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The Effect of Formative Assessments on Teaching and Learning

Brian W. Radford

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

Master of Science

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ABSTRACT

The Effect of Formative Assessments on Teaching and Learning

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Master of Science

This study sought to improve the learning outcomes at the Missionary Training Center in Provo, Utah. Here, missionary trainees aged 19-24 are taught language and doctrine in an accelerated environment. In an effort to improve learning outcomes, the effect of formative feedback provided to students and summary feedback provided to teachers was assessed in a 2x2 factorial design with a separate control group. Four dependent variables were assessed including (a) doctrinal knowledge, (b) knowledge of teaching principles, (c) language grammar, and (d) ability to speak in a foreign language.

The results showed that students who received immediate formative feedback outperformed students who did not receive such feedback. However, providing summary feedback to teachers did not lead to an increase in achievement. The interaction effect was not statistically significant. The results indicated that students who completed formative assessments significantly outperformed students who did not complete such assessments.

Keywords: formative assessments, assessment for learning, teacher feedback, student feedback

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Chapter 1: Introduction

Background

The environment at the Latter Day Saint (LDS) Missionary Training Center is quite unique. Every student is a volunteer. Short training cycles are repeated throughout the year with different students. Students are highly motivated to learn since their stay will be short and, for most of them, it will be their only formal training before actually having to perform their tasks. Classroom time is typically 8 hours per day for three, eight, or eleven week periods depending upon the individual's language assignment. The training is very concentrated over a relatively short period of time. The teachers are non-professionals: They are typically college students in varying fields of study who for the most part only qualify to teach because they have been a missionary before.

Changes to the training program in recent years have focused more on allowing students to progress at their own pace. The challenge is that these students are still organized into classes typically of eight to twelve students who are put together merely because of their target language and country in which they are assigned to serve. Their levels of existing language skills vary greatly. Their abilities to gather and process the instruction vary greatly. These challenges make it hard for a non-professional teacher to adjust classroom teaching to meet everyone's needs, and also make it difficult for students to monitor and assess their learning.

Another significant change in recent years has been a shift in the intended learning outcomes. Previously, the missionaries were expected to memorize lessons in their target language that they could later present to investigators. Now the memorizing focus has shifted to allow the trainees to speak more in their own words and to learn basic language constructs in order to do so. Memorization remains in practice with regards to vocabulary in the target

language, but memorization of lesson content in a predefined order has been discontinued. The act of memorizing the lesson content had allowed for students to *chunk*, or group into logically related topics, the content. This chunking allowed the students to know where they were in their progress and how much more they needed to memorize before being prepared for their service. As a result of memorization, students were teaching only the words they had memorized and were not expanding their language abilities or their understanding of the content they were teaching. This memorization allowed most students to feel too comfortable with their level of learning and their teaching was done in a rote manner with no additional effort to improve. Even though the recent changes have addressed these latter issues, there has not been an obvious replacement provided yet for the built-in chunking and built-in progress tracking.

New Challenges

To adjust for this, recent changes have been made in schedules giving students more free time to either (a) process what they have been taught and catch up with their understanding or (b) study extra materials and push their learning beyond that of what was presented in the classroom. In addition to these schedule changes, additional testing is being proposed as a means of formative assessment in hopes to better assist the students in identifying weaknesses and strengths to enable them to better use this free time.

The MTC has a trained research staff that has experienced success in the past at creating and using assessments with these students. These assessments have been designed to measure (a) language abilities, (b) understanding of the gospel principles to be taught, and (c) study skills. The typical use of these assessment results has been to report on the progress of learning/teaching at the MTC to administrators. This new formative approach would differ greatly from the summative approach that has been taken thus far.

The rationale of this study is based on the assumption that formative assessments will (a) enable teachers to review the progress of their students and adjust their teaching to better meet the needs of the classroom, and (b) enable students to identify their own strengths and weaknesses in order to use their time wisely to advance their learning. The researcher hopes to show that both teachers and students will be able to adjust the levels of time and effort that they invest into different subject areas. This adjustment in study time and effort will also end up increasing their base learning levels beyond that of what they would be able to do without the formative assessments.

The frequent turnover of both trainees and teachers allows for adjusting the use and training on these formative assessments over a short period of time, and the test groups will be larger. This allows the study to provide results that can be extrapolated to other areas of formative assessment.

Areas of Focus

The MTC administrators expect the teachers to adjust their teaching to each individual class of missionaries. Each class varies greatly in their prior knowledge and understanding of the principles being taught, as well as how quickly they learn what is being taught. Teachers are expected to adjust the pace and depth of content coverage to match the readiness and abilities of the students in each class. This is a huge challenge because the teachers only receive minimal training before they begin teaching. Through the use of formative assessments, data will be provided to each teacher on their individual classes that will assist them to adjust their pace and depth of content coverage

Statement of Purpose

The purpose of this study is to investigate the effects of providing formative feedback to missionaries and to their teachers regarding each individual missionary's progress and achievement. It is hypothesized that the use of formative assessments and frequent feedback will improve achieved intended learning outcomes.

Research Hypotheses

The augmented 2 by 2 factorial design, which this study used, allowed for several hypotheses to be tested. The study focused on the following hypotheses:

1. Missionary trainees who receive regular feedback will have higher posttest scores on the average than missionaries who do not receive feedback.

2. Missionaries taught by teachers who are provided feedback regarding responses and scores of the individual missionaries in their class will have higher posttest scores on the average than missionaries taught by teachers who do not receive such feedback.

3. Providing feedback to both missionaries and to their teachers will have a combined effect that will increase posttest scores on the average beyond the performance of missionaries in classes who do not receive both types of feedback and beyond the posttest scores of missionaries who did not receive either type of feedback.

4. The posttest scores of missionaries who experience regular assessments will be higher on the average than missionaries who do not receive any assessments.

Research Question

Martinez and Martinez (1992) recorded that formative assessments results in higher learning gains for inexperienced teachers than it did for those who were experienced. Due to the high turnover rate of the teachers in this study, this would be a desired effect. The teachers

selected for this study will be stratified into two groups according to their levels of experience in teaching. It is assumed that like the Martinez and Martinez research, formatives assessments in this environment will produce higher learning gains for the inexperienced teachers.

Chapter 2: Review of Relevant Literature

This chapter discusses the available literature as it pertains to the use of formative assessments in education. It describes how assessments are used currently in education and how their use has been changing in recent years. The different types of feedback are discussed with regards to what information they provide to the student. The benefits and challenges with formative assessments will then be discussed followed by a summary and list of implications resulting from this literature review.

Uses of Assessments

The emphasis of testing, evaluations, and assessments in the past has generally been to provide a mechanism for teachers and institutions that allow them to distinguish between students. These mechanisms attempt to provide a summative score known by most every student and teacher as a grade. Studies have argued that this approach has been too dominant and that emphasis should be given to allowing assessment to assist in the learning process and not to only serve the purpose of grading (Crooks, 1988).

The historical overuse of summative assessments has weakened current teacher and administrator understanding of effective assessments and weakened teachers' abilities to perform and use results effectively in the classroom. Teachers do not trust the results of assessments that were created by other teachers. A teacher's tendency is to trust only assessments that they have created through their own personal efforts. They also tend to gather results in a vacuum separate from all others, not sharing their own findings about each student. (Cizek, Fitzgerald, & Rachor, 1995; Hall, Webber, Varley, Young, & Dorman, 1997).

In recent years, assessment approach used by many has shifted to providing an opportunity to improve learning as opposed to solely providing a grade. One of the approaches

to accomplish this shift is to increase the frequency of feedback that students receive. This increased frequency can be accomplished through the introduction of short formative assessments. Formative assessments have been shown to lead to significant learning gains (Black, 1998a; Fontana & Fernandes, 1994).

The term *formative assessments* has been and is interpreted in different ways, but for the purpose of this paper I will use the definition provided by Black and Wiliam (1998). This definition is: "all those activities undertaken by teachers, and/or by their students, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged" (p. 7).

In order for an assessment to be formative, the information provided must be used. The use of this information includes two steps. The teacher or student must be able to perceive a gap between a desired goal and the present state. The second step is that the teacher or student must take action in order to close this gap (Ramaprasad, 1983; Sadler, 1989). The focus of the assessment on this gap should focus on an individual's improvement and mastery (Ames, 1992).

Types of Feedback

The classic definition of the term *feedback* in instructional settings has been one of the many procedures that inform a learner whether a response is right or wrong. In addition to this classic definition, feedback can also provide instructional information to the learner that explains specifically why the correct answer is right, and why other possible responses are incorrect. It has been found that this additional instructional information has been effective in providing a basis for correcting mistakes or misconceptions ascertained through the learning process (Clariana, 1993; Cohen, 1985).

The focus of this study will be on the effects of instructional feedback used in the learning environment. This instructional feedback can be divided into groups defined by the type of information it provides to the learner. Using this classification scheme, feedback is usually divided into verification and elaboration feedback.

Verification feedback. The simplest type of verification feedback is when the learner is only given an indication of the correctness of a response such as "right/wrong." This type of verification feedback is known as *knowledge of results* feedback. Another type of verification feedback is when the learner is given additional information such as a corrective hint or suggestion as well as the "right/wrong" indication. When additional explanation is provided this type of verification feedback is known as *knowledge of correct response*.

Elaboration feedback. Elaboration feedback provides the learner with more information than did the knowledge of correct response feedback type. This type can range from simple hints to substantial information provided as corrective or additional information. As this additional information becomes more complex and complete, it can begin to provide new instruction.

Research findings of verification and elaboration feedback. Research has shown that either type of feedback is better than none at all and that the more information that is provided in the feedback, the greater the impact there is on the resulting performance measured (Olina & Sullivan, 2002; Whyte, Karolick, Nielsen, Elder, & Hawley, 1995). The comparison between these two types of feedback is not the point of this study, but the point that either type of feedback increasing performance over no feedback provides strength to support the hypotheses of this study.

Feedback can also be defined in terms of the timeliness of delivery. The feedback can be provided in an immediate manner or delayed. Research shows that there is a greater effect on

intended learning outcomes when this information if provided in a more immediate manner (Lemley, 2005). This research also showed that the length of time to completion in distance learning can be shortened when delayed feedback is provided. The focus of this study includes a fixed time frame course in which intended learning outcomes is the focus, so the method of immediate feedback will be employed.

Benefits of Formative Assessments

The use of frequent formative assessments has introduced more benefits than just increased learning outcomes. Whiting, Van Burgh, and Render (1995) showed that the learning styles, attitudes toward school, and attitudes toward learning also all showed positive changes. This study also resulted in the teacher believing that it made him a better teacher.

Thomas, Bol, Warkentin, Wilson, Strage, and Rohwer (1993) showed that feedback in addition to challenging assignments, greater achievements also lead to greater student engagement.

Other benefits of frequent feedback have been shown by Chickering and Gamson (1991) to keep students on task by helping identify areas in which the student is not performing well. This prompt feedback also appears to inform students while they are planning their individual study plans and strategies. Even upon completion of study, this feedback can provide suggestions on areas that still need to be pursued for deeper understanding.

Challenges with Formative Assessments

Although several studies have shown significant learning outcomes as a result of the introduction of frequent formative assessments (Fontana & Fernandes, 1994; Whiting et al., 1995; Martinez & Martinez, 1992) there are still many requirements and restrictions that need to be addressed in order to make formative assessments effective. Fontana & Fernandes showed

that students need to have an understanding of both the intended learning outcomes and the assessment criteria. In order to assist students in learning this information, there must be a change in the classroom pedagogy. This may require additional training of the teachers in order to properly accomplish this. The amount of additional training required depends on the amount of change required and the ability of the teachers to accept and implement these changes. Whiting et al. point out that this approach requires a completely new learning regime for the students, and cannot just be the addition of more tests.

Although many studies have shown formative assessments to increase learning gains, it must be pointed out that these learning gains are not equal for all groups. A study performed by Martinez and Martinez (1992) recorded learning gains to be smaller for an experienced teacher than for the inexperienced. Similarly, Frederiksen and White (1997) recorded that the low scoring group showed more gains than that of a medium scoring group, and that the medium group showed more gain than that of the high group. Although these are differences that affect each learning group, a benefit that this provides to the Missionary Training Center's environment is that of leveling the learning outcomes of each classroom. As the MTC employs non-professionals, there exists a high turnover in teachers and thus there exist a large number of inexperienced teachers. These studies show that the students who have inexperienced teachers will benefit greater from formative assessments and that these assessments may fill in the gaps in teaching ability of the inexperienced teachers.

The effectiveness of formative assessments does not depend merely on its existence or lack of existence, but it depends on the quality and communication of the assessment feedback. Bulter (1988) showed that even positive feedback that is helpful for students can be undermined by negative motivational effects as a result of giving grades, or comparing the students to a

norm. Lepper and Hodell (1989) showed that giving positive feedback incorrectly can also have negative effects. Thus feedback can also undermine both interest and motivation. The effectiveness of the feedback is even more complicated because it also depends on assumptions about the motivations and self-perceptions of the students (Black, 1998a). Students may fail to understand the feedback or fail to see it as helpful. Blumenfield (1992) showed that students can be reluctant to seek help and that they may view extra help as evidence of their low ability. Feedback that draws attention towards one's own self-esteem can have a negative effect on attitudes and performance (Cameron & Pierce, 1994; Kluger & DeNisi, 1996).

