Brigham Young University
BYU ScholarsArchive

Theses and Dissertations

2014-12-01

The Effect of Computer-Based Pronunciation Readings on ESL Learners' Perception and Production of Prosodic Features in a Short-Term ESP Course

Caitlin Jolley
Brigham Young University - Provo

Follow this and additional works at: https://scholarsarchive.byu.edu/etd

Part of the Linguistics Commons

BYU ScholarsArchive Citation

Jolley, Caitlin, "The Effect of Computer-Based Pronunciation Readings on ESL Learners' Perception and Production of Prosodic Features in a Short-Term ESP Course" (2014). *Theses and Dissertations*. 4321.
https://scholarsarchive.byu.edu/etd/4321

This Thesis is brought to you for free and open access by BYU ScholarsArchive. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of BYU ScholarsArchive. For more information, please contact scholarsarchive@byu.edu, ellen_amatangelo@byu.edu.

The Effect of Computer-Based Pronunciation Readings on ESL Learners' Perception and Production of Prosodic Features in a Short-Term ESP Course

Caitlin Jolley

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of

Master of Arts

Mark W. Tanner, Chair
Lynn E. Henrichsen
Troy L. Cox

Department of Linguistics and English Language

Brigham Young University

December 2014

Copyright © 2014 Caitlin Jolley

All Rights Reserved

ABSTRACT

The Effect of Computer-Based Pronunciation Readings on ESL Learners' Perception and Production of Prosodic Features in a Short-Term ESP Course

Caitlin Jolley
Department of Linguistics and English Language, BYU
Master of Arts

Recent studies on pronunciation teaching in ESL classrooms have found that the teaching of suprasegmentals, namely stress, pausing, and intonation, has a great effect on improving intelligibility (Derwing, Munro, & Wiebe, 1998; Kang, Rubin, & Pickering, 2010; Morley, 1991). The current project describes the development and implementation of computer-based pronunciation materials used for an English for Specific Purposes (ESP) program. The pronunciation program made use of cued pronunciation readings (CPRs) which used suprasegmentals and were developed for English as a second language (ESL) missionaries at the Provo, Utah, Missionary Training Center (MTC). Because there was no pronunciation program in place at the MTC, instructional materials that focused on prosodic features were greatly needed. Missionaries participated in the program anywhere from three to six weeks. Results from the implementation period revealed that missionaries made medium to large gains in their ability to perceive suprasegmentals after using the practice tasks and small-medium gains in their ability to produce suprasegmentals during this short time period. Recommendations for further development, implementation, and testing of similar materials are made for use with individuals in other ESP settings like these missionaries at the MTC.

Keywords: suprasegmentals, intelligibility, cued pronunciation readings, ESL, ESP, missionaries

ACKNOWLEDGMENTS

I would first like to thank my parents, Burke and Elaine Jolley, and my sisters, Andrea and Lizzie, for their constant love and encouragement. I would also like to thank the many professors, including Dr. Mark Tanner, Dr. Lynn Henrichsen, and Dr. Troy Cox who were guides throughout. Thanks also to Tim Zeidner, Lucas Aidukaitis and especially to Bart Palmer at the MTC for bringing this project to life. Lastly, I am especially grateful for the ESL missionaries – those who participated in the study and those who did not – who were my motivation for doing this in the first place.

Table of Contents

ABSTRACT ii

ACKNOWLEDGMENTS iii

LIST OF TABLES vii

LIST OF FIGURES viii

INTRODUCTION 1

REVIEW OF LITERATURE 4

- The Role of Suprasegmentals and Intelligibility 5
- Computer-Assisted Pronunciation Instruction (CAP) 7
- Cued Pronunciation Readings 8
- Cued Pronunciation Readings and the MTC 10
- Delimitations 13

PROJECT DEVELOPMENT 14

- Creating the Testimony Text 14
- Developing the Text of the Passages 14
- Establishing a Baseline for Native-Like Pausing, Stress, and Intonation Patterns 16
- Creating the CPRs 19
- Assessment Measures for the Project 19

PROJECT IMPLEMENTATION 21

- Participants 22

Schedule 25

Process 27

RESULTS 29

Perception Tasks 30

Summary 34

Production Tasks 35

Summary 37

Survey Results 38

Time Spent 38

Reflections about the Experience 40

Suggestions for Future Practice 42

Summary 44

Profile of Top Performers 44

CONCLUSION 49

Limitations 50

Pedagogical Implications 52

Directions for Future Research 52

REFERENCES 56

APPENDIX A: CPRs 61

APPENDIX B: Pre-Survey 81

APPENDIX C: Post-Survey 84

APPENDIX D: Introduction to Pronunciation 88

List of Tables

Table 1: Demographics of Participants……………………………………………………….….23

Table 2: ESL Missionaries' Stated Goals for Learning English…………………………………23

Table 3: Number of Weeks Spent Using the Materials and Number of CPRs Completed by Missionary………………………………………………………………………….……….25

Table 4: Planned Schedule for Completing the MTC CPR Study…………………………..……27

Table 5: Listening Task: Descriptive Statistics and 95% Confidence Interval………………..…33

Table 6: Speaking Task: Descriptive Statistics and 95% Confidence Interval………………..…36

Table 7: Amount of Lab Time…………………………………………………………...…….39

Table 8: Statements about the Missionaries' Perceived Progress……………………………..…41

Table 9: Statements about the CPRs…………………………………………………………..….41

Table 10: How would you make the practices better? ……………………..…………………43

Table 11: Rankings………………………………………………………………………………45

Table 12: What was most difficult about the CPR practice tasks? …………………...………48

List of Figures

Figure 1: Using the CPRs…………………………………………………………………………9

Figure 2: Box-plot: Listening……………………………………………………………………31

Figure 3: 95% Confidence interval: Listening……………………………………………….....34

Figure 4: Box-plot: Speaking…………………………………………………………………….35

Figure 5: 95% Confidence interval: Speaking…………………………………………….....37

Introduction

Learning English is an extensive endeavor. Because of this, English for Specific Purposes (ESP) programs have been developed to help learners focus on gaining the grammar and vocabulary necessary for them to be successful in their work. There are many examples of these types of programs including Business English, English for tourism, and Aviation English. The purpose of programs such as these is to teach English in a setting "where the goal of the learners is to use English in a particular domain" (Paltridge & Starfield, 2012). One unique ESP institution is found at Missionary Training Centers (MTCs) founded by the Church of Jesus Christ of Latter-day Saints. At MTCs, ESL missionaries gather to study those things that will help them be more successful in their work of teaching religious principles. Although the work that missionaries do is unique, this setting is similar to other ESP programs designed to help learners acquire language specific to their task.

Every year, thousands of young men and women ages 18-26 leave their homes to serve as volunteer missionaries for the Church of Jesus Christ of Latter-day Saints. In 2013, there were over 80,000 such full-time missionaries with more projected to serve in the coming years (Walker, 2013). Among those missionaries learning a foreign language is a sizeable number of missionaries who are required to learn English in order to carry out their missionary labors. These missionaries spend 2-8 weeks in the MTC to receive English language training. While the language curriculum currently in place at the MTC is centered on basic grammar principles and vocabulary, very little time is spent on pronunciation practice (*ESL language guide*, 2011).

For individuals who need to communicate effectively in the target language, such as missionaries, learning correct pronunciation is critical. As learners improve their pronunciation, they increase their intelligibility, which in turn helps them reach their goals of missionary service. However, many ESP programs, including the MTC, do not make pronunciation instruction a priority.

Although it is true that pronunciation is often one of the first things noticed and corrected by someone who is listening to an ESL speaker, it is not something that many teachers in ESP settings explicitly teach. There are several possible reasons that this happens with ESL teachers at the MTC. One reason for this could be due to the fact that most of the teachers are hired because of their effectiveness in having previously served as a missionary and not because of their language teaching skills. Additionally, most receive very little training on teaching ESL even after they are hired. Most of the training that they do receive is focused on grammar and vocabulary instruction, but hardly any emphasis is place on pronunciation. Although instructors in other ESP settings have most likely been trained to teach English, many have not been trained in teaching pronunciation. Therefore, the pronunciation help teachers do offer is often given only informally and infrequently. Like teachers in other ESP settings, ESL teachers at the MTC may base much of their pronunciation instruction on “anecdotal evidence and personal impressions” (Derwing and Munro, 2005, p. 380). Thus, this lack of teacher training in the area of pronunciation instruction makes it difficult for them to offer specific help when their students struggle to be understood.

The purpose of this pedagogical thesis was to create computer-based pronunciation materials to help ESL learners improve their intelligibility in an ESP setting. This was accomplished by: 1) creating pronunciation materials for missionaries learning ESL at the MTC in Provo, Utah and 2) testing the effectiveness of these materials with missionaries over a period of three to six weeks. Just like pronunciation materials are needed for ESL learners at the MTC, it is likely that they are also needed in other ESP settings. With more focus on pronunciation, it is hoped that ESL learners will become more comprehensible and more able to accomplish their specific tasks. Current research in the area of comprehensibility has provided empirical evidence supporting the teaching of suprasegmentals as key to improving comprehensibility. According to McNerney and Mendelsohn (1992), short-term language courses “should focus first and foremost on suprasegmentals as they have the greatest impact on the comprehensibility of the learner’s English” (p. 186). Several major studies on second language learners’ comprehensibility (Derwing & Munro, 1997; Derwing, Munro, & Wiebe, 1998; Hahn, 2004; Pickering, 2004) assert that teaching suprasegmentals to non-native speakers helps improve learners’ pronunciation as well as their comprehensibility.

Additionally, using computer-assisted pronunciation (CAP) instruction to teach suprasegmentals may by ideal for certain ESP settings where instructors are not trained in pronunciation instruction or English is taught as a foreign language (Seferoglu, 2005). Because of the nature of the MTC, using pronunciation materials that not only focus on suprasegmentals, but also require very little explicit instruction from teachers is ideal. That way, students can still receive the benefits of pronunciation practice without greatly altering the nature of the program itself.

In 2010, Holly Mueller began the development of self-directed pronunciation materials aimed at helping improve ESL missionaries’ oral fluency and accuracy in speaking English. These materials were known as cued pronunciation readings (CPRs) (Mueller, 2010). Previous research (Tanner & Landon, 2009) showed that these types of materials could raise learners’ awareness and correct use of suprasegmental features. Additionally, Tanner and Landon (2009) found that when CPR units were implemented in a self-directed program of study, significant gains were made in the treatment groups’ use of pausing and stress in English.

The current project built upon the initial work done by Mueller (2010). Her initial development of CPRs for ESL missionaries included the creation of six tasks, four of which were scriptural passages, and two of which were oral testimonies. In her project, missionaries indicated that they wanted more CPRs based on scriptures, but were especially interested in having more units based on testimonies (Mueller, 2010). The current study focused on creating four additional testimony passages covering key concepts in the remaining gospel lessons (lesson 2 and lesson 3) that missionaries teach from the *Preach My Gospel* manual. These additional CPRs combined with those created by Mueller (2010) provided 10 CPR tasks that were all piloted with ESL missionaries over the course of 3-6 weeks.

The purpose of having the missionaries practice with the CPR tasks was to help them improve their overall fluency, level of confidence, and level of comprehensibility in speaking English as an additional language. Missionaries were able to work towards these objectives by developing greater awareness of how suprasegmentals function and by practicing their production within oral discourse. All of this was done using CAP instruction in a self-directed setting, meaning they were able to work independently. A successful computer program designed to help ESL learners perceive and produce suprasegmentals could not only help hundreds of ESL missionaries who attend the MTC in Provo, Utah each year, but perhaps thousands of other learners who participate in other ESP type programs and are looking to improve their pronunciation and intelligibility.

Review of Literature

This review of literature will first discuss several studies examining the role of suprasegmentals in pronunciation instruction. After establishing suprasegmentals as a necessary component of successful pronunciation instruction, the relationship between suprasegmentals and intelligibility will be explored. This will be followed by a discussion on computer-aided pronunciation instruction and the benefits of using computer-aided pronunciation practice in a self-directed setting. The review of literature will conclude by reviewing two current studies involving the use of CPRs with ESL learners and ESL missionaries.

The Role of Suprasegmentals and Intelligibility

The history of pronunciation teaching shows that instructors have used a variety of methods over the past several decades to try and help learners improve their pronunciation. During the height of the audiolingual method that was popular from the 1940s through the 1970s, much of the focus was on promoting accuracy in speaking the second language through drilling and practicing segmentals, or the individual sounds of the language (Anderson-Hsieh, 1989). However, over time, general teaching practices were altered to include a greater emphasis on communication. Today, communicative language teaching focuses on helping students become mutually intelligible and thus be more capable of dealing with situations they would encounter in the real world (Jenkins, 2002). In pronunciation teaching, instruction consequently shifted from focusing on perfecting the individual sounds of English to a more “top-down” approach that included the teaching of suprasegmentals (Wrembel, 2005). According to Pennington (1999), “…teaching the prosodic aspects of phonology, intonation, rhythm, rules of linking words, etc., will have a far greater pay-off than the teaching of individual sounds, as these inevitably vary greatly in context” (p. 433).

Recent studies show that helping students recognize and produce suprasegmentals is an important part of working towards the goal of becoming more intelligible. As defined by Derwing and Munro (2005), intelligibility is “the extent to which a listener actually understands an utterance” (p. 385). Because intelligibility, rather than accent reduction, is the primary goal, pronunciation instruction should reflect that (Derwing, 2008; Munro, 2008). As instructors help learners focus on those prosodic features that influence the rhythm of the language, listeners are more likely to understand them. Some of these features include “patterns of stress and intonation” in addition to “timing, phrasing, and rhythm” (Anderson-Hsieh, Johnson, & Koehler, 1992). Research shows that as learners improve their production of suprasegmentals, they will also improve their intelligibility in the L2 (Derwing, Munro, & Wiebe, 1998; Kang, Rubin, & Pickering, 2010; Morley, 1991).

Several major studies including those conducted by Derwing et al. (1997), Derwing et al. (1998) and Hahn (2004) show the role that suprasegmentals can have in helping learners be more comprehensible. Derwing et al. (1998) conducted one of the few empirical studies designed to assess the effects of different types of pronunciation instruction. In this study, three types of pronunciation instruction were assessed regarding their effect on NNS’ accentedness and comprehensibility. The first type of instruction focused on the word level and smaller segmental units. The second type used a more global approach, focusing on interactive discourse and suprasegmentals. The third type of instruction involved no pronunciation-specific instruction and served as the control group for the study.

After a 12-week period, results showed that levels of comprehensibility, accent, and fluency all improved for the first two types of pronunciation instruction. However, the students in the global instruction class that focused on suprasegmentals were also able to transfer the things they learned to spontaneous production. The study by Derwing et al. (1998) offers empirical evidence that while various types of pronunciation instruction can yield positive results, explicitly teaching suprasegmentals to NNSs can help them improve their comprehensibility in spontaneous speech.

Computer-Assisted Pronunciation Instruction (CAP)

Although pronunciation is an important part of successful language acquisition, it is often regarded as one of the most neglected and least understood areas of language teaching (Celce-Murcia, Brinton, & Goodwin, 2010). Because so little research has been done, and so many teachers are unsure of how to teach pronunciation, it often gets overlooked (Derwing & Munro, 2005). For these reasons, finding simple yet effective ways to help teachers and learners improve in this area is important. During the past several years, computer-assisted pronunciation (CAP) instruction has become increasingly popular, especially among ESL learners looking to improve their language in a self-directed setting. Some of the unique features of this type of language learning that are especially pertinent to the current project will be explored in this review.

One of the most important advantages to using CAP instruction is connected to the lack of teacher training in pronunciation instruction. Like the ESL teachers at the MTC, many teachers in ESP programs who do make an effort to include pronunciation instruction in their curriculum often rely on their own intuition rather than on proven pronunciation practices in order to teach pronunciation to their students (Derwing & Munro, 2005). A successful CAP system could assist teachers who are not qualified to teach pronunciation by themselves.

Another major benefit of using CAP instruction is learner independence. As students use this type of technology in a self-directed setting, they are able to control the timing and pace at which they learn (Kaltenbock, 2001; Neri, Cucchiarini, Strik, & Boves, 2002). As they do so, they become more autonomous learners (Kaltenbock, 2001). Although this may mean that students can work independently of a teacher, being an autonomous learner may also refer to the fact that students are simply given a way to take charge of their own learning, thus possibly increasing their own motivation. With CAP instruction, "…students themselves can monitor problems and improvements, which in turn might result in increased motivation" (Neri et al., 2002, p. 450).

Because pronunciation instruction can be challenging for students as well as teachers, CAP instruction can be a great alternative to traditional classrooms. ESP programs looking to help students learn pronunciation, increase their motivation, and ultimately become more intelligible in the L2 could consider using this resource.

Cued Pronunciation Readings

The current project was developed in an effort to combine the teaching of suprasegmentals and CAP instruction. The materials created are referred to as Cued Pronunciation Readings (CPRs), which are reading passages that ESL students use to improve their ability to both perceive and produce suprasegmentals. Research shows that "improvements in perception can lead to improvement in production" (Levis, 2007, p. 190). In a study conducted by Bradlow, Pisoni, Akahane-Yamada, and Tohkura (1997), the authors found that as Japanese learners practiced recognizing the /r/ and /l/ sounds in English, their ability to use these sounds increased. Hsieh, Dong, and Wang (2013) found that as students were trained in "shadowing" NSs, or listening and following their utterances as closely as they could, the learners' own intonation, fluency, word pronunciation, and overall pronunciation improved (Hsieh et al., 2013). This may also be true when teaching students about suprasegmentals (Levis, 2007). The goal of the current project was to allow students to practice perceiving and then producing suprasegmentals in a controlled setting so that the learners would then be able to implement these prosodic features in spontaneous speech and therefore improve their pronunciation and their intelligibility.

CPRs were first developed by Dr. Mark Tanner as a way for students to learn about and practice recognizing prosodic elements in a self-directed setting. Although other oral reading programs may be similar to CPRs, several features set these oral reading tasks apart (Tanner & Landon, 2009). First, as mentioned previously, CPRs are generally used in a self-directed setting. Second, each task includes listening for and producing three main suprasegmental features, rather than separating each feature into separate tasks. Finally, there is an answer key that allows students to see where native speakers typically produce each feature. Students see an answer key for each suprasegmental feature as they proceed through the task. Once they have identified all these features (pausing, word stress, and sentence-final intonation) in the passage they then record themselves incorporating the prosodic elements into their reading of the passage (Tanner and Landon, 2009, p. 53-54). Figure 1 shows the process that the learners went through to complete each CPR unit.

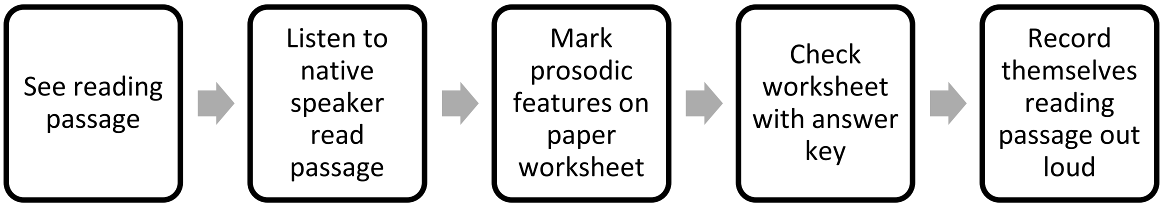

See reading passage
Listen to native speaker read passage
Mark prosodic features on paper worksheet
Check worksheet with answer key
Record themselves reading passage out loud

Figure 1. Using the CPRs

Because many who teach in various ESP settings like the MTC do not receive training in pronunciation instruction, these materials can be beneficial for students to use in a self-directed setting. Furthermore, the materials are designed to be used by students who have not been exposed to suprasegmentals beforehand. Learners are able to focus on one prosodic feature at a time, first listening for the feature before attempting to produce it. Then, instead of relying on someone else to give them feedback, they can check their work with an answer key. Once again, this allows them to use the materials completely independently of a teacher. These features make CPRs an ideal choice for pronunciation practice in an ESP setting such as the MTC.

Tanner and Landon first examined the use of CPRs by ESL learners in a self-directed setting in 2009. Their objective was to determine how the CPR units affected the students' perception of pausing, word stress, and sentence-final pitch and how the students would use these features in controlled production. Additionally, Tanner and Landon also wanted to explore how the CPRs affected the learners' perceived comprehensibility in spontaneous speech tasks. In a 13-week experimental study, the researchers randomly divided 75 ESL participants enrolled in intermediate listening/speaking classes into two groups; the first group used the CPRs outside of class in a computer lab for approximately 10 minutes each day. The control group was not involved in this additional study outside of class. After the 13-week period, the results of an ANCOVA showed that the treatment had a significant effect on learners' perception of pausing, perception of word stress and controlled production of word stress. However, the results also showed that "there was no significant change in the learners' level of perceived comprehensibility at Time 2" (p. 61). Because some of the findings could have been due to some limitations of the study, including the limited length of practice time, lack of teacher feedback, and an apparent low level of motivation put forth by the students, a call was made to conduct further research in order to determine the effectiveness of such materials.

Cued Pronunciation Readings and the MTC

Creating CPR units and surveying their use with ESL missionaries at the MTC was the topic of Mueller's (2010) master's project. For this project, she developed six CPR units catered to assist the language learning of an MTC audience. The units she created were based on four commonly used scriptural passages and two engineered testimonies. Of the four scriptural passages, three are verses used regularly in LDS worship services and the fourth is a passage of scripture often memorized by new missionaries. The two initial testimonies developed by Mueller (2010) used material from lesson one of *Preach My Gospel* ("The Message of the Restoration of the Gospel of Jesus Christ"), the teaching manual used by all missionaries (*Preach My Gospel,* 2004, p. 31).

After creating the CPR passages, Mueller piloted them with a group of 15 missionaries in an intermediate ESL class at the MTC. Once she introduced the missionaries to the concept of suprasegmentals and the CPR units, she accompanied the missionaries to their first computer lab visit outside of class. After helping the missionaries with their first lab session (where they completed the first CPR unit), Mueller encouraged the missionaries to use the CPRs on a daily basis during their study time in the computer lab. Permission was given by the director of the MTC's Research and Development Department for the missionaries to spend 10-15 minutes of their computer lab time working on the CPR tasks. Mueller was not an employee at the MTC, but was granted permission to accompany the missionaries to the lab a few times during the actual study. The missionaries' classroom teachers encouraged them to use the CPRs daily; however, the teachers did not collect anything from them to show what they actually completed. The missionaries had access to the CPR units for three weeks, after which Mueller administered the post-test and post-test survey.

The primary objective of Mueller's study (2010) was to gather initial data from the missionaries regarding their use of the CPR units and any progress that the missionaries felt they made during the 3-week period. Her evaluation of the project, and thus the results of her work, centered on the missionaries' use of the practice tasks as well as their perceptions of how helpful the materials were in helping them with their pronunciation. During the 3-week period in which the missionaries used the materials, they averaged five visits to the computer lab with each visit lasting approximately 18 minutes. Of those five visits, the missionaries went to the computer lab on their own approximately 1.6 times. The missionaries were also asked to evaluate the materials and suggest ways that they could be improved (p. 47). Some of the suggestions provided included having slower recordings of the passages, including more practice tasks, and providing teacher feedback (p. 61). In general, the missionaries' comments about the CPR units were positive. Many who participated in the study stated that they felt the CPR units helped them improve their pronunciation and that people could understand them more easily (p. 55). While these comments were encouraging, Mueller also acknowledged that future researchers would need to develop the CPR units and ancillary materials even more, as well as conduct additional studies in order to better understand the actual effectiveness of these pronunciation materials on missionaries' speech at the MTC.

The current study focused on addressing several of these comments. Of the 12 missionaries that participated in the original study, 11 indicated that they were interested in having access to more practice tasks based on testimonies (Mueller, 2010, p. 57). As a follow up to these responses, the current project focused on the creation of four additional testimony CPR units addressing other gospel principles from the *Preach My Gospel* manual. Furthermore, Mueller also suggested "refining the ancillary materials for better application by the missionaries" (p. 71) which lead to the addition of a classroom presentation and revised pre- and post-tests. Finally, because the data collected in the original study was primarily qualitative, the current study also sought to collect quantitative data that could provide further insight into the effectiveness of the materials on missionaries' perception and production skills. The current study included an empirical study and evaluation of the use of all 10 CPR units with a group of missionaries over a 3-6 week period.

Delimitations

Before discussing the development of the CPR units and the rationale behind the current project, it is important to note what delimitations were established early on.

The MTC is a unique language-learning center and therefore everything was carried out according to the guidelines established by the MTC and its Research and Development Office. Most researchers coming from outside of the MTC have limited access to the missionaries and are not permitted to alter the curriculum currently in place. Because of these constraints, it was not possible to conduct a true experimental study utilizing a control group. This also meant that missionaries were only permitted to use the practice tasks during certain times, as dictated by the curriculum rather than by the researchers. Furthermore, due to the nature of the MTC, it was impossible to control the number of participants and regulate the amount of time they would be available to participate. Since ESL missionaries only stayed at the MTC for an approximate period of six weeks, this was the time period during which the study had to be conducted.

Integrating the CPR materials with Assessment Tools, the computer program used at the MTC, was an extremely time consuming process. Since Mueller (2010) experienced difficulty converting all her materials for use in Assessment Tools, it was expected that this portion of the current project would be challenging as well. The conversion requires the time of MTC programmers. Their time is quite limited as they are also working to complete assigned tasks given to them by the Research and Development Office at the MTC.

Project Development

Because this project was modeled after the CPR project that Mueller (2010) implemented at the MTC, similar steps were followed in creating the four additional testimonies for this project. This process helped ensure that all testimonies were consistent in length, form, and authenticity. The following steps outline the development of the passages.

Creating the Testimony Text

In the missionary training manual, *Preach My Gospel*, missionaries are directed to bear testimony often of the principles they teach (p. 198). According to this manual, a testimony is “a simple, direct declaration of belief – a feeling, an assurance, a conviction of gospel truth” (p. 198). Because this type of spoken discourse is used frequently in missionary work, it was also an excellent way to expose missionaries to the different suprasegmental features that are part of spontaneous speech. The testimony CPRs were created to cover the first three lessons from *Preach My Gospel.* Missionaries typically drew from these three lessons to explain their religious beliefs.

In Mueller’s project, she created two CPRs based on lesson 1 (“The Message of the Restoration of the Gospel of Jesus Christ”) from chapter 3 of *Preach My Gospel*. In order to create additional testimonies that could be used together with Mueller’s CPRs, the four additional testimonies created for the current project were based on lesson 2 (“The Plan of Salvation”) and lesson 3 (“The Gospel of Jesus Christ”) from chapter 3 of *Preach My Gospel*.

Developing the Text of the Passages

In an effort to create authentic passages that mimicked testimonies given by missionaries in real teaching situations, it was essential to work with people who had experience both with missionary work and with ESL missionaries at the MTC. Because the researcher was once a full-time missionary and was employed as an ESL teacher at the MTC at the time of this study, she was able to draw on her own experiences and observations as a proselyting missionary and ESL teacher as she began creating the CPR tasks. In addition to her personal experience, she was able to enlist the help of other MTC teachers who also teach ESL missionaries. The ideas and feedback they provided were invaluable in the construction of the CPR tasks.

To first determine the content of the testimonies, the researcher interviewed six ESL teachers (all returned missionaries and native speakers of English) to determine which topics they felt were the most important for missionaries to testify of from the material given in lessons 2 and 3 from chapter 3 of *Preach My Gospel*. The teachers were asked to review those sections in the manual and determine which sub-sections(s) they felt would be most beneficial for missionaries to practice. From their responses, in addition to talking with thesis advisor for the project, the topics of the four testimonies were determined. The titles of the four testimonies come from principles from lessons 2 and 3. They are: “Pre-Earth Life: God’s Purpose and Plan for Us”, “The Atonement”, “Baptism, Our First Covenant”, and “Endure to the End”. These topics are not only important within each of the lessons of *Preach My Gospel*, but they are also essential doctrine of which missionaries testify on a regular basis, whether or not they are teaching that particular lesson. For example, even though the section describing baptism appears in lesson 3, missionaries are encouraged to “teach the doctrine of baptism and testify often of the importance of all people being baptized” even when teaching lesson 1 (*Preach My Gospel,* 2004, p. 40).

After determining the topics of the four testimonies, four ESL teachers helped construct testimonies that were authentic and natural. These teachers were first asked to read through each of the corresponding sections in *Preach My Gospel* and determine which phrases and vocabulary they felt were the most important. This helped the teachers use the information presented in *Preach My Gospel* (which is what missionaries are encouraged to do) and also helped them organize their own thoughts before giving a spontaneous testimony. After writing down what they considered to be the most important words and phrases for that section, they were asked to share their testimony on the topic as if they were missionaries. The teachers were encouraged them to look at their notes as they did this. These testimonies were recorded and saved as audio files on a simple laptop computer.

Once each of the testimonies was recorded and transcribed, the researchers reviewed the text of each person's spontaneous testimony and looked for common vocabulary, phrases and themes. These elements were then used to create another version of each testimony. This testimony was then reviewed by six ESL teachers at the MTC, all of whom had also served previously as missionaries. With their feedback, the final version of each testimony was created.

Establishing a Baseline for Native-Like Pausing, Stress, and Intonation Patterns

In order to establish benchmarks for each of the prosodic features being evaluated, five native speakers of North American English (three males and two females) were recorded reading the testimonies out loud. The speakers were encouraged to read the text with conviction as though they were sharing testimony of the principles being taught while still sounding as natural as possible. Their readings were recorded and saved using the Praat, a computer software program used to analyze speech. The researcher and thesis chair then listened to these recordings to determine the location of pausing, stress, and sentence final intonation that occurred in each testimony for each speaker. The process of marking the features and also ensuring inter-rater reliability will be described below.

Rather than relying on raters to subjectively determine the location of pauses in the recordings, this feature was measured using Praat. It was determined that since the majority of pauses “occur in the duration interval between 250 ms and one second” (Oliveira 2002), periods of silence that occurred for 250 milliseconds or longer in the recorded testimonies were marked as pauses.

Although pauses were easily identified using the computer, the other two features, stress and pitch, were identified using two experienced raters. Both raters had multiple years of ESL teaching experience with training in phonology and communicative pronunciation teaching techniques. The raters worked independently to identify locations of word stress and sentence-final pitch contours. In order to do this, each rater listened to the recording of each native speaker testimony separately from one another. While listening to each recording, a transcript of the passage was used to mark places where word stress and sentence-final pitch occurred.

As the raters listened to the recordings, it became clear that some variation was occurring in the NSs’ production of the passages. For example, one speaker may have stressed a certain word, while another did not. Given that there is rarely 100% agreement between NSs regarding the use of suprasegmental features, a threshold level of 80% was established (Tanner & Landon, 2009). This threshold level is further explained below.

To establish the threshold, each of the raters first listened to the recordings independently of one another, marking all locations where they believed a suprasegmental feature had been used. After each rater had marked his or her transcript, the two raters came together and compared their markings. The raters’ markings were then compared in order to determine the level of inter-rater reliability. The average inter-rater reliability scores for the two features before they resolved differences were as follows: stress, .95 and pitch, .82. The two raters then worked to resolve differences. If the raters did not initially agree on the location of a feature (for example, one rater heard stress on a particular syllable while the other rater did not), repeated listening to that segment occurred until they agreed on the occurrence or absence of the particular feature.

Through this process, the raters determined that some of the variations that existed among the NS were acceptable. Because of this, they decided to include features that were obligatory and optional. If at least four out of the five speakers paused at a certain location, an obligatory pause was marked in the final CPR. However, if only three of the speakers paused at a certain location, the two raters worked together to determine if that location should be marked as an optional pause in the final CPR. They decided that in order to account for some of the variations that exist among native speakers, it was important to acknowledge some of these optional features. Furthermore, they did not want to penalize the participants of the current study later on if they used a feature that did not meet the 80% requirement but in reality was still acceptable among NSs. Thus the raters established features as obligatory (where the participant had to use the feature in order to avoid penalty) and optional (where the participant could use or not use the feature without penalty). In the final answer key (see Appendix A), obligatory features were marked in red and optional features were marked in blue.

The procedure used in identifying the prosodic features for the first testimony was subsequently used for each of the other three testimonies. The final CPRs for each testimony contained obligatory markings for pausing, stress, and sentence-final intonation where there was at least 80% agreement among the NSs, as well as optional markings as agreed upon by the raters (see Appendix A).

Creating the CPRs

Once the final CPR units were completed, two native speakers (one male and one female) were recorded reading the passages aloud. It was necessary to have two different recordings as there were participants of both genders participating in the study. These final recordings incorporated all of the obligatory features of pausing, stress, and pitch and served as the answer keys for the final product. These recordings were then programmed into Assessment Tools, the computer program used at the MTC, along with the text of the passages. This process of uploading the answer keys and the audio files onto the MTC's computer program was extremely time consuming; it required hundreds of hours of work by two programmers at the MTC. More information regarding this process will be discussed in the limitations section.

The final product for each CPR unit contained two audio files (one male speaker and one female speaker) and five versions of the same passage (one with only the text of the passage, one marked with pausing, one marked with stress, one marked with sentence-final intonation, and one marked with all three features).

