those accustomed to dealing with non-natives.

#### NOVICE

Novice-level speakers can communicate short messages on highly predictable, everyday topics that affect them directly. They do so primarily through the use of isolated words and phrases that have been encountered, memorized, and recalled. Novice-level speakers may be difficult to understand even by the most sympathetic interlocutors accustomed to non-native speech.

#### **Novice High**

Speakers at the Novice High sublevel are able to handle a variety of tasks pertaining to the Intermediate level, but are unable to sustain performance at that level. They are able to manage successfully a number of uncomplicated communicative tasks in straightforward social situations. Conversation is restricted to a few of the predictable topics necessary for survival in the target language culture, such as basic personal information, basic objects, and a limited number of activities, preferences, and immediate needs. Novice High speakers respond to simple, direct questions or requests for information. They are also able to ask a few formulaic questions.

Novice High speakers are able to express personal meaning by relying heavily on learned phrases or recombinations of these and what they hear from their interlocutor. Their language consists primarily of short and sometimes incomplete sentences in the present, and may be hesitant or inaccurate. On the other hand, since their language often consists of expansions of learned material and stock phrases, they may sometimes sound surprisingly fluent and accurate. Pronunciation, vocabulary, and syntax may be strongly influenced by the first language. Frequent misunderstandings may arise but, with repetition or rephrasing, Novice High speakers can generally be understood by sympathetic interlocutors used to non-natives. When called on to handle a variety of topics and perform functions pertaining to the Intermediate level, a Novice High speaker can sometimes respond in intelligible sentences, but will not be able to sustain sentence-level discourse.

#### **Novice Mid**

Speakers at the Novice Mid sublevel communicate minimally by using a number of isolated words and memorized phrases limited by the particular context in which the language has been learned. When responding to direct questions, they may say only two or three words at a time or give an occasional stock answer. They pause frequently as they search for simple vocabulary or attempt to recycle their own and their interlocutor's words. Novice Mid speakers may be understood with difficulty even by sympathetic interlocutors accustomed to dealing with non-natives. When called on to handle topics and perform functions associated with the Intermediate level, they frequently resort to repetition, words from their native language, or silence.



#### **Novice Low**

Speakers at the Novice Low sublevel have no real functional ability and, because of their pronunciation, may be unintelligible. Given adequate time and familiar cues, they may be able to exchange greetings, give their identity, and name a number of familiar objects from their immediate environment. They are unable to perform functions or handle topics pertaining to the Intermediate level, and cannot therefore participate in a true conversational exchange.

### Appendix B: Self-assessment surveys

### Survey 1:

Question 1: Say hello and goodbye to someone I know. Response Percent Answer Choice Response Total I can do this well 237 1 80.1% I do this fairly well 2 18.6% 55 3



Question 2:

Answe	Answer Choice Respo		Response Total	Say hello and goodbye to someone I don't know.
1	I can do this well	60.8%	180	4.4%
2	I do this fairly well	34.8%	103	
3	It's one of my goals	4.4%	13	L can do this well
		answered	296	34.8%
		skipped 0	60.8% It's one of my goals	

### Question 3:



### Question 4:

Ask for	r someone's name.			Ask for someone	's name.
Answe	er Choice	Response Percent	Response Total		
1	I can do this well	54.1%	160	10.1%	
2	I do this fairly well	35.8%	106		
3	It's one of my goals	10.1%	30		I can do this well
		answered	296	35.8% 54.1%	I do this fairly well
		skipped	0	35.8% 54.1%	It's one of my goals

### Question 5:

136 111	ere someone comes fro	////.		Ask where someone	comes from.
Percent		Response Total			
1	I can do this well	40.5%	120		
2	I do this fairly well	37.8%	112	21.6%	
3	It's one of my goals	21.6%	64	40.5%	I can do this well
		answered	296		I do this fairly well
		skipped	0		It's one of my goals
				37.8%	

### Question 6:



### Question 7:

ay ho	y how I feel.			Say how I feel.	
Inswe	r Choice	Response Percent	Response Total		
1	I can do this well	25.3%	75		
2	I can do this fairly well	36.5%	108	38.2% 25.3%	I can do this well
3	It's one of my goals	38.2%	113	30.270	I can do this fairly well
		answered	296		It's one of my goals
		skipped	0	36.5%	

### Question 8:



### Survey 2

Question 1:

Juci	rder something at a restaurant.			Order something at a restaurant.		
Answe	r Choice	Response Percent	Response Total			
1	I can do this well	12.7%	31	12.7%		
2	I do this fairly well	52.7%	129	34.7%	I can do this well	
3	It's one of my goals	34.7%	85		I do this fairly well	
answered 245			245	52.7%	It's one of my goals	
		skipped	0	52.178		
				_		

### Question 2:

Give d	ive dates and times.			Give dates and times.		
Answe	er Choice	Response Percent	Response Total			
1	I can do this well	18.8%	46	18.8%		
2	I do this fairly well	45.3%	111	35.9%	I can do this well	
3	It's one of my goals	35.9%	88		I do this fairly well	
		answered	245	45.3%	It's one of my goals	
		skipped	0	45.57		

### Question 3:

Tell someone about my family.		
31.8% 25.3% I can do this well		
I do this fairly well		
42.9%		