Allinder (1995) showed that teachers confident in their personal and teaching efficacy made better use of formative assessments than those who were less confident.

Summary and Implications of Recent Literature

With the increased focus on flexible teaching at the MTC and the focus on teachers adjusting their teaching content to the pace of their learners, the addition of formative assessments may provide the teachers with data to facilitate this approach. As the literature suggests, formative assessments result in a larger student learning increase with inexperienced MTC teachers and this should increase the learning of the students in the classes which have the more inexperienced teachers.

Chapter 3: Method

Participants

The participants in this study were organized in 49 classrooms of 8-12 students (99-104 students per experimental group, 504 students total), and 2 teachers per classroom (98 teachers). All of the students were missionaries enrolled as trainees at the Missionary Training Center (MTC) in Provo, Utah. Each student began the study having never received training at the MTC previously. The students comprised an equal number (a) who were only learning the teaching skills and content they will need to use as missionaries, and (b) who were learning a new language in addition to these teaching skills and content. The students were divided among five experimental groups. The composition of students assigned to each group is described below in Table 1.

Table 1

Composition of Subjects

Group	English	Spanish	Korean	Total
1	54	36	9	99
2	52	38	10	100
3	49	41	9	99
4	54	40	10	104
5	52	39	11	102

The study used a stratified sample of teachers. The teachers who participated in the study were identified as teachers with little experience (less than 12 months) teaching at the MTC and teachers who have been teaching at the MTC for quite some time (more than 12 months). These

experimental groups were tracked in order to identify any differences between student learning gains amongst the experienced and non-experienced teachers.

A histogram was created defining the months of experience for all of the teachers at the MTC. The lower and higher extremes were identified so that the groups were stratified as extremes to increase the chance for identifying any differences. A combination of both stratified groups was compared to check against each of the four hypotheses. In addition to this comparison, each of the stratified groups (experienced vs. non-experienced) were compared to see if there is any significant difference between the two.

For each group described below, there were nine to twelve classrooms of 8-12 students. About half of the classrooms for each group were students who were not learning a second language, and the other classrooms were students who learned a second language.

Design

The experimental design consisted of a 2 by 2 factorial design plus a control group. Hypotheses 1, 2, and 3 were simultaneously tested using a 2 by 2 factorial analysis of variance. To test hypothesis 4, the average achievement of Group 5 was compared against the mean achievement of Group 1. SPSS was used to perform these analyses.

Classrooms were randomly selected from the available pool and randomly assigned to one of the five experimental conditions shown in Table 1. All groups excluding the control group received online tests during their training period. Feedback was provided only as outlined in Table 2. This feedback was a mix of verification feedback, more specifically knowledge of correct response feedback, and elaboration feedback. The student feedback was provided immediately after while the teacher feedback was provided when the teacher accessed the computer system to review the student results.

Table 2

Test Groups and Treatments

Group Description	Assessments	Student Feedback	Teacher Feedback	Posttest
1- Full Formative Assessment	Yes	Yes	Yes	Yes
2- Student Formative Assessment Only	Yes	Yes		Yes
3- Teacher Formative Assessment Only	Yes		Yes	Yes
4- Assessments w/o Feedback	Yes			Yes
5- Control Group				Yes

The two independent variables that made up the factorial design were (a) whether or not the students receive immediate feedback upon completing each assessment, and (b) whether or not the teachers received feedback and access to test results.

All students taking assessments received an online tutorial describing the nature of the assessments and how to take them. This training was already being used at the MTC with the students and was not altered for these tests.

All teachers who received summarized data on their students' results (Groups 1 and 3) were given a 30 minute live training session in which a description of the pilot was presented along with how to interpret and use the data to increase their effectiveness as a teacher. Upon full-scale implementation of this project, this training will be built into the pre-service training provided to each teacher.

Research assistants were assigned to each of the five treatment groups. Research assistants provided handouts to the teachers describing the schedule for the assessments to be taken. The handouts for Groups 1 and 3 also included a brief description of how to access and

use the recorded results; these handouts can be seen in Appendix A. The research assistants assigned to each group attended the first assessments taken along with the students. Research assistants ensured that the students took the assessments and that there were no technical difficulties. These research assistants did not attend future sessions when assessments were to be taken. For Groups 1 and 2, the research assistants encouraged the students to read over the feedback and to take notes on areas in which they could improve.

Group 1 – Full Formative assessment. These classrooms received the formative assessments as outlined above in Tables 1 and 2. The students received computer-generated feedback at the end of each assessment stating which questions they answered incorrectly. This feedback included a description of why their answer is incorrect and also why the correct answer is correct. The feedback also included references for study in order to verify the correct answer. The students were asked to write down these references in their study journals (journals they use to track content they are studying in classroom time and on their own). The teachers received summarized data identifying weaknesses and strengths in their students' scores. The teachers also received student specific results so that the teacher could drill down into the exact responses of each student to better identify what it is that they were answering incorrectly.

Group 2 – Student Formative assessment only. Classrooms assigned to this condition received the formative assessments as outlined above in Tables 1 and 2. The students received computer generated feedback at the end of each assessment as described in the Group 1 description. The teachers in this group did not receive any summarized data concerning their students. This group was tracked in order to distinguish the difference in scores that resulted by the addition of teacher feedback. The assumption was that the individual student feedback

would have the largest effect, but that teacher feedback would also make a positive effect on overall scores.

Group 3 – Teacher Formative assessment only. These classrooms received the formative assessments as outlined above in Tables 1 and 2. The students did not receive computer-generated feedback at the end of each assessment. The teachers received summarized data identifying weaknesses and strengths in their students' scores and described in the Group 1 description.

Group 4 – Assessments without feedback. These classrooms received the formative assessments as outlined above in Tables 1 and 2. Neither the students nor the teachers received any form of formative feedback as a result of these assessments. This group was to act as a type of control that would allow for distinguishing whether the assessments in themselves were providing for any changes in learning outcome without the feedback. It is possible that the fact of taking the assessments frequently, even without feedback, would result in the learning outcomes increasing due to a student awareness of their own understanding of course content. Results from this group assisted in determining the effects of this frequent testing independently from the feedback.

Group 5 – Control group. Missionaries in this group did not receive any formative assessments during their training at the MTC. These students took a posttest during the final week of their training. Their scores were compared to those of other classrooms in order to identify any significant differences.

Instrumentation Overview

Currently at the MTC, there are 11 assessments available for each missionary learning a language and 7 assessments available for each missionary who is not learning a language. These

assessments along with their purpose, availability, and length in minutes are listed in Tables 3 and 4. Each of these assessments is divided into groups of questions relating to specific subject matter. These groups and subjects are documented and shared with teachers and their supervisors in order to ensure that data is being collected on subjects of interest to the teachers. An effort was be made to gather feedback from teachers and administration on the subjects of interest, the feedback was reviewed, and categorization of the assessment items was entered into the system. This categorization was used in the reporting of student results so that the teachers could see overall student scores per category along with the ability for the teacher to look at individual item responses from each student or the class as a whole.

This data was used to drive at the student's understanding of the principles, or categories, from *Preach My Gospel*, principles from the doctrinal basis of the scriptures, language abilities, and study skills. The assessments that cover each of these areas are titled and scheduled as shown in Table 3 and Table 4.

Teachers completed the *Teacher Questionnaire* after their students completed all of their assigned assignments. Emails were sent out to all teachers to remind them to complete this questionnaire in order to provide feedback to the MTC organization on their involvement with the test.

A proctor was present for all students in Groups 1-4 while taking the *Entrance Questionnaire, Doctrine Assessment Form A, Language Grammar Assessment Form A,* and the first attempt at the *Language Speaking Assessment (Short)*. The proctor ensured that the students took the proper assessments as the correct time and encouraged students in Groups 1 and 2 to carefully study the feedback at the end of the assessments and try to learn the information contained in the assessments. Students and teachers were then given a checklist in order to

encourage participation with the remaining assessments on their own time within the prescribed time frame. This checklist was reviewed as a class and posted on the classroom wall.

Table 3

Assessment Schedule for Missionaries Not Learning a New Language (3 week program)

Instrument	Length in Minutes	Proctor Present	Week(s) Available	Number of attempts	Treatment Groups
Entrance Questionnaire	4-6	Yes	1	1	1-4
Attribute Assessment	8-10	No	All	1+	1-4
Scripture Study Checklist	8-10	No	All	1+	1-4
Doctrine Assessment Form A	8-12	Yes	1-2	1+	1-4
Principles Assessment Form A	5-8	No	1-2	1+	1-4
Doctrine Assessment Form B	8-12	No	3	1	1-5
Principles Assessment Form B	5-8	No	3	1	1-5
Exit Questionnaire	8-10	No	3	1	1-5
Teacher Evaluation	20-30	No	3	1	1-5

Instrumentation Details

Each assessment is composed of several parts: (a) instructions, (b) questions, and (c) feedback. The instructions for the assessment consist of the purpose of the particular assessment, instructions on how to take the assessment, and possibly an example question for the assessment. An example of instructions can be seen in Figure 1, which contains the instructions for the Language Grammar Assessment.

Table 4

Assessment Schedule for Missionaries Learning a New Language (8 & 11 week programs)

Instrument	Length in Minutes	Proctor Present	Week(s) Available	Number of attempts	Treatment Groups
Entrance Questionnaire	4-6	Yes	1	1	1-4
Attribute Assessment	8-10	No	All	1+	1-4
Scripture Study Checklist	8-10	No	All	1+	1-4
Language Study Checklist	8-10	No	All	1+	1-4
Doctrine Assessment Form A	8-12	Yes	2-3	1+	1-4
Principles Assessment Form A	5-8	No	2-3	1+	1-4
Doctrine Assessment Form B	8-12	No	4	1	1-5
Principles Assessment Form B	5-8	No	4	1	1-5
Lang. Speaking Assmnt. (Short)	15-20	Yes	6-8	1+	1-4
Language Grammar Assmnt. A	25-30	Yes	6-8	1+	1-4
Lang. Speaking Assmnt. (Short)	15-20	No	2nd to Last	1	1-5
Language Grammar Assmnt. B	25-30	No	2nd to Last	1	1-5
Teacher Evaluation	20-30	No	2nd to Last	1	1-5
Exit Questionnaire	8-10	No	Final	1	1-5

The questions of each assessment are made of questions of type (a) multiple choice, (b) multiple select, (c) fill in the blank, (d) multiple fill in the blank, or (e) short answer. These questions are either independent of each other as seen in Figure 2, or a situation may be presented to the student followed by several context dependent questions as seen in Figure 3. Each question may also include an option for selecting "I do not know the answer to this question." Which can be seen in both Figures 2 and 3. This option is provided to the student since they are not allowed to move on in the test without responding to all questions provided on each screen. Once the student has responded to all questions in the assessment, they are able to complete the assessment.

Feedback is provided to the student at the conclusion of their assessment. Once all answers are submitted, the student is displayed the exact same pages on which they responded, but correct answers are displayed along with feedback. The feedback includes either a description of why the correct response is correct for the context provided or it provides a reference to which the student may refer to further explanation of the correct answer. Each student is asked to bring a study journal with them while they take these assessments, and the student then is able to write down any references or explanations that they feel are helpful. Figure 4 shows an example that includes an explanation of the correct answers and Figure 5 shows an example that includes references.

Procedure

The assessments were delivered as web-based assessments. The students responded to each of these assessments in onsite labs that contain 12 computer workstations each. The time they spend in each of these labs was scheduled by each classroom or set of missionaries during a time of their choice. The recommended weeks for each of these assessments is shown in the

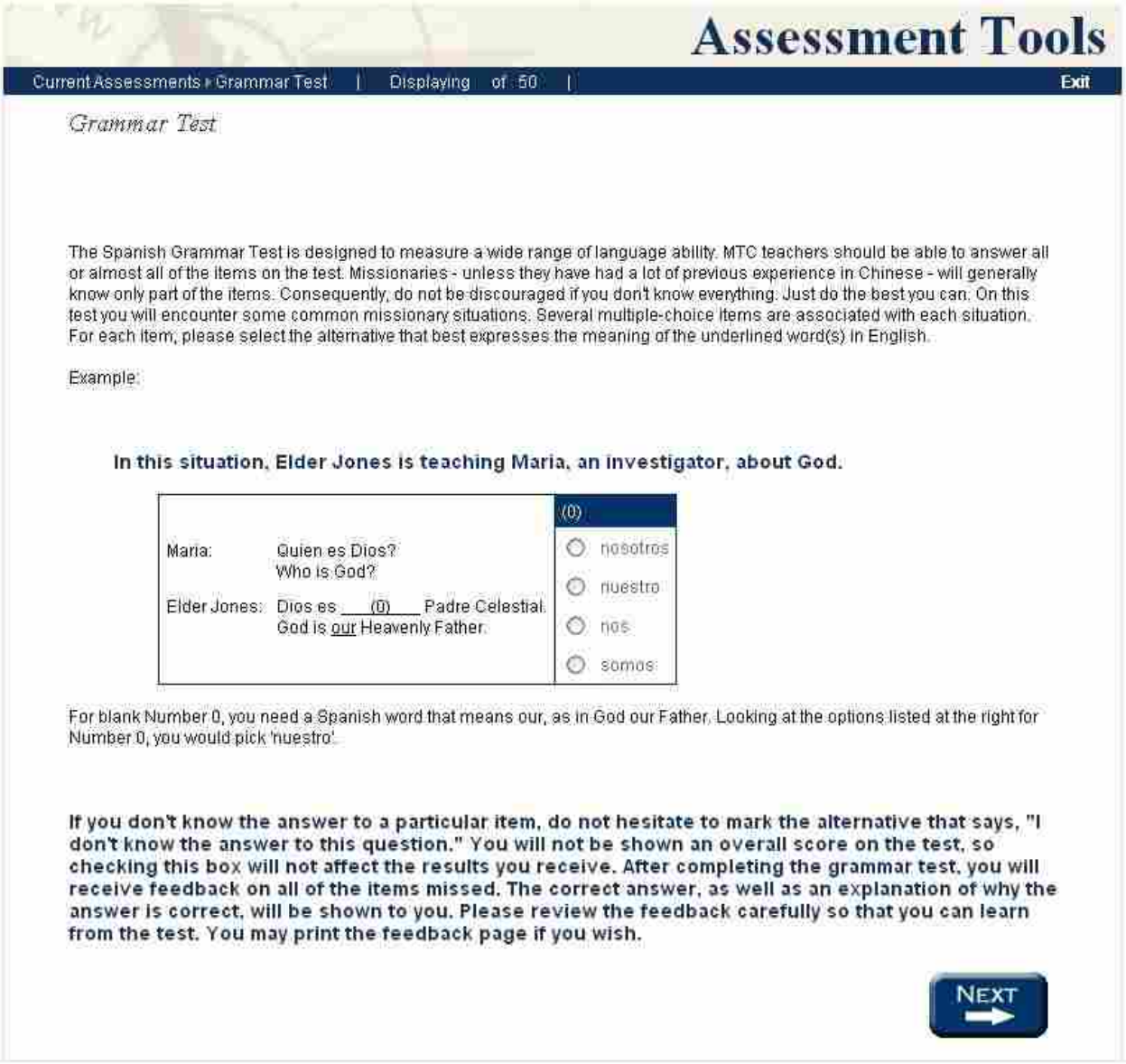


Figure 1. Example instructions for Language Grammar Assessment.