Assessment Measures for the Project

In order to obtain evaluation data from the ESL missionaries on the use of the CPR units, a pre- and post-test was created along with pre- and post-surveys. The same instrument was used for the pre- and the post-test. It was determined by the research team that the same instrument could be used as the participants did not have access to the ascribed tasks other than during the testing period. This test was taken on a computer and contained a warm-up, a controlled-production task, a perception task, and a spontaneous speaking task. The surveys were also accessed on the computer and were designed to capture the missionaries' feelings about using the

CPR units. The development of each of these assessments, which utilized work done by Mueller (2010), will be discussed later in more detail.

In 2010, Mueller created some initial pre- and post-tests aimed at gaining preliminary feedback regarding the missionaries' experience during a three-week period in which 15 ESL missionaries used the CPR units. After reviewing and evaluating her tests, new assessments were created for the current project that incorporated some of the tasks that appeared in Mueller's (2010) version. These new assessments were created in an effort to simplify the assessments and the amount of time required by the missionaries, as suggested by Mueller (2010). Some changes included simplifying and shortening the instructions and providing more examples. The story-telling task that appeared in Mueller's (2010) version was eliminated in an effort to increase the validity of the assessment. Since the CPR units themselves did not contain anything resembling a picture-word task, it was decided that this task should be removed. The revised assessments included a warm-up (where participants answered simple questions about where they would serve, what they like to do for fun, and how long they have studied English), an oral reading task (where participants were recorded reading a paragraph out loud), an awareness task (where participants listened to a passage multiple times to mark stress, sentence-final pitch, and pausing), and a production task that served as a wind down (where participants asked questions they would ask an investigator in a role-play situation). Although the participants completed all of the tasks, only the oral reading task and the perception task were scored. More information concerning the steps that were taken to score these two tasks will be described in the *Process* section.

The purpose of the pre- and post-assessments were to determine what, if any, changes occurred in the missionaries' perception and production of the target suprasegmental features after using the CPR units for 3 to 6 weeks. Because the main purpose of the current study was not to test the validity of the testing instrument, the assessments used to assess the missionaries both before and after using the CPR units were exactly the same. This procedure helped ensure that any differences that occurred on the two tests were based on the participants' ability and not because of the testing instrument. The pre-test, post-test research design was also used to measure individual progress over the specified time rather than incorporating experimental and control groups. Given that all missionaries are required to participate in the same language training, a true experimental study utilizing a control group would not have been possible in this language-learning context.

In addition to the two assessments, Mueller (2010) also created two surveys. The pre-test survey was designed primarily to gather information concerning the participants' backgrounds, levels of motivation, and goals for learning English. Some alterations made to Mueller's (2010) version included simplifying some of the responses for various items. For example, the five-point Likert scale ("strongly agree", "agree", "neither agree nor disagree", "disagree", and "strongly disagree") was changed to a two-point Likert scale ("agree" or "disagree"). Alterations to Mueller's (2010) post-test survey included simplifying the language of various items and eliminating the "neither agree nor disagree" choice on the Likert scale. All changes were made in an effort to make the survey simpler and more accessible to an ESL audience (see Appendix B and Appendix C).

Project Implementation

As an ESL teacher at the MTC, the researcher was able to work directly with staff from the Research and Development Office at the MTC to organize the implementation of the self-directed language study program and delivery of the tasks in Assessment Tools, the MTC's program for computer-assisted learning.

To evaluate the effectiveness of the project implementation, there were three guiding questions:

1. What was the effectiveness of the CPRs on the missionaries' perception skills?
2. What was the effectiveness of the CPRs on the missionaries' production skills?
3. What was the missionaries' feedback regarding the use of the materials?

Knowing the extent to which CPR use was effective would help guide future development and revisions of the project. The following section will provide more information regarding the actual participants, the schedule they followed, and the process they underwent to complete the evaluation tasks, surveys, and CPR units.

Participants

The missionaries who participated in this study were both male and female and came from a variety of L1 backgrounds. Table 1 provides some demographics for the group of participants. A total of 28 missionaries completed the pre-test and survey; however, due to unforeseen early departures from the MTC, incomplete assessments, and difficulties with the Assessment Tools program where participant data was not saved, the results from only 13 missionaries were available for analysis. Of these 13 participants, there were 5 males and 8 females. Their native languages were Spanish (*n* = 4), Korean (*n* = 2), Cantonese (*n* = 1), Italian (*n* = 1), Japanese (*n* = 1), Mandarin (*n* = 1), Tagalog (*n* = 1), Thai (*n* = 1), and Tongan (*n* = 1).

Table 1

Demographics of Participants

Missionary	Gender	Age	Country	L1
1	F	19	Chile	Spanish
2	M	20	Hong Kong	Cantonese
3	M	23	USA	Spanish
4	F	19	Japan	Japanese
5	M	18	Peru	Spanish
6	M	20	South Korea	Korean
7	F	19	Italy	Italian
8	F	20	Tonga	Tongan
9	F	21	Mexico	Spanish
10	M	23	Taiwan	Mandarin
11	F	21	Philippines	Tagalog/Cebuano
12	F	19	South Korea	Korean
13	F	23	Thailand	Thai

When asked to identify their three main goals for learning English, the most frequent answers of the 13 participants were: to be a better missionary (77%), to speak English clearly and naturally (77%), and to speak so others can understand them more easily than they can now (54%). Table 2 describes the goals that were identified, along with the number of missionaries that chose each one.

Table 2

ESL Missionaries' Stated Goals for Learning English

Goal	N	Number of Responses	Percentage
To be a better missionary	13	10	77%
To speak English clearly and naturally	13	10	77%
To speak so others can understand me more easily than they can now	13	7	54%
To gain confidence in new speaking situations	13	5	38%
To learn to fix misunderstandings when I'm in a conversation	13	5	38%
To understand others more clearly	13	4	31%
To have no accent and sound like a native speaker	13	3	23%

All of the missionaries who participated in this study were placed in the MTC's ESL program. Upon arrival at the MTC, all missionaries received an initial face-to-face interview with a language evaluation coordinator. Following a brief two to five minute conversation, the coordinator then placed the missionary in an assigned class depending on the evaluator's perception of the missionary's level of pronunciation, fluency, grammar, and vocabulary. The missionary's language level was based on a 7-point scale. Missionaries who received a score of 0-4 were placed in ESL and stayed in the MTC for approximately 6-8 weeks. Missionaries who received a score of 5-7 were placed in the Advanced Level Program (ADL) and stayed in the MTC for 2 weeks. The missionaries who participated in the current project were all placed in the beginning ESL program. Their English levels ranged from 2 to 4.

This evaluation system is unique to the MTC and does not correspond to standardized oral assessment measures found in other ESP settings. Therefore, it was decided that the missionaries' language levels as determined by the MTC would not be taken into account in the evaluation process.

Due to the continual coming and going of missionaries at the MTC, selecting a specific beginning and ending time period for the implementation was difficult. Because MTC administrative projections showed small groups of ESL missionaries coming to the MTC during the 2-3 month time period in which the study was scheduled to take place (0-2 missionaries were projected to arrive each week), the researcher decided to include in the study missionaries who had already begun their MTC service. Thus missionaries who had arrived at the MTC several weeks before the initial start date participated in the study for 3-4 weeks until they left the MTC. Those who arrived after the initial start date were able to use the units for 6 weeks, or for the entire period of their MTC training.

Some of the participants were able to complete all 10 CPR units while others did not. Those who used the materials for a longer period of time did not necessarily complete more units. A breakdown of the number of weeks each missionary participated, along with the number of completed CPRs and the number of minutes spent using the CPRs each week is given in Table 3. It should be noted that much of the data tracking Missionaries 10, 11, 12, and 13 were not saved on the computer program due to a malfunction in Assessment Tools, and therefore the amount of time these participants spent working on the CPRs is unknown.

Table 3

Number of Weeks Spent Using the Materials and Number of CPRs Completed by Missionary

Participant	Number of Weeks of MTC Language Treatment	Number of Completed CPRs	Number of Minutes Per Week Spent Working on CPRs
1	3	10	37.86
2	4	10	44.03
3	6	8	22.09
4	4	10	48.86
5	3	5	25.53
6	4	10	42.26
7	3	7	41.07
8	4	10	62.90
9	3	5	1.14
10	6	6	N/A
11	6	10	N/A
12	6	8	N/A
13	6	5	N/A

Schedule

As stated previously, no matter when the ESL missionary entered the MTC, he or she followed the same format for completing the CPR tasks. In week one, the missionaries completed a pre-test designed to measure their awareness and use of suprasegmentals. After completing the pre-test, they then completed an initial survey designed to capture information about their language background, level of motivation, and goals for learning English, among other things (see Appendix B). Once the missionaries had completed the pre-test and survey, they attended a 20 minute classroom presentation that included a basic introduction to pronunciation and using suprasegmentals (see Appendix D for an outline of the instruction). The presentation also included a quick overview of the self-directed use of the CPR units as they were to be used during the missionaries' computer lab time. In this setting, missionaries were further instructed on when to use the tools (during their daily language study) and the amount of time required to complete the units (approximately 10-15 minutes each day). After attending this presentation, the missionaries then began working on the units during their scheduled time in the computer lab.

In the lab setting, the missionaries' use of the CPR units was self-regulated, meaning that the amount of time each missionary spent in the lab working on the CPR tasks and the number of units they completed were determined by the individual missionary. Because the use of the CPR tasks was voluntary, the missionaries could only be encouraged to make use of these materials. Table 4 shows the schedule the missionaries were encouraged to follow in order to complete the initial and post-assessments, pre-and post-test surveys, and all 10 units before they left the MTC. The schedule was designed for missionaries to complete the units over a six-week period since that was the average amount of time that most ESL missionaries are in the MTC. However, as noted before, those who participated in the study were not always in the MTC for six weeks. The missionaries were encouraged to complete one CPR unit before moving onto the next. Because some participants completed units more quickly than others did, this schedule was not followed exactly. After completing the pre-test, pre-test survey, and classroom presentation, missionaries used the CPR units at their own pace for however many weeks they remained in the MTC. At the end of the missionaries’ last week in the MTC, they were taken to the computer lab where they completed the final post-test and post-test survey.

Table 4

Planned Schedule for Completing the MTC CPR Study

Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1			*Missionaries arrive*		Pre-test	Survey
2	Introduction	X[b]	Scripture 1	Scripture 2	Scripture 3	Scripture 4
3	Scripture 4	X	Testimony 1	Testimony 1	Testimony 2	Testimony 2
4	Testimony 3	X	Testimony 3	Testimony 3	Testimony 4	Testimony 4
5	Testimony 4	X	Testimony 5	Testimony 5	Testimony 5	Testimony 6
6	Testimony 6	X	Testimony 6	X	Post-test	Survey
7	*Missionaries leave*					

[b] The “X” represents days when missionaries did not work on the CPRs due to other scheduled activities

Process

This study required that the missionaries comply with two requirements in order to successfully complete each CPR unit. At the completion of each unit, the missionaries had to submit two things: a paper worksheet and an electronic recording. The paper worksheet had the reading passage printed on it. The missionaries used this copy to mark the features they heard as they completed the listening portion for each CPR unit. The electronic recording was a recording that each missionary made reading the passage out loud. This segment comprised the speaking practice portion of each CPR unit. Each day, the missionaries put their paper worksheets in a plastic bin that contained file folders with each of the different CPR units. The researcher collected these papers at the end of their visit to the computer lab each day and kept a record of which missionaries completed which units. While the recordings made by the missionaries were saved electronically, access to these recordings was not given to the researcher until after the study had been completed. Because of this, feedback was not provided to missionaries during the study.

In order to quantitatively measure whether or not each participant improved between the pre- and post-assessments, the researcher used the same perception and controlled production tasks for the time 1 and time 2 assessments that had been previously tested by Tanner and Landon (2009). Rubrics for scoring the participants' performance were created by having 10 native English speakers listen to the perception task and mark the location of pauses, stressed words, and the direction (up or down) for sentence-final intonation (p. 56). The same 10 native speakers also read the controlled production task out loud. Once the speech samples were recorded, two expert judges independently evaluated the passages for the three suprasegmental features being studied and created an answer key based on the pooled responses of the native speakers (p. 56). (For further clarification, see Tanner and Landon, 2009, p. 56.) With the rubrics, the perception and production tasks were then independently scored for each participant by two expert raters by evaluating the subject's ability to produce and hear the location of the three prosodic features of pausing, word stress, and sentence final intonation in the texts. Errors for pausing and stress were categorized as missing (where the participant should have should have included the feature but did not) or incorrect (where the participant included the feature but should not have). The number of missing and incorrect errors was totaled providing an overall score for each feature. Errors for intonation were simply identified by whether or not the individual used the appropriate type of sentence-final pitch (rising or falling). Each participant was given a total of three scores for the number of errors they produced in pausing, stress, and sentence-final pitch. These scores were used to look for progress made from the pre- to the post-test.

In order to limit the subjectivity of the scoring process, two trained raters scored each portion of the speaking task. After identifying errors on their own, the two raters came together to compare their findings. Before resolving differences, they compared their scores and found that the average inter-rater reliability scores for the two features on the pre-test were: stress, .91 and pitch, .97 while the average inter-rater reliability scores for the two features on the post-test were: stress, .92 and pitch, .97. After calculating these scores, the raters worked together to resolve all differences. Each time there was a discrepancy (for example, one rater believed a certain syllable was stressed while the other did not), the two raters listened together to the specific feature being evaluated and resolved the issue. Once again, errors in pausing were identified as silences that lasted for 250 milliseconds or more as identified by the program Praat, thus eliminating the need for raters.

In addition to completing the CPRs over the course of their stay in the MTC, and after missionaries completed the post-test perception and production task, missionaries also completed a post-survey administered through Assessment Tools. This survey provided valuable information concerning their views of the CPRs. Like Mueller's post-test survey, the questions included in this questionnaire asked missionaries how beneficial they felt the CPRs were. They also rated their use of the CPRs in connection with their perceived changes in language ability and provided feedback concerning changes they would make on the practice tasks that could be helpful for future researchers.

Results

This section will discuss the results that were found after the missionaries used the CPR units for a period of 3-6 weeks and participated in the pre- and post-tests and surveys. Once again, research questions guided this part of the project by looking at the effectiveness of the CPRs on the missionaries' perception and production skills as well as the missionaries' feedback about the materials themselves.

The first two research questions used a similar methodology. The effectiveness of the materials was measured by looking at the difference in the number of errors that the participants made on the pre- and the post-test in both the perception and the production tasks. The errors were identified as pausing, stress, or intonation and were analyzed individually. The descriptive statistics were calculated first followed by an ANOVA in an effort to see what inferences could be made about the generalizability of the effectiveness of the materials with other groups. The third research question examined the results of the surveys administered with the pre- and post-test.

Perception Tasks

As noted earlier, this section aims to explore the missionaries' ability to correctly perceive, or to listen to, the location of prosodic features in a piece of discourse following an extended practice period of 3-6 weeks. Figure 2, a box-and-whiskers plot, illustrates the number of errors made on the pre- and post-test for each prosodic feature. This type of plot is helpful because it provides a visual of central tendency and distributional shape. The thick horizontal line in each box represents the median. As the figure illustrates, the number of pausing errors decreased from the pre-test ($M = 4.77$) to the post-test ($M = 1.77$). The number of sentence-final pitch errors was reduced only slightly from the pre-test ($M = 2.77$) to the post-test ($M = 1.15$) as the missionaries were already able to perceive the direction of sentence-final pitch with a high degree of accuracy. By far the greatest change occurred in the number of word stress errors made on the pre-test ($M = 21.23$) versus the post-test ($M = 11.31$). In addition to showing the median scores, the whiskers on each box plot show the range of errors made for each feature, with each whisker representing the highest and lowest number of errors students made. (Any points labeled outside of the whiskers are outliers.) The edges of each box are the upper and lower quartile points, and represent the median of the lower half of the numbers and the median of the upper half of the numbers plotted. These points allow readers to see that the plots do not have a normal distribution. As Figure 2 illustrates, it is clear that the ranges of the number of errors made for each prosodic feature decreased from the pre- to the post-test, especially with stress. This means that after the treatment period, the missionaries not only made fewer stress errors on the post-test, but the overall range of errors also greatly decreased.

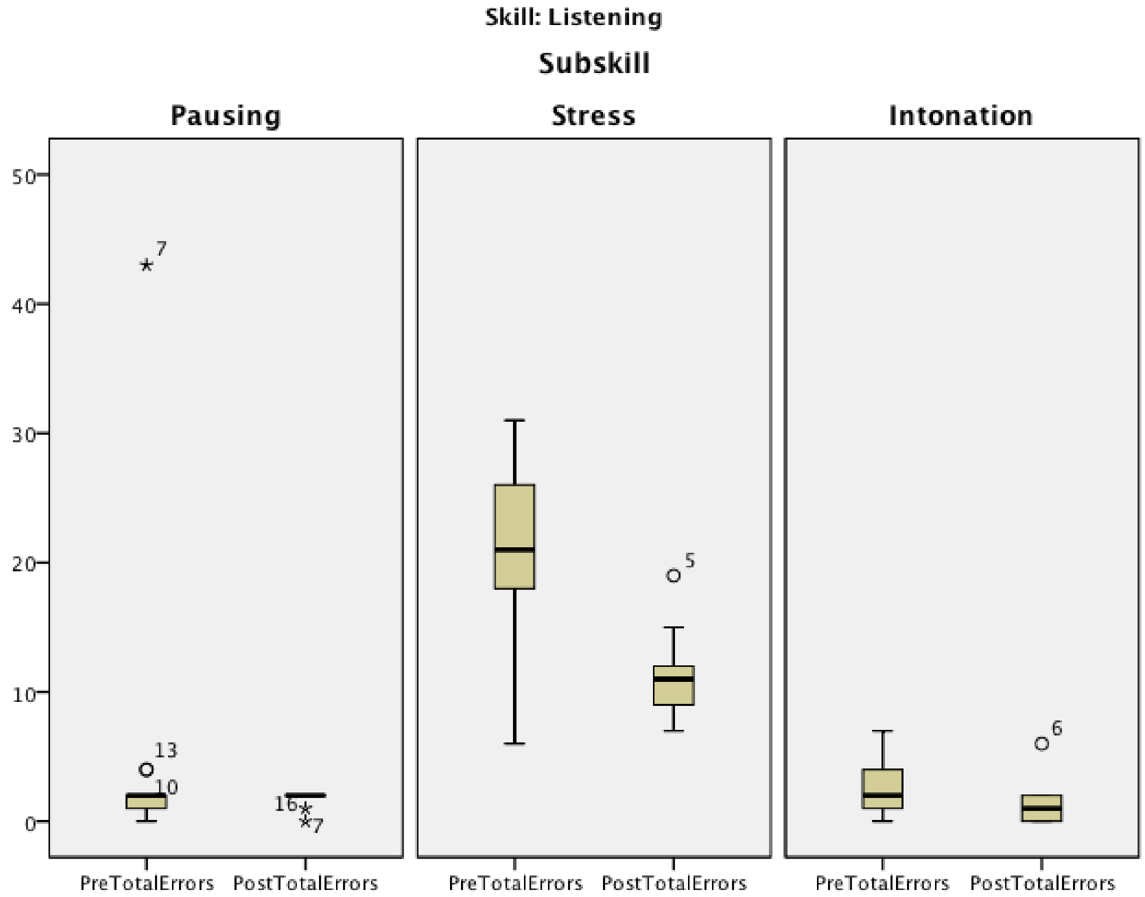


Figure 2. Box-plot: Listening

To look at the generalizability of the findings, a repeated measures ANOVA found that there was a difference between the pre- and post-test scores (F = 12.5, *p* = .001, df = 1) for all combined prosodic features of the perception (listening) task. To see the extent to which individual features reduced the number of errors participants made in the perception task from time 1 to time 2, effect sizes were calculated for each of the three features: pausing, word stress, and sentence-final intonation (see Table 5). Effect sizes compare two variables and state how strongly they correlate. The effect size is calculated by finding the difference between the two means (from the pre- and post-test) and dividing it by the standard deviation of either group. Cohen (1988) roughly classified effect sizes of $d = 0.2$ as small, $d = 0.5$ as medium, and $d = 0.8$ as large (Cohen, 1988). In the current study, Cohen's effect size value for stress ($d = 1.74$) and intonation ($d = 0.83$) suggest a large effect size for both features (Cohen, 1988). Cohen's effect size value for pausing ($d = 0.37$) suggests a small-medium effect size (Cohen, 1988). The outlier in the pre-test of the pausing task (see Figure 2) could have actually skewed the results to make the effect size even smaller than these calculations suggest, perhaps even to the point that there was no effect at all. It is possible that this apparent lack of improvement in pausing was due to the fact that there were not as many pausing locations as there were locations of word-stress. Another explanation could be that the missionaries were already quite good at identifying pauses when they took the pre-test. Whether or not there was an actual effect for pausing, it is obvious that the number of gains made in the number of word-stress errors from the pre- to the post-test was the most significant. Stress had the largest effect size, meaning that on average, the participants were able to greatly increase their ability to recognize where word-stress occurred in the passage.

Table 5

Listening Task: Descriptive Statistics and 95% Confidence Interval

		Pre-Test				**Post-Test**				
		Errors		**95% CI**		**Errors**		**95% CI**		
Feature	**N**	**Mean**	**SD**	**Lower Bound**	**Upper Bound**	**Mean**	**SD**	**Lower Bound**	**Upper Bound**	**Effect Size**
Pausing	9	4.77	11.56	-2.22	11.76	1.77	0.60	1.41	2.13	0.37
Stress	9	21.23	7.37	16.78	25.69	11.31	3.30	9.31	13.30	1.74
Intonation	9	2.77	2.20	1.44	4.10	1.15	1.68	0.14	2.17	0.83

The 95% confidence intervals give further insight into what inferences can be made about the generalizability of the effectiveness of the materials with other groups (see Figure 3). Confidence intervals describe the range that most likely contains the unknown population parameter. In other words, knowing the confidence interval is useful because it can help researchers better understand how effective CPRs could be for other populations. One advantage of using the 95% confidence interval is that possible outliers do not impact the results as heavily as they do when running a repeated measures ANOVA. The results from the 95% confidence interval make it very apparent that there is a significant difference for stress and it is also likely that there is a difference for intonation. It is a little more difficult to interpret the results from pausing. The wide range of pausing errors on the pre-test makes it difficult to know what the actual mean might be; it could be higher or lower than the mean number of pausing errors on the post-test. Figure 3 shows these numbers.

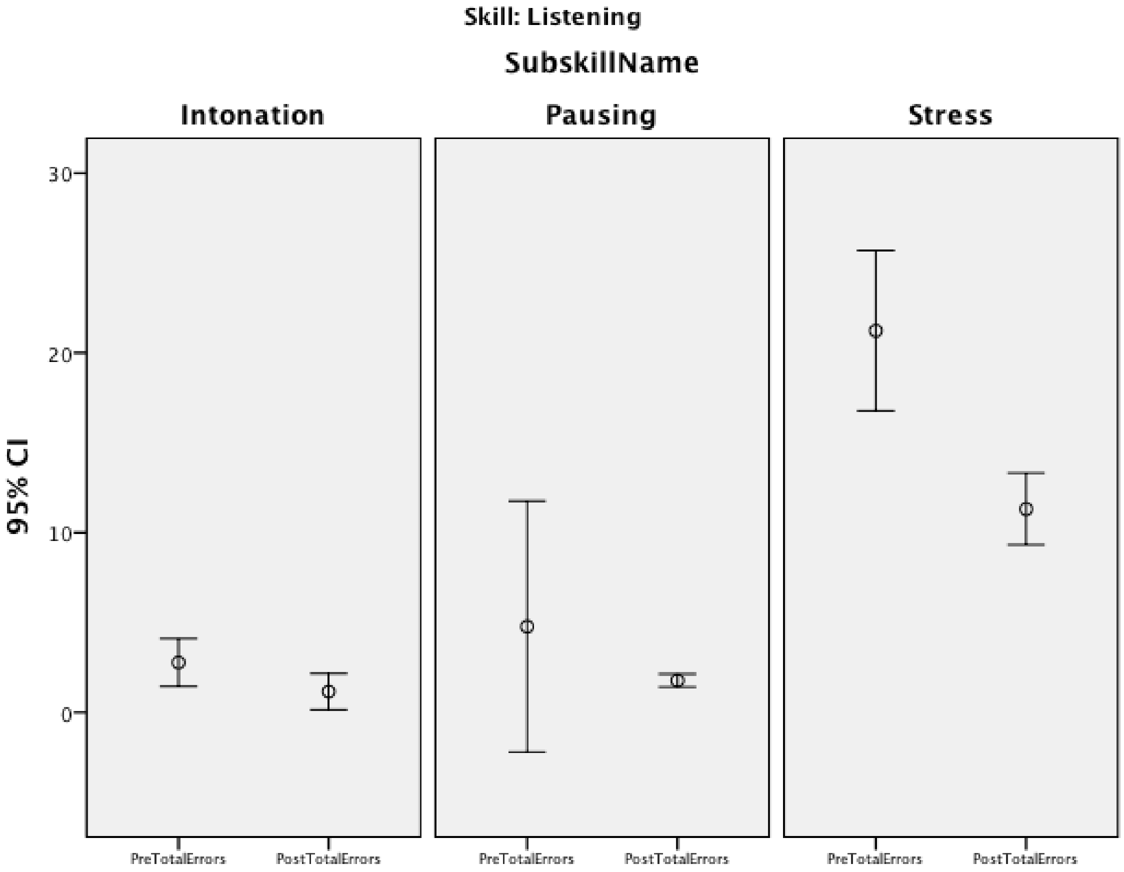


Figure 3. 95% Confidence interval: Listening

Summary

The results from the perception task indicate that the missionaries improved in their ability to correctly perceive the three suprasegmental features from the pre- to the post-test. They made the most gains identifying stress, but also improved in their ability to recognize correct intonation patterns. The missionaries made the smallest gains identifying locations of pausing. The results obtained from the 95% confidence interval showed that the mean number of errors was reduced significantly for stress.

Production Tasks

Similar steps were taken in order to evaluate the effectiveness of the materials on the missionaries' production skills. Figure 4 illustrates the number of errors made on the pre- and post-test for pausing, stress, and intonation for the production task. As shown, the number of pausing errors decreased from the pre-test (*M* = 11.85) to the post-test (*M* = 9.08), as did the number of word stress errors from the pre-test (*M* = 10.69) to the post-test (*M* = 8.15). Interestingly enough, the number of intonation errors actually increased from the pre-test (*M* = 1.38) to the post-test (*M* = 2.08).

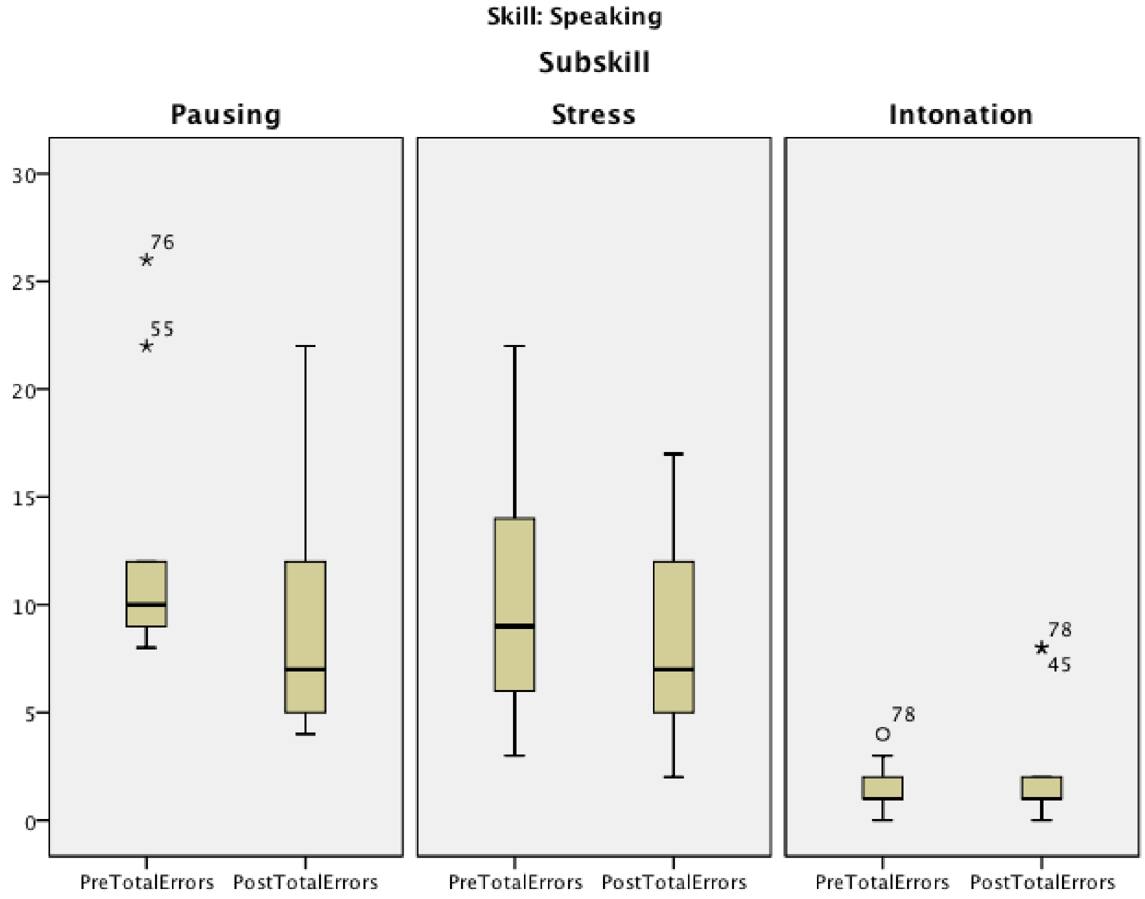


Figure 4. Box-plot: Speaking

Results from a repeated measures ANOVA indicate that there was a smaller difference between the pre- and post-test (F = 7.066, *p* = .012, df = 1) for all combined features of the production task than the difference found in the perception task. One explanation for this could be that although the missionaries were able to improve in their ability to perceive prosodic features in a short period of time, it may take more than three to six weeks for ESL learners to make significant gains in their ability to actually produce these elements in their speech. Cohen's effect size value for pausing (*d* = 0.51) and stress (*d* = 0.47) suggest a medium effect size while the effect size value for intonation was small (*d* = 0.33) (Cohen, 1988). It is interesting to note that the number of intonation errors that the missionaries made on the pre-test was already quite low. Because there were so few locations for sentence-final pitch, the results on the pre- and the post-test were very similar. Table 6 shows these results.

Table 6

Speaking Task: Descriptive Statistics and 95% Confidence Interval

		Pre-Test				**Post-Test**				
		Errors		**95% CI**		**Errors**		**95% CI**		
Feature	**N**	**Mean**	**SD**	**Lower Bound**	**Upper Bound**	**Mean**	**SD**	**Lower Bound**	**Upper Bound**	**Effect Size**
Pausing	9	11.85	5.63	8.45	15.25	9.08	5.22	5.92	12.23	0.51
Stress	9	10.69	5.92	7.11	14.27	8.15	4.83	5.24	11.07	0.47
Intonation	9	1.38	1.19	0.66	2.11	2.08	2.72	0.43	3.72	-0.33

Figure 5 reports the 95% confidence intervals, which can provide more information regarding the generalizability of the effectiveness of the materials. The wide ranges for each of these features on the production task make it difficult to know exactly where the mean is. However, it appears that for stress and pausing, the number of errors decreased from the pre-test to the post-test. On the other hand, for intonation, the number of errors actually increased from the pre-test to the post-test.