### Question 4:

Answer Choice		hoice Response Percent Response Total		like and dislike.	
1	I can do this well	23.3%	57		
2	I do this fairly well	49.0%	120		L can do this well
3	It's one of my goals	27.8%	68	27.8% 23.3%	
answered 245			245	49.0%	I do this fairly well It's one of my goals
		skipped	0	49.0%	It's one of my goals

### Question 5:

Tell so	ell someone the time and location of an event.			Tell someone the time and		
Answe	nswer Choice Response Percent		Response Total	location of a	an event.	
1	I can do this well	15.9%	39	15.9%		
2	I do this fairly wel	42.0%	103		I can do this well	
3 It's one of my goa	It's one of my goal	42.0%	103	42.0%	I do this fairly well	
		answered	245	42.0%	It's one of my goals	
		skipped	0		= it's one of my boar	

### Survey 3

### Question 1:

Say sor	mething about the weat	her.		Say something about the weather.	
Answer Choice		Response Percent	Response Total		
1	I can do this well	30.4%	62		
2	I do this fairly well	46.1%	94	23.5% 30	0.4%
3	It's one of my goals	23.5%	48		■ I can do this well
		answered	204		I do this fairly well
	skipped		0		It's one of my goals
				46.1%	

Question 2:



### Question 3:

ay something about my hobbies and interests.				Say something about my	
Answer Choice		Response Percent Response Total		hobbies and interests.	
1	I can do this well	15.2%	31		
2	I do this fairly well	41.2%	84		I can do this well
3	It's one of my goals 43	43.6%	89	15.2%	
answered 204		204	43.6%	I do this fairly well	
	skipped		0	41.2%	It's one of my goals

### Question 4:

Give St	ome information about s	something rulu i	in the past.	Give some information about	
Inswer Choice		Response Percent	Response Total	something I did in the past.	
1	I can do this well	8.8%	18	8.8%	
2	I do this fairly well	37.7%	77		I can do this well
3	It's one of my goals	53.4%	109		
	answered skipped	answered	204	53.4% 37.7%	I do this fairly well
		0		It's one of my goals	

Question 5:

Answe	er Choice	Response Percent Response Total		Answer questions about where I'm going.	
1	I can do this well	27.0%	55		
2	I do this fairly well	49.0%	100		I can do this well
3	It's one of my goals	24.0%	49	24.0% 27.0%	I do this fairly well
	answered		204	49.0%	
		skipped	0	45.07	It's one of my goals

### Question 6:

Answe	r questions about where I	went.		Answer questions about where I	
Answe	r Choice	Response Percent Response Total		went.	
1	I can do this well	9.8%	20	9.8%	
2	I can do this fairly well	42.2%	86	48.0%	
3	It's one of my goals	48.0%	98		I can do this well
		answered	204	42.2%	I can do this fairly we
		skipped	0		It's one of my goals

### Question 7:

nswe	nswer Choice Response Percent		Response Total	Ask simple questions about dates, times, places and events.	
1	I can do this well	26.5%	54		
2	I can do this fairly well	46.6%	95		
3	It's one of my goals	27.0%	55	27.0% 26.5%	I can do this well
		answered 204	204		I can do this fairly well
		skipped	0	46.6%	It's one of my goals
				40.078	

### Survey 4

Question 1:

Answer Choice		Response Percent	Response Total	something (e.g., "I can speak Spanish")	
1	I can do this well	38.0%	52	Spani	sn )
2	I do this fairly well	46.0%	63	16.1%	
3	It's one of my goals	16.1%	22		I can do this well
answered 137		46.0%	I do this fairly well		
		skipped	1 0	46.0%	■ It's one of my goals



Tell so	meone I don't know ho	w to do somethin	ng (e.g., "I can't sv	Tell someone I don't know how	
Answer Choice		Response Percent	Response Total	to do something (e.g., "I can'	
1	I can do this well	31.4%	43	swim")	n")
2	I do this fairly well	47.4%	65	21.2%	
3	It's one of my goals	21.2%	29		I can do this well
		answered	137	47.4%	I do this fairly well
		skipped	0	47.470	It's one of my goals

### Question 3:

		Say what I do professionally.	
Answer Choice Response Percent		Suy what I us	or or controlling.
24.1%	33		
40.1%	55	35.8% 24.1%	I can do this well
35.8%	49	55.670	I do this fairly well
answered	137	40.1%	■ It's one of my goals
skipped	0	40.1%	
	Percent 24.1% 40.1% 35.8% answered	Percent Response Total   24.1% 33   40.1% 55   35.8% 49   answered 137	Response Percent Response Total   24.1% 33   40.1% 55   35.8% 49   answered 137

### Question 4:

Answer Choice		Response Percent Response Total		Talk about health issues and aches and pains.		
1	I can do this well	5.8%	8	5.8%		
2	I do this fairly well	46.7%	64			
3	It's one of my goals	47.4%	65	47.4%	I can do this well	
		answered 137		47.4%	I do this fairly well	
skipped 0			1 0	40.776	It's one of my goals	

### Question 5:

				Talk about my taste in music.	
Answer Choice Pe		Response Percent	Response Total	4.4%	
1	I can do this well	4.4%	6		
2	I do this fairly well	26.3%	36	26.3%	I can do this well
3	It's one of my goals 69.3%	69.3%	95		I do this fairly well
answered 137			137	69.3%	It's one of my goals
		skipped	0		