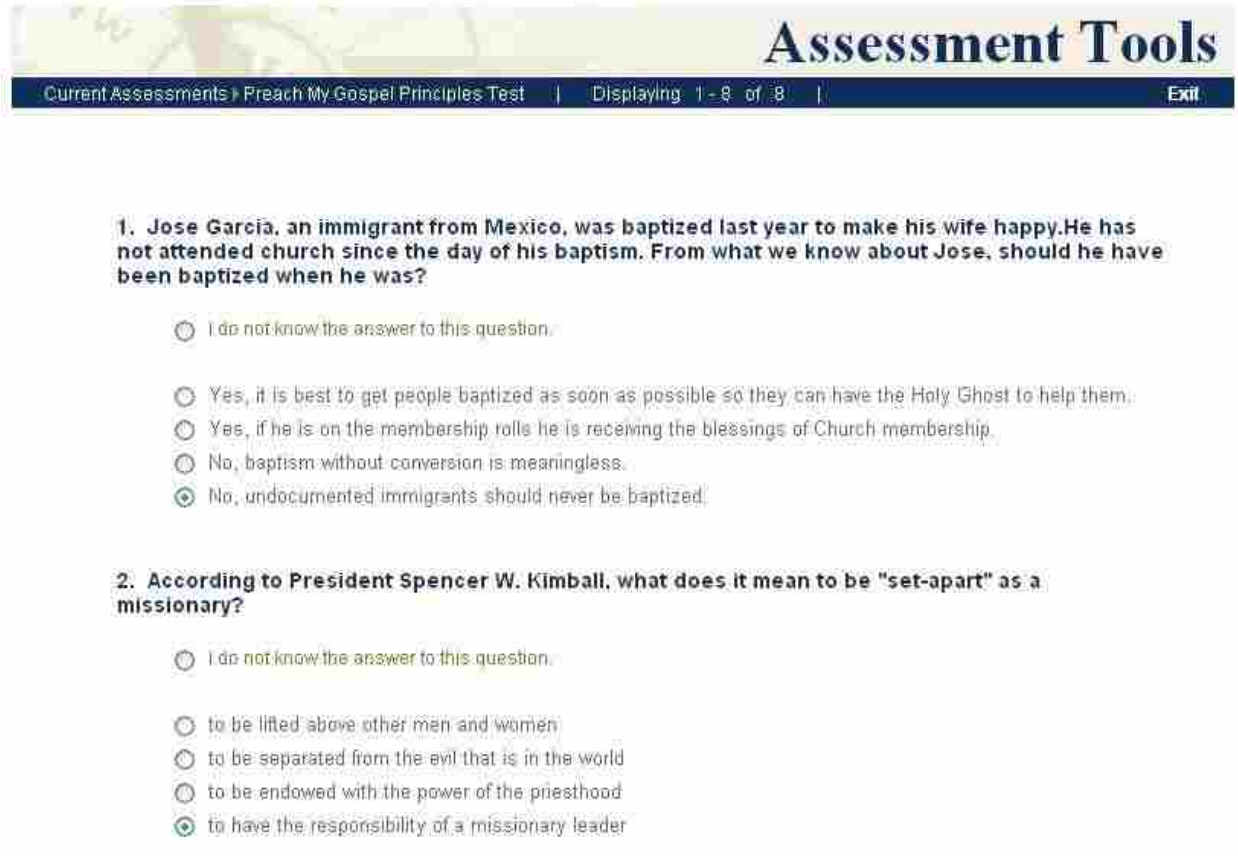


Figure 2. Example of questions that are independent of each other.

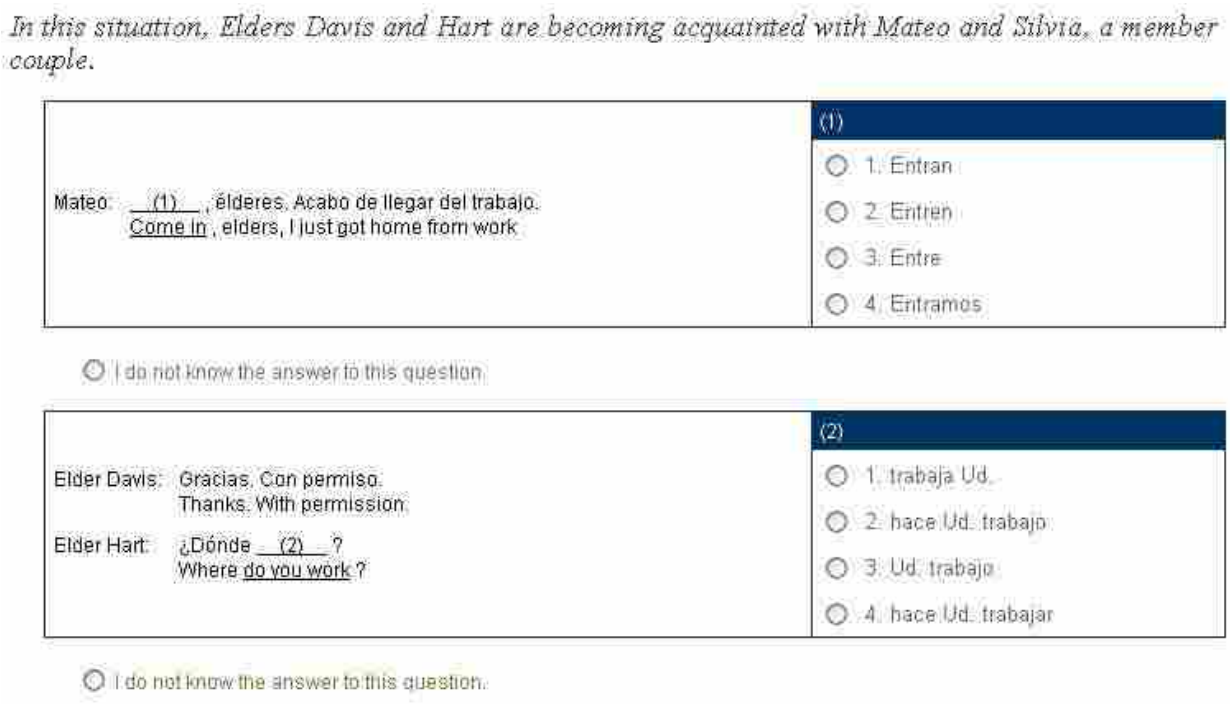
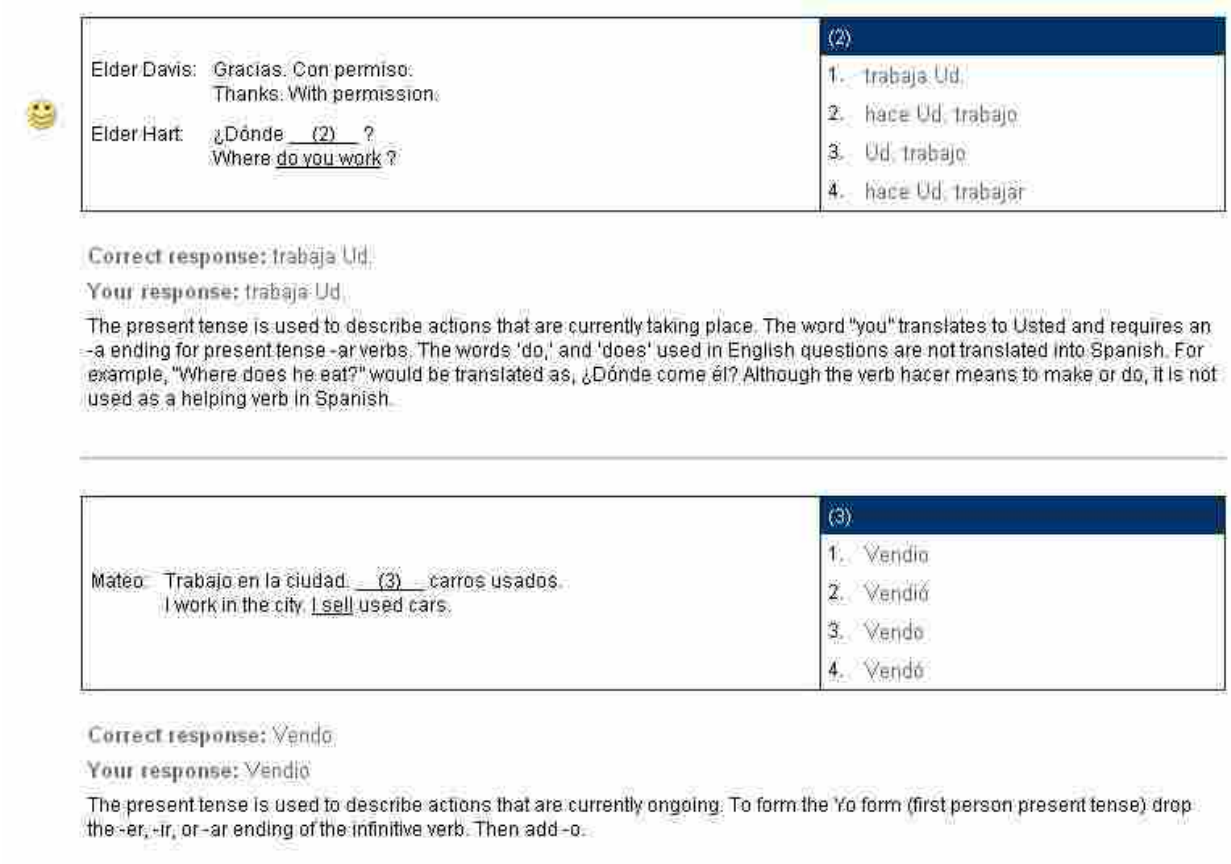


Figure 3. Example of questions that are context dependent.



Elder Davis: Gracias. Con permiso. Thanks. With permission. Elder Hart: ¿Dónde __(2)__ ? Where do you work ?	(2) 1. trabaja Ud. 2. hace Ud. trabajo 3. Ud. trabajo 4. hace Ud. trabajar

Correct response: trabaja Ud.

Your response: trabaja Ud.

The present tense is used to describe actions that are currently taking place. The word "you" translates to Usted and requires an -a ending for present tense -ar verbs. The words 'do,' and 'does' used in English questions are not translated into Spanish. For example, "Where does he eat?" would be translated as, ¿Dónde come él? Although the verb hacer means to make or do, it is not used as a helping verb in Spanish.

Mateo: Trabajo en la ciudad. __(3)__ carros usados. I work in the city. I sell used cars.	(3) 1. Vendio 2. Vendió 3. Vendo 4. Vendó

Correct response: Vendo

Your response: Vendio

The present tense is used to describe actions that are currently ongoing. To form the Yo form (first person present tense) drop the -er, -ir, or -ar ending of the infinitive verb. Then add -o.

Figure 4. Example feedback with description of correct response.