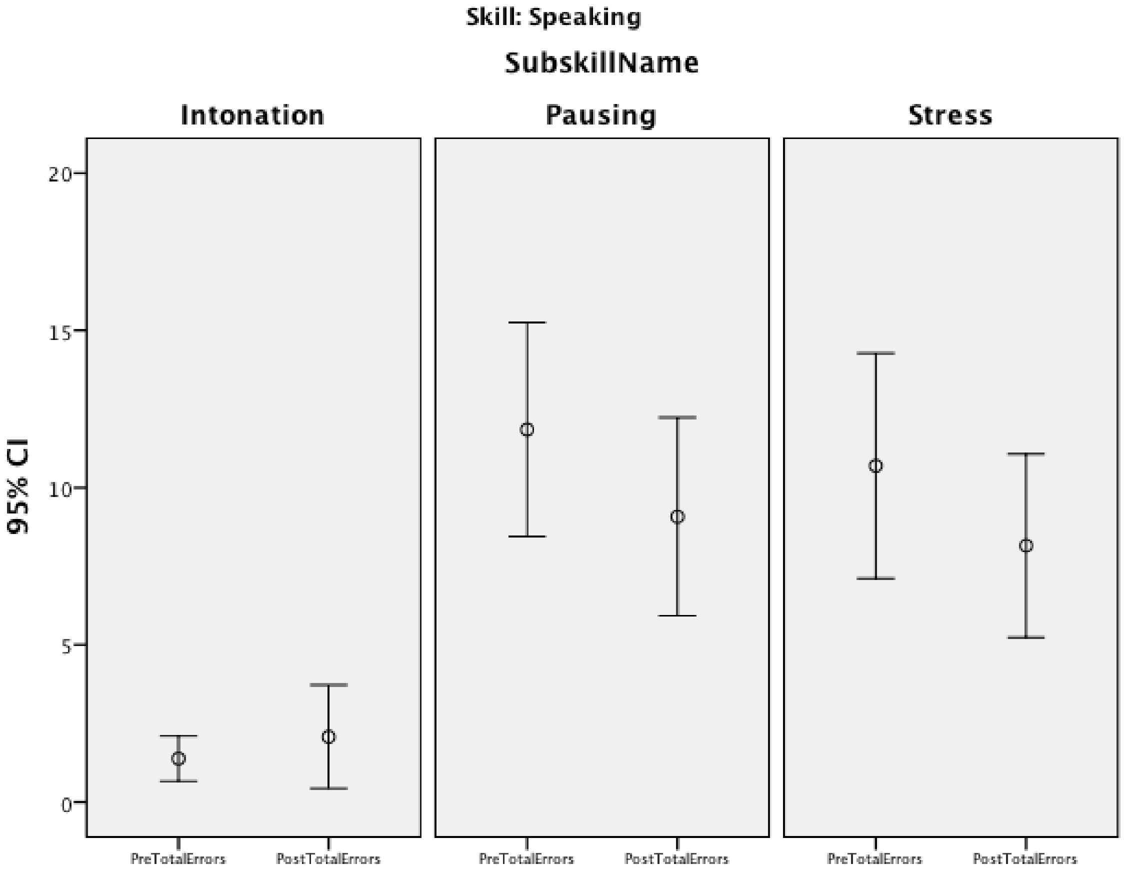


Figure 5. 95% Confidence interval: Speaking

Summary

The progress that the missionaries made in their ability to correctly produce the three suprasegmental features did not improve as drastically as their ability to correctly perceive them. As mentioned previously, this could be due in large part to the time it takes language learners to start perceiving things in the new language versus the time it takes to actually start producing those things (Dickerson, 1994; Landon, 2007). While using the materials for three to six weeks may have been sufficient to help most of the missionaries begin to recognize the three prosodic features in a NS's speech, it may not be enough time to help most missionaries in their accurate use of those features in their own speech. Nevertheless, the missionaries' speech still started to improve as a whole as they still made progress in their production of correct pausing and stress. Perhaps more time is needed to see if missionaries can also improve in their production of correct intonation patterns.

Survey Results

After completing the post-test, all participants completed a survey asking them questions regarding their experience using the CPRs. The questions on the survey asked them how much time they spent using the materials as well as how many CPRs they had completed. The questions also asked them about their progress and perceived benefits of using the practice tasks. The final questions asked the missionaries about their thoughts on how to improve the practices. Although 13 participants completed the post-test survey, only nine of their responses saved on the computer program. The following section discusses the feedback gained from those nine responses.

Time Spent

According to the nine survey responses completed, participants spent between 2 and 5 days each week working on the practice tasks. Two missionaries reported spending 2 days each week, one reported spending 3 days each week, five reported spending 4 days each week, and one reported spending 5 days each week. The missionaries also reported the amount of time they spent in the computer lab each day. On the survey, missionaries chose between the following options: less than 5 minutes (n = 0), 5-10 minutes (n = 2), 10-15 minutes (n = 3), 15-30 minutes (n = 4), and more than 30 minutes (n = 0). It is important to note that because the missionaries themselves reported these numbers, they may not be completely accurate. Table 7 describes the missionaries' perception of the amount of time they spent working on the CPRs in the computer lab. The table also includes each missionary's overall score, meaning the difference between the number of errors each one made on the pre-test and the post-test. Although this score will be discussed in more detail later on, it should be noted that those who have a higher score made greater improvements than those who have a lower score. Missionary 9, whose score was negative, was the only participant who made more errors on the post-test than on the pre-test.

Table 7

Amount of Lab Time

Missionary	Overall Score	Number of Completed CPRs	Self-Estimated Number of Lab Visits Each Week	Self-Estimated Number of Lab Minutes Each Day	Actual Number of Lab Minutes Each Week	Actual Number of Lab Minutes Each Day
1	51	10	4	5-10	37.86	9.47
2	32	10	4	15-30	44.03	11.01
3	27	8	2	15-30	22.09	11.05
4	23	10	3	10-15	48.86	16.29
5	20	5	4	5-10	25.53	6.38
6	14	10	4	15-30	42.26	10.57
7	11	7	5	10-15	41.07	8.21
8	1	10	4	15-30	62.90	15.73
9	-10	5	2	10-15	1.14	0.57

Because each missionary spent a different number of total weeks working on the practice units, it was important to calculate the amount of time participants spent using the materials each week. This was recorded according to a stopwatch on the computer that automatically recorded the amount of time missionaries were logged onto the program. The amount of time that missionaries spent each week was then divided by the number of days spent in the lab, as reported by the missionaries. This was done in an effort to compare the actual time spent by the missionaries as calculated by the computer versus the amount of time spent as reported by the participants. It should be noted, however, that the amount of time spent as recorded by the computer might not have been accurate. For example, although Table 7 shows Missionary 9 spending approximately one minute in the lab each week, she completed 5 CPRs during the three weeks that she participated in the study. Thus, it was nearly impossible that she only spent one minute total working on the CPR units. There were several issues with Assessment Tools that occurred during the implementation of the project, and this was a major one.

Reflections about the Experience

A post-survey was administered in order to gather qualitative data from the missionaries regarding the degree to which how much they felt they improved in their pronunciation after using the CPR materials. They were asked to respond to several questions using a Likert scale where 1 = “strongly disagree”, 2 = “disagree”, 3 = “neither agree nor disagree”, 4 = “agree”, and 5 = “strongly agree”. In general, their feedback was quite positive. The missionaries felt most strongly that they could understand English conversations more easily now (M = 4.56). The missionaries also felt people could now understand what they said more easily (M = 4.44) and that by doing the tasks, they learned a lot about English pronunciation (M = 4.33) and how to speak more easily and correctly in English (M = 4.33). Overall, the missionaries felt like their English pronunciation improved (M = 4.33) and that because of the CPR tasks, it was now easier for them to see their pronunciation errors (M = 4.22). Finally, the missionaries felt that they now have more confidence when they speak than they did before doing the practice tasks (M = 4.22). Table 8 shows these statements.

Table 8

Statements about the Missionaries' Perceived Progress

Statement	M (n = 9)	SD (n = 9)
By doing the pronunciation practices, I learned a lot about English pronunciation.	4.33	.5
By doing the pronunciation practices, I learned how to speak more easily and correctly in English.	4.33	1
Because of the pronunciation readings, it is easier to see my pronunciation errors.	4.22	.67
I feel that people can now understand what I say more easily.	4.44	.73
I have more confidence when I speak English than I did before I did the practices.	4.22	.67
I can understand English conversations more easily now.	4.56	.53
I think that my English pronunciation has improved.	4.33	.5

When asked to evaluate statements based on the pronunciation materials themselves, most answers were again quite positive. Those who participated felt that the practices were a good use of time (*M* = 4.44, *SD* = .53), they learned something they did not know before (*M* = 4.44, *SD* = .53) and that the oral reading tasks helped them with their pronunciation (*M* = 4.44, *SD* = .53). While still positive, they also felt the readings were easy to use (*M* = 4.22, *SD* = .97) and that the directions were easy to understand and follow (*M* = 4.22, *SD* = .97). The statement that received the lowest score was that the practices were fun to do (*M* = 3.67, *SD* = 1). (See Table 9.)

Table 9

Statements about the CPRs

Statement	M (n = 9)	SD (n = 9)
The pronunciation readings were easy to use.	4.22	.97
The pronunciation practices were fun to do.	3.67	1
The pronunciation practices were a good use of my time.	4.44	.53
The directions in the practices were easy to understand and follow.	4.22	.97
I learned something that I didn't already know.	4.44	.53
The pronunciation readings helped me with my pronunciation.	4.44	.53

Suggestions for Future Practice

Feedback received from the missionaries who participated in Mueller's (2010) study at the MTC indicated that they wanted more CPR practice tasks based on testimonies. In the current study, the post-test survey for the current project also asked participants if they would like more practice tasks based on scriptures and/or testimonies. All of the participants indicated that they agreed or strongly agreed that they would like more practice tasks based on scriptures. All but one of the participants indicated that they agreed or strongly agreed that they would like more practices based on testimonies. This could mean that the missionaries are eager to have more practice tasks available to them that are based on anything that could help them in their missionary work. In addition to creating more tasks based on these two types of discourse, it might be helpful to create other tasks centered solely on the text based on the lessons in *Preach My Gospel* as well as the supplementary pamphlets the missionaries use to teach lessons. Although the testimony tasks created for the current project used *Preach My Gospel*, the text for each one was also based heavily on the oral testimonies of a small number of NSs. Because the text in *Preach My Gospel* and the supplementary pamphlets use common vocabulary and phrasing that is more typical of today's spoken English than scripture passages, it might be more beneficial for additional CPR tasks to have this type of discourse. That way, missionaries would be using tasks that could help them improve their missionary teaching, but also could help them in their everyday conversations about things unrelated to gospel teaching. Providing more practice tasks from a variety of related but current sources could help them with the overall goal of becoming more intelligible.

The final question on the post-test survey asked missionaries how they would make the practice tasks better. Their responses, listed in Table 10, were somewhat difficult to organize into meaningful and helpful feedback. Two missionaries felt satisfied with the current project (Missionaries 1 and 4) while another (Missionary 2) only suggested looking at other responses for feedback. One missionary (Missionary 3) suggested providing some sort of a reference for commonly mispronounced words, which was not the focus of the current project, but is perhaps something the missionaries would find useful. Two of the participants (Missionaries 6 and 8) gave suggestions for things they could do themselves to make the experience more beneficial. These included trying to make the situation feel more realistic and practicing more often. Two others (Missionaries 7 and 9) did not fully express themselves so it is hard to know what they meant by their responses. It appeared that one missionary (Missionary 5) is interested in having more CPRs based on scriptures and testimonies.

Table 10

How would you make the practices better?

Missionary	Response
1	For me its [*sic*] ok now
2	Improve it according to the evaluate reports from Elders & Sisters.
3	I would put a reference of how to pronounce the words that are the most commonly difficult to pronounce.
4	I think it's good.
5	I would like practice the pronunciation with more scriptures to memorized [*sic*] and experiences of members or testimonies.
6	I thought about situation and tried to imagine real investigator. I could more concentrate on practicing and feel it is important in my English skills. Furthermore, if I sleep then I didn't do it.
7	Speaking more.
8	Practice every time when we have time for pronunciation practices and read the Book of Mormon in English.
9	Yes.

Overall, the responses to this question do not provide a clear idea of how missionaries really feel the materials could be improved. This is most likely due to their limited English proficiency or not fully understanding the question itself. Future researchers could consider asking these same types of questions orally, rather than having the missionaries respond using the computer. That way, if there are any misunderstandings or if the researchers want to use follow-up questions in order to get more meaningful feedback, they will be able to do so.

Summary

The feedback obtained from the surveys gave greater insights into the participants themselves and their perceptions of the materials. These results were also helpful in suggesting directions for future research.

Overall, the missionaries' views of the materials were quite positive. As a group, they spent between 2 and 5 days each week and worked on the practice tasks for approximately 5-20 minutes each time. Most of the participants felt that they could understand English conversations and that others could understand their conversations as well. Most believed the materials helped them with their pronunciation. As future researchers conduct more interviews, perhaps orally, they may be able to better understand how missionaries feel the materials could be improved.

Profile of Top Performers

An attempt was made with the response data to determine whether or not there were certain characteristics that described those missionaries who made the most gains by significantly lowering the number of errors they made from the pre-test to the post-test. Nearly all of the missionaries improved during the course of the study; however, in an effort to separate them, the researchers divided them into three separate groups (see Table 11). The missionaries ranked 1, 2, and 3 were considered to be the top performers. The missionaries ranked 4, 5, and 6 were in the middle, and those ranked 7, 8, and 9 were at the bottom.

These rankings were figured by calculating the number of errors each missionary made on the pre- and post-test for the perception task and the production task. These scores were then combined for a single overall score. For example, on the pre-test, Missionary 1 made 43 pausing errors, 6 stress errors, and 7 intonation errors on the perception task. On the post-test, the same missionary made 1 pausing error, 12 stress errors, and 0 intonation errors for that same task. These numbers were then combined to calculate the difference between the pre- and the post-test for each feature. Thus Missionary 1 received a score of 42 (43-1 = 42) for pausing, -6 (6-12 = -6), for stress and 7 (7-0 = 7) for intonation. These revised scores for each feature were then combined to give each missionary an overall score. Missionary 1's score was thus calculated to be 43 (42-6+7 = 43). The score for the production task was calculated in the same way. Missionary 1's production total was 8. After calculating these scores for each task, the two numbers were then combined to give each missionary a combined score. Missionary 1's overall score was 51 (43+8 = 51). On the other hand, Missionary 9, whose scores for both the perception and the production tasks were negative, made more errors on the post-test than on the pre-test. This is the reason that her scores were negative. These combined scores were then used to determine the missionaries' rankings as shown below.

Table 11

Rankings

Missionary Number	Perception Total	Production Total	Overall Score
1	43	8	51
2	20	12	32
3	26	1	27
4	11	12	23
5	7	13	20
6	10	4	14
7	6	5	11
8	1	0	1
9	-3	-7	-10

In an effort to explore what characteristics or factors could have contributed to these gains, the results from the surveys were used to compile a list of items that may be relevant to future researchers as well as teachers and missionaries. Although the top performers shared several things in common that will be discussed here, it does not mean that those who did not make as much gain did not also share some of these qualities. Additional studies using CPRs and a larger number of participants would reinforce these preliminary findings suggesting those characteristics of top performing missionaries.

After analyzing the results from the surveys, it was determined that those who made the greatest gains in using the CPR tasks appeared to have a strong desire overall to be successful missionaries, made a concentrated effort to speak and participate in class, were willing to speak English with those they did not know well, and spoke English even though they knew they were making mistakes. Many of these characteristics can be further explained by key language learning principles described by Brown (2007). Several of these principles relate directly to the current study and to behaviors and comments of the top performers.

Intrinsic Motivation. When asked about their goals for learning English, all of the participants indicated that one of their primary goals for learning the language was to be a better missionary. Brown (2007) asserts that it is essential to consider students' personal motives when implementing teaching activities. "The most powerful rewards are those that are intrinsically motivated within the learner. Because the behavior stems from needs, wants, or desires within oneself, the behavior itself is self-rewarding; therefore, no externally administered reward is necessary" (p. 68). The MTC is a unique ESP setting because there are no extrinsically motivating rewards such as grades or certificates. It appears that perhaps one of the motivations for participating in the current project was because missionaries felt it could help them improve their English skills so that they could ultimately fulfill their desire to do missionary work and be better missionaries. This could show that as the top performers understood how the practices could help them improve in their missionary work, they had increased motivation to complete the CPR tasks and do well on them.

Strategic Investment. As described by Brown (2007), strategic investment is “a learner’s own personal ‘investment’ of time, effort, and attention to the second language” (p. 69). The top three participants worked on the practices for 2-4 days each week and spent anywhere from 5-30 minutes working on the practice tasks each day. They completed 8-10 CPR units during the time of the study. Although the top performers shared several of these factors with other participants, there could be a link between understanding what their greater goals and aspirations are and putting forth the effort to make reaching those goals a reality.

Meaningful Learning. Meaningful learning is a principle that encourages language instruction to focus on students’ needs and goals. Several responses to the survey questions indicate that the missionaries felt the CPRs were applicable to their purpose as missionaries. The top performing missionaries had very positive reactions about their own perceived progress and about the CPR units themselves. The top three agreed or strongly agreed that after using the materials, they could understand English conversations more easily, and that they think their English pronunciation had improved. They also felt that they learned something they didn’t already know and that the units helped them with their pronunciation. Concerning the materials themselves, the missionaries agreed or strongly agreed that the readings were easy to use and a good use of their time and that the directions were easy to understand and follow.

It is interesting to note that when asked what was most difficult about the practice tasks, those missionaries who made the greatest gains were able to describe different suprasegmental features that were hard for them to perceive and produce. On the other hand, those who made the smallest gains spoke about their difficulty keeping up with the program itself; for example, they felt the pace was too quick or the level of difficulty was too high. The answers to this question are shown in Table 12.

Table 12

What was most difficult about the CPR practice tasks?

Missionary	Response
1	I think the most difficult in pronunciation is try to use good intonation
2	To recognize the emphasized pronunciation [stress] was the most difficult part of it.
3	What was the most difficult for me in this practices [*sic*] was finding the pitch in the sentences.
7	Speak fast.
8	The most difficult things for me in pronunciation practices when I try to read are paragraph and record because some time I didn't pronounce the word correctly like the speaker read it correct.
9	Just almost words.

These responses may indicate that the missionaries who were the most successful really grasped the purpose of the CPRs and focused on the different prosodic elements. On the other hand, those who did not make as many gains were so concerned with keeping up with the pace of the program that the concept of suprasegmentals was not even their immediate concern. Perhaps the materials were not considered as meaningful to them because their level of English prevented them from using them effectively. The lack of understanding apparent in the responses of Missionaries 7-9 may reaffirm the idea that these materials may be best suited for learners at a high-beginning or intermediate level, like Missionaries 1-3. Learners at this level have usually developed basic decoding skills and are able to read out loud. The CPR tasks are designed for ESL learners who have already mastered these basic skills. It is possible that those missionaries who made the greatest gains (Missionaries 1-3) were those at a high-beginning or intermediate level. Further discussion concerning missionaries' English levels and CPRs use will be considered in the section on Directions for Future Research.

Willingness to Communicate. Several researchers (MacIntyre, Baker, Clément, & Conrod, 2001; MacIntyre, Clément, Dörnyei, & Noels, 1998; Yashima, 2002) assert that there are ties between motivation and self-confidence and that both of these factors influence an individual's willingness to communicate. In the survey responses, the top missionaries indicated that they all make an effort to speak in class, they feel comfortable speaking English with people they do not know well, and they want to speak English even when they make mistakes. All of these responses can be linked to their own willingness to communicate. It is possible that those missionaries who actively sought opportunities to communicate, even if they made mistakes, were those who made more progress from the pre- to the post-test.

Conclusion

The purpose of this pedagogical thesis was to follow up on Mueller's (2010) project by creating, revising, and implementing materials to help ESL missionaries practice pronunciation while studying ESL at the MTC. In an effort to further Mueller's (2010) initial work, four additional CPR units were created and two assessment tasks were revised such that evaluative feedback could be obtained from missionaries using all of the CPR tasks over the course of three to six weeks.

The results from the surveys and assessment tasks show that the participants made gains in their ability to perceive suprasegmentals after receiving treatment. Stress and intonation had large effect sizes and missionaries made the greatest gains in their ability to perceive these features. Pausing had a small-medium effect size. The results from the production task, while still notable, were not as dramatic as the results from the perception task. Concerning their ability to produce the three prosodic features, the missionaries made small-medium gains. For this task, pausing and stress both had medium significance. There was no significant effect size for intonation.

Characteristics of top performers for these computer-assisted pronunciation instruction tasks were also identified. It was found that perhaps those who were the most successful in reducing the number of errors made from the pre-test to the post-test were intrinsically motivated (they felt the practice tasks could help them reach their bigger goals), strategically invested (they worked on the tasks regularly), engaged in meaningful learning (they understood the benefits of using the materials and felt the tasks helped them), and willing to communicate in English (they made an effort to speak in class and with people they did not know well, even if they knew they were making mistakes).

Limitations

With the full results coming from a total of only nine missionaries, the conclusions and the generalizability of information concerning the use of CPRs in the MTC are limited. However, because so little research related to suprasegmentals and missionaries has been done, the information gained through this study is quite valuable for ESL learners at the MTC as well as those studying English in other ESP programs.

Because of the nature of the MTC, having complete control over the design and implementation of the study itself was not possible. All missionaries studying at the MTC are required to complete the same language training during the time they are there. This meant that the researchers could not implement an experimental or a quasi-experimental design, which could have been useful in determining the effectiveness of teaching suprasegmentals in this particular setting, as was done by Derwing et al. (1998). Furthermore, it was not possible to predict the number of missionaries who would be in the MTC at any given time, nor was it always possible to know how long they would stay. Thus the number of participants who completed both the pre- and post-test and survey was very low. It is difficult to draw implications from this small sample size.

Another important limitation to acknowledge is the current software program used at the MTC, Assessment Tools, which caused a number of problems for this study. As mentioned previously, the program was designed in such a way that it took two computer programmers hundreds of hours to format the materials onto the system. Moreover, the programmers had to re-do all of Mueller's (2010) materials because they had not been saved after her initial study. This process took over six months. In addition to the lengthy process of preparing the materials on Assessment Tools, it also appeared that the program did not always keep accurate records. When accessing the tests and surveys at the end of the study, the researcher found that several of these items had not saved even though the participants had completed them. This was unfortunate because it made all the information gained from their weeks of practice invalid for the current study. It was also difficult to know how accurate the information the program provided really was. For example, one missionary was recorded as having spent only 1.14 minutes on the program each week, even though she successfully completed 5 CPR units in a three-week period. Some of these discrepancies made it difficult to fully trust the information provided by the computer program.

One final limitation arose from analyzing the results. When an ANOVA with repeated measures is run, the data must typically meet a series of assumptions in order to yield results that are valid. These five assumptions are: 1) the dependent variable is measured at the continuous level, 2) the independent variable consists of at least two related groups, 3) there are no significant outliers, 4) the distribution of the dependent variable in the related groups is normally distributed, and 5) the variances of the differences between all combinations of the groups must be equal (ANOVA with repeated measures using SPSS statistics, 2013). In the current study, not all of these assumptions were met. There were outliers in both the perception and production tasks that made the data prone to a Type I error (detecting an effect that really is not present). Additionally, because the sample size was so small, it was difficult to have a normal distribution.

Pedagogical Implications

Both the quantitative and qualitative results from the study provide several implications regarding the use of CPRs at the MTC. Pronunciation is an important component of successful language acquisition and it is not explicitly taught in the MTC. This study showed that pronunciation instruction is not only something that missionaries want, but prosodic features are an area where they can improve over a short period of time. The results of the study showed the materials had a medium-strong effect on the participants' perception skills and a small-medium effect on their production skills, all of which can lead to ESL missionaries becoming more intelligible and perhaps more successful in their missionary work. It is currently unknown what influence the materials might have if the daily practice time was lengthened, more CPR practice units were available, or the missionaries were encouraged to use this technique for an extended time following their time at the MTC. These unknown factors are important to consider when conducting similar studies in the future.

Directions for Future Research

There are several directions for future research that arise from the results of this study. Several alterations to the current study could allow researchers to gain more information concerning the effectiveness of CPRs at the MTC. One key change would be to utilize a true experimental design, with a treatment and control group. This could allow researchers to verify that CPRs do indeed have an impact on the missionaries' pronunciation and their intelligibility beyond the regular English language instruction that all missionaries receive. Next, implementing the materials over a prolonged time period with several cohorts of missionaries would yield data from a much larger group. This could help establish some of the findings in this short study. Finally, future researchers could consider strengthening the testing process by using two different versions of the test in a mixed-design format. In the mixed-design format, half of the group would take test 1 as the pre-test, and the other half would take test 2. Then in taking the post-test, they would complete whatever version had not been previously completed. Using this mixed-design format would help strengthen the validity of the findings of the current study and avoid any possible test effect.

Other suggestions for future research involve adding a stronger teacher component to the current study to help researchers better understand the most effective way to implement the CPRs with missionaries at the MTC. First, MTC teachers in the ESL area could be more involved in the missionaries' use of CPRs. Because most ESL teachers at the MTC do not have any formal training in ESL, they would be able to participate in the presentation that introduces the missionaries to pronunciation and suprasegmentals in order to gain a greater understanding of the purpose of the CPR tasks. Teachers would then be able to provide feedback, even if it is very minimal, which could make the missionaries more accountable and diligent in their use of the materials. Additionally, it would be interesting to encourage the missionaries to use the perception and production training received from these tasks in their companionship study. Companions could be encouraged to provide feedback on the correct use of these prosodic features as the missionaries practice reading scriptures and teaching lessons with each other. This process could help further develop the missionaries' level of comprehensibility in English.

Finally, the missionaries' initial language proficiency given during their placement interview was not considered in the evaluation of the top performers. The reason for this is because the language evaluation process currently used at the MTC is a quick 3-5 minute general assessment by someone who is not trained in OPI testing. While the process is functional in separating missionaries into general ability levels, it may not be accurate or reliable, and it is not comparable to any other standardized system for evaluating language proficiency. The practice units themselves are designed to be used by missionaries at a high-beginning to intermediate level since it is assumed they are able to perform basic decoding skills and already have some ability to speak the L2. It is possible that there are language learners whose English level is ideal for these particular practice tasks and their level of English would allow them to benefit the most from using the materials. These may be the learners best suited for this type of instruction, although further research would need to be conducted in order to confirm this.

Finally, testing the effectiveness of the CPRs in other ESP settings could make the results of this study more generalizable. In addition to conducting similar studies in other ESP settings such as English business programs or English as a foreign language classes, it would be interesting to explore other opportunities for ESL missionaries to use these materials either before or after they go to the MTC. Missionaries have recently started participating in pre-MTC training where they use tablets for formal training both before and after their MTC experience (Church Expands Use of Digital Devices for Missionary Work, 2014). This program is intended to help missionaries practice their mission language, among other things. It would be interesting to have missionaries use CPRs as part of their pre-MTC language training. On the other hand, it could also be very interesting to conduct a study using ESL missionaries who have left the MTC and are already doing missionary work, especially since missionaries have recently been allowed to make greater use of technology once they leave the MTC (Walch, 2014). These missionaries are typically encouraged to make time to study English on their own (*Preach My Gospel,* 2004, p. 128), but do not receive any formal language training during the next 16-22 months of their missions. Conducting further research with missionaries either before or after their training could yield results that could be transferrable to the MTC setting itself.

The information gained through this study may not only be beneficial for ESL missionaries, but it could also be applicable to missionaries who study other languages that are taught at the MTC. Using this type of computer-assisted pronunciation instruction instruction provides learners with increased opportunities for self-directed practice, which could help them increase their skills and proficiency in the target language, whatever language that may be. These findings ultimately have the potential to influence not only the thousands of missionaries learning ESL and other languages at the MTC each year, but also tens of thousands of other learners studying in ESP programs around the world.

References

Anderson-Hsieh, J. (1989). Approaches toward teaching pronunciation: A brief history. *Cross Currents, 16*, 73-78.

Anderson-Hsieh, J., Johnson, R., & Koehler, K. (1992). The relationship between native speaker judgments of nonnative pronunciation and deviance in segmentals, prosody, and syllable structure. *Language Learning, 42*, 529-555.

ANOVA with repeated measures using SPSS statistics. (2013). In *Laerd Statistics*. Retreived September 22, 2014, from http:// statistics.laerd.com/spss-tutorials/one-way-anova-repeated-measures-using-spss-statistics.php

Bradlow, A., Pisoni, D., Akahane-Yamada, R., & Tohkura, Y. (1997). Training Japanese listeners to identify English /r/ and /l/: IV some effects of perceptual learning on speech production. *The Journal of the Acoustical Society of America, 101*, 2299-2310.

Brown, D. (2007). *Teaching by Principles, An Interactive Approach to Language Pedagogy* (3rd ed.). White Plains, NY: Pearson Education.

Celce-Murcia, M., Brinton, D, & Goodwin, J. (1996). *Teaching Pronunciation* (2nd ed.). New York City: Cambridge University Press.

Church Expands Use of Digital Devices for Missionary Work. (2014). In *Newsroom*. Retreived October 7, 2014, from http://www.mormonnewsroom.org

Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (Second ed.). Hillsdal, NJ: Lawrence Earlbaum Associates.

Derwing, T. (2008). Curriculum issues in teaching pronunciation to second language learners. In J.G. Hansen & M.L. Zampini (Eds.), *Phonology and Second Language Acquisition* (pp. 247-369). Amsterdam: John Benjamins Publishing Company.

Derwing, T., & Munro, M. (1997). Accent, intelligibility, and comprehensibility. *Studies in Second Language Acquisition, 19,* 1-16.

Derwing, T., & Munro, M. (2005). Second language accent and pronunciation teaching: A research-based approach. *TESOL Quarterly, 39*, 379-397.

Derwing, T., Munro, M., & Wiebe, G. (1998). Evidence in favor of a broad framework for pronunciation instruction. *Language Learning, 48*, 393-410.

Dickerson, W. (1994). Empowering students with predictive skills. In J. Morley (Ed.), *Pronunciation Pedagogy and Theory: New Views, New Directions* (pp.17-35). Alexandria, VA: Teachers of English to Speakers of Other Languages, Inc.

Hahn, L. (2004). Primary stress and intelligibility: Research to motivate the teaching of suprasegmentals. *TESOL Quarterly, 38*, 201-223.

Hsieh, K., Dong, D., & Wang, L. (2013). A preliminary study of applying shadowing technique to English intonation instruction. *Taiwan Journal of Linguistics, 11*, 43-66.

ESL language guide. (2011). Salt Lake City, UT: Intellectual Reserve.

Jenkins, J. (2002). A sociolinguistically based, empirically researched pronunciation syllabus for English as an international language. *Applied Linguistics, 23*, 83-103.

Kaltenbock, G. (2001). Learner autonomy: A guiding principle in designing a CD-ROM for intonation practice. *ReCALL, 13*, 179-190.

Kang, O., Rubin, D., & Pickering, L.. (2010). Suprasegmental measures of accentedness and judgments of language learner proficiency in oral English. *The Modern Language Journal, 94*, 554-566.

Landon, M. (2007). *The effects of cued pronunciation readings on ESL learners' pausing, stress, pitch, and perceived comprehensibility.* Brigham Young University, Brigham Young University.

Learn a little about the Missionary Training Center. (2008). In *MTC*. Retrieved November 5, 2013, from http://mtc.byu.edu/themtc.htm

Levis, J. (2007). Computer technology in teaching and researching pronunciation. *Annual Review of Applied Linguistics, 27*, 184-202.

MacIntyre, P., Baker, S., Clément, R., & Conrod, S. (2001). Willingness to communicate, social support, and language-learning orientations of immersion students. *Studies in Second Language Acquisition, 23*, 369-388.

MacIntyre, P., Clément, R., Dörnyei, Z., & Noels, K. (1998). Conceptualizing willingness to communicate in a L2: A situational model of L2 confidence and affiliation. *The Modern Language Journal, 82*, 545-562.

McNerney, M., & Mendelsohn, D. (1992). Suprasegmentals in the pronunciation class: Setting priorities. In P. Avery & S. Ehrlich (Eds.), *Teaching American English pronunciation* (pp. 185-196). Oxford: Oxford University Press.

Morley, J. (1991). The pronunciation component in teaching English to speakers of other languages. *TESOL Quarterly, 25*, 481-520.

Mueller, H. (2010). *Developing cued pronunciation readings for Latter-day Saint missionaries learning English.* Brigham Young University, Brigham Young University.

Munro, M. (2008). Foreign accent and speech intelligibility. In J.G. Hansen & M.L. Zampini (Eds.), *Phonology and Second Language Acquisition* (pp. 193-218). Amsterdam: John Benjamins Publishing Company.

Neri, A., Cucchiarini, C., Strik, H., & Boves, L. (2002). The pedagogy-technology interface in computer assisted pronunciation training. *Computer Assisted Language Learning, 15*, 441-467.

Oliveira, M. (2002). Pausing strategies as means of information processing in spontaneous narratives. *Speech Prosody 2002*, (pp. 539-542). Aix-en-Provence.

Paltridge, B., & Starfield, S. (Eds.). (2012). *The handbook of English for specific purposes.* Oxford, UK: John Wiley & Sons, Ltd.

Pennington, M. (1999). Computer-aided pronunciation pedagogy: Promise, limitations, directions. *Computer Assisted Language Learning, 12*, 427-440.

Pickering, L. (2004). The structure and function of intonational paragraphs in native and nonnative speaker instructional discourse. *English for Specific Purposes, 23*, 19-43.

Preach My Gospel. (2004). Salt Lake City: The Church of Jesus Christ of Latter-day Saints.

Seferoglu, G. (2005). Improving students' pronunciation through accent reduction software. *British Journal of Educational Techology, 36,* 303-316.

Tanner, M., & Landon, M. (2009). The effects of computer-assisted pronunciation readings on ESL learners' use of pausing, stress, intonation, and overal comprehensibility. *Language Learning & Technology, 13*, 51-65.

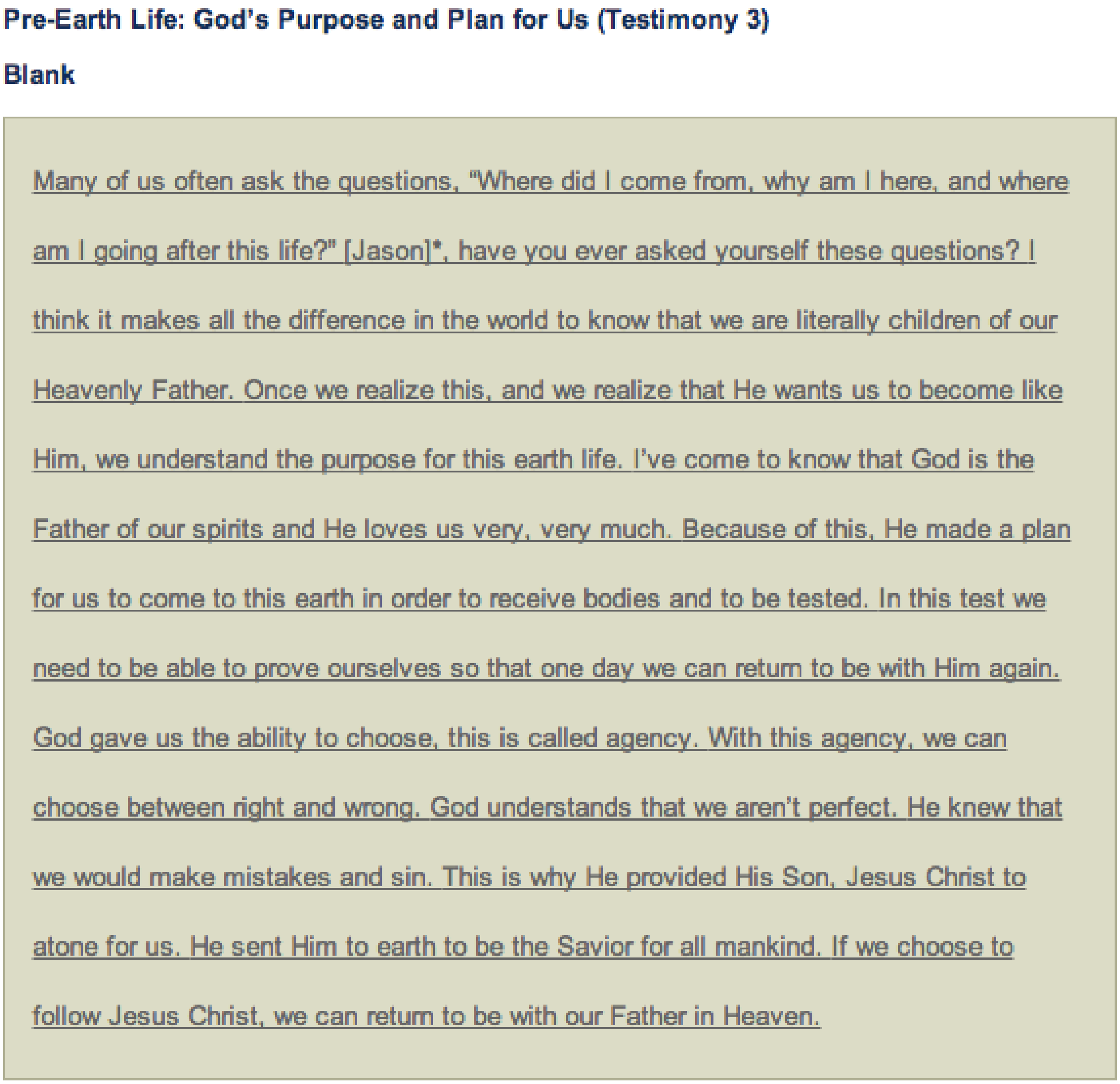
Walch, T. (2014, July 2) More LDS missionaries to use and pay for digital devices. *KSL.* Retreived from http://www.ksl.com

Walker, J. (2013, October 5) Instructed and inspired: Conference speakers share poignant personal reflections, timeless truths. *The Deseret News*. Retrieved from http://www.deseretnews.com

Wrembel, M. (2005). An overview of English pronunciation teaching materials: Patterns of change; model accents, goals and priorities. *English Pronunciation Models: A Changing Scene, 21*, 421-437.

Yashima, T. (2002). Willingness to communicate in a second language: The Japanese EFL context. *The Modern Language Journal, 86,* 54-66.

Appendix A: CPRs

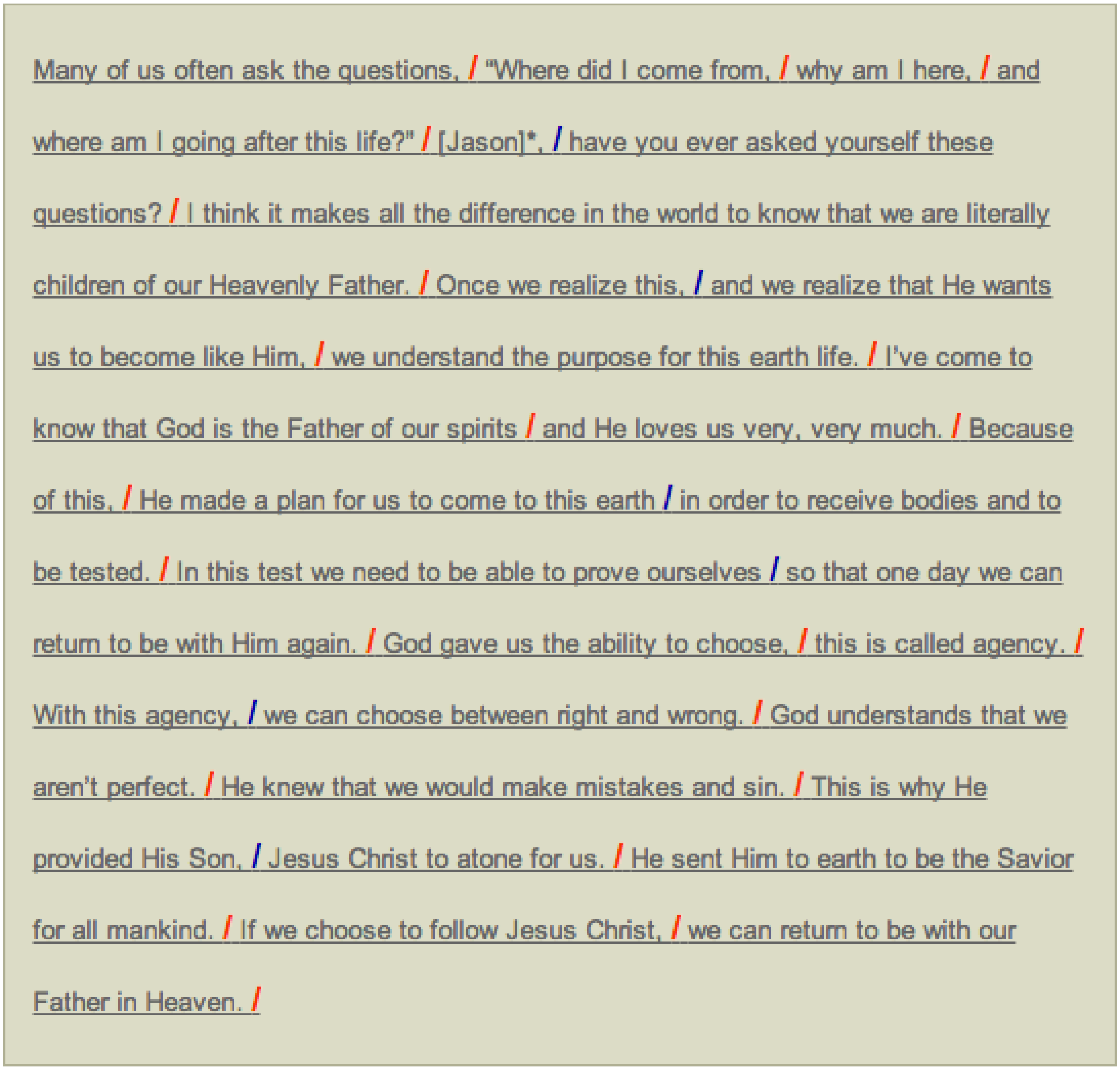


Pre-Earth Life: God's Purpose and Plan for Us (Testimony 3)

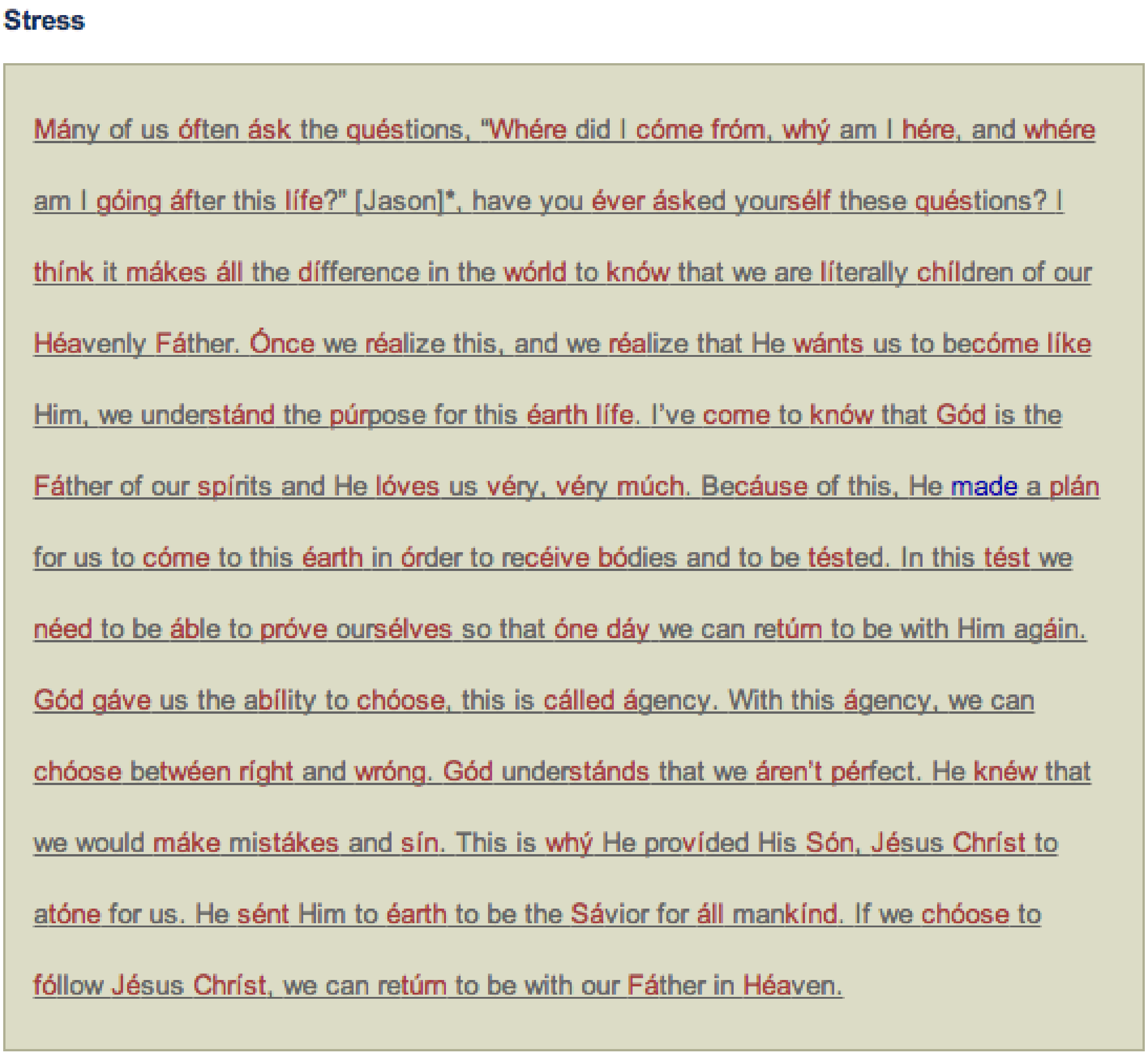
Blank

Many of us often ask the questions, "Where did I come from, why am I here, and where am I going after this life?" [Jason]*, have you ever asked yourself these questions? I think it makes all the difference in the world to know that we are literally children of our Heavenly Father. Once we realize this, and we realize that He wants us to become like Him, we understand the purpose for this earth life. I've come to know that God is the Father of our spirits and He loves us very, very much. Because of this, He made a plan for us to come to this earth in order to receive bodies and to be tested. In this test we need to be able to prove ourselves so that one day we can return to be with Him again. God gave us the ability to choose, this is called agency. With this agency, we can choose between right and wrong. God understands that we aren't perfect. He knew that we would make mistakes and sin. This is why He provided His Son, Jesus Christ to atone for us. He sent Him to earth to be the Savior for all mankind. If we choose to follow Jesus Christ, we can return to be with our Father in Heaven.

Pausing



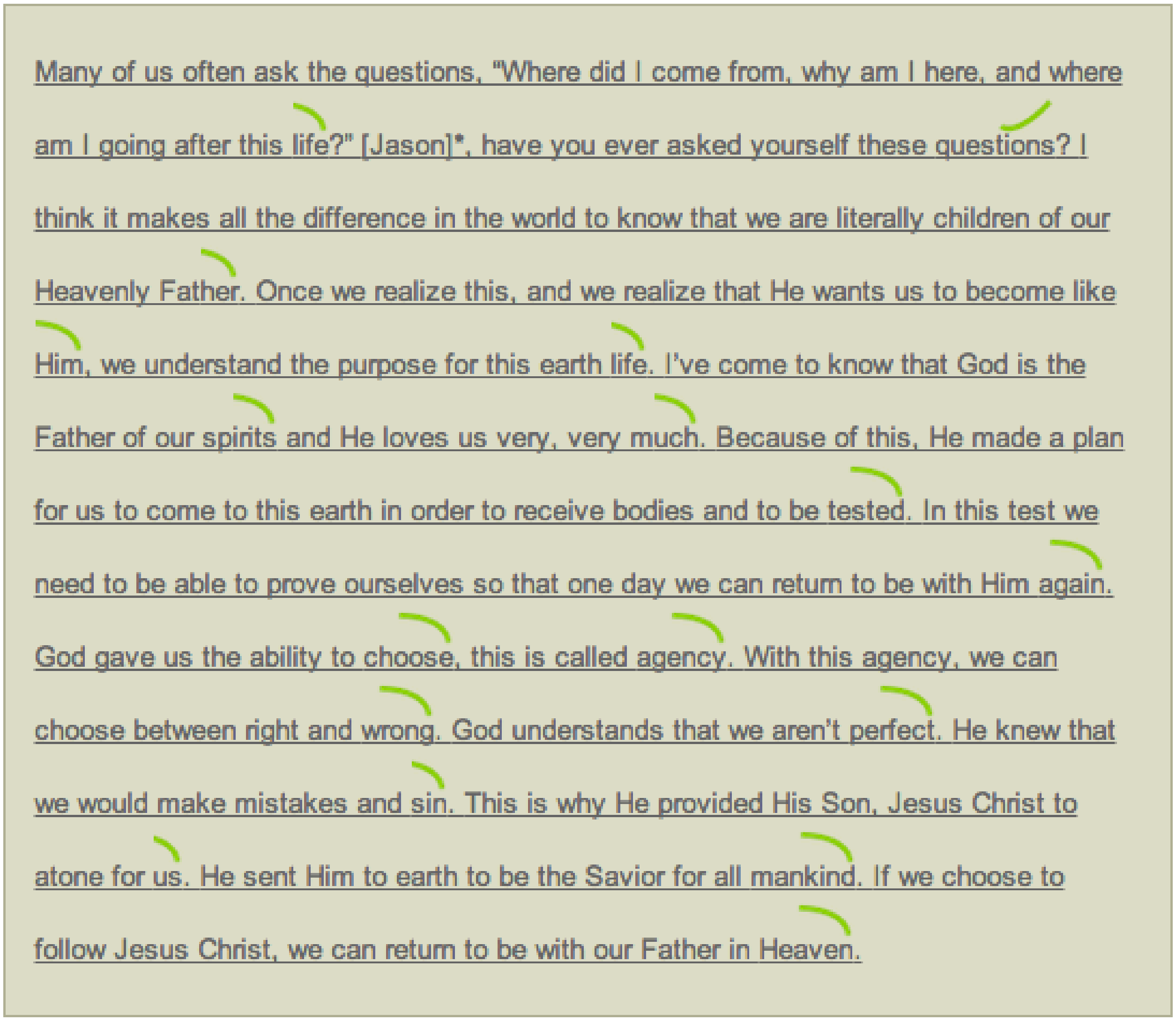
Many of us often ask the questions, / "Where did I come from, / why am I here, / and where am I going after this life?" / [Jason]*, / have you ever asked yourself these questions? / I think it makes all the difference in the world to know that we are literally children of our Heavenly Father. / Once we realize this, / and we realize that He wants us to become like Him, / we understand the purpose for this earth life. / I've come to know that God is the Father of our spirits / and He loves us very, very much. / Because of this, / He made a plan for us to come to this earth / in order to receive bodies and to be tested. / In this test we need to be able to prove ourselves / so that one day we can return to be with Him again. / God gave us the ability to choose, / this is called agency. / With this agency, / we can choose between right and wrong. / God understands that we aren't perfect. / He knew that we would make mistakes and sin. / This is why He provided His Son, / Jesus Christ to atone for us. / He sent Him to earth to be the Savior for all mankind. / If we choose to follow Jesus Christ, / we can return to be with our Father in Heaven. /



Stress

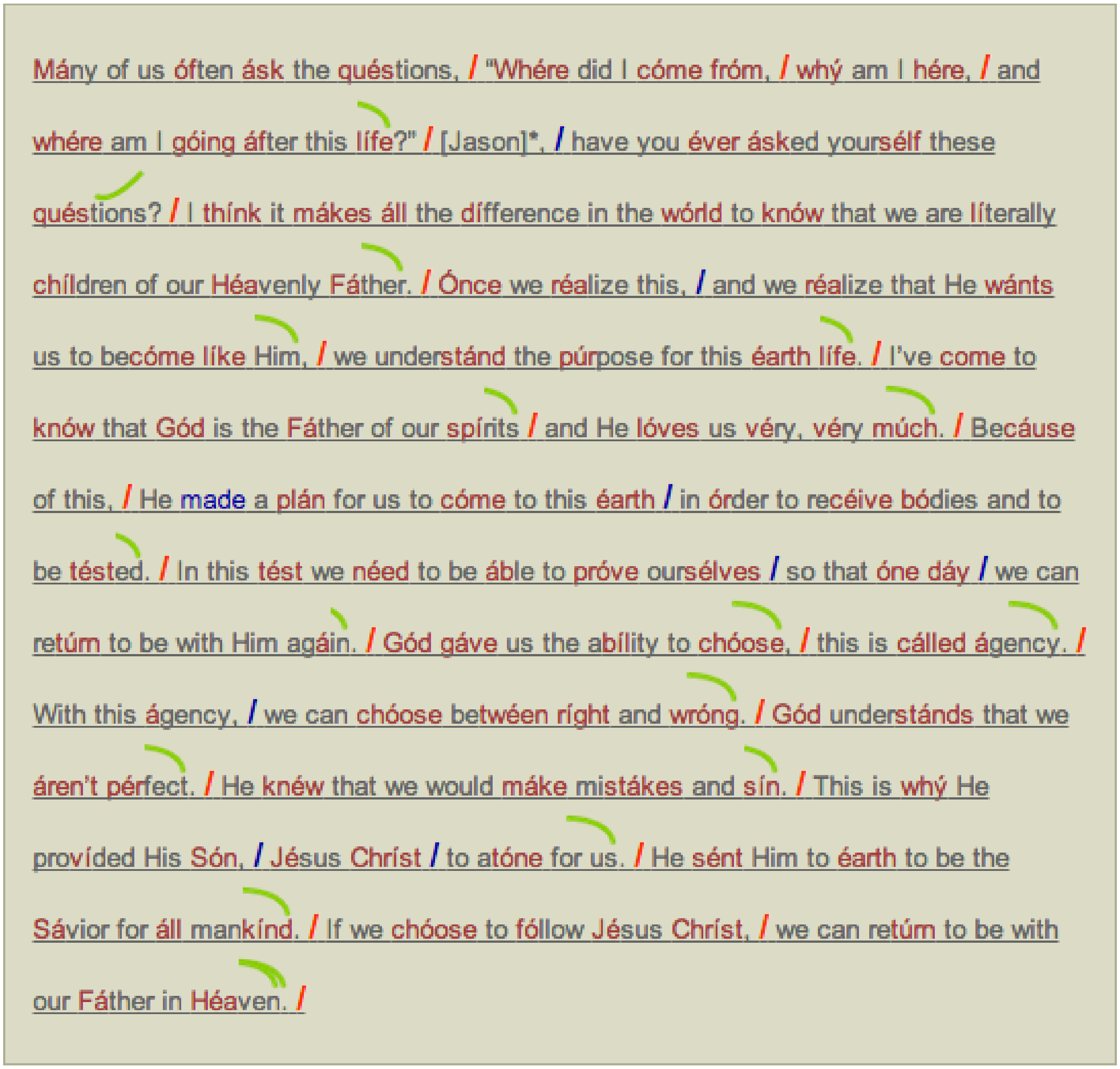
Mány of us óften ásk the quéstions, "Whére did I cóme fróm, whý am I hére, and whére am I góing áfter this lífe?" [Jason]*, have you éver ásked yoursélf these quéstions? I thínk it mákes áll the dífference in the wórld to knów that we are líterally chíldren of our Héavenly Fáther. Ónce we réalize this, and we réalize that He wánts us to becóme líke Him, we understánd the púrpose for this éarth lífe. I've come to knów that Gód is the Fáther of our spírits and He lóves us véry, véry múch. Becáuse of this, He made a plán for us to cóme to this éarth in órder to recéive bódies and to be tésted. In this tést we néed to be áble to próve oursélves so that óne dáy we can retúrn to be with Him agáin. Gód gáve us the abílity to chóose, this is cálled ágency. With this ágency, we can chóose betwéen ríght and wróng. Gód understánds that we áren't pérfect. He knéw that we would máke mistákes and sín. This is whý He províded His Són, Jésus Chríst to atóne for us. He sént Him to éarth to be the Sávior for áll mankínd. If we chóose to fóllow Jésus Chríst, we can retúrn to be with our Fáther in Héaven.

Intonation

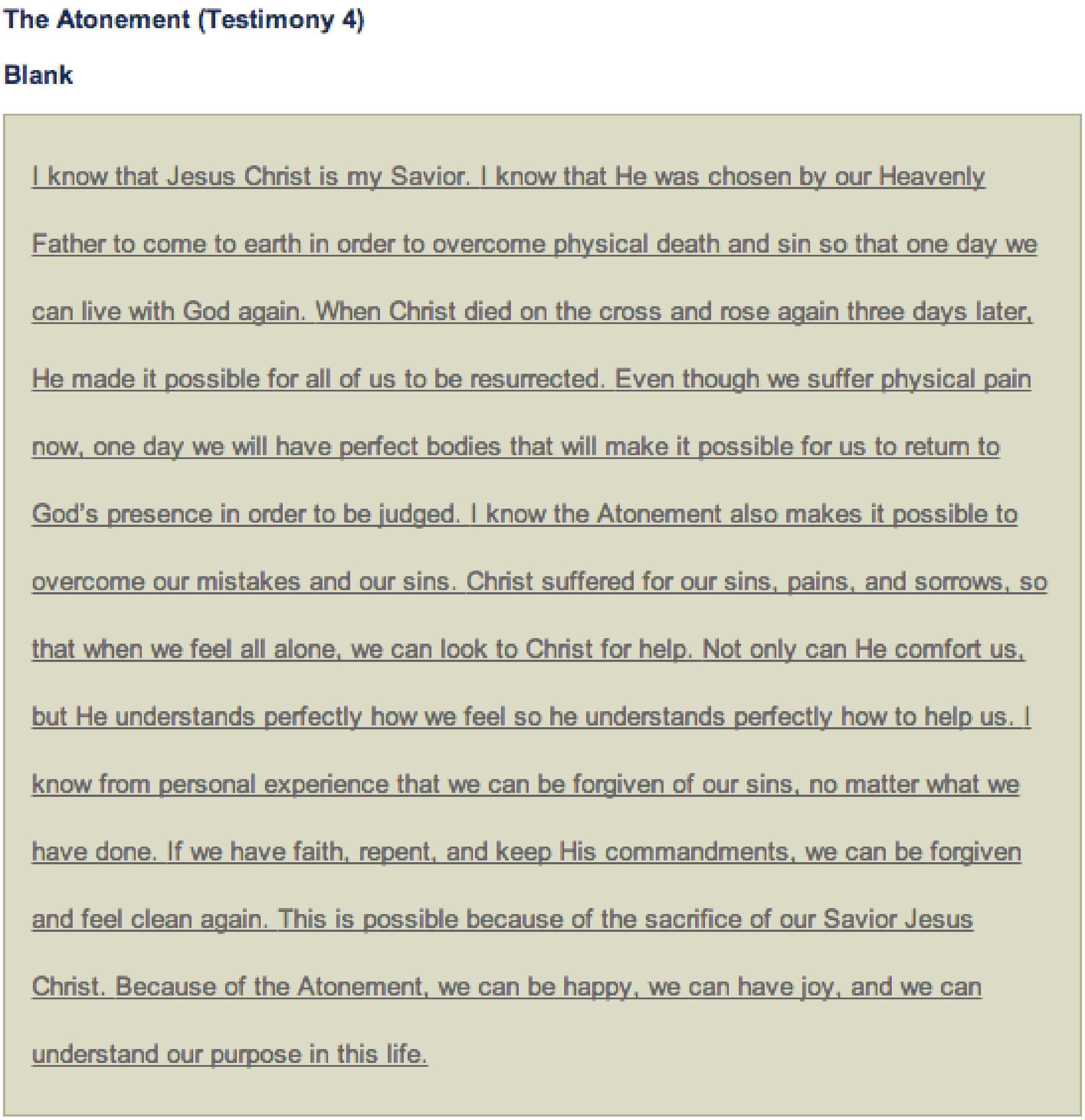


Many of us often ask the questions, "Where did I come from, why am I here, and where am I going after this life?" [Jason]*, have you ever asked yourself these questions? I think it makes all the difference in the world to know that we are literally children of our Heavenly Father. Once we realize this, and we realize that He wants us to become like Him, we understand the purpose for this earth life. I've come to know that God is the Father of our spirits and He loves us very, very much. Because of this, He made a plan for us to come to this earth in order to receive bodies and to be tested. In this test we need to be able to prove ourselves so that one day we can return to be with Him again. God gave us the ability to choose, this is called agency. With this agency, we can choose between right and wrong. God understands that we aren't perfect. He knew that we would make mistakes and sin. This is why He provided His Son, Jesus Christ to atone for us. He sent Him to earth to be the Savior for all mankind. If we choose to follow Jesus Christ, we can return to be with our Father in Heaven.

Final



Mány of us óften ásk the quéstions, / "Whére did I cóme fróm, / whý am I hére, / and whére am I góing áfter this lífe?" / [Jason]*, / have you éver ásked yoursélf these quéstions? / I thínk it mákes áll the dífference in the wórld to knów that we are líterally chíldren of our Héavenly Fáther. / Ónce we réalize this, / and we réalize that He wánts us to becóme líke Him, / we understánd the púrpose for this éarth lífe. / I've come to knów that Gód is the Fáther of our spírits / and He lóves us véry, véry múch. / Becáuse of this, / He made a plán for us to cóme to this éarth / in órder to recéive bódies and to be tésted. / In this tést we néed to be áble to próve oursélves / so that óne dáy / we can retúrn to be with Him agáin. / Gód gáve us the abílity to chóose, / this is cálled ágency. / With this ágency, / we can chóose betwéen ríght and wróng. / Gód understánds that we áren't pérfect. / He knéw that we would máke mistákes and sín. / This is whý He províded His Són, / Jésus Chríst / to atóne for us. / He sént Him to éarth to be the Sávior for áll mankínd. / If we chóose to fóllow Jésus Chríst, / we can retúrn to be with our Fáther in Héaven. /

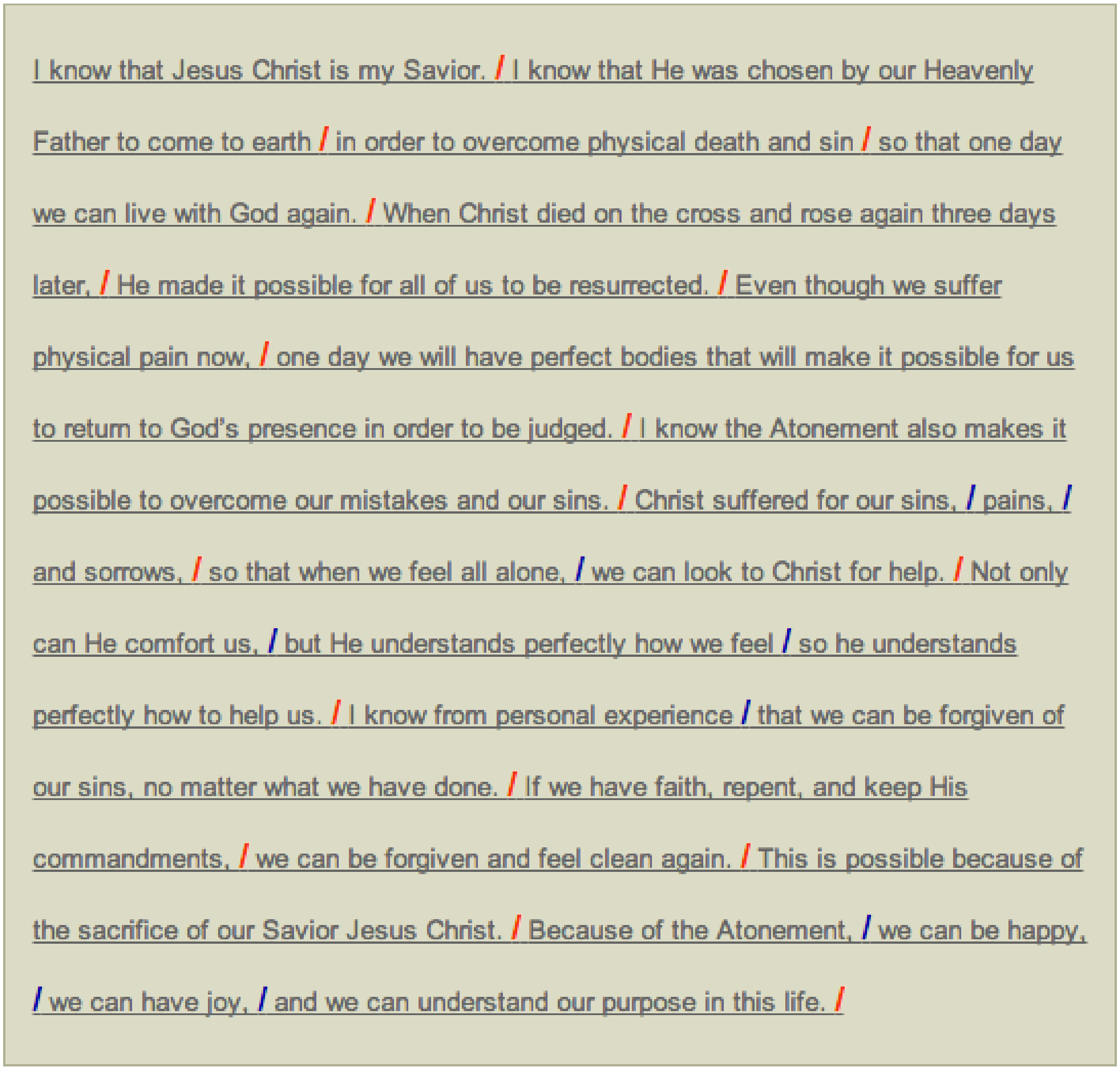


The Atonement (Testimony 4)

Blank

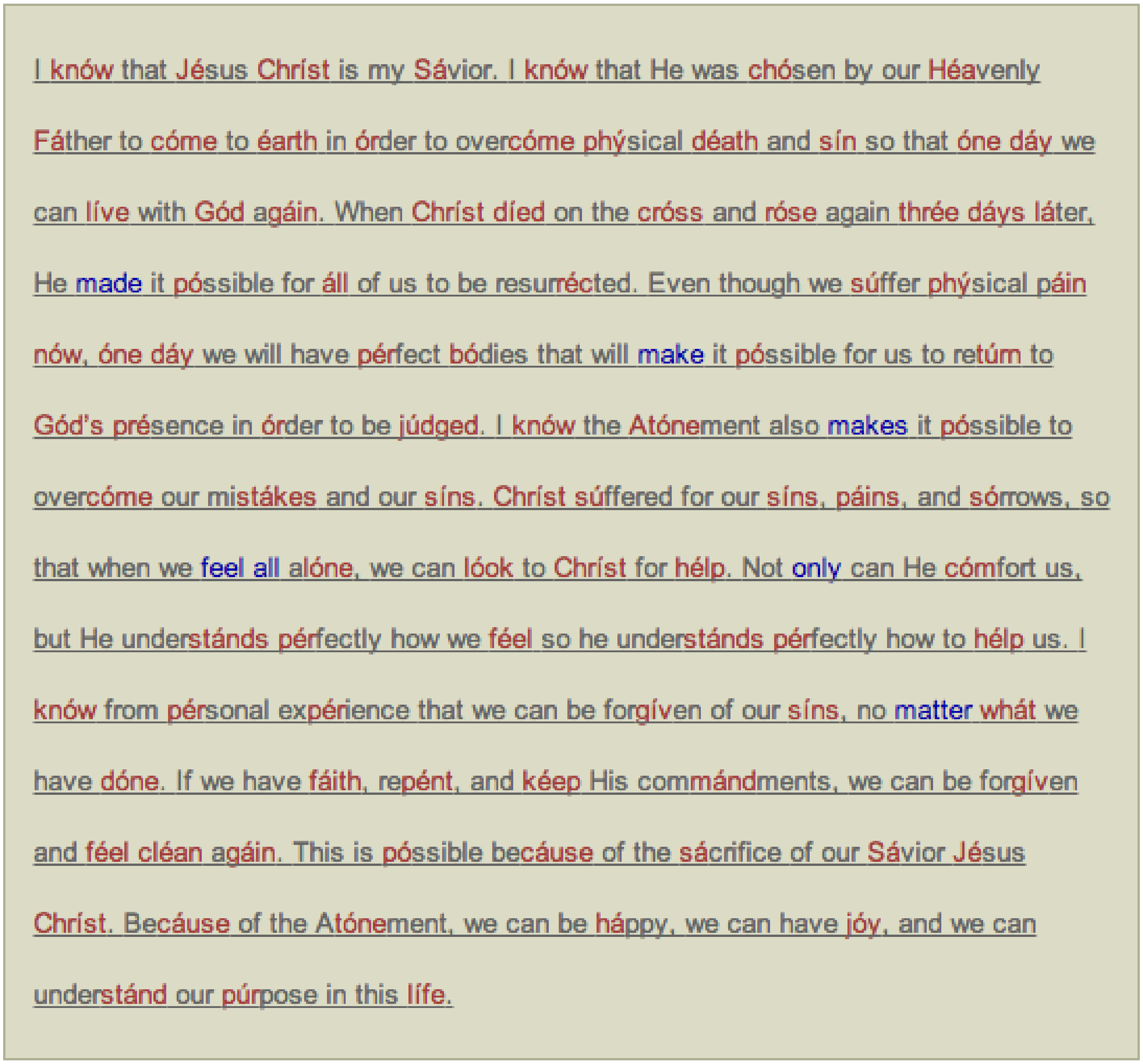
I know that Jesus Christ is my Savior. I know that He was chosen by our Heavenly Father to come to earth in order to overcome physical death and sin so that one day we can live with God again. When Christ died on the cross and rose again three days later, He made it possible for all of us to be resurrected. Even though we suffer physical pain now, one day we will have perfect bodies that will make it possible for us to return to God's presence in order to be judged. I know the Atonement also makes it possible to overcome our mistakes and our sins. Christ suffered for our sins, pains, and sorrows, so that when we feel all alone, we can look to Christ for help. Not only can He comfort us, but He understands perfectly how we feel so he understands perfectly how to help us. I know from personal experience that we can be forgiven of our sins, no matter what we have done. If we have faith, repent, and keep His commandments, we can be forgiven and feel clean again. This is possible because of the sacrifice of our Savior Jesus Christ. Because of the Atonement, we can be happy, we can have joy, and we can understand our purpose in this life.