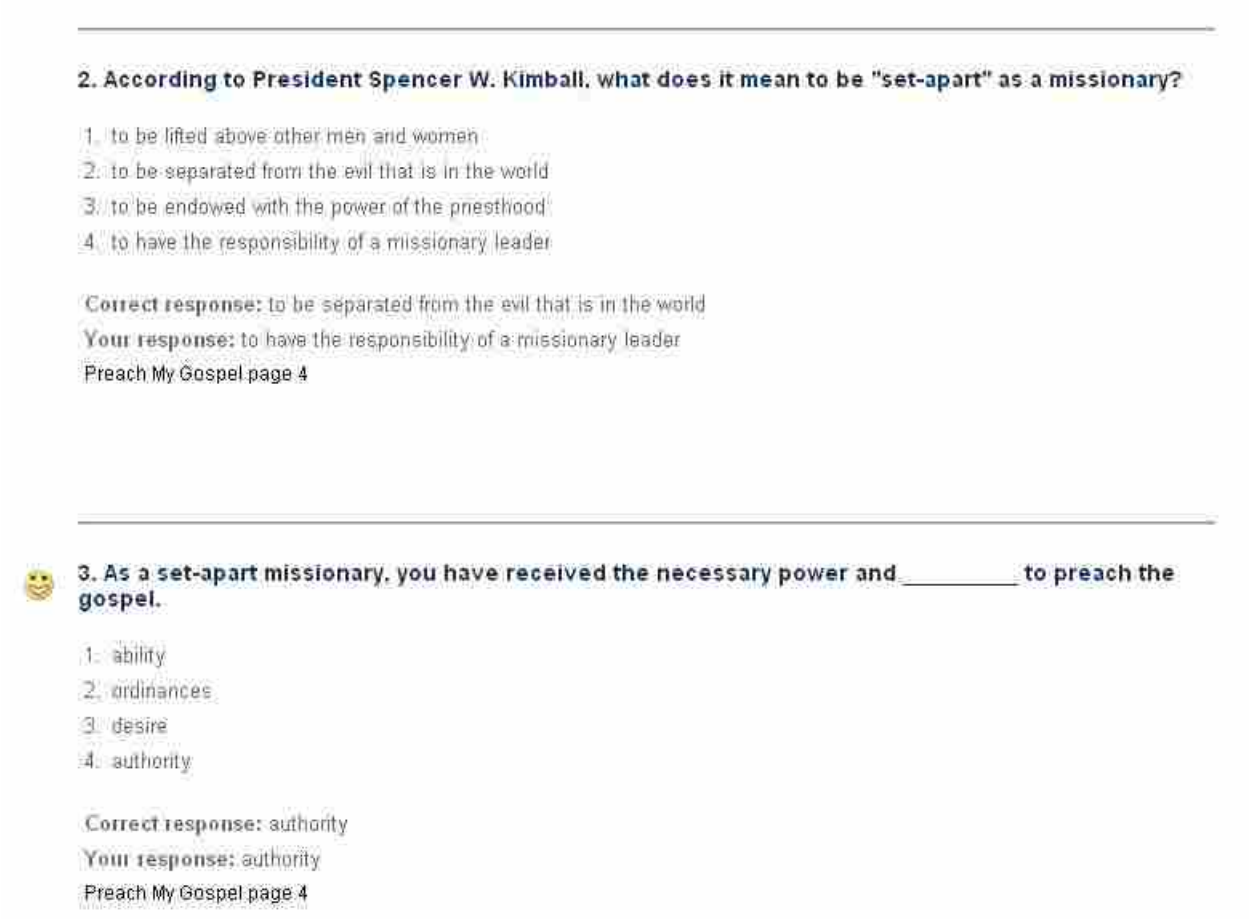


Figure 5. Example feedback with reference for further description of correct response.

above tables, but the students will neither be required to take the assessment during the recommended week nor required to take any assessment at all. These assessments are completely voluntary and each assessment can be retaken as many times as the student wishes.

Levels of use. Such studies as this one that focus on change, presuppose that some sort of innovation or intervention has been implemented. In order to help determine whether any changes noted are a result from the treatments of this study, vital information was gathered. A Levels of Use survey was administered to all participants, students and teachers, in this study in order to collect information to determine whether the innovation or intervention was properly

implemented within each experimental group. This information provided for the interpreting of the outcomes and consequence data with respect to the level of implementation. This information will assist in the interpretation of the data by allowing the study to determine to what extent the treatments were implemented (Loucks & Hall, 1977)

The Levels of Use survey sought to answer the questions of (a) how often teachers and trainees used the assessments, (b) how often teachers and trainees accessed the feedback, and (c) what features of the assessments and feedback were used. The items of this survey asked specific question targeting these questions, and the possible responses were a five-point scale defining either frequency of use or perceived usefulness. The scale for frequency ranged from 1 (*didn't use*) to 5 (*used many times*). The scale for usefulness ranged from 1 (*a waste of time*) to 5 (*absolutely essential*). The Teacher Questionnaire including these items can be found in Appendix F. This will help to identify implementation fidelity and thus identify whether the results from the study are more likely a result from the intended treatment.

How to improve. Focus groups were held periodically with the teachers to evaluate how well the formative assessments were assisting them and their students. These groups provided qualitative feedback for any adjustments that are needed to better meet the needs of the teachers and students. The data that obtained and the format in which was provided were reviewed in order to determine delivery changes to ease teacher and supervisor use and understanding.

In addition to these focus groups, analysis of the assessment results helped staff to recognize changes that may be needed in the tests to better differentiate between learning types and to better identify the principles that are being learned. Reviews of assessment items occurred each time there are curriculum changes in order to identify whether the correct curriculum items were being assessed and reported.

Analysis

The data were gathered via the web based assessments, and the results were summarized to match the information deemed valuable by the teachers through initial focus groups and deemed valuable by the supervisors of the teachers and the administration of the MTC. The data were summarized by a computer program developed specifically for this project. The information was delivered via a web based application. In addition to data being provided for the teacher on the current class they are teaching, additional data will be made available after this study to allow for (a) comparisons to previous classes that each teacher has taught (using the data from the same week in the program as their current class) and (b) comparisons of the current class to all other classes in the past who have learned the same language (using the data from the same week in the program as their current class). These data were also provided to supervisors and administration with the addition of the ability to summarize the data on levels of organizational hierarchy.

Feedback was provided on an individual level in hopes to educate and motivate the students. The feedback provided by these assessments should not be shared with others, and it will be linked to opportunities for improvement (Ames, 1992).

Schedule

The largest obstacle in getting this project completed was getting the MTC Administrative Staff to agree upon the specifics of the feedback that should be presented to the students and teachers. There was some disagreement on the type of information that would likely be helpful and how it should be displayed. Table 5 shows the actual timelines and high-level tasks for completing this project.

Table 5

Timelines and Tasks

Timeline	Task
January 2006	Concept Review with Committee Chair
February 2006	Concept Review with MTC Administration
February 15 – May 15, 2006	Literature Review
May 15 – June 1, 2006	Review Literature in light of concept adjustments
June 1 – November 1, 2006	Write Prospectus
November 1 – 20, 2006	Defend and Submit Prospectus
November 20, 2006	Submit Application to IRB
December 1, 2006	IRB Approval
December 1, 2006 – February 23, 2009	Conduct Project / Write Report
August 2009	Apply for Graduation
September 1, 2009 – November 1, 2009	Submit Draft for Review and Make Revisions
November 16, 2009	Schedule and Hold Final Oral Examination
December 2009	Obtain Final Approvals and Signatures
December 2009	Submit Electronic Thesis

Budget

All funding for this project was covered through MTC Operational Budget and an approved MTC Special Projects Funding Request. Table 5 outlines the projected costs of the efforts discussed in this paper. The abbreviations used in the following table are defined as follows: PT = Part-Time employee(s), FT = Full-Time employee, and wks = Number of Weeks.

Table 6

Budget and Descriptions

Budget Item	Operational Funds	Project Funds
Instrument Development (2 PT x 10 hrs/wk x 8 wks x $10/hr)	$1,600	
Instrument Tryout and Evaluation (3 PT x 12 hrs/wk x 2 wks x $10/hr)	$720	
Programming for Data Delivery (2 PT x 20 hrs/wk x 6 wks x $12/hr)		$2,880
Full-Time Programming and Review (1 FT x 20 hrs/wk x 20 wks x $20/hr)		$8,000
Testing of Interface (1 PT x 20 hrs/wk x 3 wks x $10/hr)		$600
Research Assistants (5 PT x 10 hrs/wk x 10 wks x $15/hr)	$7500	
Programming Updates after deployment (2 PT x 10 hrs/wk x 4 wks x $12/hr)		$960
Total	$9,820	$12,440

The costs associated with the development and testing of the actual measurements to be used were covered by MTC Operational Funds as is defined by MTC policy. The payment of programming hours on new projects must be covered by special project funds upon approval by the Administrative Staff at the MTC.

Chapter 4: Results

Due to the nature of an augmented 2 by 2 factorial design, which this study used, the following hypotheses were tested. This chapter will present the results of the tests performed to gather information on the following hypotheses:

1. Missionary trainees who receive regular feedback will have higher achievement on the average than missionaries who do not receive feedback.

2. Missionaries taught by teachers who are provided feedback regarding the progress and achievement of the individual missionaries in their class, will have higher achievement on the average than missionaries taught by teachers who do not receive such feedback.

3. Providing feedback to both missionaries and to their teachers will have a combined effect that will increase achievement on the average beyond the performance of missionaries in classes who do not receive both types of feedback and beyond the achievement of missionaries who did not receive either type of feedback.

4. The achievement of missionaries who experience regular assessments will be higher on the average than missionaries who do not receive any assessments.

Assessments of the Various Components

A series of univariate, 2 by 2 factorial analyses of variance (ANOVA) were performed on the data obtained from each of the learning outcome tests that were administered. The ANOVA tested for the main and interaction effects of the independent variables on the various dependent variables. These ANOVA tests allowed for investigation of the first three hypotheses listed above. Following the ANOVA tests, *t*-tests were performed comparing the weighted, grand mean of the four experimental groups with the mean of the control group, in order to investigate the general effect of regular assessments on learning outcomes.

The results of ANOVA tests on the Doctrine and Principles assessments revealed significant main and interaction effects on the dependent variables that would support the first three hypotheses. The results of ANOVA tests for the language assessments revealed no significant main or interaction effects on any of the dependent variables, but analysis of data gathered shows that these assessments were not properly implemented and thus not enough data was gathered to provide conclusive evidence. Descriptive statistics for the language assessments is provided below in the corresponding section.

Doctrine. The Doctrine Assessment was used to measure doctrinal knowledge of concepts used by missionaries in the lessons which they will teach. The descriptive statistics for the Doctrine Assessment are reported in Table 7. The mean doctrinal score for missionaries which received feedback was 82.69, while the mean for the missionaries who did not receive feedback was 71.36. The mean for the two groups of missionaries who received feedback was higher than the two groups which did not receive feedback and the resulting effect was statistically significant, $F(1, 303) = 40.55$, $p < .001$.

The mean score for the missionaries whose teachers received feedback was 77.48, while the mean score for the missionaries whose teachers did not receive feedback was 76.93. This main effect was not statistically significant, $F(1,303) = 1.36$, $p = .245$.

The interaction effect of feedback provided to the missionaries and feedback provided to the teachers on the missionaries' scores on the Doctrine Assessment was not statistically significant, $F(1, 303) = 1.17$, $p = .279$.

Table 7

Descriptive Statistics for the Factorial Groups on the Doctrine Assessment

Teacher Feedback Condition	Missionary Feedback Condition								
	Feedback Provided			No Feedback			Combined Groups		
	n	M	SD	*n*	M	SD	*n*	M	SD
Feedback Provided	85	82.02	11.51	83	72.84	13.34	168	77.48	13.24
No Feedback	78	83.43	10.23	69	69.58	12.67	147	76.93	13.34
Combined Groups	163	82.69	10.91	152	71.36	13.10	315	72.22	13.27

Although the researcher took precautions to ensure that each student completed all of the required assessments, not all students participated in the study by completing all assessments. Of the students assigned to take the Doctrine Assessment, 373 students (74% of students in Groups 1-5) completed the posttest (Form B).

The mean differences between Form A and Form B of the Doctrine Assessments was not a focus of this study, but the data were collected and greater insights can be gained from these data. For Groups 1 and 2, where the students received feedback, the time spent viewing the feedback was also recorded. The mean scores for Groups 1-4 along with the time spent reading over the feedback is included in Table 8. The standard deviations and frequency counts for each group are included in Table 7, and so only the standard deviations for the time spent are listed below.

Table 8

Doctrine Assessment Time Spent Viewing Feedback for Pre- and Posttests

	Pretest Time Spent (minutes)		Posttest Time Spent (minutes)	
Group	M	SD	M	SD
1	14.17	12.17	2.54	2.04
2	23.42	11.20	2.27	1.73

While mean scores are similar across the four groups for the pretest doctrine scores, the difference in means across the treatment groups were statistically significant, $p < .0001$. This significance is also true when accounting for the proportion of variance explained by language. The treatment groups providing formative feedback to the students, Groups 1 and 2, also resulted in means that were significantly different from the remaining groups with $p < .0001$. Table 9 below shows the gain scores per language and treatment group.

Table 9

Doctrine Assessment Gain Scores per Treatment per Language

Treatment Group	English	Spanish	Korean
1	29.41	25.62	15.15
2	28.78	29.92	34.08
3	20.10	16.13	26.70
4	21.58	17.49	15.95

Principles. The Principles Assessment was used to measure knowledge of principles discussed in each chapter of Preach My Gospel. These principles are typically related to how missionary work is to be conducted. The descriptive statistics for the Principles Assessment are reported in Table 10. The mean principles score for missionaries with feedback was 58.14, while the mean for the missionaries without feedback was 49.36. The mean for the two groups of missionaries who received feedback was higher than the two groups which did not receive feedback and the resulting effect was statistically significant, $F(1, 303) = 28.50$, $p < .001$.

The mean score for the missionaries whose teachers received feedback was 52.85, while the mean score for the missionaries whose teachers did not receive feedback was 55.10. This main effect was not statistically significant, $F(1, 303) = 1.69$, $p = .195$.

Table 10

Descriptive Statistics for the Factorial Groups on the Principles Assessment

	Missionary Feedback Condition								
	Feedback Provided			No Feedback			Combined Groups		
Teacher Feedback Condition	*n*	M	SD	*n*	M	SD	*n*	M	SD
Feedback Provided	83	57.47	16.60	80	48.06	11.30	163	52.85	14.97
No Feedback	76	58.88	16.10	68	50.89	11.79	144	55.10	14.73
Combined Groups	159	58.14	16.33	148	49.36	11.57	307	53.91	14.88

The interaction effect of missionary feedback and teacher feedback was measured by the Principles Assessment and was not statistically significant, $F(1, 303) = .191$, $p = .663$.

Although the researcher took precautions to ensure that each student completed all of the required assessments, not all students completed all assessments. Of the students assigned to take the Principles Assessment, 357 students (71% of students in Groups 1-5) completed the posttest (Form B).

The mean differences between Form A and Form B of the Principles Assessment was not a focus of this study, but the data were collected and greater insights can be gained from these data. For groups 1 and 2, where the students received feedback, the time spend viewing the feedback was also recorded. The mean scores for groups 1-4 along with the time spent reading over the feedback are included in Table 11.

Table 11

Principles Assessment Time Spent Viewing Feedback for Pre- and Posttests

	Pretest Time Spent (minutes)		Posttest Time Spent (minutes)	
Group	M	SD	M	SD
1	6.09	6.11	2.75	1.80
2	12.91	15.26	2.51	2.20

While mean scores are similar across the four groups for the pretest principles scores, the difference in means across the treatment groups were statistically significant, $p < .0001$. This significance is also true when controlling for the language interaction. The treatment groups providing formative feedback to the students, Groups 1 and 2, also resulted in means that were significantly different from the remaining groups with a $p < .002$. Table 12 below shows the gain scores per language and treatment group.

Table 12

Principles Assessment Gain Scores per Treatment per Language

Treatment Group	English	Spanish	Korean
1	16.27	8.52	19.19
2	15.32	16.21	20.48
3	7.42	7.31	-5.24
4	11.79	3.82	18.32

Language. There were many issues found while gathering the language assessment data. These issues include lower counts of assessments taken due to the fact that research assistants did not attend the lab sessions with the missionaries, so these sessions were left up to the teachers and the missionaries. Also, with regards to the Language Speaking Assessment, there were difficulties with getting staff members to rate the assessments (listen to the recorded audio clips and rate them). Also, there were rater reliability issues with the audio ratings. It was found that one rater would give a low score to a missionary while another rater would give a higher score to the exact same audio response. These issues were identified early on and it was decided by the researchers to not continue efforts with the language assessments.

Table 13 presents descriptive statistics for the Grammar Assessments for the interest of the reader, but these statistics were not included as part of the report on findings regarding the original four hypotheses.

The Grammar Assessment was used to measure knowledge of language grammar concepts. The mean grammar score for missionaries with feedback was 39.02, while the mean for the missionaries without feedback was 37.91. The mean for the two groups of missionaries

who received feedback was slightly higher than the two groups which did not receive feedback but the resulting effect was not statistically significant, $F(1, 145) = .332$, $p = .565$.

The mean score for the missionaries whose teachers received feedback was 36.89, while the mean score for the missionaries whose teachers did not receive feedback was 39.59. This main effect was not statistically significant, $F(1, 145) = 1.445$, $p = .231$.

Table 13

Descriptive Statistics for the Factorial Groups on the Grammar Assessment

	Missionary Feedback Condition								
	Feedback Provided			No Feedback			Combined Groups		
Teacher Feedback Condition	*n*	M	SD	*n*	M	SD	*n*	M	SD
Feedback Provided	34	37.45	15.08	38	40.43	11.38	72	39.02	13.24
No Feedback	29	36.23	13.37	48	38.93	15.83	77	37.91	14.92
Combined Groups	63	36.89	14.22	86	39.59	13.98	149	38.45	14.10

The interaction effect of missionary feedback and teacher feedback was not statistically significant, $F(1, 145) = .004$, $p = .952$.

Table 14 and Table 15 display the mean scores on the pre- and posttests that were administered for the language grammar assessments. These data are included as information only and will not be included in the summary for the reasons listed above.

The mean scores across these groups show no statistically significant differences. The gain scores among students in Groups 1-4 when split out by language also do not have statistically significant differences. These gain scores are listed below in Table 16.

Table 14

Spanish Grammar Time Spent Viewing Feedback for Pre- and Posttests

Group	Pretest Time Spent (minutes)	Posttest Time Spent (minutes)
1	5.08	4.16
2	5.32	3.61

Table 15

Korean Grammar Time Spent Viewing Feedback for Pre- and Posttests

Group	Pretest Time Spent (minutes)	Posttest Time Spent (minutes)
1	5.89	6.78
2	3.60	2.33

Table 16

Grammar Assessment Gain Scores per Treatment per Language

Treatment Group	Spanish	Korean
1	0.04	-0.18
2	0.06	-0.02
3	0.07	-0.06
4	0.08	-0.07

Effect of Regular Assessments

To test the fourth hypothesis, two sample *t*-tests were performed to compare the mean of all four treatment groups and the mean of the control group for each of the following dependent variables: the Doctrine Assessment and Principles Assessment.

Table 17 shows the descriptive statistics for each test. The *t*-test shows a statistically significant difference between the pooled treatment groups and the control group, thus supporting the hypothesis that missionaries how experience regular assessments will score higher on average than missionaries who do not experience regular assessments. This *t*-test supports the fourth hypothesis of the study.

Table 17

Descriptive Statistics for Treatment Groups and Control Groups

Doctrine Assessment

Group	N	Mean	SD	*t* value	p value
Treatment	308	77.19	13.30	-6.07	< .0001
Control	65	66.33	12.20		

Principles Assessment

Group	N	Mean	SD	*t* value	p value
Treatment	300	53.35	14.68	-2.25	0.0250
Control	57	48.73	11.31		

Each *t*-test was run with two different methods, Pooled and Satterthwaite. These methods assumed equal variances (Pooled) and unequal variances (Satterthwaite). The Satterthwaite approximation of the standard errors differs from the Pooled method in that is does not assume that the variances of the two samples are equal. Thus if the variances are equal, the approximation of both methods should provide the same result. Table 18 below shows the results from both methods.

Table 18

t-test Results from Different Methods

Doctrine Assessment

Method	Variances	DF	*t* value	Pr > |t|
Pooled	Equal	371	-6.07	< .0001
Satterthwaite	Unequal	98.8	-6.42	< .0001

Principles Assessment

Method	Variances	DF	*t* value	Pr > |t|
Pooled	Equal	355	-2.25	0.0250
Satterthwaite	Unequal	95.8	-2.68	0.0086

Levene's Test for Equality of Variances was also run on the means to verify the assumption that variances are equal across groups or samples. The results from this test are shown below in Table 19. These results are shown for both the Doctrine and Principles assessments.

Table 19

Results from Equality of Variances

	Num DF	Den DF	*F* value	Pr > F
Doctrine Assessment	307	64	1.19	0.4077
Principles Assessment	299	56	1.69	0.0194

Time Spent with Formative Feedback

There were statistically significant correlations found among some covariates in this study. Both (a) the amount of time students spent studying the formative feedback provided at the end of an assessment (r = .16, p = .0477) and (b) the amount of time teachers spent studying the assessment results (r = .21, p = .0604, respectively) correlated slightly with the *Principles Assessment* scores. Similar correlations with the *Doctrine Assessment* were not statistically significant (r = .03, p = .7526 and r = .01, p = .9227, respectively).

The amount of time students spent reviewing the formative feedback is reported in Table 8 for the *Doctrine Assessment*, Table 11 for the *Principles Assessment*, and Tables 14-15 for the *Grammar Assessment*.

The amount of time teachers spent reviewing different sections of formative feedback provided to them is presented in Table 20. Teachers assigned to Group 1 and Group 3 had access to the assessment results and their average times per treatment group and per language are listed below in Table 21.

All teachers indicated that they would probably or definitely like to continue to have access to the assessment results with their next groups of students after the research study was over. All teachers indicated that they valued the information that was presented to them via the tools made available.

Student Attitudes Towards Assessments

Only 35% of the students responded to the *Missionary Questionnaire*. The distribution of responses per treatment group is indicated in Table 22. These responses provided valuable feedback in terms of how the students viewed assessments.

Table 20

Average Teacher Time Spent Reviewing Formative Feedback By Feedback Category

Feedback Category	English (minutes)	Spanish (minutes)	Korean (minutes)
Teacher Evaluation	36	29	47
Doctrine / Principles	55	14	1
Background Info.	24	13	2
Language Speaking	--	2	9
Language Grammar	--	4	7
Language Checklist	--	1	1
Assessment Usage	5	7	1
Scripture Checklist	1	1	1

Table 21

Average Teacher Time Spent Reviewing Formative Feedback Per Group Per Language

Treatment Group	English (minutes)	Spanish (minutes)	Korean (minutes)
1	64.14	26.50	34.00
3	46.75	36.88	13.00

Specific items from the *Missionary Questionnaire* have been identified below in Table 23. The responses to these items were averaged per treatment group to illustrate differences in responses across the treatment groups. Some correlations between treatment group scores and responses to these items were statistically significant. For example, there was a statistically significant negative correlation between doctrine scores and the statements “Taking assessments

makes me frustrated or discouraged" ($r = .26$, $p = .0013$) and "I had some bad experiences with tests in school" ($r = .34$, $p < .0001$).

Table 22

Student Questionnaire Responses

Treatment Group	English	Spanish	Korean	Combined
1	22	13	10	45
2	23	29	10	62
3	4	14	2	20
4	21	15	0	36
5	9	10	0	19
Combined	71	21	82	174

The students responded to the items in Table 23 according to the degree to which they agree or disagree with the statements in the left column. The means were distributed on a scale from 1 to 5. The means were also adjusted to represent a higher number for a more positive attitude about assessments.

In summary, multiple instruments were used to test the four hypotheses of this study. The data collected for the language assessments was not reliable and was thus thrown out. The data collected from the Doctrine and Principles assessments provided statistically significant support for the first and fourth hypotheses, while providing no substantive support for the second and third hypotheses.

Table 23

Descriptive Statistics for Attitudinal Scoresby Group by Item

Item	Statistics	Group 1 (n = 45)	Group 2 (n = 62)	Group 3 (n = 20)	Group 4 (n = 36)	Group 5 (n = 19)
Taking assessments helps me learn important things.	Mean	3.44	3.57	2.69	3.33	2.70
	St. Dev.	1.18	0.93	0.95	1.07	1.00
Taking assessments makes me frustrated or discouraged.	Mean	3.40	3.28	3.50	3.21	3.00
	St. Dev.	1.28	1.16	1.24	1.12	0.94
Taking assessments motivates me to work harder.	Mean	3.00	3.31	2.95	3.12	2.95
	St. Dev.	1.17	1.02	1.10	0.99	0.91
It is hard for me to accept feedback or criticism.	Mean	4.00	4.05	4.35	4.03	3.79
	St. Dev.	0.89	0.82	0.49	0.91	0.71
Taking assessments has given needed variety to my learning.	Mean	3.09	3.16	2.45	2.85	3.21
	St. Dev.	1.18	0.98	0.94	1.06	1.03
[a]I had some bad experiences with tests in school.	Mean	3.74	3.64	3.90	3.24	2.26
	St. Dev.	1.18	1.24	0.91	1.37	1.19
Assessment Tools are not very helpful or useful.	Mean	3.33	3.40	2.40	2.97	2.95
	St. Dev.	1.10	0.97	1.10	1.03	0.91
Taking assessments helps me find out what I don't know.	Mean	3.60	3.95	3.05	3.33	3.05
	St. Dev.	1.03	0.96	1.15	1.05	1.13
Taking assessments helps me keep track of my progress.	Mean	3.09	3.31	2.75	2.97	2.63
	St. Dev.	1.20	1.06	1.07	1.07	1.12
I prefer not to have any tests or assessments at the MTC.	Mean	3.30	3.55	3.00	3.12	2.68
	St. Dev.	1.26	1.03	1.17	1.09	1.06
Overall Attitude	Mean	3.40	3.52	3.13	3.21	2.94
	St. Dev.	1.46	1.48	1.16	1.11	1.17

[a]This item was reverse scored because of the negative orientation of the stem.

Chapter 5: Discussion

As discussed in Chapter 2, studies have shown that formative feedback can be an effective tool for increasing learning outcomes for students. Allinder (1995) showed that some teachers are able to use formative assessments to assist their students in increasing learning outcomes. In order to benefit from formative assessments, the teacher or student must take action (Ramaprasad, 1983; Sadler, 1989). Little has been done to investigate the interaction of teacher and student effort. Although this study resulted in observable gains in with the interaction of student and teacher formative feedback, there were no statistically significant interaction results found as a result of this study.

Research Hypotheses

Although data collected provided statistically significant support for only the first and fourth hypotheses of this study, there may have been helpful data collected to shed light on benefits from focusing on the second and third hypotheses. The four hypotheses of this study were:

1. Missionary trainees who receive regular feedback will have higher achievement on the average than missionaries who do not receive feedback.