Pausing



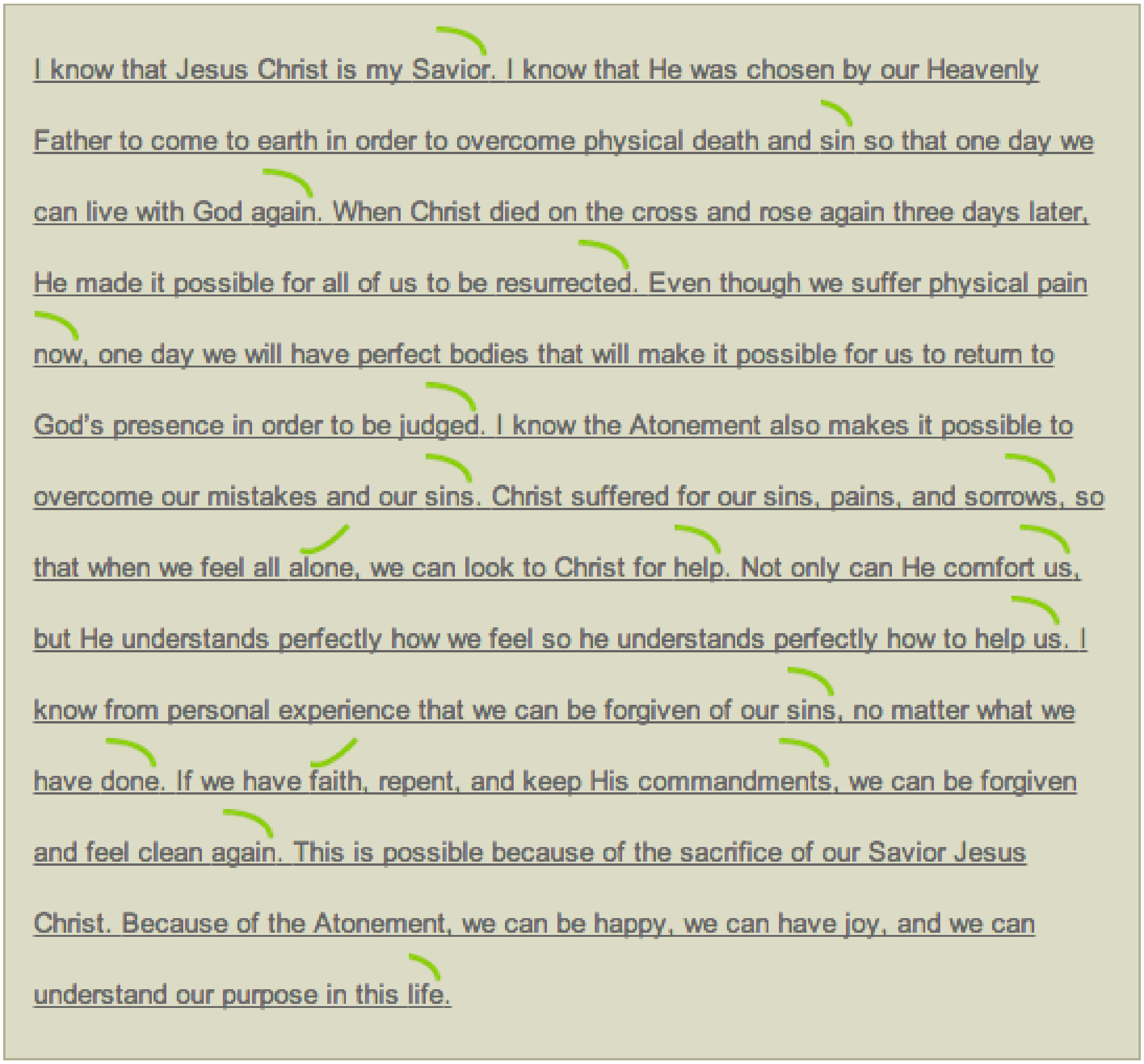
I know that Jesus Christ is my Savior. / I know that He was chosen by our Heavenly Father to come to earth / in order to overcome physical death and sin / so that one day we can live with God again. / When Christ died on the cross and rose again three days later, / He made it possible for all of us to be resurrected. / Even though we suffer physical pain now, / one day we will have perfect bodies that will make it possible for us to return to God's presence in order to be judged. / I know the Atonement also makes it possible to overcome our mistakes and our sins. / Christ suffered for our sins, / pains, / and sorrows, / so that when we feel all alone, / we can look to Christ for help. / Not only can He comfort us, / but He understands perfectly how we feel / so he understands perfectly how to help us. / I know from personal experience / that we can be forgiven of our sins, no matter what we have done. / If we have faith, repent, and keep His commandments, / we can be forgiven and feel clean again. / This is possible because of the sacrifice of our Savior Jesus Christ. / Because of the Atonement, / we can be happy, / we can have joy, / and we can understand our purpose in this life. /

Stress



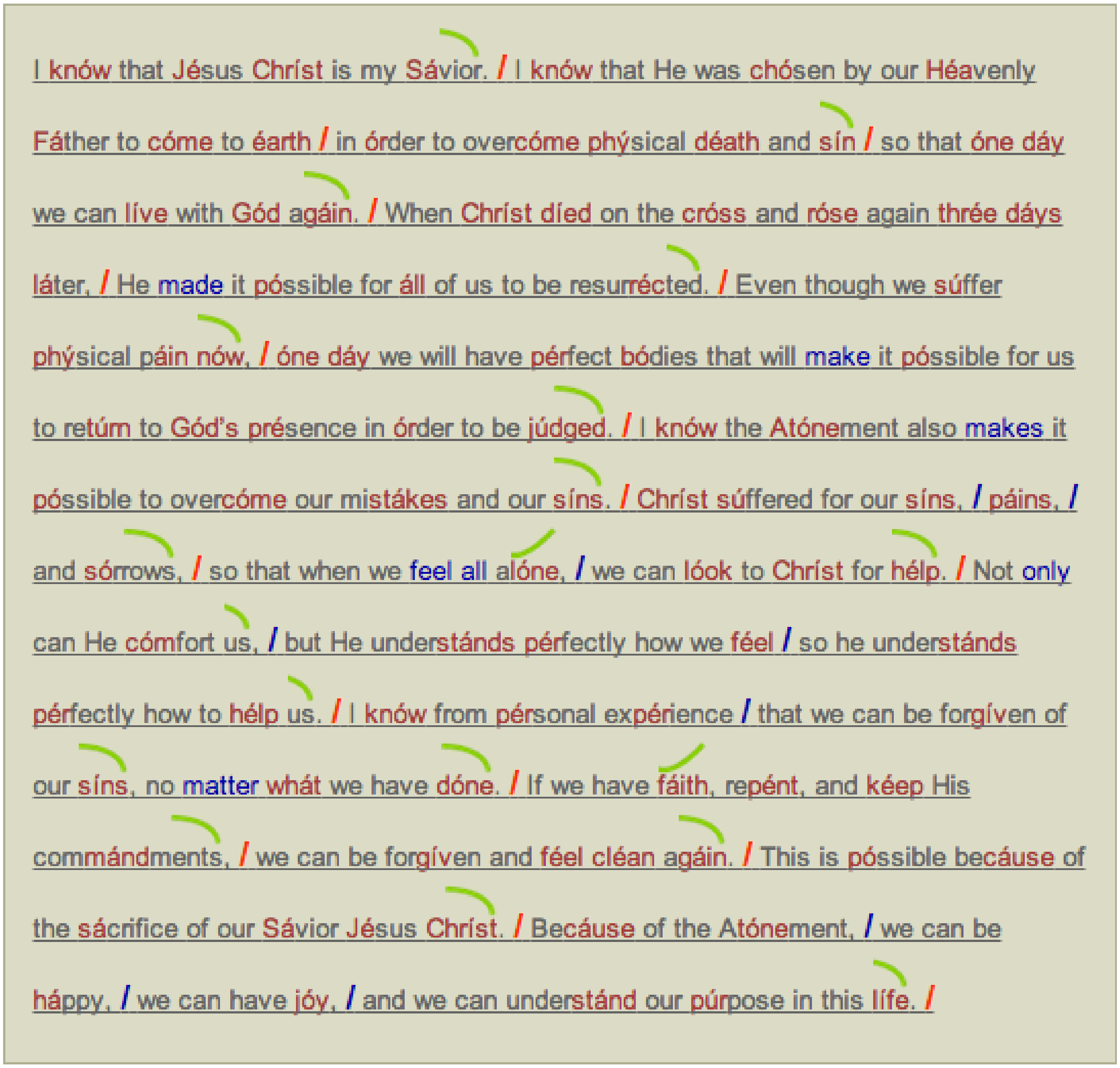
I knów that Jésus Chríst is my Sávior. I knów that He was chósen by our Héavenly Fáther to cóme to éarth in órder to overcóme phýsical déath and sín so that óne dáy we can líve with Gód agáin. When Chríst díed on the cróss and róse again thrée dáys láter, He made it póssible for áll of us to be resurrécted. Even though we súffer phýsical páin nów, óne dáy we will have pérfect bódies that will make it póssible for us to retúrn to Gód's présence in órder to be júdged. I knów the Atónement also makes it póssible to overcóme our mistákes and our síns. Chríst súffered for our síns, páins, and sórrows, so that when we feel all alóne, we can lóok to Chríst for hélp. Not only can He cómfort us, but He understánds pérfectly how we féel so he understánds pérfectly how to hélp us. I knów from pérsonal expérience that we can be forgíven of our síns, no matter whát we have dóne. If we have fáith, repént, and kéep His commándments, we can be forgíven and féel cléan agáin. This is póssible becáuse of the sácrifice of our Sávior Jésus Chríst. Becáuse of the Atónement, we can be háppy, we can have jóy, and we can understánd our púrpose in this lífe.

Intonation



I know that Jesus Christ is my Savior. I know that He was chosen by our Heavenly Father to come to earth in order to overcome physical death and sin so that one day we can live with God again. When Christ died on the cross and rose again three days later, He made it possible for all of us to be resurrected. Even though we suffer physical pain now, one day we will have perfect bodies that will make it possible for us to return to God's presence in order to be judged. I know the Atonement also makes it possible to overcome our mistakes and our sins. Christ suffered for our sins, pains, and sorrows, so that when we feel all alone, we can look to Christ for help. Not only can He comfort us, but He understands perfectly how we feel so he understands perfectly how to help us. I know from personal experience that we can be forgiven of our sins, no matter what we have done. If we have faith, repent, and keep His commandments, we can be forgiven and feel clean again. This is possible because of the sacrifice of our Savior Jesus Christ. Because of the Atonement, we can be happy, we can have joy, and we can understand our purpose in this life.

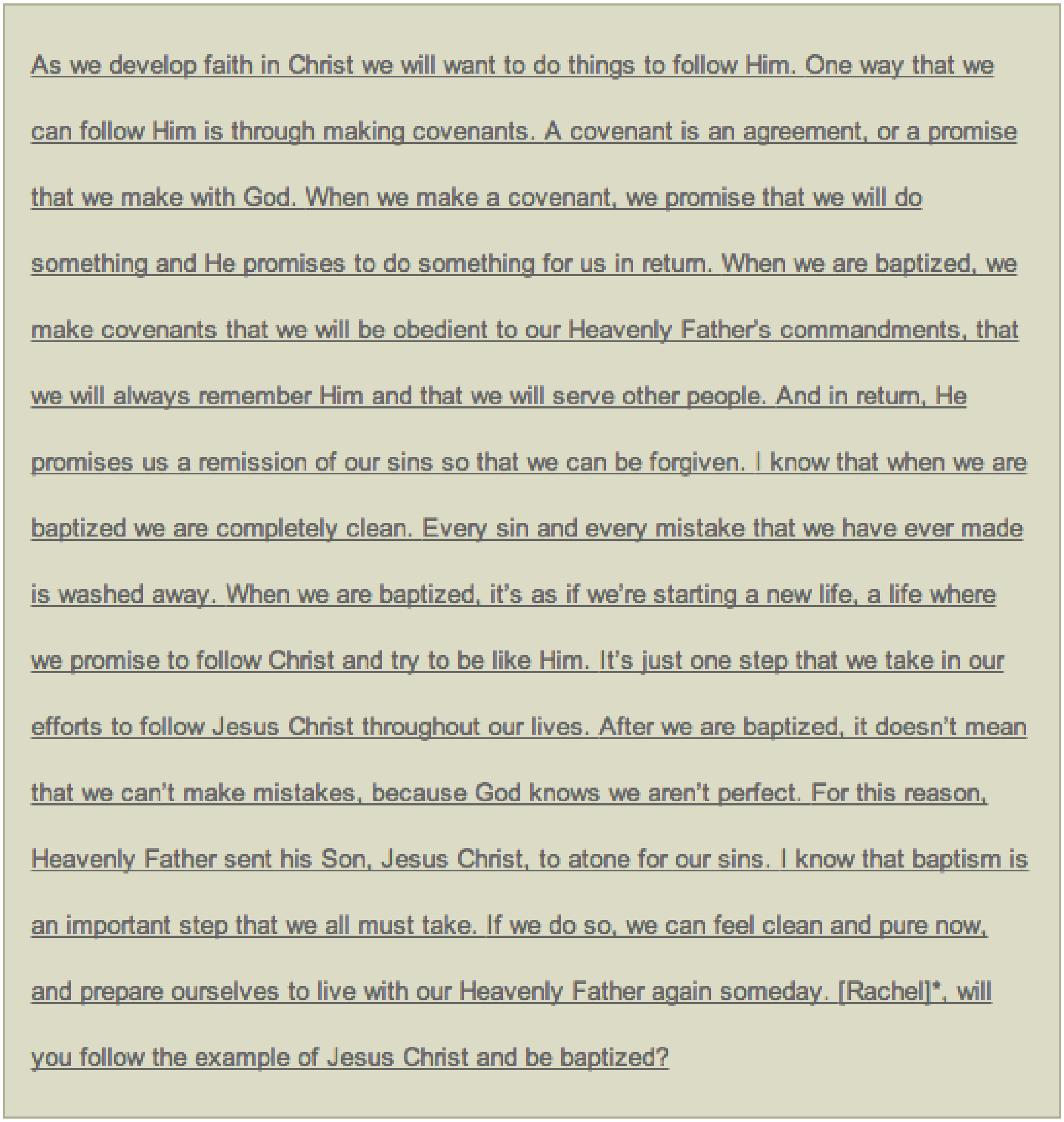
Final



I knów that Jésus Chríst is my Sávior. / I knów that He was chósen by our Héavenly Fáther to cóme to éarth / in órder to overcóme phýsical déath and sín / so that óne dáy we can líve with Gód agáin. / When Chríst díed on the cróss and róse again thrée dáys láter, / He made it póssible for áll of us to be resurrécted. / Even though we súffer phýsical páin nów, / óne dáy we will have pérfect bódies that will make it póssible for us to retúrn to Gód's présence in órder to be júdged. / I knów the Atónement also makes it póssible to overcóme our mistákes and our síns. / Chríst súffered for our síns, / páins, / and sórrows, / so that when we feel all alóne, / we can lóok to Chríst for hélp. / Not only can He cómfort us, / but He understánds pérfectly how we féel / so he understánds pérfectly how to hélp us. / I knów from pérsonal expérience / that we can be forgíven of our síns, no matter whát we have dóne. / If we have fáith, repént, and kéep His commándments, / we can be forgíven and féel cléan agáin. / This is póssible becáuse of the sácrifice of our Sávior Jésus Chríst. / Becáuse of the Atónement, / we can be háppy, / we can have jóy, / and we can understánd our púrpose in this lífe. /

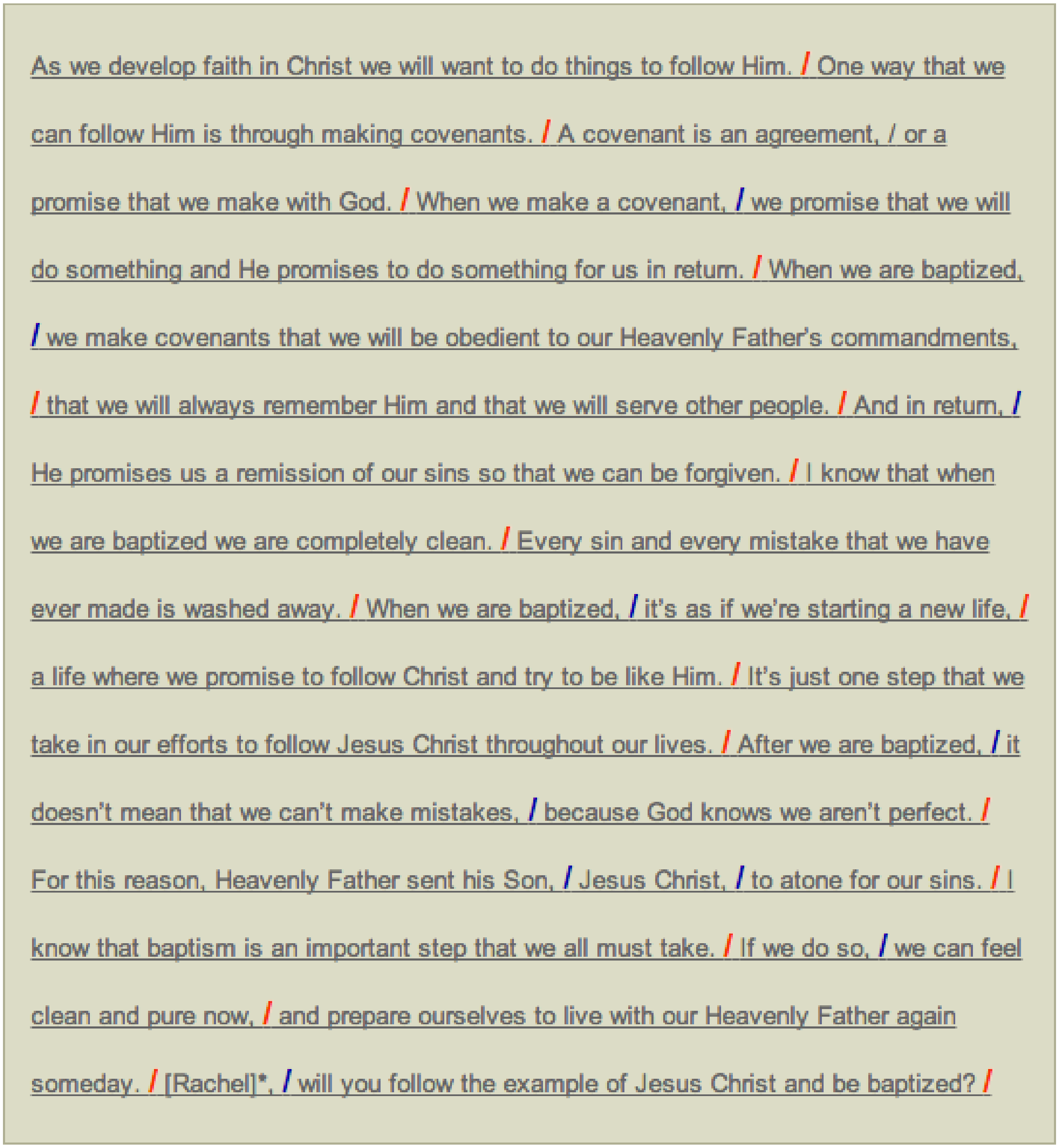
Baptism, Our First Covenant (Testimony 5)

Blank



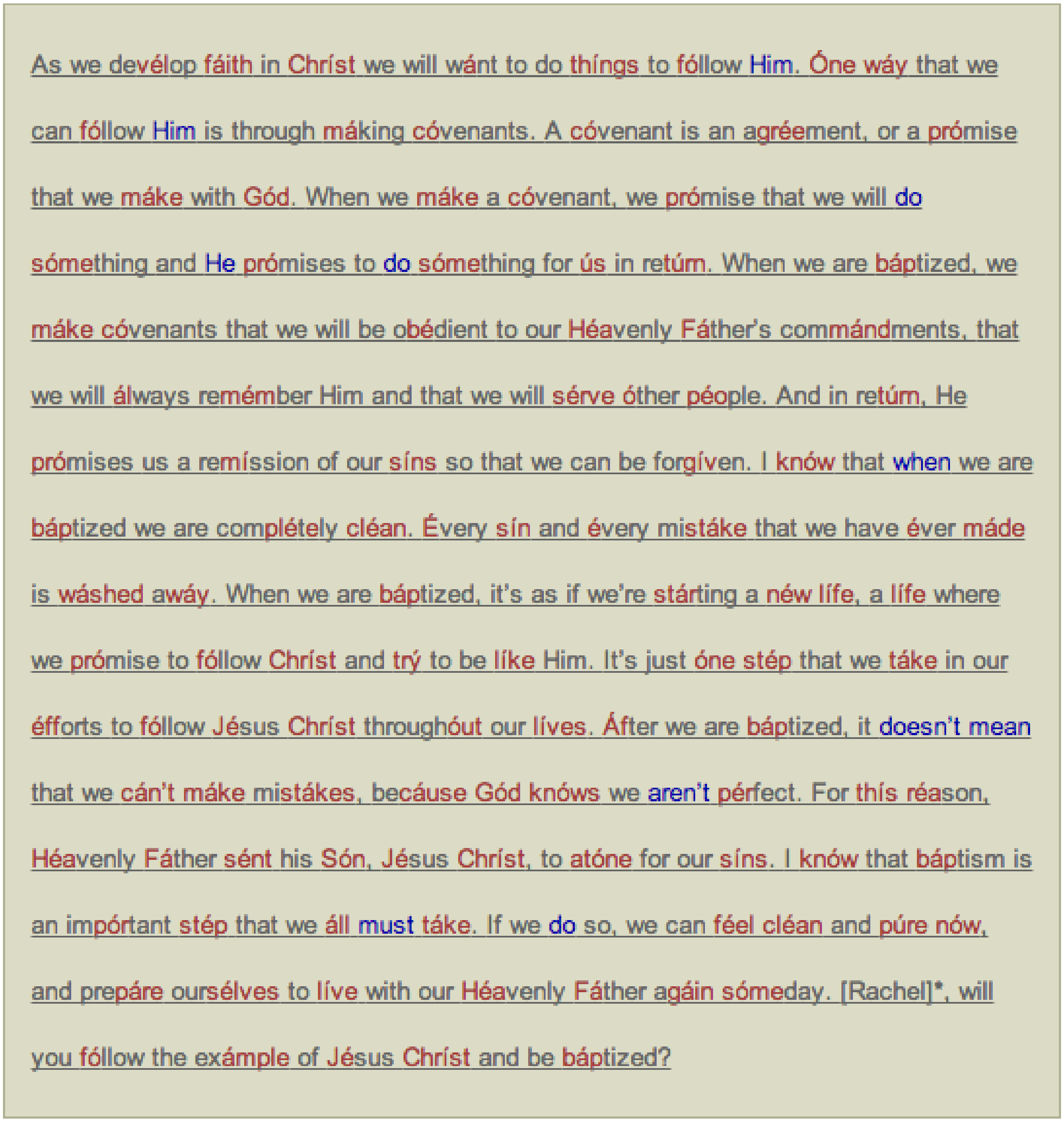
As we develop faith in Christ we will want to do things to follow Him. One way that we can follow Him is through making covenants. A covenant is an agreement, or a promise that we make with God. When we make a covenant, we promise that we will do something and He promises to do something for us in return. When we are baptized, we make covenants that we will be obedient to our Heavenly Father's commandments, that we will always remember Him and that we will serve other people. And in return, He promises us a remission of our sins so that we can be forgiven. I know that when we are baptized we are completely clean. Every sin and every mistake that we have ever made is washed away. When we are baptized, it's as if we're starting a new life, a life where we promise to follow Christ and try to be like Him. It's just one step that we take in our efforts to follow Jesus Christ throughout our lives. After we are baptized, it doesn't mean that we can't make mistakes, because God knows we aren't perfect. For this reason, Heavenly Father sent his Son, Jesus Christ, to atone for our sins. I know that baptism is an important step that we all must take. If we do so, we can feel clean and pure now, and prepare ourselves to live with our Heavenly Father again someday. [Rachel]*, will you follow the example of Jesus Christ and be baptized?

Pausing



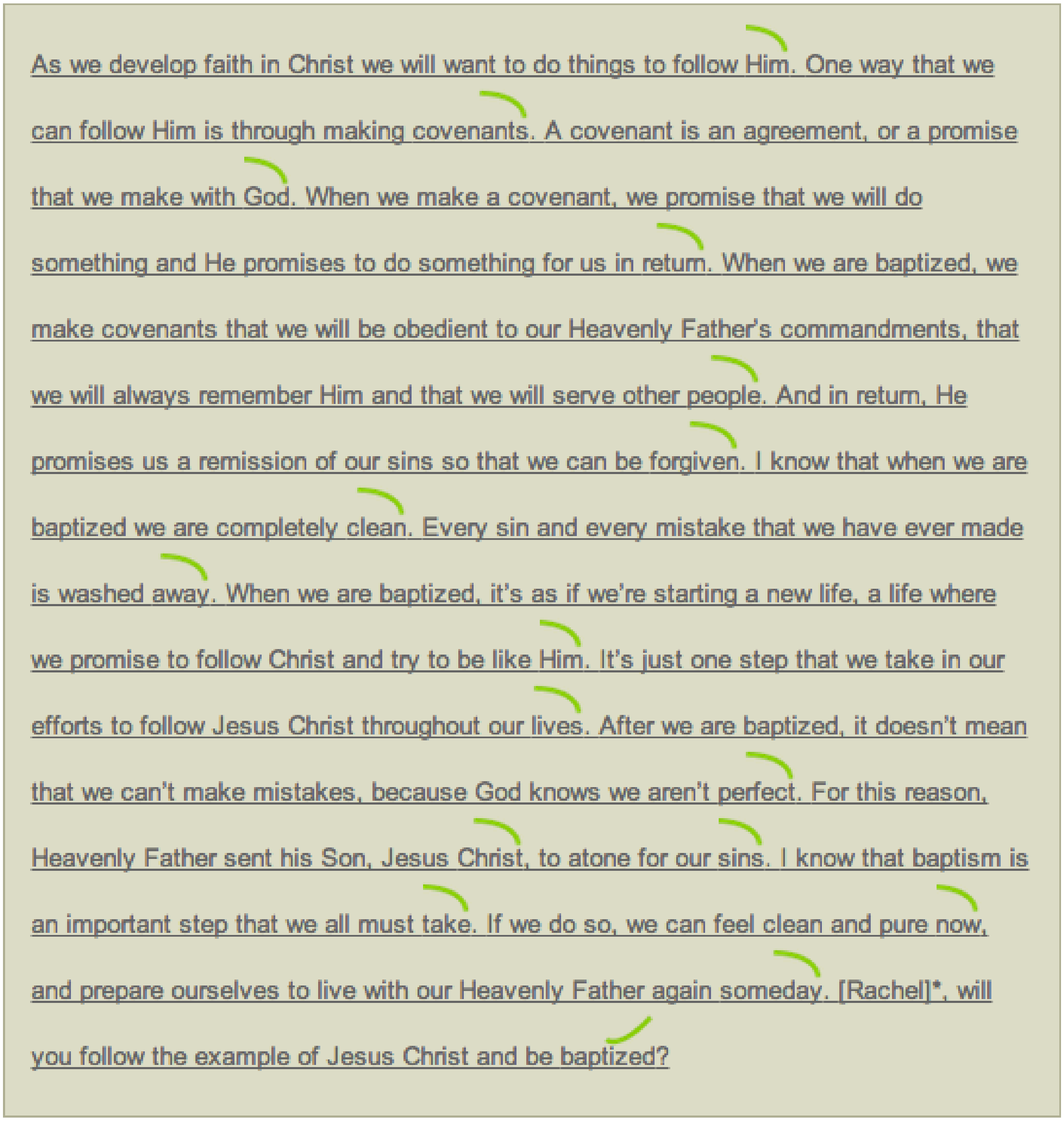
As we develop faith in Christ we will want to do things to follow Him. / One way that we can follow Him is through making covenants. / A covenant is an agreement, / or a promise that we make with God. / When we make a covenant, / we promise that we will do something and He promises to do something for us in return. / When we are baptized, / we make covenants that we will be obedient to our Heavenly Father's commandments, / that we will always remember Him and that we will serve other people. / And in return, / He promises us a remission of our sins so that we can be forgiven. / I know that when we are baptized we are completely clean. / Every sin and every mistake that we have ever made is washed away. / When we are baptized, / it's as if we're starting a new life, / a life where we promise to follow Christ and try to be like Him. / It's just one step that we take in our efforts to follow Jesus Christ throughout our lives. / After we are baptized, / it doesn't mean that we can't make mistakes, / because God knows we aren't perfect. / For this reason, Heavenly Father sent his Son, / Jesus Christ, / to atone for our sins. / I know that baptism is an important step that we all must take. / If we do so, / we can feel clean and pure now, / and prepare ourselves to live with our Heavenly Father again someday. / [Rachel]*, / will you follow the example of Jesus Christ and be baptized? /

Stress



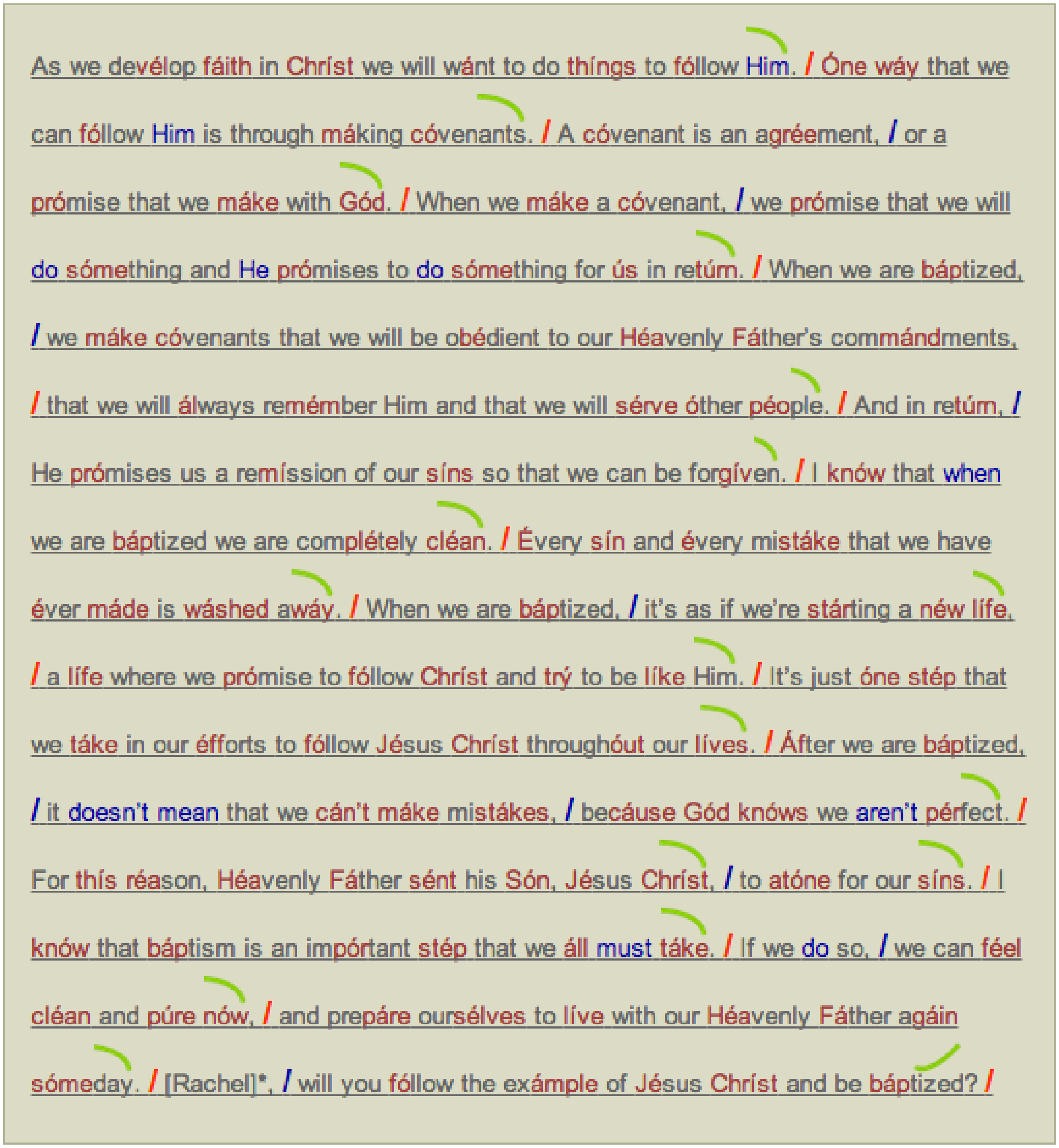
As we devélop fáith in Chríst we will wánt to do thíngs to fóllow Him. Óne wáy that we can fóllow Him is through máking cóvenants. A cóvenant is an agréement, or a prómise that we máke with Gód. When we máke a cóvenant, we prómise that we will do sómething and He prómises to do sómething for ús in retúrn. When we are báptized, we máke cóvenants that we will be obédient to our Héavenly Fáther's commándments, that we will álways remémber Him and that we will sérve óther péople. And in retúrn, He prómises us a remíssion of our síns so that we can be forgíven. I knów that when we are báptized we are complétely cléan. Évery sín and évery mistáke that we have éver máde is wáshed awáy. When we are báptized, it's as if we're stárting a néw lífe, a lífe where we prómise to fóllow Chríst and trý to be líke Him. It's just óne stép that we táke in our éfforts to fóllow Jésus Chríst throughóut our líves. Áfter we are báptized, it doesn't mean that we cán't máke mistákes, becáuse Gód knóws we aren't pérfect. For thís réason, Héavenly Fáther sént his Són, Jésus Chríst, to atóne for our síns. I knów that báptism is an impórtant stép that we áll must táke. If we do so, we can féel cléan and púre nów, and prepáre oursélves to líve with our Héavenly Fáther agáin sómeday. [Rachel]*, will you fóllow the exámple of Jésus Chríst and be báptized?