2. Missionaries taught by teachers who are provided feedback regarding the progress and achievement of the individual missionaries in their class, will have higher achievement on the average than missionaries taught by teachers who do not receive such feedback.

3. Providing feedback to both missionaries and to their teachers will have a combined effect that will increase achievement on the average beyond the performance of missionaries in classes who do not receive both types of feedback and beyond the achievement of missionaries who did not receive either type of feedback.

4. The achievement of missionaries who experience regular assessments will be higher on the average than missionaries who do not receive any assessments.

Student formative feedback. The first hypothesis asserts that formative feedback provided via assessments will increase learning outcomes. The results from this study matched the results from the literature mentioned in Chapter 2. Although this was not a surprise, it was helpful to match these observations from the literature in the particular implementation for this study. Not only was there a statistically significant increase in learning outcomes, but also there was a qualitatively significant increase in attitude towards assessments.

The overall attitude of students tends to be positive with regards to assessments, but students in Groups 1 and 2 tended to have higher ratings and more positive comments about the assessments than did the students in Groups 3, 4 and 5. One would hope that this change in attitude could affect the culture as the training center over time, and might result in improved learning outcomes over time.

Students, who received feedback, primarily used their time to review the items they missed and to take note on references in which they could find support for the correct answer. A point of interest was that students spent more time when they were encouraged to review the feedback and a proctor was present. In subsequent visits where a proctor was not present, time was still spent reviewing the feedback, but the students did not spend as much time reviewing that feedback. Even though there was a correlation of increased learning outcomes with time spent in the feedback, learning outcomes may be enhanced even more if teachers were to attend assessment sessions with their students and teacher spent time encouraging the students to review the feedback.

Teacher formative feedback. The second hypothesis presumes that providing teachers with the results from such assessments will enable the teacher to increase learning outcomes. Although the data did not support this hypothesis, all teachers responded with the need to continue to receive the information that was provided. The qualitative data collected showed that there was at least a perceived need for this data. Learning outcomes may not have increased, but the teacher's comfort level of understanding the students and their abilities may have increased. It is recommended that the data provided may have not been the correct data to share nor may it have been shared in the proper format. It is possible that further research and work in this area may have resulted in a more significant outcome.

Some questions that may need to be answered in order to better identify where teacher formative feedback may improve learning outcomes include:

1. What data is needed by the teacher in order to increase learning outcomes?
2. How should the data be presented to the teacher?
3. Were the teachers capable of responding to any needs identified by the data presented?
4. Did the teachers have time to respond to individual needs identified by the data?

Implementation was another concern with the use of data provided to the teachers. Many teachers are stuck in their approach that coverage of content is more important than mastery of content. This coverage focus results from past approaches to MTC training and missionary teaching, but the recent changes in MTC curriculum have shifted the focus to mastery of content for both missionaries and those whom they teach. This transition is not fully understood by the teachers thus is not fully implemented. If teachers understood the need to assist their missionaries in mastery of the content taught, then increased attention may be given to the

feedback provided and it is speculated that the effect would have increased measurable learning outcomes.

This struggle between coverage versus mastery is not limited to MTC training alone. This is a struggle with many teachers across all disciplines. It is recommended that more time be spent in this area to further understand how a teacher's focus on mastery of content taught might affect their use of formative assessment data provided and result in assisting the teachers to improve their teaching focus and affect student learning outcomes.

Interaction between student and teacher formative feedback. The third hypothesis asks whether there is an interaction effect between the first two focal points, student and teacher feedback. Due to the difficulties discovered above with teacher feedback and the questions left unanswered, the study was not able to properly analyze this interaction. No statistically significant interaction was discovered, but both pieces seemed to have a positive effect on attitudes regarding the assessments. Teachers seemed to be more interested in having their students take the assessments, so that the teachers could view the data.

Frequent assessments. The fourth hypothesis presumes that students who take frequent assessments, in the first place, will benefit from increased learning outcomes. There was statistically significant data supporting this hypothesis. The study demonstrated that frequent assessments increased learning outcomes. Although students who did not receive feedback seemed to be disappointed that they were not receiving feedback, the students were still able to identify areas of weakness and they were able to improve their learning outcomes when performing on posttests.

In summary, frequent assessments appear to increase the learning outcomes of students, while the addition of formative feedback not only increases the learning outcomes even more, it also increases the attitude towards the positive with regards to taking the assessments.

Recommendations

A follow-up study should be performed to investigate why teachers felt that they needed to view the results of the assessments that students were taking. This follow-up study should also focus on what data should be shared with the teachers and how that data might be presented. Teachers perceive that the data if helpful and/or valuable to them and their ability to teach the students. Efforts spent in this area of study may yield improved results identifying the interaction between teacher formative feedback and that of the students.

A similar study could be performed to observe how teachers use the data that is presented to them, and to categorize the teacher use to see if patterns can be identified that may be more effective for use than others. This study would focus on the practices of teachers to identify best practices along with identifying how data may be organized to better enable teachers to perform these best practices. This study would also focus on the intent of the teachers to assist students by covering all content or assisting students to master content and only move onto new content once the already presented content has been mastered.

A cost-benefit analysis could also be performed in order to determine if the effort spent in creating formative feedback for the students is worth the difference in learning outcomes between taking frequent assessments without feedback and taking those same assessments with feedback provided. It may be difficult to identify methods for determine the cost-to-benefit ratio in order to determine if the effort is “worth it,” but such a study may help future groups identify

whether they would like to spend the time generating formative feedback for each item in their assessments.

Conclusion

The purpose of this study was to examine the interaction of student formative feedback and teacher formative feedback. It was hypothesized that taking frequent assessments would increase learning outcomes of students. It was further hypothesized that the addition of providing formative feedback for each item in those assessments would results in an additional increase in learning outcomes. It was also further hypothesized that providing formative feedback to teachers would once again provide an additional increase in learning outcomes.

Support was found in the study to show that frequent assessments did in fact result in a statistically significant learning gain in outcomes. Support was also found to show that providing formative feedback to the students resulted in a second significant learning gain in outcomes. Although support was not found to indicate that providing teachers with feedback on student progress resulted in any learning gains, nor was there support that there was any interaction from these two types of feedback, there were indications that such feedback may encourage teachers to be more involved with encouraging their students to take the assessments. Teachers may also be more easily encouraged to attend sessions while the students are taking the assessments, which results in more time spent in reviewing the feedback which data showed has a strong correlation with increased learning outcomes.

It is assumed that the tools used did not identify all of the benefits of the teachers receiving feedback, and thus there may be benefits that encourage the use of assessments with feedback for their students. Such encouragement would result in learning outcomes due to the results shown for the first and third hypotheses.

For MTC specific goals and implementation, MTC administration felt that the results of this study validated the efforts put into developing both the assessments and the item level formative feedback. The study also validated the efforts to build a teacher tool which allows the teachers to view the results from the assessments. It is felt by administration that the new tools will involve teachers with the student learning process and keep them informed on the process. Administration also feels that sharing the information will both encourage the teachers to follow up with the students on taking assessments as well as inform the teachers on ways in which they may improve or adjust their teaching content. Although confirmation data was not found to show that hypotheses 2 and 3 were met, there is still a feeling on all levels of the organization that there is a benefit and that the data should be made available to all teachers as an ongoing basis.

References

Allinder, R.M. (1995) An examination of the relationship between teacher efficacy and curriculum-based measurement and student-achievement. *Remedial and Special Education, 16*, 247-254.

Ames, C. (1992) Classrooms: goals, structures, and student motivation. *Journal of Educational Psychology, 84*, 261-271.

Black, P., & Wiliam, D. (1998a). Assessment and classroom learning. *Assessment in Education: Principles, Policy, and Practice, 5*(1), 7-74.

Blumenfeld, P.C. (1992) Classroom learning and motivation: clarifying and expanding goal theory. *Journal of Educational Psychology, 84,* 272-281.

Butler, R. (1988) Enhancing and undermining intrinsic motivation; the effects of task-involving and ego-involving evaluation on interest and performance. *British Journal of Educational Psychology, 58*, 1-14.

Cameron, J. & Pierce, D.P. (1994) Reinforcement, reward, and intrinsic motivation: a meta-analysis. *Review of Educational Research, 64,* 363-423.

Chickering, A. W. & Gamson, Z. F. (1991). Applying the seven principles for good practice in undergraduate education. In *New Directions for Teaching and Learning, 47*. San Francisco: Jossey-Bass Inc.

Clariana, R. B. (1993). A review of multiple-try feedback in traditional and computer-based instruction. *Journal of Computer-Based Instruction, 20*, 67-74.

Cohen, V. B. (1985, January). A reexamination of feedback in computer-based instruction: Implications for instructional design. *Educational Technology, 25*, 33-37.

Crooks, T.J. (1988) The impact of classroom evaluation practices on students. *Review of Educational Research, 58,* 438-481.

Cizek, G.J., Fitzgerald, S.M. & Rachor, R.E. (1995) Teachers' assessment practices: preparation, isolation and the kitchen sink. *Educational Assessment, 3*, 159-179.

Fontana, D. & Fernandes, M. (1994) Improvements in mathematics performance as a consequence of self-assessment in Portuguese primary school pupils. *British Journal of Educational Psycology, 64*, 407-417.

Frederiksen, J.R. & White, B.J. (1997, April) *Reflective assessment of students' research within an inquiry-based middle school science curriculum*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Hall, K., Webber, B., Varley, S., Young, V. & Dorman, P. (1997) A study of teacher assessment at key stage 1. *Cambridge Journal of Education, 27*, 107-122.

Kluger, A.N. & DeNisi, A. (1996) The effects of feedback interventions on performance: a historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychological Bulletin, 119*, 254-284.

Lepper, M.R. & Hodell, M. (1989) Intrinsic motivation in the classroom, In: C. Ames & R. Ames (Eds.), *Research on Motivation in the Classroom,* (Vol. 3, pp. 73-105). San Diego, CA: Academic Press.

Lemley, Duane C. (2005) *Delayed versus immediate feedback in an independent study high school setting*. Unpublished dissertation, Brigham Young University, Provo, Utah, USA.

Loucks, S., Hall, G. E. (1977) A developmental model for determining whether the treatment is actually implemented. *American Educational Research Journal, 14*, 264-276.

Martinez, J.G.R. & Martinez, N. C. (1992) Re-examining repeated testing and teacher effects in a remedial mathematics course. *British Journal of Educational Psychology, 62,* 356-363.

Olina, Z. & Sullivan, H. J. (2002). Effects of classroom evaluation strategies on student achievement and attitudes. *Educational Technology Research & Development, 50*(3), 61-75.

Ramaprasad, A. (1983) On the definition of feedback, *Behavioral Science, 28*, 4-13.

Sadler, R. (1989) Formative assessment and the design of instructional systems. *Instructional Science, 18*, 119-144.

Thomas, J.W., Bol, L., Warkentin, R.W., Wilson, M., Strage, A. & Rohwer, W.D. (1993) Interrelationships among students' study activities, self-concept of academic ability, and achievement as a function of characteristics of high-school biology courses. *Applied Cognitive Psychology, 7*, 499-532.

Whiting, B., Van Burgh, J.W. & Render, G.F. (1995) *Mastery learning in the classroom*. Paper presented at the annual meeting of the American Educational Research Association. San Francisco, CA. ERIC Document ED382688.

Whyte, M. M., Karolick, D. M., Nielsen, M. C., Elder, G. D., & Hawley, W. T. (1995). Cognitive styles and feedback in computer-assisted-instruction. *Journal of Educational Computing Research*, 12, 195-203.

Appendix A

Handouts for Teachers

Group Instructions (English) — Group 1

Overview

Your district has been selected to participate in a project involving the doctrine, *Preach My Gospel*, and Language assessments administered through the Assessment Tools product in the computer labs. It is very important that your missionaries take the assessments according to the following schedule.

Schedule

Week 1

Assessment Title	Missionary Action
• Entrance Questionnaire • Doctrine Test Form A (FB) • Principles Test Form A (FB)	1. Take Assessments 2. Review Feedback for both Test A's, taking notes so they can study the topics they have missed.

Teacher Action	
Teacher Action	Spend 15-30 minutes reviewing "Missionary Information" provided in the Reportal. This is the information that was collected through the Entrance Questionnaire. Please review this information to get to know the background of the missionaries you will be teaching.

Week 2

Teacher Action	
Teacher Action	Spend 15-30 minutes with your companion teacher, review the results from the Doctrine and Principles Tests that are shown in the Reportal. Set goals on how you might help the missionaries learn the topics that they missed. Note: Please help the missionaries however you feel best, e.g. you may teach these topics in class, encourage the missionaries to study them on their own, provide additional scriptures or references to assist them, etc.

Week 3

Assessment Title	Missionary Action
• Doctrine Test Form B (FB) • Principles Test Form B (FB)	1. Take Assessments to see how they have improved.

Week 4

Assessment Title	Missionary Action
• Missionary Questionnaire (FB)	1. Fill out online questionnaire

Teacher Action	
Teacher Action	Fill out online teacher questionnaire

Reportal – Reviewing Assessment Results

Your teacher companionship has been especially selected to have access to extra information in the Reportal that will allow you to see how your missionaries are doing on the assessments that they are taking. This information is only available to those teachers who have been selected for this portion of the study and so you should not discuss the information provided with anyone other than you companion teacher. Additional time (up to 30 minutes per week) above and beyond your schedule has been approved by your managers in order to accommodate this request. It is recommended that the time spent reviewing this information be spent during your weekly companionship meeting, as you review the needs of the missionaries that you are teaching. It is important to review weaknesses in the missionaries' performance as identified by the assessments in the Reportal, to set goals and to discuss ways of helping out the missionaries and the district.

**Note: If you are an international student, you are not able to spend any additional time with the Reportal because of restrictions on your work hours. Please coordinate with your supervisor to authorize a temporary schedule change where you may take 10-20 minutes from class time to review the Reportal data with your companion teacher.

Group Instructions (English) — Group 1

How to Access the Reportal

1. Log into Teacher Assistant and click on "Teacher Eval" under the Evaluation graphic.

2. Your Reportal screen now has additional features enabled. Please note the Statement on the bottom of the page reminding you that this information is to be only viewed by you and your companion teacher.

3. Click through the options on the screen in step 2 to become familiar with what information is available.
   a. Teacher Evaluation – These are the results from the teacher evaluations that have been completed by your districts in the past.
   b. Missionary Information – This is the information provided by the Entrance Questionnaire. You can click through the topics list on the left to see the results for those topics. If you click on the missionary icon to see individual responses with names.
   c. Language Assessments – Includes the grammar, language study checklist, and the language speaking assessment. The Language Speaking Assessment allows you to listen to the audio responses of your missionaries.
   d. Preach My Gospel – Doctrine and Principles from Preach My Gospel are included here. Choose the appropriate accordion header on the left to switch between PMG Doctrine and PMG Principles. If you click on an individual missionary's bar, then the data below will be filtered to their specific responses.
   e. Other – This includes an Assessment Usage view that shows which assessments have been taken by each missionary and the Scripture Study Checklist.

Group Instructions (Spanish) — Group 1

Overview

Your district has been selected to participate in a project involving the doctrine, *Preach My Gospel*, and Language assessments administered through the Assessment Tools product in the computer labs. It is very important that your missionaries take the assessments according to the following schedule.

Schedule

	Assessment Title	Missionary Action
Week 1	• Entrance Questionnaire	1. Take Assessment
	Teacher Action	Spend 15-30 minutes reviewing "Missionary Information" provided in the Reportal. This is the information that was collected through the Entrance Questionnaire. Please review this information to get to know the background of the missionaries you will be teaching.
Week 2	• Doctrine Test Form A (FB) • Principles Test Form A (FB)	1. Take Assessments 2. Review Feedback for both Test A's, taking notes so they can study the topics they have missed.
Week 3	**Teacher Action**	Spend 15-30 minutes with your companion teacher, review the results from the Doctrine and Principles Tests that are shown in the Reportal. Set goals on how you might help the missionaries learn the topics that they missed. Note: Please help the missionaries however you feel best, e.g. you may teach these topics in class, encourage the missionaries to study them on their own, provide additional scriptures or references to assist them, etc.
Week 4	• Doctrine Test Form B (FB) • Principles Test Form B (FB)	1. Take Assessments to see how they have improved.
Week 6	• LSA (Short) • Grammar Test Form A (FB)	1. Take Assessments 2. Review Feedback for both Test A's, taking notes so they can study the topics they have missed.
Week 7	**Teacher Action**	Spend 15-30 minutes with your companion teacher, review the results from the Language Speaking Assessment and Grammar Assessment that are shown in the Reportal. Set goals on how you might help the missionaries learn the topics that they missed.
Week 8	• LSA (Short) • Grammar Test Form B (FB)	1. Take Assessments to see how they have improved.
Week 9	• Missionary Questionnaire (FB)	1. Fill out online questionnaire
	Teacher Action	Fill out online teacher questionnaire

Group Instructions (Spanish) — Group 1

Reportal – Reviewing Assessment Results

Your teacher companionship has been especially selected to have access to extra information in the Reportal that will allow you to see how your missionaries are doing on the assessments that they are taking. This information is only available to those teachers who have been selected for this portion of the study and so you should not discuss the information provided with anyone other than you companion teacher. Additional time (up to 30 minutes per week) above and beyond your schedule has been approved by your managers in order to accommodate this request. It is recommended that the time spent reviewing this information be spent during your weekly companionship meeting, as you review the needs of the missionaries that you are teaching. It is important to review weaknesses in the missionaries' performance as identified by the assessments in the Reportal, to set goals and to discuss ways of helping out the missionaries and the district.

**Note: If you are an international student, you are not able to spend any additional time with the Reportal because of restrictions on your work hours. Please coordinate with your supervisor to authorize a temporary schedule change where you may take 10-20 minutes from class time to review the Reportal data with your companion teacher.

Group Instructions (Spanish) — Group 1

How to Access the Reportal

1. Log into Teacher Assistant and click on "Teacher Eval" under the Evaluation graphic.

2. Your Reportal screen now has additional features enabled. Please note the Statement on the bottom of the page reminding you that this information is to be only viewed by you and your companion teacher.

3. Click through the options on the screen in step 2 to become familiar with what information is available.

a. Teacher Evaluation – These are the results from the teacher evaluations that have been completed by your districts in the past.

b. Missionary Information – This is the information provided by the Entrance Questionnaire. You can click through the topics list on the left to see the results for those topics. If you click on the missionary icon to see individual responses with names.

c. Language Assessments – Includes the grammar, language study checklist, and the language speaking assessment. The Language Speaking Assessment allows you to listen to the audio responses of your missionaries.

d. Preach My Gospel – Doctrine and Principles from Preach My Gospel are included here. Choose the appropriate accordion header on the left to switch between PMG Doctrine and PMG Principles. If you click on an individual missionary's bar, then the data below will be filtered to their specific responses.

e. Other – This includes an Assessment Usage view that shows which assessments have been taken by each missionary and the Scripture Study Checklist.

Group Instructions (Korean) — Group 1

Overview

Your district has been selected to participate in a project involving the doctrine, *Preach My Gospel*, and Language assessments administered through the Assessment Tools product in the computer labs. It is very important that your missionaries take the assessments according to the following schedule.

Schedule

	Assessment Title	Missionary Action
Week 1	• Entrance Questionnaire	1. Take Assessment
	Teacher Action: Spend 15-30 minutes reviewing "Missionary Information" provided in the Reportal. This is the information that was collected through the Entrance Questionnaire. Please review this information to get to know the background of the missionaries you will be teaching.	
Week 2	• Doctrine Test Form A (FB) • Principles Test Form A (FB)	1. Take Assessments 2. Review Feedback for both Test A's, taking notes so they can study the topics they have missed.
Week 3	**Teacher Action:** Spend 15-30 minutes with your companion teacher, review the results from the Doctrine and Principles Tests that are shown in the Reportal. Set goals on how you might help the missionaries learn the topics that they missed. Note: Please help the missionaries however you feel best, e.g. you may teach these topics in class, encourage the missionaries to study them on their own, provide additional scriptures or references to assist them, etc.	
Week 4	• Doctrine Test Form B (FB) • Principles Test Form B (FB)	1. Take Assessments to see how they have improved.

	Assessment Title	Missionary Action
Week 8	• LSA (Short) • Grammar Test Form A (FB)	1. Take Assessments 2. Review Feedback for both Test A's, taking notes so they can study the topics they have missed.
Week 9	**Teacher Action:** Spend 15-30 minutes with your companion teacher, review the results from the Language Speaking Assessment and Grammar Assessment that are shown in the Reportal. Set goals on how you might help the missionaries learn the topics that they missed.	
Week 10	• LSA (Short) • Grammar Test Form B (FB)	1. Take Assessments to see how they have improved.
Week 11	• Missionary Questionnaire (FB)	1. Fill out online questionnaire
	Teacher Action: Fill out online teacher questionnaire	

Group Instructions (Korean) — Group 1

Reportal – Reviewing Assessment Results

Your teacher companionship has been especially selected to have access to extra information in the Reportal that will allow you to see how your missionaries are doing on the assessments that they are taking. This information is only available to those teachers who have been selected for this portion of the study and so you should not discuss the information provided with anyone other than you companion teacher. Additional time (up to 30 minutes per week) above and beyond your schedule has been approved by your managers in order to accommodate this request. It is recommended that the time spent reviewing this information be spent during your weekly companionship meeting, as you review the needs of the missionaries that you are teaching. It is important to review weaknesses in the missionaries' performance as identified by the assessments in the Reportal, to set goals and to discuss ways of helping out the missionaries and the district.

**Note: If you are an international student, you are not able to spend any additional time with the Reportal because of restrictions on your work hours. Please coordinate with your supervisor to authorize a temporary schedule change where you may take 10-20 minutes from class time to review the Reportal data with your companion teacher.

Group Instructions (Korean) — Group 1

How to Access the Reportal

1. Log into Teacher Assistant and click on "Teacher Eval" under the Evaluation graphic.

2. Your Reportal screen now has additional features enabled. Please note the Statement on the bottom of the page reminding you that this information is to be only viewed by you and your companion teacher.

3. Click through the options on the screen in step 2 to become familiar with what information is available.

a. Teacher Evaluation – These are the results from the teacher evaluations that have been completed by your districts in the past.

b. Missionary Information – This is the information provided by the Entrance Questionnaire. You can click through the topics list on the left to see the results for those topics. If you click on the missionary icon to see individual responses with names.

c. Language Assessments – Includes the grammar, language study checklist, and the language speaking assessment. The Language Speaking Assessment allows you to listen to the audio responses of your missionaries.

d. Preach My Gospel – Doctrine and Principles from Preach My Gospel are included here. Choose the appropriate accordion header on the left to switch between PMG Doctrine and PMG Principles. If you click on an individual missionary's bar, then the data below will be filtered to their specific responses.

e. Other – This includes an Assessment Usage view that shows which assessments have been taken by each missionary and the Scripture Study Checklist.

Group Instructions (English) — Group 2

Overview

Your district has been selected to participate in a project involving the doctrine, *Preach My Gospel*, and Language assessments administered through the Assessment Tools product in the computer labs. It is very important that your missionaries take the assessments according to the following schedule.

Schedule

Week 1

Assessment Title	Missionary Action
• Entrance Questionnaire • Doctrine Test Form A (FB) • Principles Test Form A (FB)	1. Take Assessments 2. Review Feedback for both Test A's, taking notes so they can study the topics they have missed.

Teacher Action	
Teacher Action	Encourage your missionaries to take the assessments and to spend time reviewing the feedback provided from the assessments.

Week 3

Assessment Title	Missionary Action
• Doctrine Test Form B (FB) • Principles Test Form B (FB)	1. Take Assessments to see how they have improved.

Week 4

Assessment Title	Missionary Action
• Missionary Questionnaire (FB)	1. Fill out online questionnaire

Teacher Action	
Teacher Action	Fill out online teacher questionnaire

Group Instructions (Spanish) — Group 2

Overview

Your district has been selected to participate in a project involving the doctrine, *Preach My Gospel*, and Language assessments administered through the Assessment Tools product in the computer labs. It is very important that your missionaries take the assessments according to the following schedule.

Schedule

	Assessment Title	Missionary Action
Week 1	• Entrance Questionnaire	1. Take Assessment
	Teacher Action: Encourage your missionaries to take the assessments and to spend time reviewing the feedback provided from the assessments.	
Week 2	• Doctrine Test Form A (FB) • Principles Test Form A (FB)	1. Take Assessments 2. Review Feedback for both Test A's, taking notes so they can study the topics they have missed.
Week 4	• Doctrine Test Form B (FB) • Principles Test Form B (FB)	1. Take Assessments to see how they have improved.
Week 6	• LSA (Short) • Grammar Test Form A (FB)	1. Take Assessments 2. Review Feedback for both Test A's, taking notes so they can study the topics they have missed.
Week 8	• LSA (Short) • Grammar Test Form B (FB)	1. Take Assessments to see how they have improved.
Week 9	• Missionary Questionnaire (FB)	1. Fill out online questionnaire
	Teacher Action: Fill out online teacher questionnaire	

Group Instructions (Korean) — Group 2

Overview

Your district has been selected to participate in a project involving the doctrine, *Preach My Gospel*, and Language assessments administered through the Assessment Tools product in the computer labs. It is very important that your missionaries take the assessments according to the following schedule.

Schedule

	Assessment Title	Missionary Action
Week 1	• Entrance Questionnaire	1. Take Assessment
	Teacher Action: Encourage your missionaries to take the assessments and to spend time reviewing the feedback provided from the assessments.	
Week 2	• Doctrine Test Form A (FB) • Principles Test Form A (FB)	1. Take Assessments 2. Review Feedback for both Test A's, taking notes so they can study the topics they have missed.
Week 4	• Doctrine Test Form B (FB) • Principles Test Form B (FB)	1. Take Assessments to see how they have improved.
Week 8	• LSA (Short) • Grammar Test Form A (FB)	1. Take Assessments 2. Review Feedback for both Test A's, taking notes so they can study the topics they have missed.
Week 10	• LSA (Short) • Grammar Test Form B (FB)	1. Take Assessments to see how they have improved.
Week 11	• Missionary Questionnaire (FB)	1. Fill out online questionnaire
	Teacher Action: Fill out online teacher questionnaire	

Group Instructions (English) — Group 3

Overview

Your district has been selected to participate in a project involving the doctrine, *Preach My Gospel*, and Language assessments administered through the Assessment Tools product in the computer labs. It is very important that your missionaries take the assessments according to the following schedule.