Intonation



As we develop faith in Christ we will want to do things to follow Him. One way that we can follow Him is through making covenants. A covenant is an agreement, or a promise that we make with God. When we make a covenant, we promise that we will do something and He promises to do something for us in return. When we are baptized, we make covenants that we will be obedient to our Heavenly Father's commandments, that we will always remember Him and that we will serve other people. And in return, He promises us a remission of our sins so that we can be forgiven. I know that when we are baptized we are completely clean. Every sin and every mistake that we have ever made is washed away. When we are baptized, it's as if we're starting a new life, a life where we promise to follow Christ and try to be like Him. It's just one step that we take in our efforts to follow Jesus Christ throughout our lives. After we are baptized, it doesn't mean that we can't make mistakes, because God knows we aren't perfect. For this reason, Heavenly Father sent his Son, Jesus Christ, to atone for our sins. I know that baptism is an important step that we all must take. If we do so, we can feel clean and pure now, and prepare ourselves to live with our Heavenly Father again someday. [Rachel]*, will you follow the example of Jesus Christ and be baptized?

Final



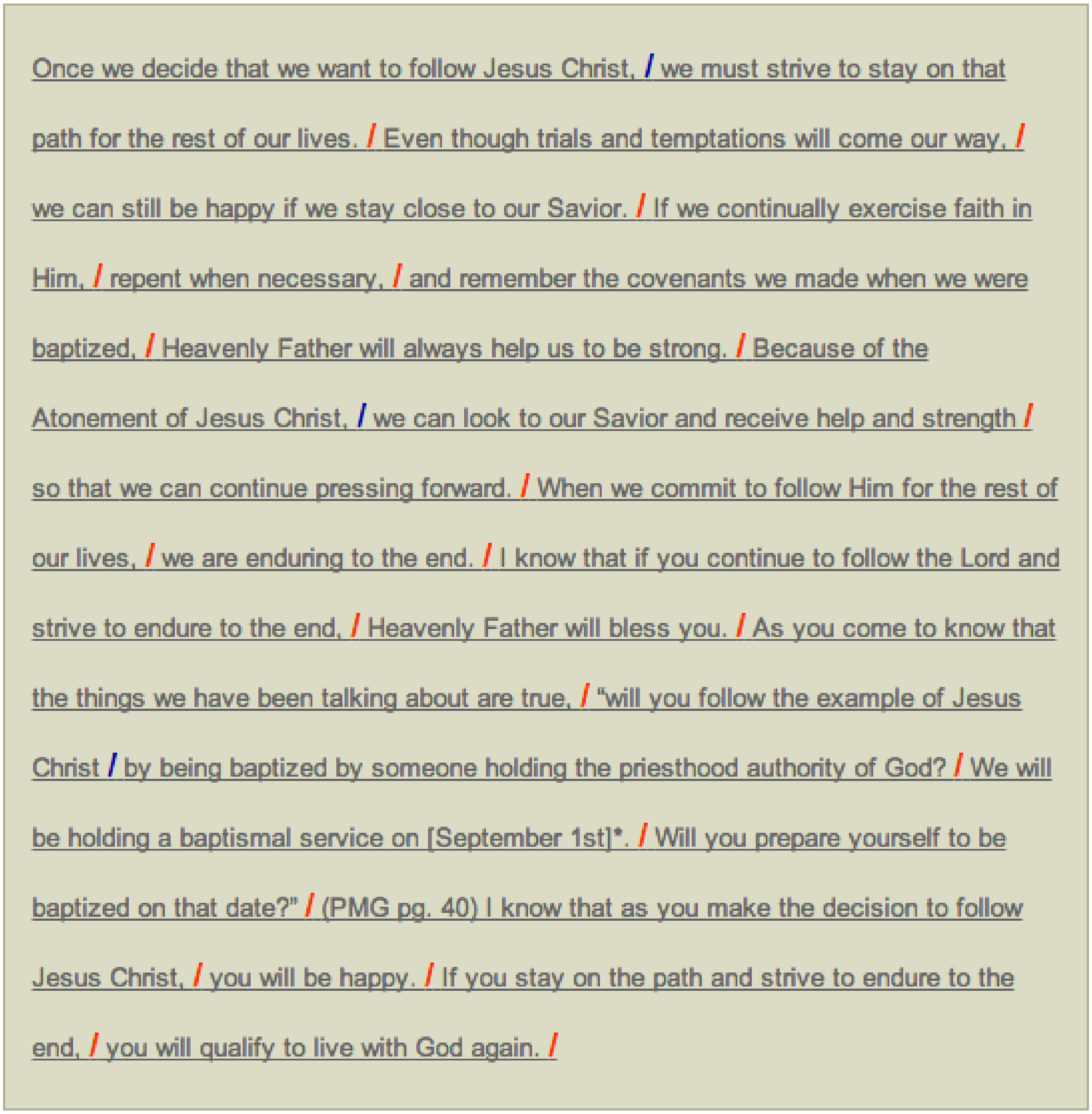
As we devélop fáith in Chríst we will wánt to do thíngs to fóllow Him. / Óne wáy that we can fóllow Him is through máking cóvenants. / A cóvenant is an agréement, / or a prómise that we máke with Gód. / When we máke a cóvenant, / we prómise that we will do sómething and He prómises to do sómething for ús in retúrn. / When we are báptized, / we máke cóvenants that we will be obédient to our Héavenly Fáther's commándments, / that we will álways remémber Him and that we will sérve óther péople. / And in retúrn, / He prómises us a remíssion of our síns so that we can be forgíven. / I knów that when we are báptized we are complétely cléan. / Évery sín and évery mistáke that we have éver máde is wáshed awáy. / When we are báptized, / it's as if we're stárting a néw lífe, / a lífe where we prómise to fóllow Chríst and trý to be líke Him. / It's just óne stép that we táke in our éfforts to fóllow Jésus Chríst throughóut our líves. / Áfter we are báptized, / it doesn't mean that we cán't máke mistákes, / becáuse Gód knóws we aren't pérfect. / For thís réason, Héavenly Fáther sént his Són, Jésus Chríst, / to atóne for our síns. / I knów that báptism is an impórtant stép that we áll must táke. / If we do so, / we can féel cléan and púre nów, / and prepáre oursélves to líve with our Héavenly Fáther agáin sómeday. / [Rachel]*, / will you fóllow the exámple of Jésus Chríst and be báptized? /

Endure to the End (Testimony 6)

Blank

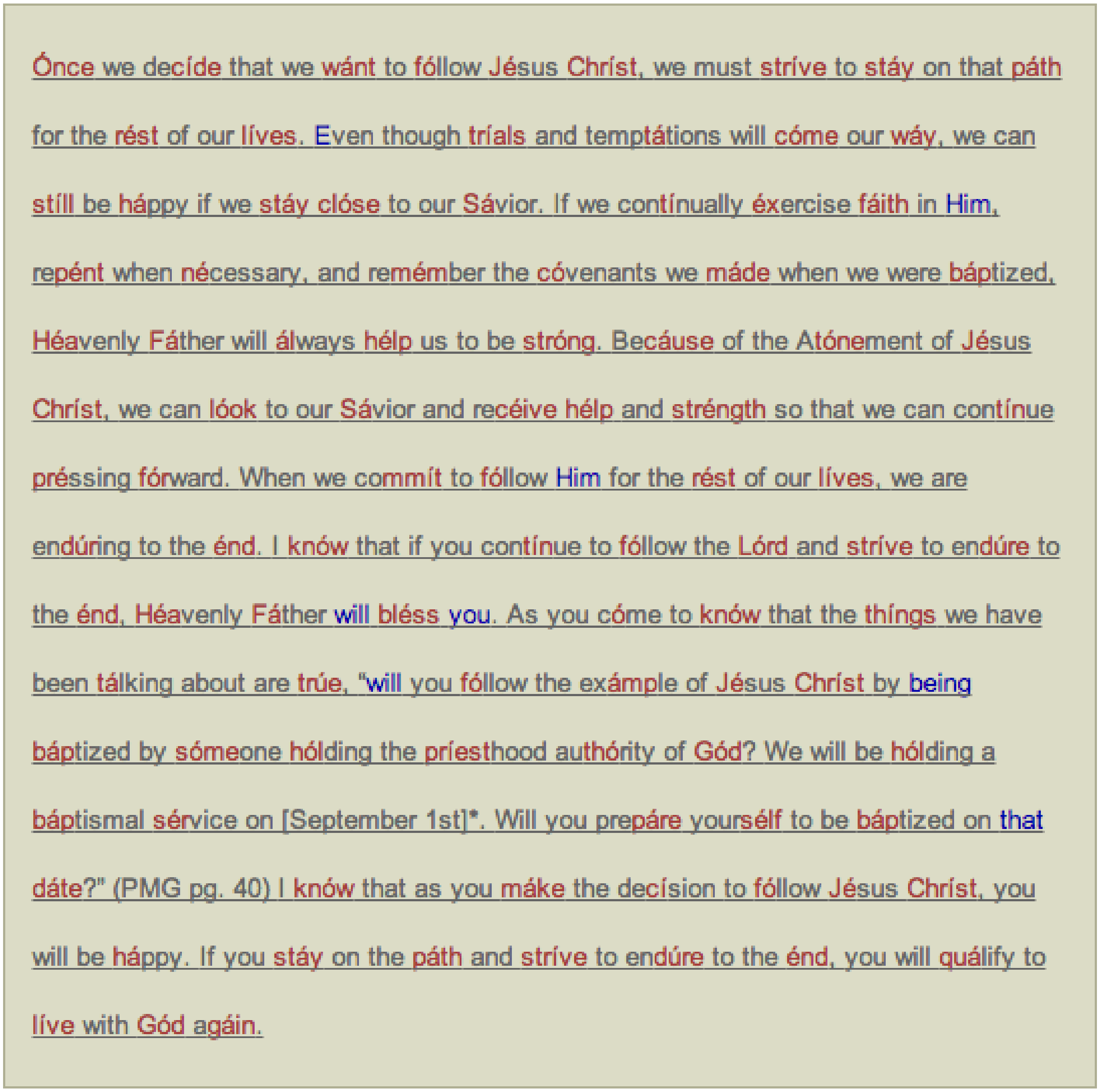
Once we decide that we want to follow Jesus Christ, we must strive to stay on that path for the rest of our lives. Even though trials and temptations will come our way, we can still be happy if we stay close to our Savior. If we continually exercise faith in Him, repent when necessary, and remember the covenants we made when we were baptized, Heavenly Father will always help us to be strong. Because of the Atonement of Jesus Christ, we can look to our Savior and receive help and strength so that we can continue pressing forward. When we commit to follow Him for the rest of our lives, we are enduring to the end. I know that if you continue to follow the Lord and strive to endure to the end, Heavenly Father will bless you. As you come to know that the things we have been talking about are true, "will you follow the example of Jesus Christ by being baptized by someone holding the priesthood authority of God? We will be holding a baptismal service on [September 1st]*. Will you prepare yourself to be baptized on that date?" (PMG pg. 40) I know that as you make the decision to follow Jesus Christ, you will be happy. If you stay on the path and strive to endure to the end, you will qualify to live with God again.

Pausing



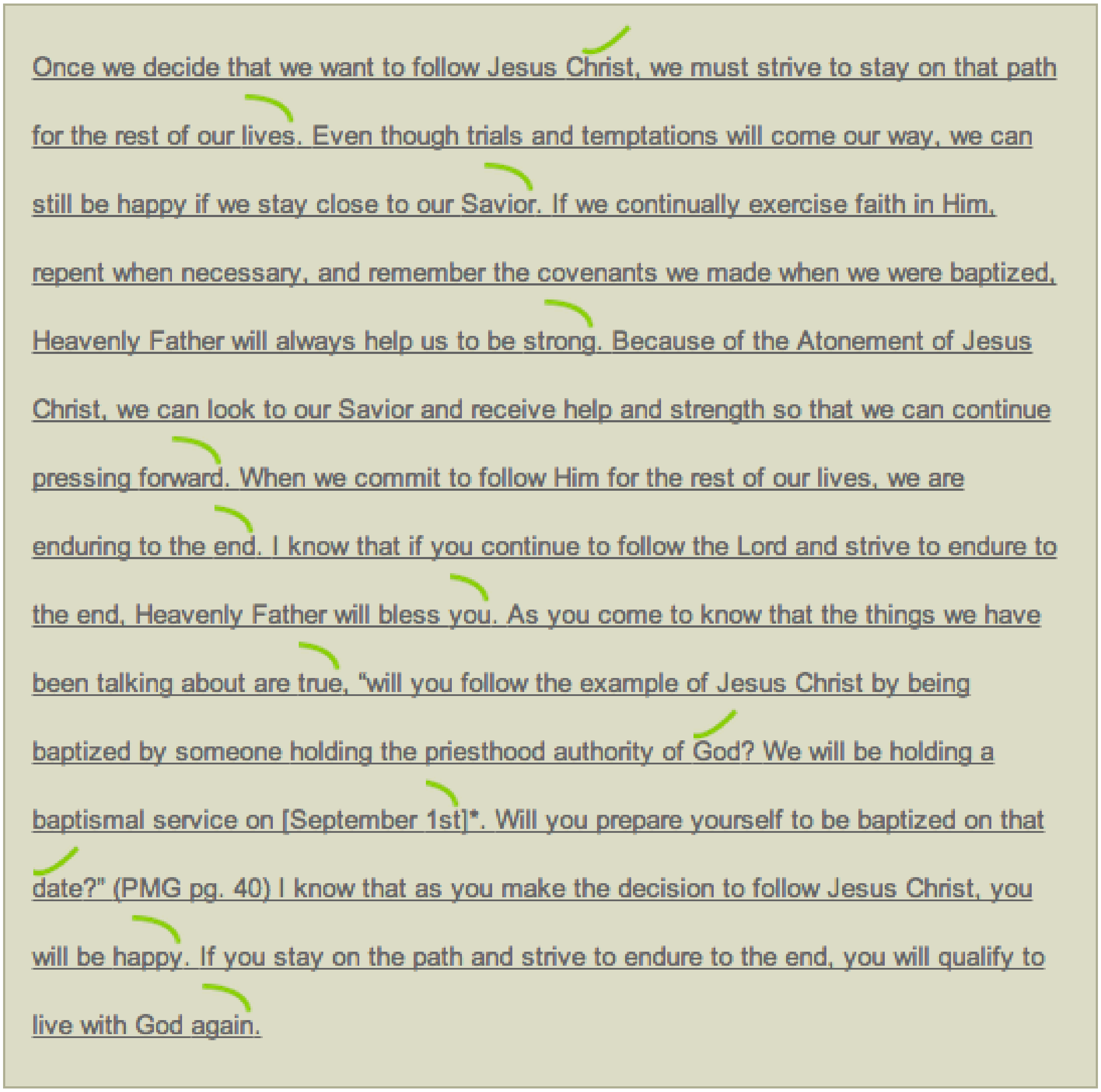
Once we decide that we want to follow Jesus Christ, / we must strive to stay on that path for the rest of our lives. / Even though trials and temptations will come our way, / we can still be happy if we stay close to our Savior. / If we continually exercise faith in Him, / repent when necessary, / and remember the covenants we made when we were baptized, / Heavenly Father will always help us to be strong. / Because of the Atonement of Jesus Christ, / we can look to our Savior and receive help and strength / so that we can continue pressing forward. / When we commit to follow Him for the rest of our lives, / we are enduring to the end. / I know that if you continue to follow the Lord and strive to endure to the end, / Heavenly Father will bless you. / As you come to know that the things we have been talking about are true, / "will you follow the example of Jesus Christ / by being baptized by someone holding the priesthood authority of God? / We will be holding a baptismal service on [September 1st]*. / Will you prepare yourself to be baptized on that date?" / (PMG pg. 40) I know that as you make the decision to follow Jesus Christ, / you will be happy. / If you stay on the path and strive to endure to the end, / you will qualify to live with God again. /

Stress



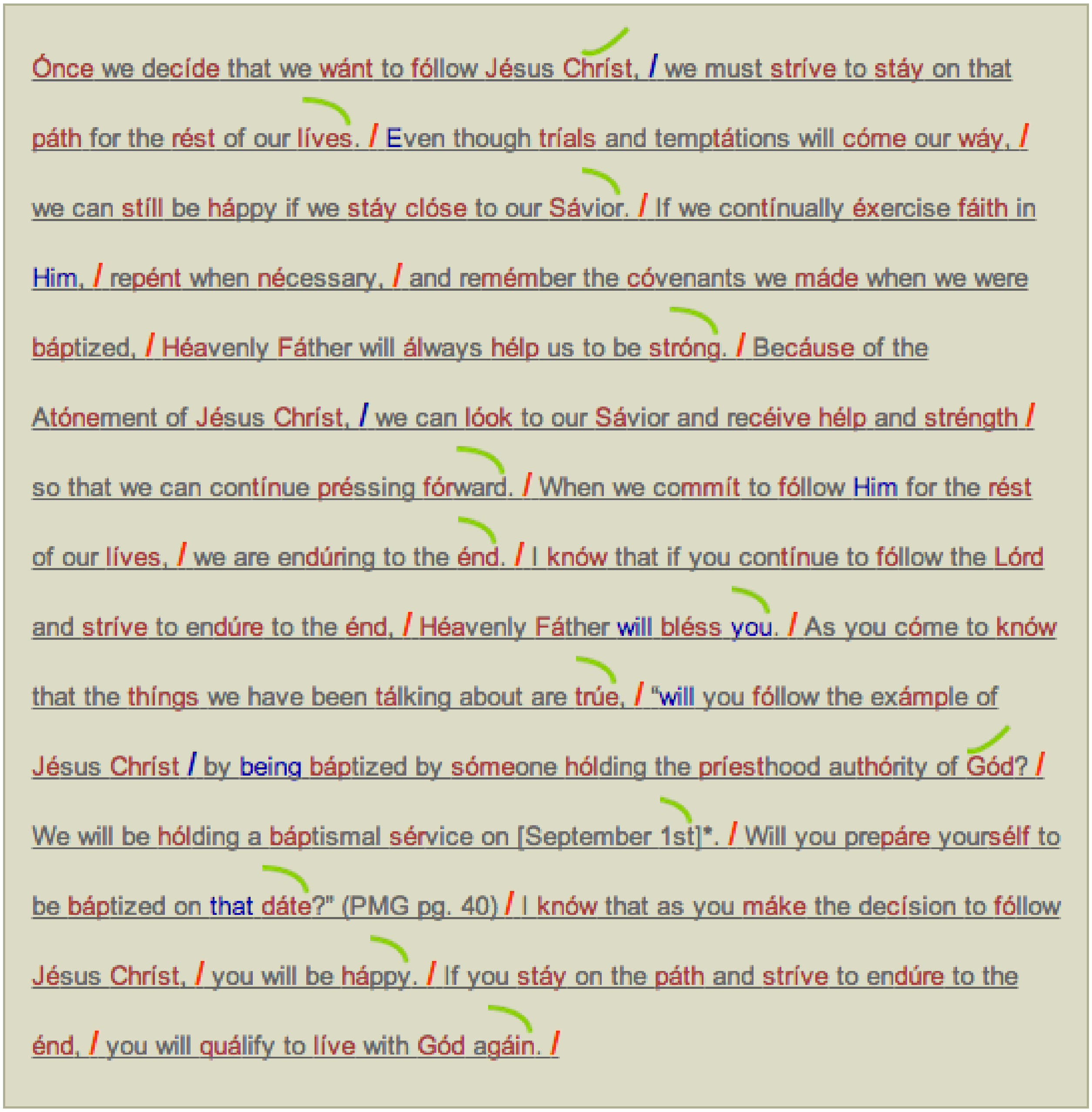
Ónce we decíde that we wánt to fóllow Jésus Chríst, we must stríve to stáy on that páth for the rést of our líves. Even though tríals and temptátions will cóme our wáy, we can stíll be háppy if we stáy clóse to our Sávior. If we contínually éxercise fáith in Him, repént when nécessary, and remémber the cóvenants we máde when we were báptized, Héavenly Fáther will álways hélp us to be stróng. Becáuse of the Atónement of Jésus Chríst, we can lóok to our Sávior and recéive hélp and stréngth so that we can contínue préssing fórward. When we commít to fóllow Him for the rést of our líves, we are endúring to the énd. I knów that if you contínue to fóllow the Lórd and stríve to endúre to the énd, Héavenly Fáther will bléss you. As you cóme to knów that the thíngs we have been tálking about are trúe, "will you fóllow the exámple of Jésus Chríst by being báptized by sómeone hólding the príesthood authórity of Gód? We will be hólding a báptismal sérvice on [September 1st]*. Will you prepáre yoursélf to be báptized on that dáte?" (PMG pg. 40) I knów that as you máke the decísion to fóllow Jésus Chríst, you will be háppy. If you stáy on the páth and stríve to endúre to the énd, you will quálify to líve with Gód agáin.

Intonation



Once we decide that we want to follow Jesus Christ, we must strive to stay on that path for the rest of our lives. Even though trials and temptations will come our way, we can still be happy if we stay close to our Savior. If we continually exercise faith in Him, repent when necessary, and remember the covenants we made when we were baptized, Heavenly Father will always help us to be strong. Because of the Atonement of Jesus Christ, we can look to our Savior and receive help and strength so that we can continue pressing forward. When we commit to follow Him for the rest of our lives, we are enduring to the end. I know that if you continue to follow the Lord and strive to endure to the end, Heavenly Father will bless you. As you come to know that the things we have been talking about are true, "will you follow the example of Jesus Christ by being baptized by someone holding the priesthood authority of God? We will be holding a baptismal service on [September 1st]*. Will you prepare yourself to be baptized on that date?" (PMG pg. 40) I know that as you make the decision to follow Jesus Christ, you will be happy. If you stay on the path and strive to endure to the end, you will qualify to live with God again.

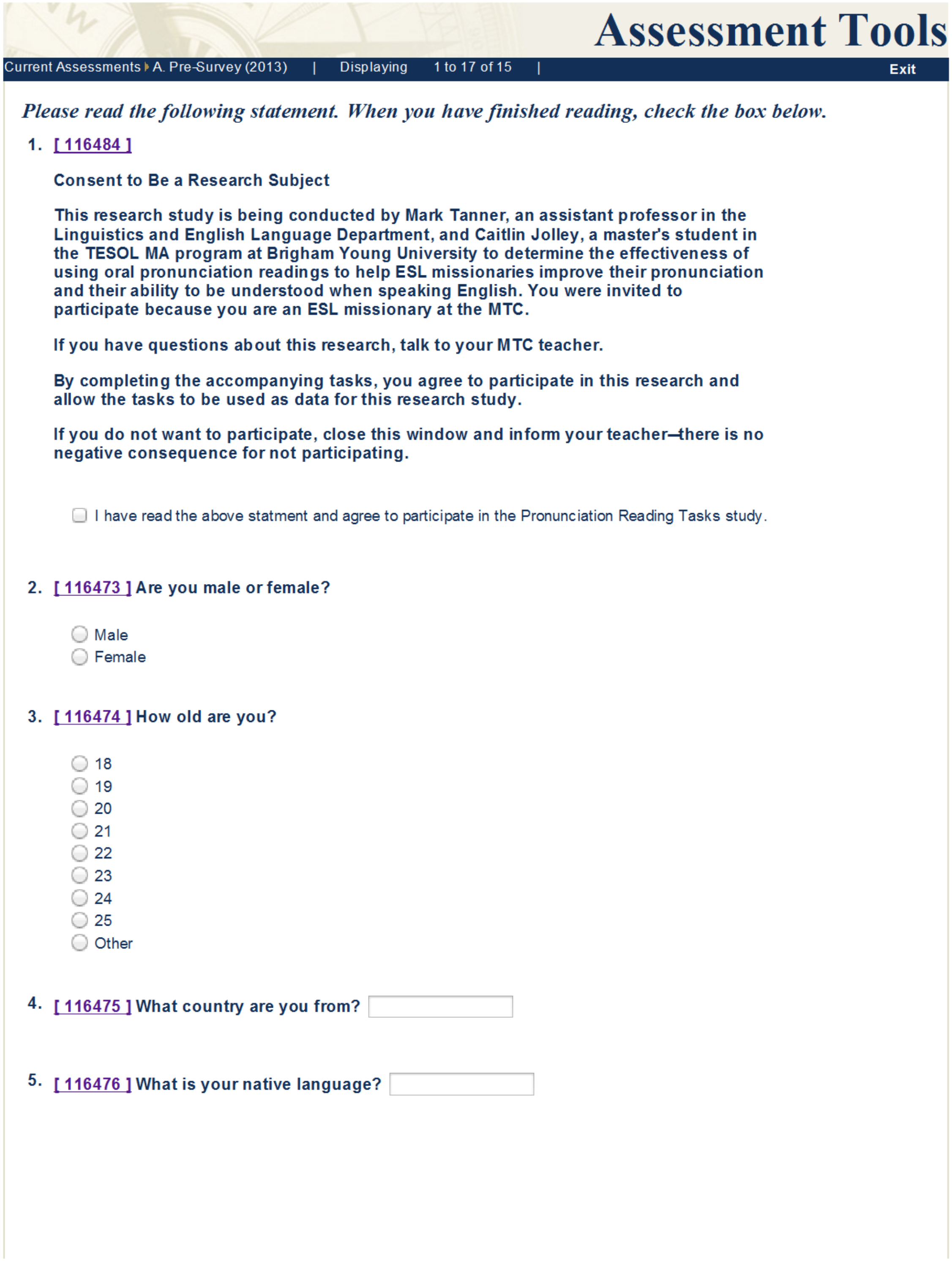
Final



Ónce we decíde that we wánt to fóllow Jésus Chríst, / we must stríve to stáy on that páth for the rést of our líves. / Even though tríals and temptátions will cóme our wáy, / we can stíll be háppy if we stáy clóse to our Sávior. / If we contínually éxercise fáith in Him, / repént when nécessary, / and remémber the cóvenants we máde when we were báptized, / Héavenly Fáther will álways hélp us to be stróng. / Becáuse of the Atónement of Jésus Chríst, / we can lóok to our Sávior and recéive hélp and stréngth / so that we can contínue préssing fórward. / When we commít to fóllow Him for the rést of our líves, / we are endúring to the énd. / I knów that if you contínue to fóllow the Lórd and strívе to endúre to the énd, / Héavenly Fáther will bléss you. / As you cóme to knów that the thíngs we have been tálking about are trúe, / "will you fóllow the exámple of Jésus Chríst / by being báptized by sómeone hólding the príesthood authórity of Gód? / We will be hólding a báptismal sérvice on [September 1st]*. / Will you prepáre yoursélf to be báptized on that dáte?" (PMG pg. 40) / I knów that as you máke the decísion to fóllow Jésus Chríst, / you will be háppy. / If you stáy on the páth and strívе to endúre to the énd, / you will quálify to líve with Gód agáin. /

Appendix B: Pre-Survey

5/9/2014 Assessment Tools - A. Pre-Survey (2013)


Assessment Tools
Current Assessments ▸ A. Pre-Survey (2013) | Displaying 1 to 17 of 15 |
Exit

Please read the following statement. When you have finished reading, check the box below.

1. [116484]

Consent to Be a Research Subject

This research study is being conducted by Mark Tanner, an assistant professor in the Linguistics and English Language Department, and Caitlin Jolley, a master's student in the TESOL MA program at Brigham Young University to determine the effectiveness of using oral pronunciation readings to help ESL missionaries improve their pronunciation and their ability to be understood when speaking English. You were invited to participate because you are an ESL missionary at the MTC.

If you have questions about this research, talk to your MTC teacher.

By completing the accompanying tasks, you agree to participate in this research and allow the tasks to be used as data for this research study.

If you do not want to participate, close this window and inform your teacher—there is no negative consequence for not participating.

☐ I have read the above statment and agree to participate in the Pronunciation Reading Tasks study.

2. [116473] **Are you male or female?**

○ Male
○ Female

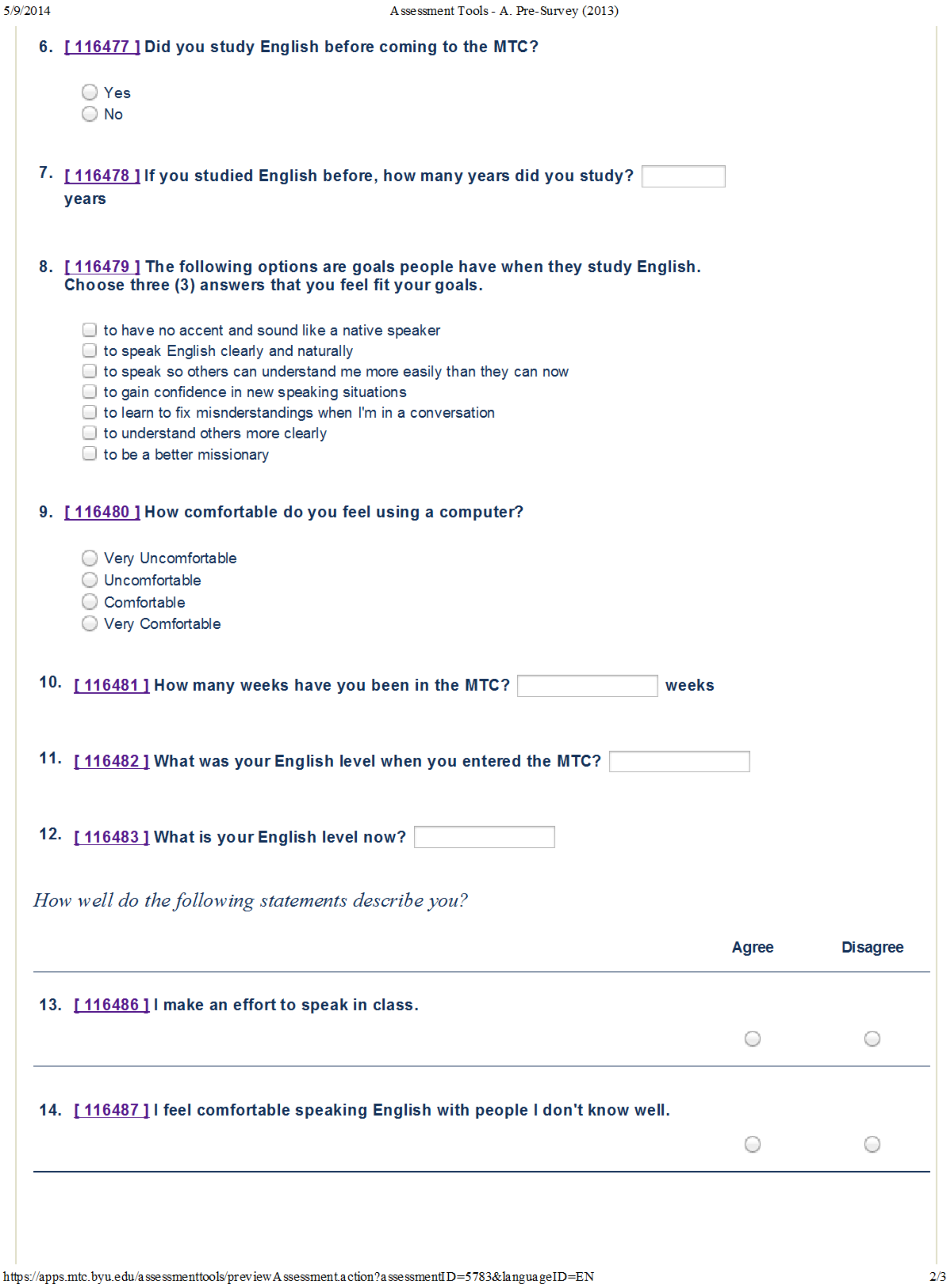
3. [116474] **How old are you?**

○ 18
○ 19
○ 20
○ 21
○ 22
○ 23
○ 24
○ 25
○ Other

4. [116475] **What country are you from?**

5. [116476] **What is your native language?**

https://apps.mtc.byu.edu/assessmenttools/previewAssessment.action?assessmentID=5783&languageID=EN 1/3



6. [116477] Did you study English before coming to the MTC?

○ Yes
○ No

7. [116478] If you studied English before, how many years did you study? years

8. [116479] The following options are goals people have when they study English. Choose three (3) answers that you feel fit your goals.

☐ to have no accent and sound like a native speaker
☐ to speak English clearly and naturally
☐ to speak so others can understand me more easily than they can now
☐ to gain confidence in new speaking situations
☐ to learn to fix misnderstandings when I'm in a conversation
☐ to understand others more clearly
☐ to be a better missionary

9. [116480] How comfortable do you feel using a computer?

○ Very Uncomfortable
○ Uncomfortable
○ Comfortable
○ Very Comfortable

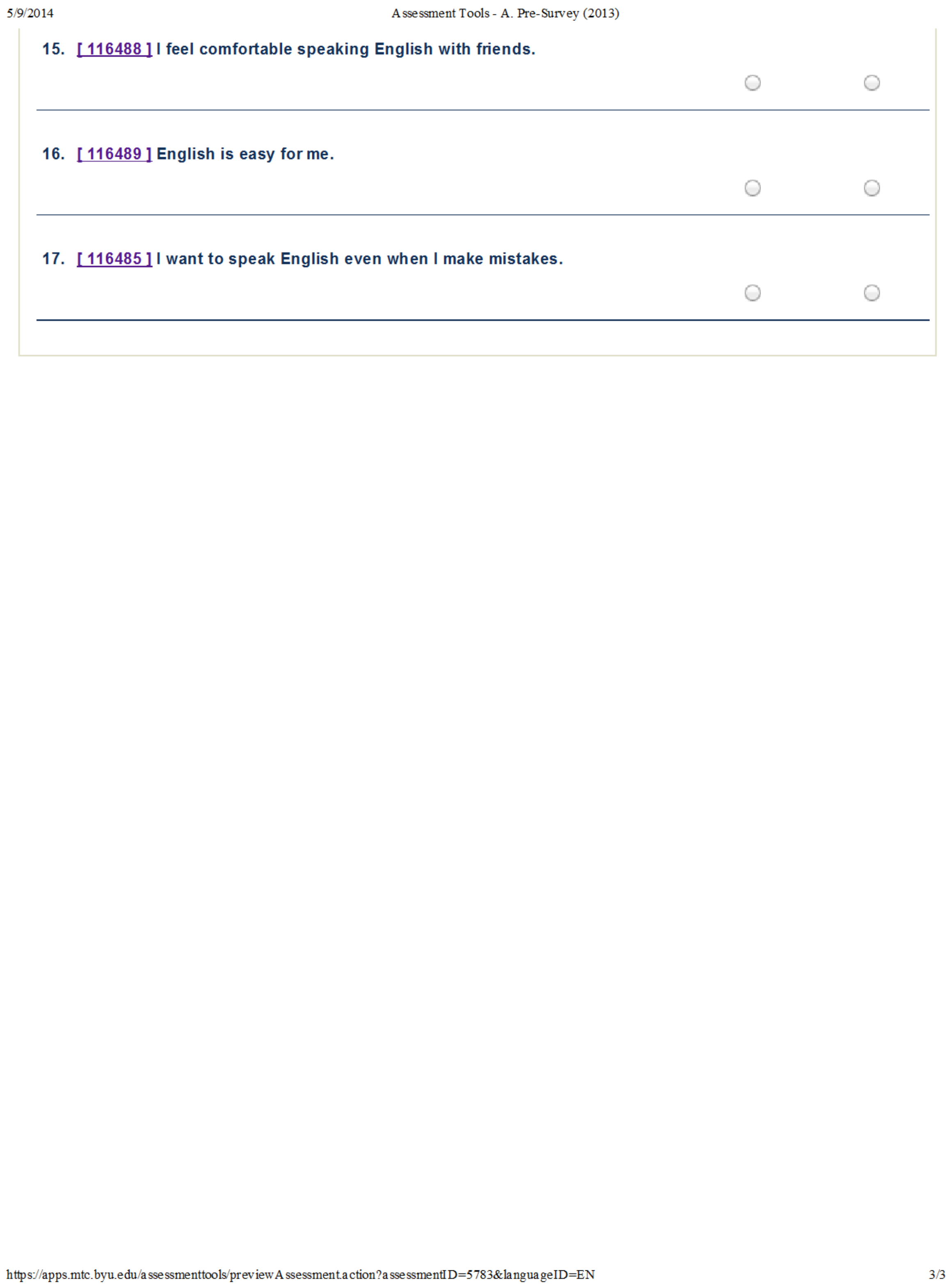
10. [116481] How many weeks have you been in the MTC? weeks

11. [116482] What was your English level when you entered the MTC?

12. [116483] What is your English level now?

How well do the following statements describe you?

	Agree	Disagree
13. [116486] I make an effort to speak in class.	○	○
14. [116487] I feel comfortable speaking English with people I don't know well.	○	○



5/9/2014 Assessment Tools - A. Pre-Survey (2013)

15. [116488] I feel comfortable speaking English with friends.

○ ○

16. [116489] English is easy for me.

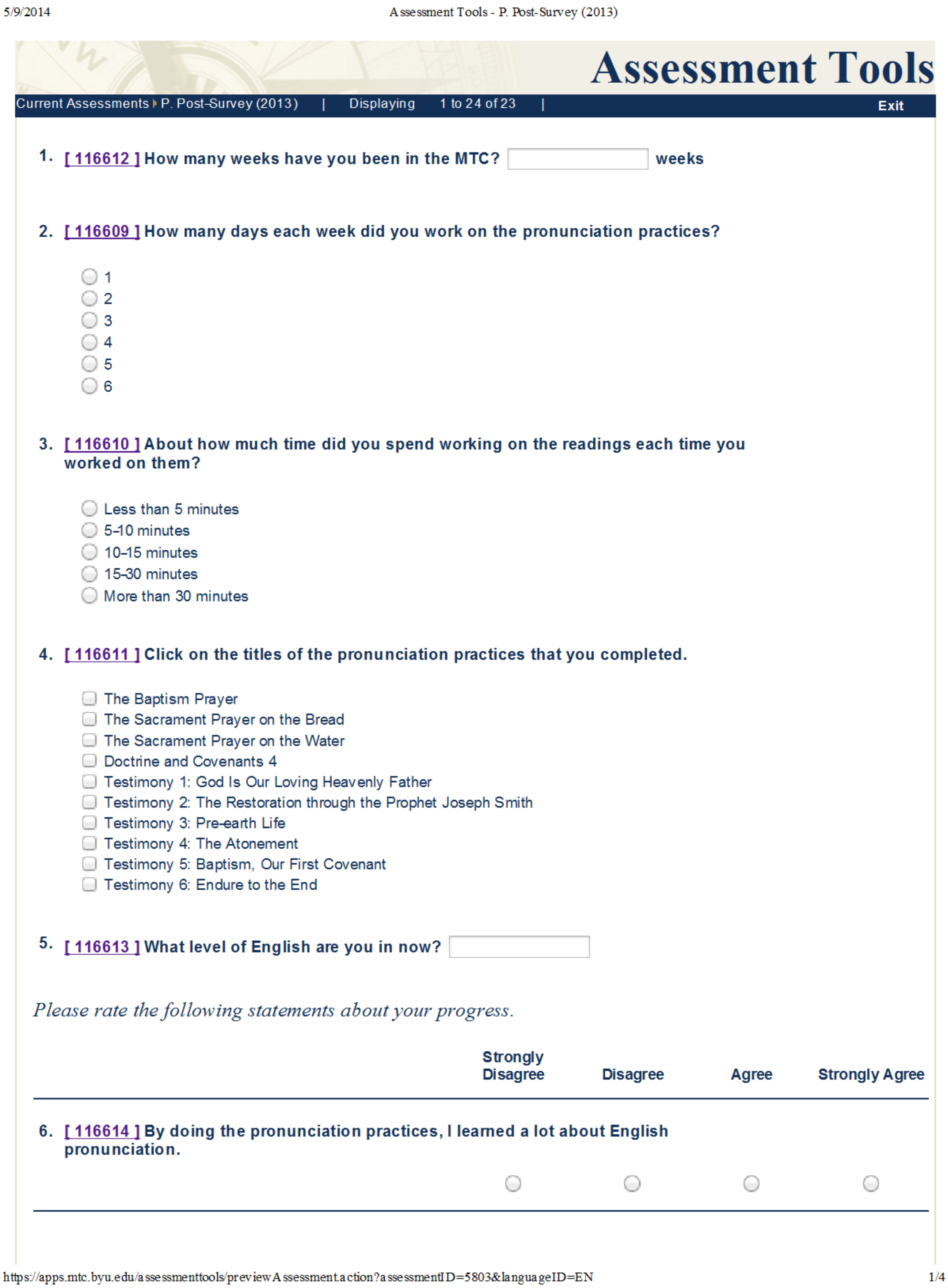
○ ○

17. [116485] I want to speak English even when I make mistakes.

○ ○

https://apps.mtc.byu.edu/assessmenttools/previewAssessment.action?assessmentID=5783&languageID=EN 3/3

Appendix C: Post-Survey



5/9/2014 Assessment Tools - P. Post-Survey (2013)

Assessment Tools
Current Assessments ▸ P. Post-Survey (2013) | Displaying 1 to 24 of 23 |
Exit

1. **[116612] How many weeks have you been in the MTC?** ☐ **weeks**

2. **[116609] How many days each week did you work on the pronunciation practices?**

○ 1
○ 2
○ 3
○ 4
○ 5
○ 6

3. **[116610] About how much time did you spend working on the readings each time you worked on them?**

○ Less than 5 minutes
○ 5-10 minutes
○ 10-15 minutes
○ 15-30 minutes
○ More than 30 minutes

4. **[116611] Click on the titles of the pronunciation practices that you completed.**

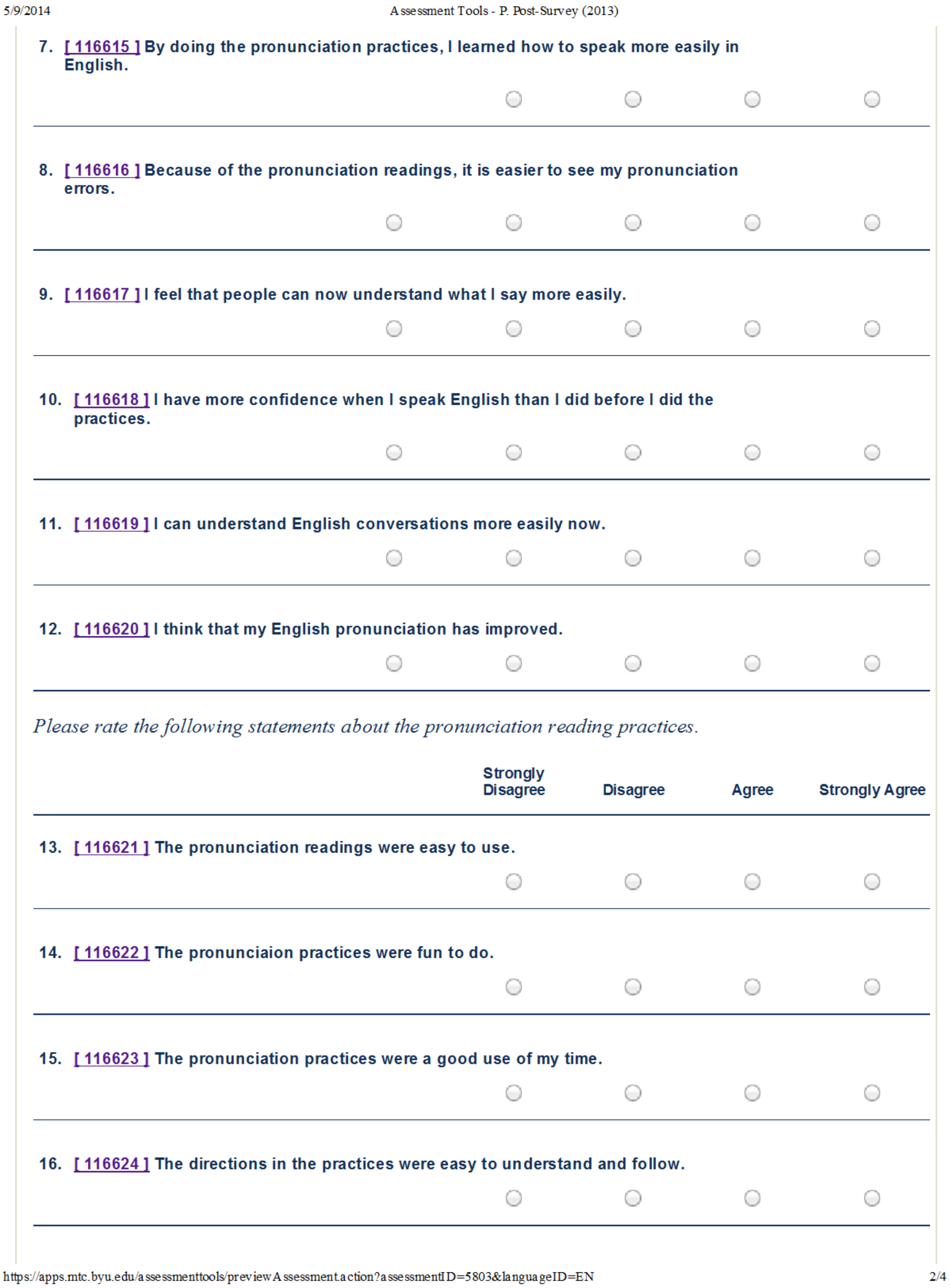
☐ The Baptism Prayer
☐ The Sacrament Prayer on the Bread
☐ The Sacrament Prayer on the Water
☐ Doctrine and Covenants 4
☐ Testimony 1: God Is Our Loving Heavenly Father
☐ Testimony 2: The Restoration through the Prophet Joseph Smith
☐ Testimony 3: Pre-earth Life
☐ Testimony 4: The Atonement
☐ Testimony 5: Baptism, Our First Covenant
☐ Testimony 6: Endure to the End

5. **[116613] What level of English are you in now?** ☐

Please rate the following statements about your progress.

	Strongly Disagree	Disagree	Agree	Strongly Agree
6. **[116614] By doing the pronunciation practices, I learned a lot about English pronunciation.**	○	○	○	○

https://apps.mtc.byu.edu/assessmenttools/previewAssessment.action?assessmentID=5803&languageID=EN 1/4



5/9/2014 Assessment Tools - P. Post-Survey (2013)

7. [116615] **By doing the pronunciation practices, I learned how to speak more easily in English.**

○ ○ ○ ○

8. [116616] **Because of the pronunciation readings, it is easier to see my pronunciation errors.**

○ ○ ○ ○ ○

9. [116617] **I feel that people can now understand what I say more easily.**

○ ○ ○ ○ ○

10. [116618] **I have more confidence when I speak English than I did before I did the practices.**

○ ○ ○ ○ ○

11. [116619] **I can understand English conversations more easily now.**

○ ○ ○ ○ ○

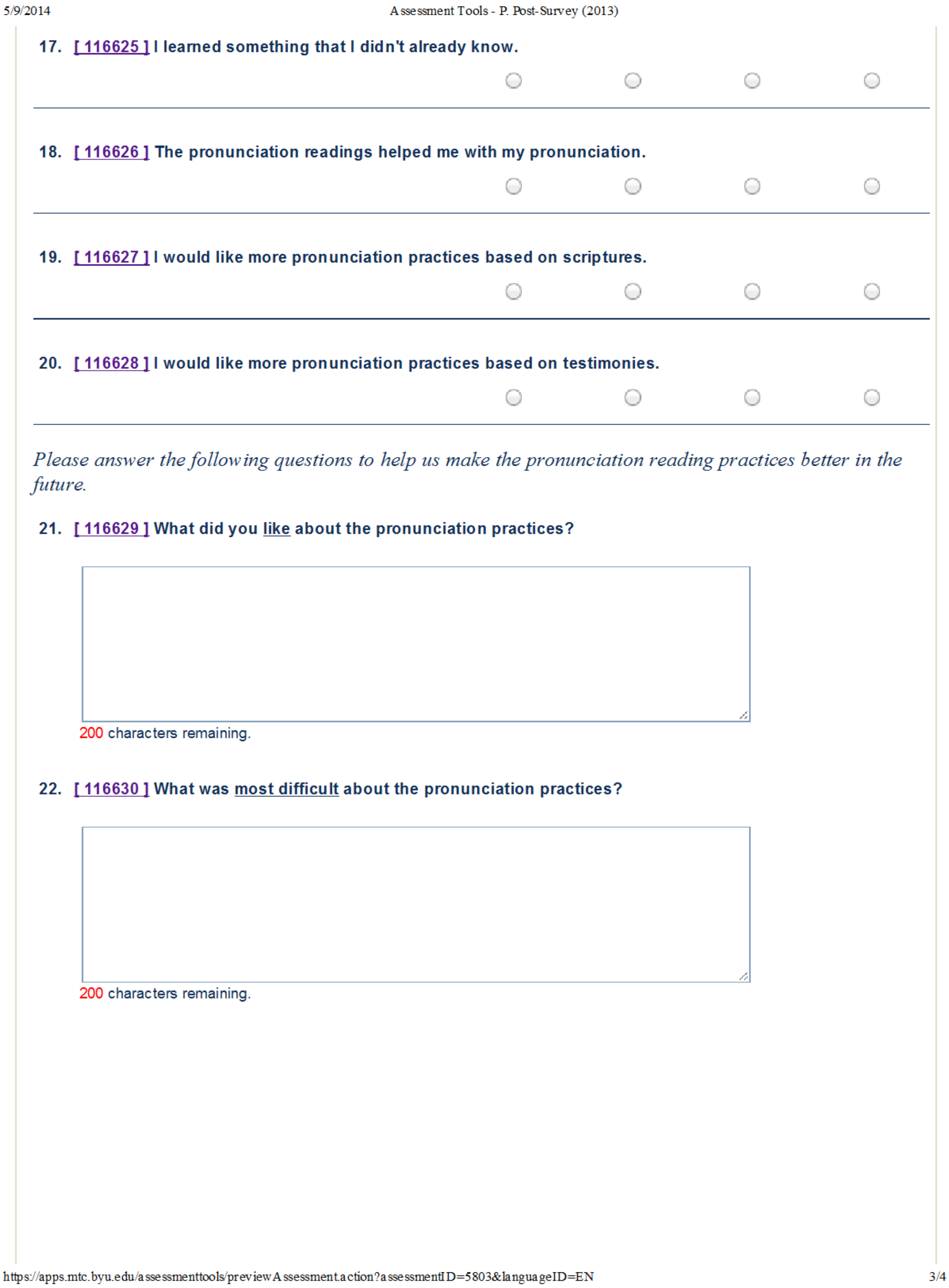
12. [116620] **I think that my English pronunciation has improved.**

○ ○ ○ ○ ○

Please rate the following statements about the pronunciation reading practices.

	Strongly Disagree	Disagree	Agree	Strongly Agree
13. [116621] **The pronunciation readings were easy to use.**	○	○	○	○
14. [116622] **The pronunciaion practices were fun to do.**	○	○	○	○
15. [116623] **The pronunciation practices were a good use of my time.**	○	○	○	○
16. [116624] **The directions in the practices were easy to understand and follow.**	○	○	○	○

https://apps.mtc.byu.edu/assessmenttools/previewAssessment.action?assessmentID=5803&languageID=EN 2/4



5/9/2014 Assessment Tools - P. Post-Survey (2013)

17. [116625] I learned something that I didn't already know.

○ ○ ○ ○

18. [116626] The pronunciation readings helped me with my pronunciation.

○ ○ ○ ○

19. [116627] I would like more pronunciation practices based on scriptures.

○ ○ ○ ○

20. [116628] I would like more pronunciation practices based on testimonies.

○ ○ ○ ○

Please answer the following questions to help us make the pronunciation reading practices better in the future.

21. [116629] What did you like about the pronunciation practices?

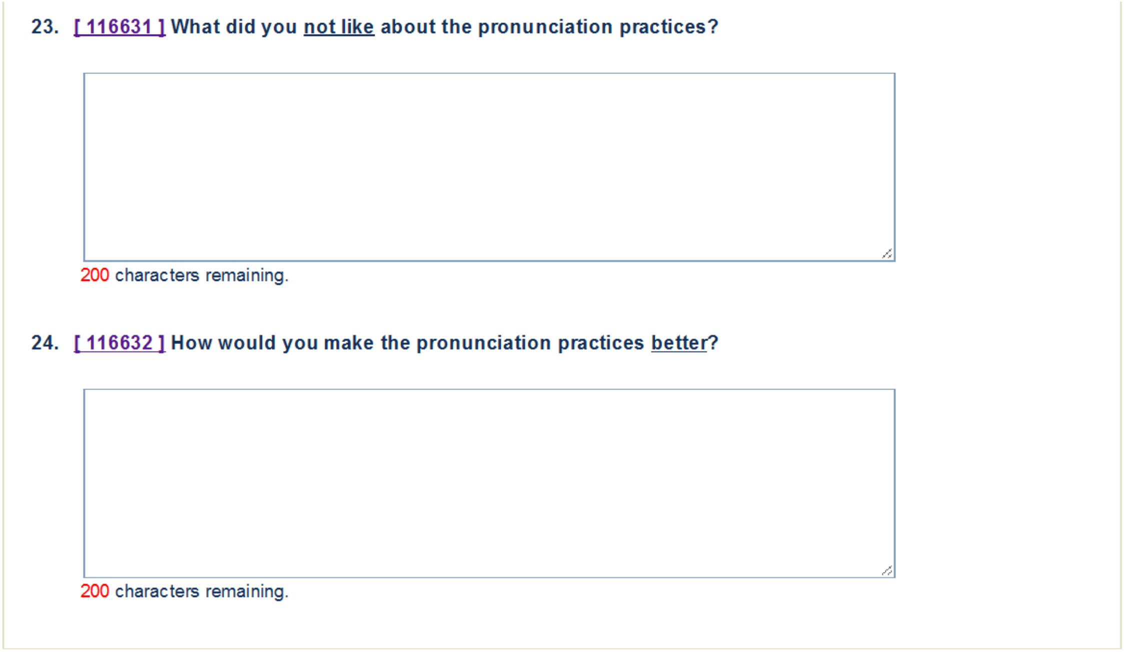
200 characters remaining.

22. [116630] What was most difficult about the pronunciation practices?

200 characters remaining.

https://apps.mtc.byu.edu/assessmenttools/previewAssessment.action?assessmentID=5803&languageID=EN 3/4

5/9/2014 Assessment Tools - P. Post-Survey (2013)



23. [116631] What did you not like about the pronunciation practices?

200 characters remaining.

24. [116632] How would you make the pronunciation practices better?

200 characters remaining.

https://apps.mtc.byu.edu/assessmenttools/previewAssessment.action?assessmentID=5803&languageID=EN 4/4

Appendix D: Introduction to Pronunciation

An Introduction to Pronunciation

للاستشارات المنارة

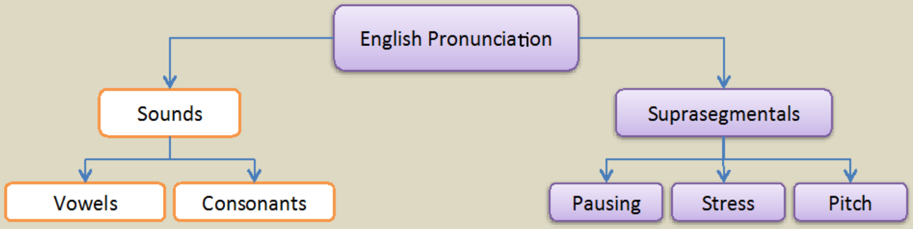
Speaking English

What helps people understand the way I talk?

Speaking English

What helps people understand the way I talk?

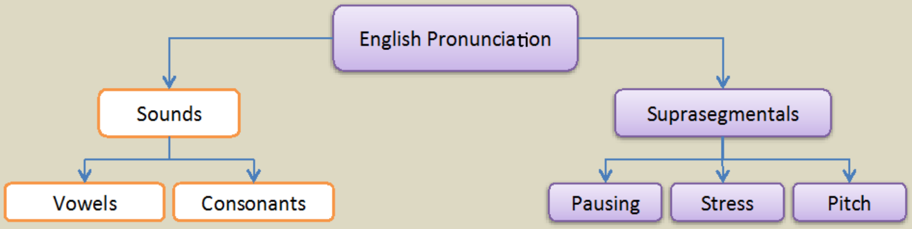
1. Clearly saying the sounds of the language


English Pronunciation
Sounds
Suprasegmentals
Vowels
Consonants
Pausing
Stress
Pitch

Speaking English

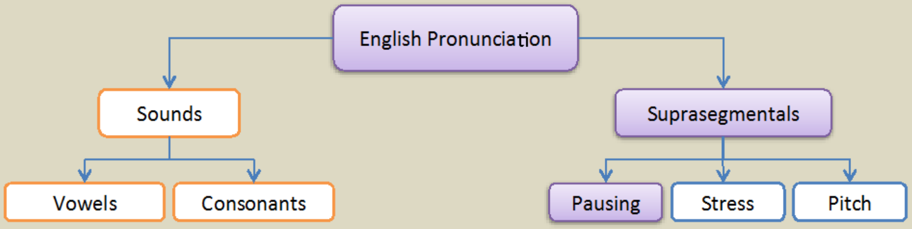
What helps people understand the way I talk?

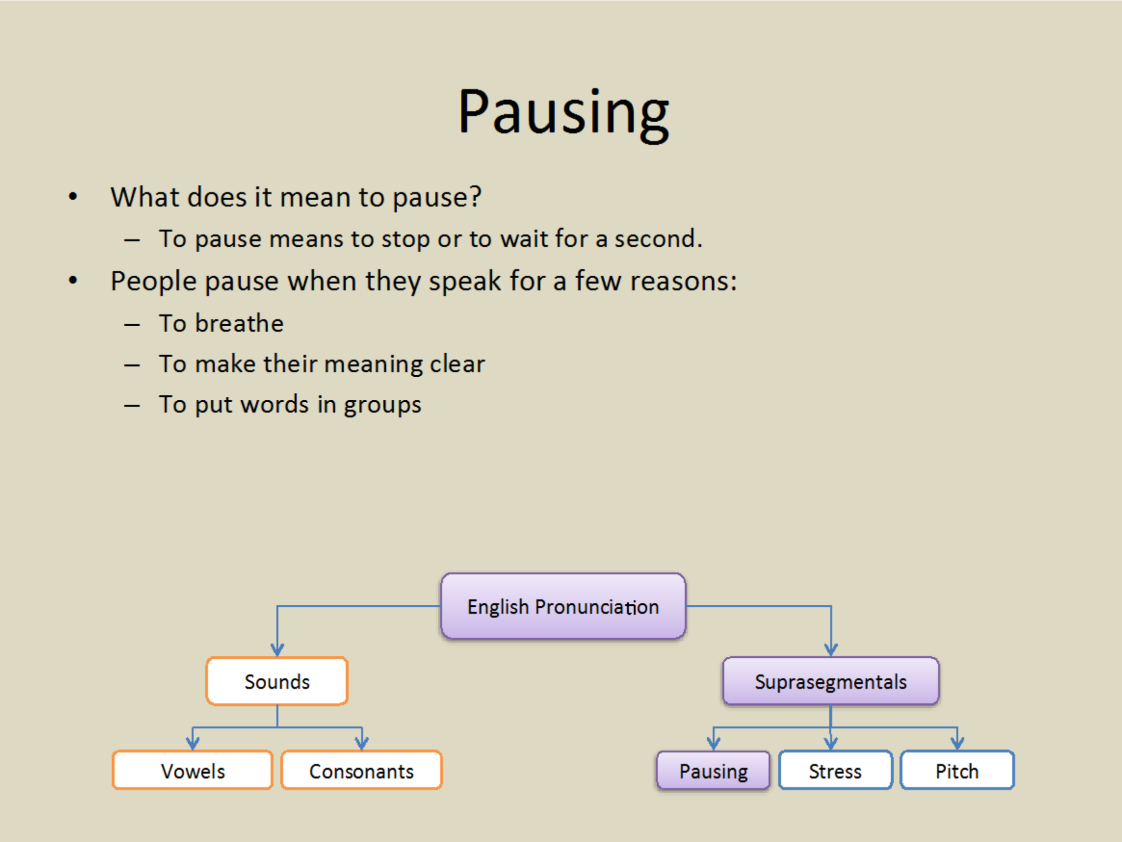
1. Clearly saying the sounds of the language
2. Producing correct pausing, stress, and pitch


English Pronunciation
Sounds
Suprasegmentals
Vowels
Consonants
Pausing
Stress
Pitch

Pausing

- What does it mean to pause?
  - To pause means to stop or to wait for a second.

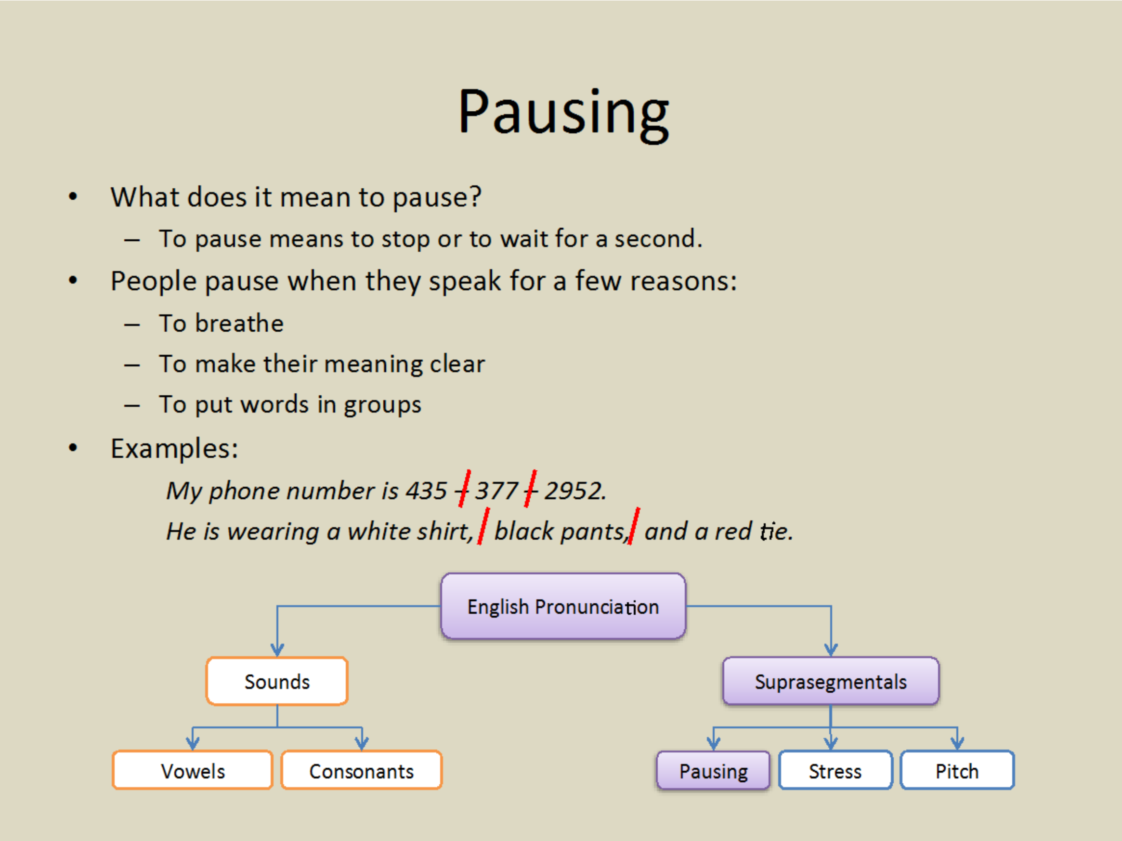

English Pronunciation
Sounds
Suprasegmentals
Vowels
Consonants
Pausing
Stress
Pitch



Pausing

- What does it mean to pause?
  - To pause means to stop or to wait for a second.
- People pause when they speak for a few reasons:
  - To breathe
  - To make their meaning clear
  - To put words in groups

- English Pronunciation
  - Sounds
    - Vowels
    - Consonants
  - Suprasegmentals
    - Pausing
    - Stress
    - Pitch



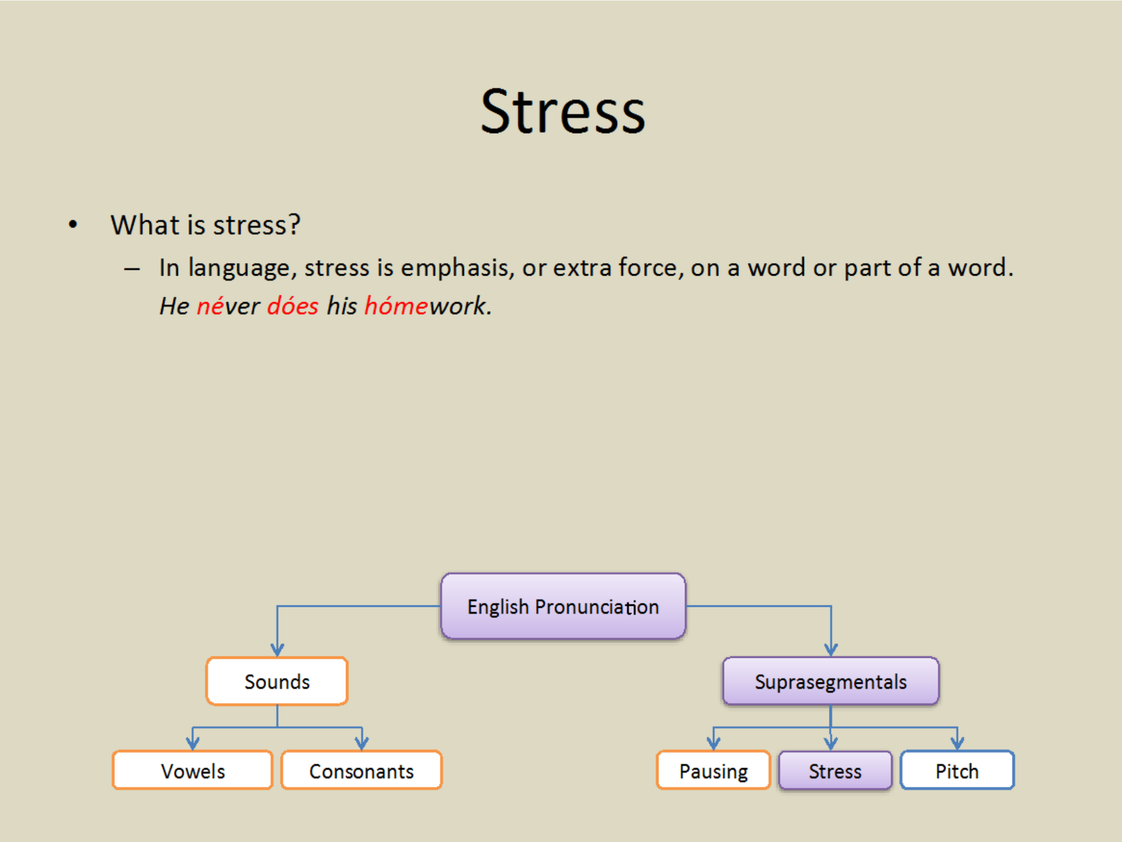
Pausing

- What does it mean to pause?
  - To pause means to stop or to wait for a second.
- People pause when they speak for a few reasons:
  - To breathe
  - To make their meaning clear
  - To put words in groups
- Examples:

  My phone number is 435 / 377 / 2952.

  He is wearing a white shirt, / black pants, / and a red tie.

- English Pronunciation
  - Sounds
    - Vowels
    - Consonants
  - Suprasegmentals
    - Pausing
    - Stress
    - Pitch

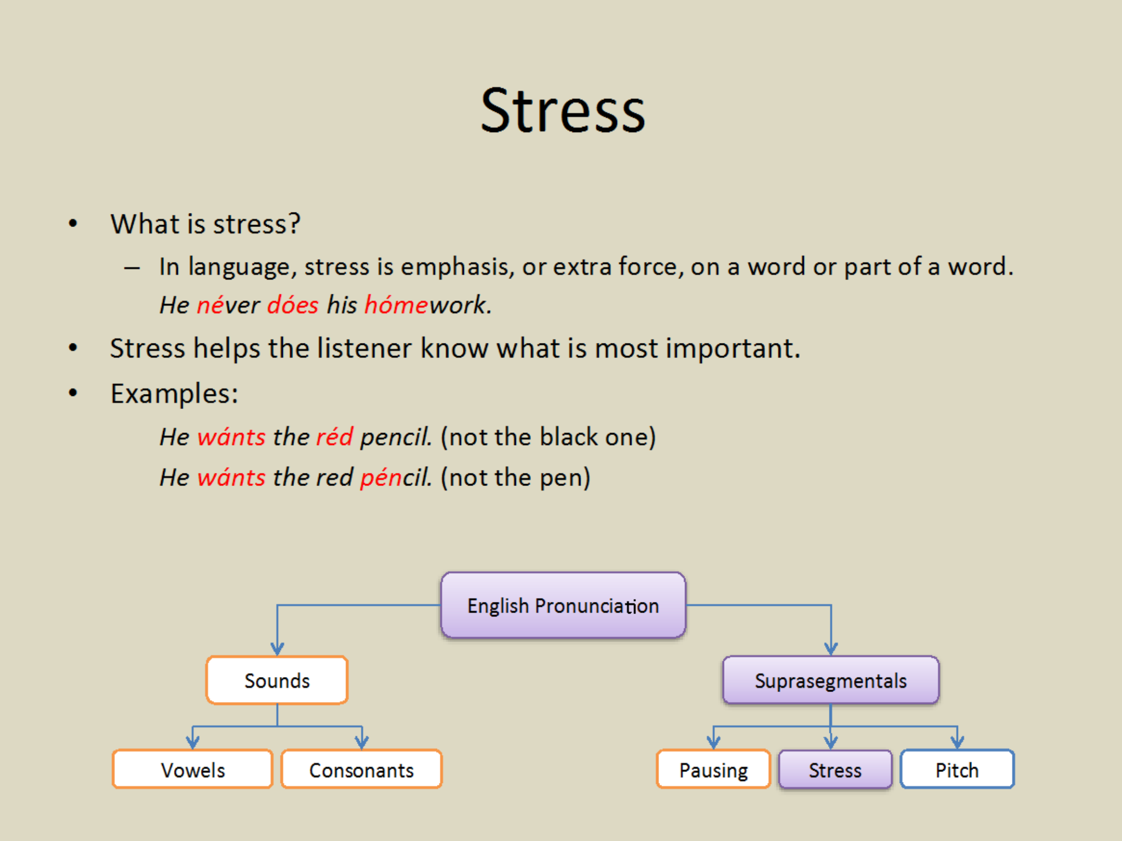


Stress

- What is stress?
  - In language, stress is emphasis, or extra force, on a word or part of a word.

    He néver dóes his hómework.

English Pronunciation
Sounds
Suprasegmentals
Vowels
Consonants
Pausing
Stress
Pitch



Stress

- What is stress?
  - In language, stress is emphasis, or extra force, on a word or part of a word.

    He néver dóes his hómework.
- Stress helps the listener know what is most important.
- Examples:

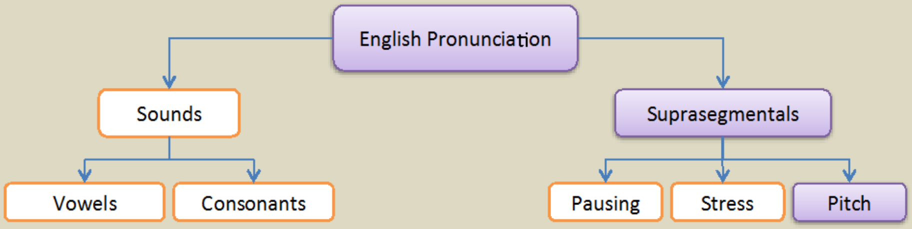
  He wánts the réd pencil. (not the black one)

  He wánts the red péncil. (not the pen)

English Pronunciation
Sounds
Suprasegmentals
Vowels
Consonants
Pausing
Stress
Pitch

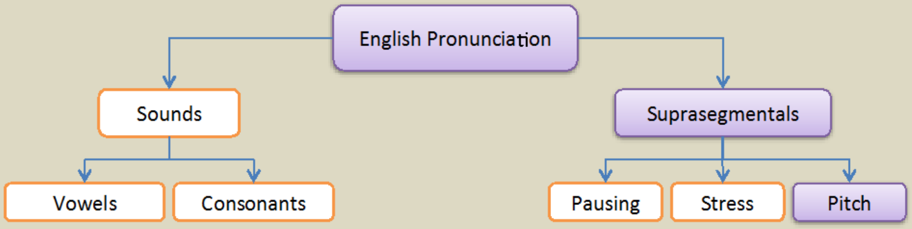
Pitch

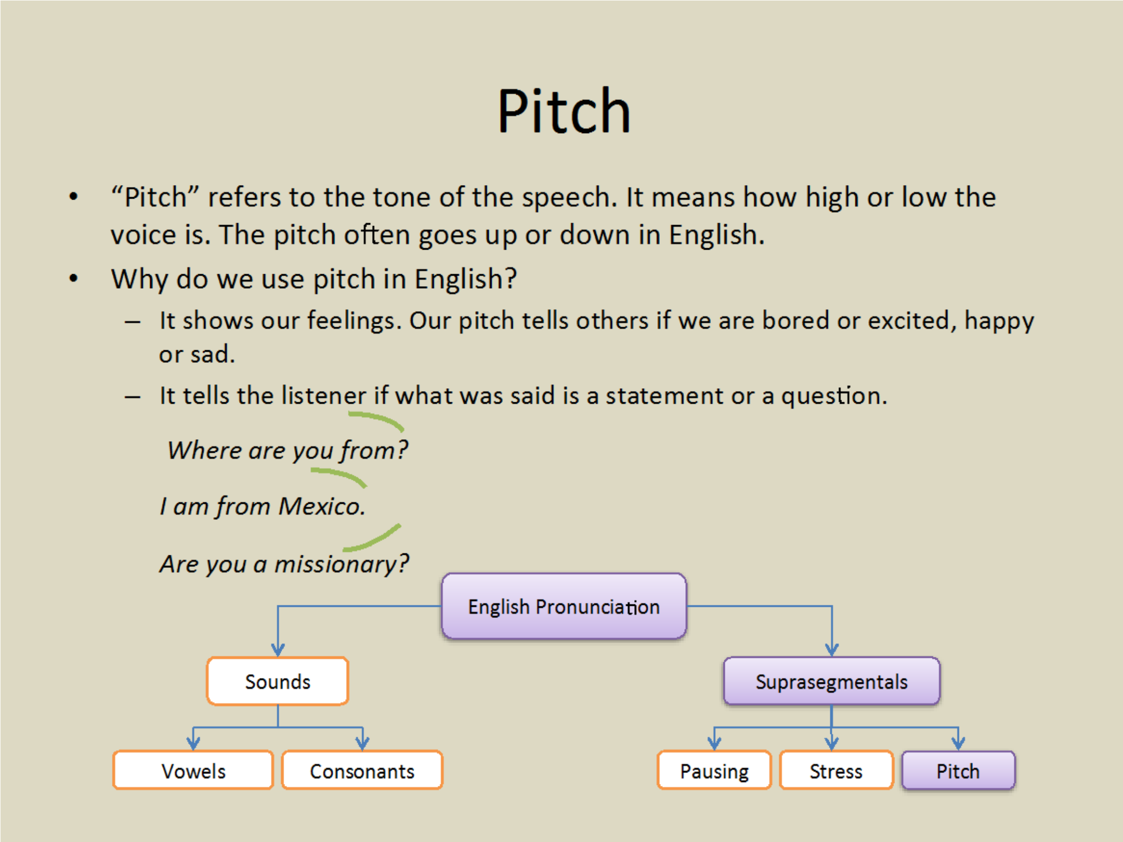
- "Pitch" refers to the tone of the speech. It means how high or low the voice is. The pitch often goes up or down in English.


English Pronunciation
Sounds
Suprasegmentals
Vowels
Consonants
Pausing
Stress
Pitch

Pitch

- "Pitch" refers to the tone of the speech. It means how high or low the voice is. The pitch often goes up or down in English.
- Why do we use pitch in English?
  - It shows our feelings. Our pitch tells others if we are bored or excited, happy or sad.


English Pronunciation
Sounds
Suprasegmentals
Vowels
Consonants
Pausing
Stress
Pitch



Pitch

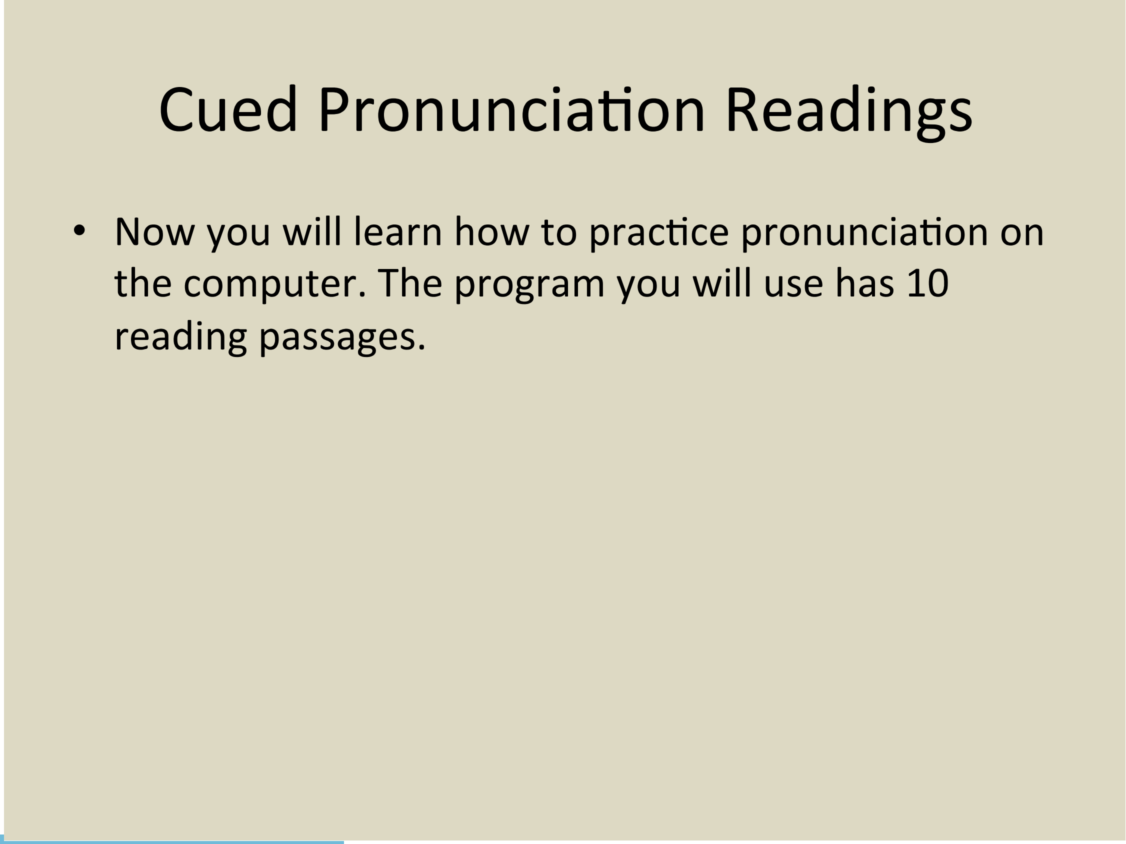
- "Pitch" refers to the tone of the speech. It means how high or low the voice is. The pitch often goes up or down in English.
- Why do we use pitch in English?
  - It shows our feelings. Our pitch tells others if we are bored or excited, happy or sad.
  - It tells the listener if what was said is a statement or a question.

Where are you from?

I am from Mexico.

Are you a missionary?

- English Pronunciation
  - Sounds
    - Vowels
    - Consonants
  - Suprasegmentals
    - Pausing
    - Stress
    - Pitch



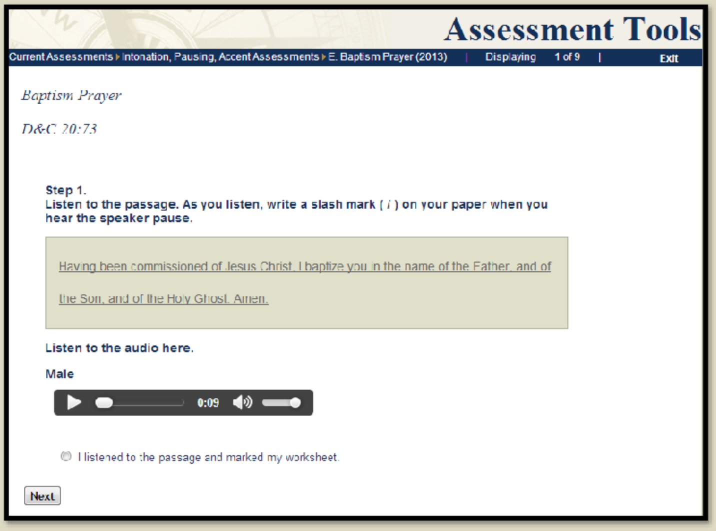
Cued Pronunciation Readings

- Now you will learn how to practice pronunciation on the computer. The program you will use has 10 reading passages.

Cued Pronunciation Readings

- Now you will learn how to practice pronunciation on the computer. The program you will use has 10 reading passages.
- For every reading passage, you will complete 4 steps:
  1) Listen to the passage for **pausing**.
  2) Listen to the passage for **stress**.
  3) Listen to the passage for **pitch**.
  4) Practice saying the passage and **record** it.

Instructions for Pausing


Assessment Tools
Current Assessments ▸ Intonation, Pausing, Accent Assessments ▸ E. Baptism Prayer (2013) | Displaying 1 of 9 |
Exit
0:09
Next

Baptism Prayer

D&C 20:73

Step 1.
Listen to the passage. As you listen, write a slash mark (/) on your paper when you hear the speaker pause.

Having been commissioned of Jesus Christ, I baptize you in the name of the Father, and of the Son, and of the Holy Ghost. Amen.

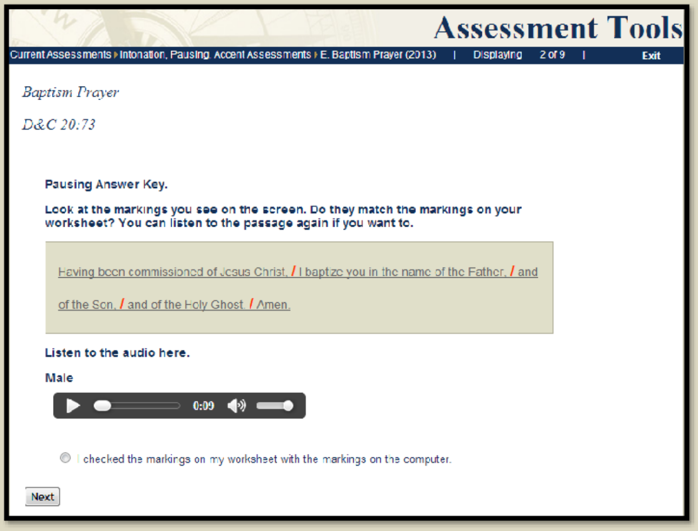
Listen to the audio here.

Male

○ I listened to the passage and marked my worksheet.

1. Listen to the native speaker read the passage.
2. Write a slash mark (/) on your paper every time you hear the speaker pause.
3. When you finish, check the box and click “Next”.

Instructions for Pausing


Assessment Tools
Current Assessments ▸ Intonation, Pausing, Accent Assessments ▸ E. Baptism Prayer (2013) | Displaying 2 of 9 | Exit
0:09
Next

Baptism Prayer

D&C 20:73

Pausing Answer Key.

Look at the markings you see on the screen. Do they match the markings on your worksheet? You can listen to the passage again if you want to.

Having been commissioned of Jesus Christ, / I baptize you in the name of the Father, / and of the Son, / and of the Holy Ghost. / Amen.

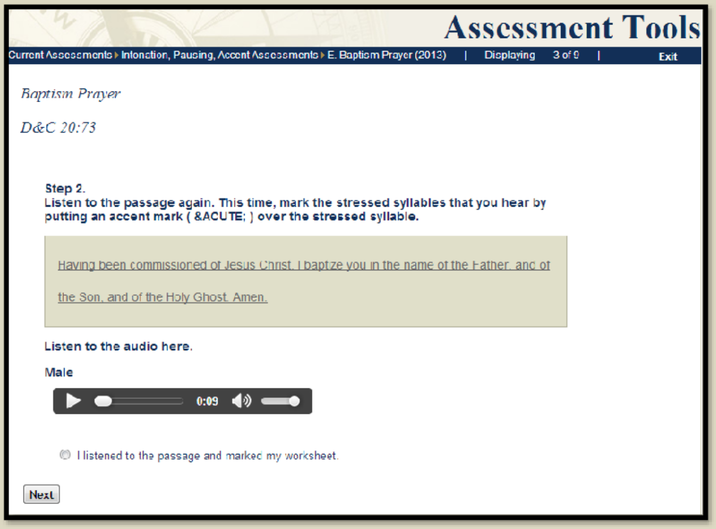
Listen to the audio here.

Male

○ I checked the markings on my worksheet with the markings on the computer.

Here you will see the Pausing Answer Key. You can check what you've written on your paper with the Answer Key. You can also practice saying the passage out loud.

Instructions for Stress


Assessment Tools
Current Assessments ▸ Intonation, Pausing, Accent Assessments ▸ E. Baptism Prayer (2013) | Displaying 3 of 9 | Exit
0:09
Next

Baptism Prayer

D&C 20:73

Step 2.
Listen to the passage again. This time, mark the stressed syllables that you hear by putting an accent mark (&ACUTE;) over the stressed syllable.

Having been commissioned of Jesus Christ, I baptze you in the name of the Father, and of the Son, and of the Holy Ghost. Amen.

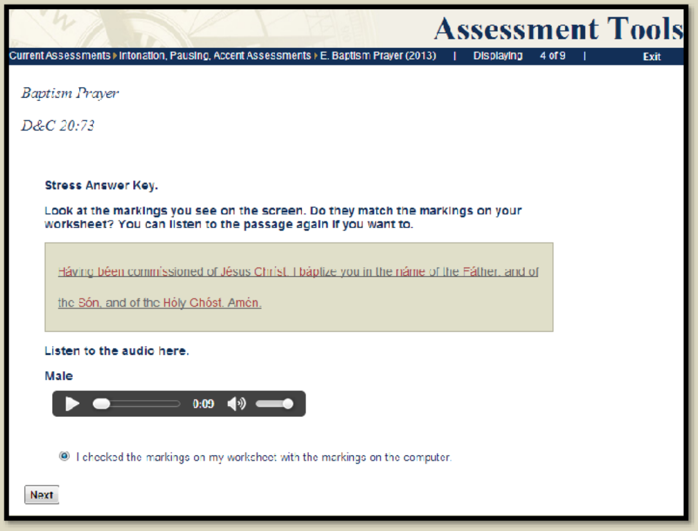
Listen to the audio here.

Male

○ I listened to the passage and marked my worksheet.

1. Listen to the native speaker read the passage.
2. Write an accent mark (á) on your paper every time you hear a stressed syllable.
3. When you finish, check the box and click "Next".

Instructions for Stress


Assessment Tools
Current Assessments ▸ Intonation, Pausing, Accent Assessments ▸ E. Baptism Prayer (2013) | Displaying 4 of 9 | Exit
0:09
Next

Baptism Prayer

D&C 20:73

Stress Answer Key.

Look at the markings you see on the screen. Do they match the markings on your worksheet? You can listen to the passage again if you want to.

Háving béen commíssioned of Jésus Chríst, I báptize you in the náme of the Fáther, and of the Són, and of the Hóly Ghóst. Amén.

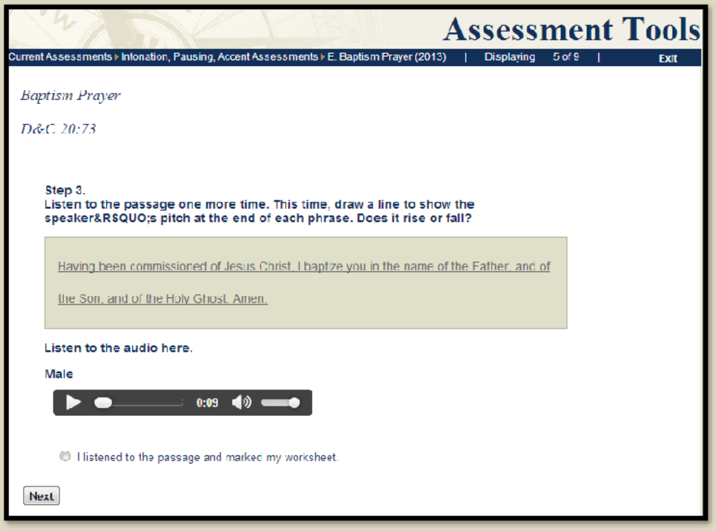
Listen to the audio here.

Male

● I checked the markings on my worksheet with the markings on the computer.

Here you will see the Stress Answer Key. You can check what you've written on your paper with the Answer Key. You can also practice saying the passage out loud.

Instructions for Pitch


Assessment Tools
Current Assessments ▸ Intonation, Pausing, Accent Assessments ▸ E. Baptism Prayer (2013) | Displaying 5 of 9 | Exit
0:09
Next

Baptism Prayer

D&C 20:73

Step 3.
Listen to the passage one more time. This time, draw a line to show the speaker&RSQUO;s pitch at the end of each phrase. Does it rise or fall?

Having been commissioned of Jesus Christ, I baptize you in the name of the Father, and of the Son, and of the Holy Ghost. Amen.

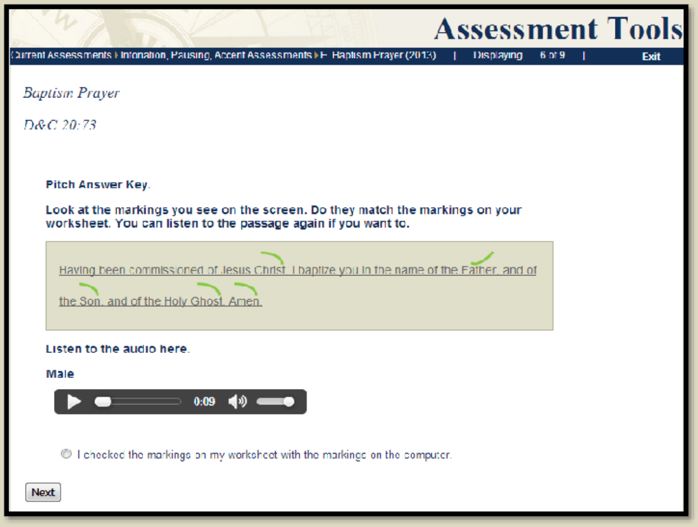
Listen to the audio here.

Male

○ I listened to the passage and marked my worksheet.

1. Listen to the native speaker read the passage.
2. Draw a line over the words to show if the pitch rises or falls.
3. When you finish, check the box and click "Next".

Instructions for Pitch


Assessment Tools
Current Assessments ▸ Intonation, Pausing, Accent Assessments ▸ E Baptism Prayer (2013) | Displaying 6 of 9 | Exit
0:09
Next

Baptism Prayer

D&C 20:73

Pitch Answer Key.

Look at the markings you see on the screen. Do they match the markings on your worksheet. You can listen to the passage again if you want to.

Having been commissioned of Jesus Christ, I baptize you in the name of the Father, and of the Son, and of the Holy Ghost. Amen.

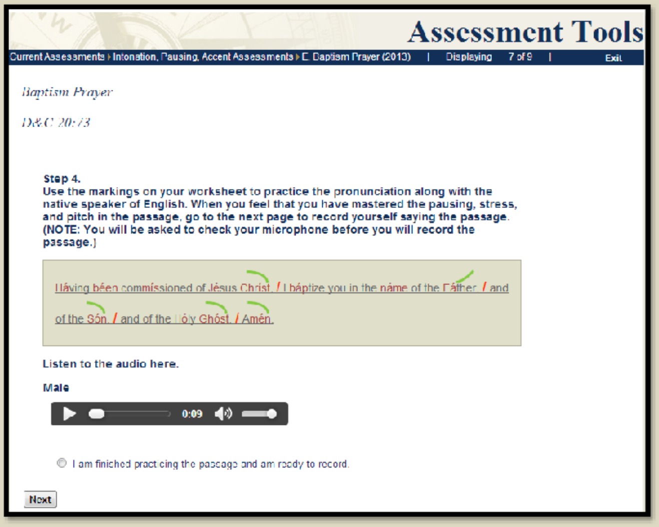
Listen to the audio here.

Male

○ I checked the markings on my worksheet with the markings on the computer.

Here you will see the Pitch Answer Key. You can check what you've written on your paper with the Answer Key. You can also practice saying the passage out loud.

Instructions for Recording


Assessment Tools
Current Assessments ▸ Intonation, Pausing, Accent Assessments ▸ E Baptism Prayer (2013) | Displaying 7 of 9 | Exit
0:09
Next

Baptism Prayer

D&C 20:73

Step 4.
Use the markings on your worksheet to practice the pronunciation along with the native speaker of English. When you feel that you have mastered the pausing, stress, and pitch in the passage, go to the next page to record yourself saying the passage. (NOTE: You will be asked to check your microphone before you will record the passage.)

Háving béen commíssioned of Jésus Christ, / I báptize you in the náme of the Fáther, / and of the Són, / and of the Hóly Ghóst. / Amén.

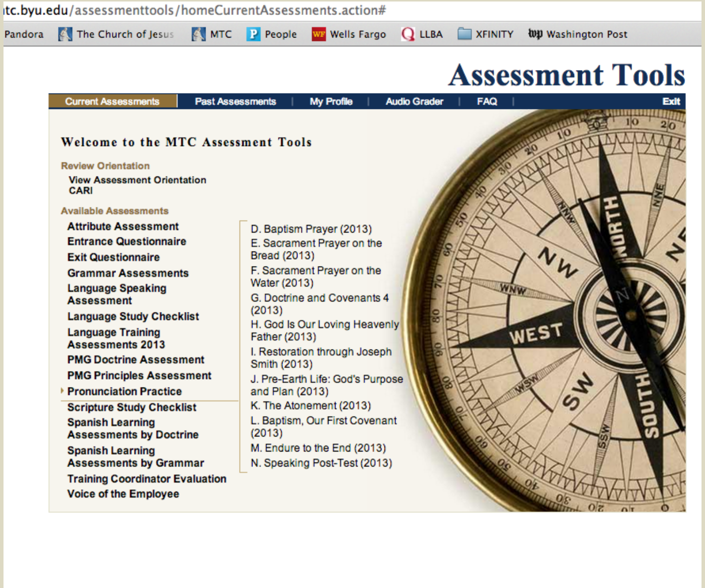
Listen to the audio here.

Male

○ I am finished practicing the passage and am ready to record.

On this final step, you will see the Answer Key for pausing, stress, and pitch together. Use the markings on your paper to practice saying the passage. Prepare to record.

Now You are Ready to Begin!


ıtc.byu.edu/assessmenttools/homeCurrentAssessments.action#
Pandora
The Church of Jesus
MTC
People
Wells Fargo
LLBA
XFINITY
Washington Post
Assessment Tools
Current Assessments
Past Assessments
My Profile
Audio Grader
FAQ
Exit

Welcome to the MTC Assessment Tools

Review Orientation

- View Assessment Orientation
- CARI

Available Assessments

- Attribute Assessment
- Entrance Questionnaire
- Exit Questionnaire
- Grammar Assessments
- Language Speaking Assessment
- Language Study Checklist
- Language Training Assessments 2013
- PMG Doctrine Assessment
- PMG Principles Assessment
- Pronunciation Practice
  - D. Baptism Prayer (2013)
  - E. Sacrament Prayer on the Bread (2013)
  - F. Sacrament Prayer on the Water (2013)
  - G. Doctrine and Covenants 4 (2013)
  - H. God Is Our Loving Heavenly Father (2013)
  - I. Restoration through Joseph Smith (2013)
  - J. Pre-Earth Life: God's Purpose and Plan (2013)
  - K. The Atonement (2013)
  - L. Baptism, Our First Covenant (2013)
  - M. Endure to the End (2013)
  - N. Speaking Post-Test (2013)
- Scripture Study Checklist
- Spanish Learning Assessments by Doctrine
- Spanish Learning Assessments by Grammar
- Training Coordinator Evaluation
- Voice of the Employee

To access the reading practices, log onto Assessment Tools. Complete one reading passage before you begin the next one. Good luck!