Schedule

Week 1

Assessment Title	Missionary Action
• Entrance Questionnaire • Doctrine Test A (NFB) • Principles Test A (NFB)	1. Take Assessments

Teacher Action	
	Spend 15-30 minutes reviewing "Missionary Information" provided in the Reportal. This is the information that was collected through the Entrance Questionnaire. Please review this information to get to know the background of the missionaries you will be teaching.

Week 2

Teacher Action	
	Spend 15-30 minutes with your companion teacher, review the results from the Doctrine and Principles Tests that are shown in the Reportal. Set goals on how you might help the missionaries learn the topics that they missed. Note: Please help the missionaries however you feel best, e.g. you may teach these topics in class, encourage the missionaries to study them on their own, provide additional scriptures or references to assist them, etc.

Week 3

Assessment Title	Missionary Action
• Doctrine Test Form B (NFB) • Principles Test Form B (NFB)	1. Take Assessments to see how they have improved.

Week 4

Assessment Title	Missionary Action
• Missionary Questionnaire (NFB)	1. Fill out online questionnaire

Teacher Action	
	Fill out online teacher questionnaire

Reportal – Reviewing Assessment Results

Your teacher companionship has been especially selected to have access to extra information in the Reportal that will allow you to see how your missionaries are doing on the assessments that they are taking. This information is only available to those teachers who have been selected for this portion of the study and so you should not discuss the information provided with anyone other than you companion teacher. Additional time (up to 30 minutes per week) above and beyond your schedule has been approved by your managers in order to accommodate this request. It is recommended that the time spent reviewing this information be spent during your weekly companionship meeting, as you review the needs of the missionaries that you are teaching. It is important to review weaknesses in the missionaries' performance as identified by the assessments in the Reportal, to set goals and to discuss ways of helping out the missionaries and the district.

**Note: If you are an international student, you are not able to spend any additional time with the Reportal because of restrictions on your work hours. Please coordinate with your supervisor to authorize a temporary schedule change where you may take 10-20 minutes from class time to review the Reportal data with your companion teacher.

Group Instructions (English) — Group 3

How to Access the Reportal

1. Log into Teacher Assistant and click on "Teacher Eval" under the Evaluation graphic.

2. Your Reportal screen now has additional features enabled. Please note the Statement on the bottom of the page reminding you that this information is to be only viewed by you and your companion teacher.

3. Click through the options on the screen in step 2 to become familiar with what information is available.
   a. Teacher Evaluation– These are the results from the teacher evaluations that have been completed by your districts in the past.
   b. Missionary Information – This is the information provided by the Entrance Questionnaire. You can click through the topics list on the left to see the results for those topics. If you click on the missionary icon to see individual responses with names.
   c. Language Assessments – Includes the grammar, language study checklist, and the language speaking assessment. The Language Speaking Assessment allows you to listen to the audio responses of your missionaries.
   d. Preach My Gospel – Doctrine and Principles from Preach My Gospel are included here. Choose the appropriate accordion header on the left to switch between PMG Doctrine and PMG Principles. If you click on an individual missionary's bar, then the data below will be filtered to their specific responses.
   e. Other – This includes an Assessment Usage view that shows which assessments have been taken by each missionary and the Scripture Study Checklist.

Group Instructions (Spanish) — Group 3

Overview

Your district has been selected to participate in a project involving the doctrine, *Preach My Gospel*, and Language assessments administered through the Assessment Tools product in the computer labs. It is very important that your missionaries take the assessments according to the following schedule.

Schedule

	Assessment Title	Missionary Action
Week 1	• Entrance Questionnaire	1. Take Assessment
	Teacher Action	Spend 15-30 minutes reviewing "Missionary Information" provided in the Reportal. This is the information that was collected through the Entrance Questionnaire. Please review this information to get to know the background of the missionaries you will be teaching.
Week 2	• Doctrine Test Form A (NFB) • Principles Test Form A (NFB)	1. Take Assessments
Week 3	**Teacher Action**	Spend 15-30 minutes with your companion teacher, review the results from the Doctrine and Principles Tests that are shown in the Reportal. Set goals on how you might help the missionaries learn the topics that they missed. Note: Please help the missionaries however you feel best, e.g. you may teach these topics in class, encourage the missionaries to study them on their own, provide additional scriptures or references to assist them, etc.
Week 4	• Doctrine Test Form B (NFB) • Principles Test Form B (NFB)	1. Take Assessments to see how they have improved.
Week 6	• LSA (Short) • Grammar Test Form A (NFB)	1. Take Assessments
Week 7	**Teacher Action**	Spend 15-30 minutes with your companion teacher, review the results from the Language Speaking Assessment and Grammar Assessment that are shown in the Reportal. Set goals on how you might help the missionaries learn the topics that they missed.
Week 8	• LSA (Short) • Grammar Test Form B (NFB)	1. Take Assessments to see how they have improved.
Week 9	• Missionary Questionnaire (NFB)	1. Fill out online questionnaire
	Teacher Action	Fill out online teacher questionnaire

Group Instructions (Spanish) — Group 3

Reportal – Reviewing Assessment Results

Your teacher companionship has been especially selected to have access to extra information in the Reportal that will allow you to see how your missionaries are doing on the assessments that they are taking. This information is only available to those teachers who have been selected for this portion of the study and so you should not discuss the information provided with anyone other than you companion teacher. Additional time (up to 30 minutes per week) above and beyond your schedule has been approved by your managers in order to accommodate this request. It is recommended that the time spent reviewing this information be spent during your weekly companionship meeting, as you review the needs of the missionaries that you are teaching. It is important to review weaknesses in the missionaries' performance as identified by the assessments in the Reportal, to set goals and to discuss ways of helping out the missionaries and the district.

**Note: If you are an international student, you are not able to spend any additional time with the Reportal because of restrictions on your work hours. Please coordinate with your supervisor to authorize a temporary schedule change where you may take 10-20 minutes from class time to review the Reportal data with your companion teacher.

Group Instructions (Spanish) — Group 3

How to Access the Reportal

1. Log into Teacher Assistant and click on "Teacher Eval" under the Evaluation graphic.

2. Your Reportal screen now has additional features enabled. Please note the Statement on the bottom of the page reminding you that this information is to be only viewed by you and your companion teacher.

3. Click through the options on the screen in step 2 to become familiar with what information is available.

a. Teacher Evaluation – These are the results from the teacher evaluations that have been completed by your districts in the past.

b. Missionary Information – This is the information provided by the Entrance Questionnaire. You can click through the topics list on the left to see the results for those topics. If you click on the missionary icon to see individual responses with names.

c. Language Assessments – Includes the grammar, language study checklist, and the language speaking assessment. The Language Speaking Assessment allows you to listen to the audio responses of your missionaries.

d. Preach My Gospel – Doctrine and Principles from Preach My Gospel are included here. Choose the appropriate accordion header on the left to switch between PMG Doctrine and PMG Principles. If you click on an individual missionary's bar, then the data below will be filtered to their specific responses.

e. Other – This includes an Assessment Usage view that shows which assessments have been taken by each missionary and the Scripture Study Checklist.

Group Instructions (Korean) — Group 3

Overview

Your district has been selected to participate in a project involving the doctrine, *Preach My Gospel*, and Language assessments administered through the Assessment Tools product in the computer labs. It is very important that your missionaries take the assessments according to the following schedule.

Schedule

	Assessment Title	Missionary Action
Week 1	• Entrance Questionnaire	1. Take Assessment
	Teacher Action: Spend 15-30 minutes reviewing "Missionary Information" provided in the Reportal. This is the information that was collected through the Entrance Questionnaire. Please review this information to get to know the background of the missionaries you will be teaching.	
Week 2	• Doctrine Test Form A (NFB) • Principles Test Form A (NFB)	1. Take Assessments
Week 3	**Teacher Action:** Spend 15-30 minutes with your companion teacher, review the results from the Doctrine and Principles Tests that are shown in the Reportal. Set goals on how you might help the missionaries learn the topics that they missed. Note: Please help the missionaries however you feel best, e.g. you may teach these topics in class, encourage the missionaries to study them on their own, provide additional scriptures or references to assist them, etc.	
Week 4	• Doctrine Test Form B (NFB) • Principles Test Form B (NFB)	1. Take Assessments to see how they have improved.

	Assessment Title	Missionary Action
Week 8	• LSA (Short) • Grammar Test Form A (NFB)	1. Take Assessments
Week 9	**Teacher Action:** Spend 15-30 minutes with your companion teacher, review the results from the Language Speaking Assessment and Grammar Assessment that are shown in the Reportal. Set goals on how you might help the missionaries learn the topics that they missed.	
Week 10	• LSA (Short) • Grammar Test Form B (NFB)	1. Take Assessments to see how they have improved.
Week 11	• Missionary Questionnaire (NFB)	1. Fill out online questionnaire
	Teacher Action: Fill out online teacher questionnaire	

Group Instructions (Korean) — Group 3

Reportal – Reviewing Assessment Results

Your teacher companionship has been especially selected to have access to extra information in the Reportal that will allow you to see how your missionaries are doing on the assessments that they are taking. This information is only available to those teachers who have been selected for this portion of the study and so you should not discuss the information provided with anyone other than you companion teacher. Additional time (up to 30 minutes per week) above and beyond your schedule has been approved by your managers in order to accommodate this request. It is recommended that the time spent reviewing this information be spent during your weekly companionship meeting, as you review the needs of the missionaries that you are teaching. It is important to review weaknesses in the missionaries' performance as identified by the assessments in the Reportal, to set goals and to discuss ways of helping out the missionaries and the district.

**Note: If you are an international student, you are not able to spend any additional time with the Reportal because of restrictions on your work hours. Please coordinate with your supervisor to authorize a temporary schedule change where you may take 10-20 minutes from class time to review the Reportal data with your companion teacher.

Group Instructions (Korean) — Group 3

How to Access the Reportal

1. Log into Teacher Assistant and click on "Teacher Eval" under the Evaluation graphic.

2. Your Reportal screen now has additional features enabled. Please note the Statement on the bottom of the page reminding you that this information is to be only viewed by you and your companion teacher.

3. Click through the options on the screen in step 2 to become familiar with what information is available.

a. Teacher Evaluation – These are the results from the teacher evaluations that have been completed by your districts in the past.

b. Missionary Information – This is the information provided by the Entrance Questionnaire. You can click through the topics list on the left to see the results for those topics. If you click on the missionary icon to see individual responses with names.

c. Language Assessments – Includes the grammar, language study checklist, and the language speaking assessment. The Language Speaking Assessment allows you to listen to the audio responses of your missionaries.

d. Preach My Gospel – Doctrine and Principles from Preach My Gospel are included here. Choose the appropriate accordion header on the left to switch between PMG Doctrine and PMG Principles. If you click on an individual missionary's bar, then the data below will be filtered to their specific responses.

e. Other – This includes an Assessment Usage view that shows which assessments have been taken by each missionary and the Scripture Study Checklist.

Group Instructions (English) — Group 4

Overview

Your district has been selected to participate in a project involving the doctrine, *Preach My Gospel*, and Language assessments administered through the Assessment Tools product in the computer labs. It is very important that your missionaries take the assessments according to the following schedule.

Schedule

Week 1

Assessment Title	Missionary Action
• Entrance Questionnaire • Doctrine Test Form A (NFB) • Principles Test Form A (NFB)	1. Take Assessments

Teacher Action	Encourage your missionaries to take the assessments.

Week 3

Assessment Title	Missionary Action
• Doctrine Test Form B (NFB) • Principles Test Form B (NFB)	1. Take Assessments to see how they have improved.

Week 4

Assessment Title	Missionary Action
• Missionary Questionnaire (NFB)	1. Fill out online questionnaire

Teacher Action	Fill out online teacher questionnaire

Group Instructions (Spanish) — Group 4

Overview

Your district has been selected to participate in a project involving the doctrine, *Preach My Gospel*, and Language assessments administered through the Assessment Tools product in the computer labs. It is very important that your missionaries take the assessments according to the following schedule.

Schedule

	Assessment Title	Missionary Action
Week 1	• Entrance Questionnaire	1. Take Assessment
	Teacher Action: Encourage your missionaries to take the assessments.	
Week 2	• Doctrine Test Form A (NFB) • Principles Test Form A (NFB)	1. Take Assessments
Week 4	• Doctrine Test Form B (NFB) • Principles Test Form B (NFB)	1. Take Assessments to see how they have improved.
Week 6	• LSA (Short) • Grammar Test Form A (NFB)	1. Take Assessments
Week 8	• LSA (Short) • Grammar Test Form B (NFB)	1. Take Assessments to see how they have improved.
Week 9	• Missionary Questionnaire (NFB)	1. Fill out online questionnaire
	Teacher Action: Fill out online teacher questionnaire	

Group Instructions (Korean) — Group 4

Overview

Your district has been selected to participate in a project involving the doctrine, *Preach My Gospel*, and Language assessments administered through the Assessment Tools product in the computer labs. It is very important that your missionaries take the assessments according to the following schedule.

Schedule

	Assessment Title	Missionary Action
Week 1	• Entrance Questionnaire	1. Take Assessment
	Teacher Action: Encourage your missionaries to take the assessments.	
Week 2	• Doctrine Test Form A (NFB) • Principles Test Form A (NFB)	1. Take Assessments
Week 4	• Doctrine Test Form B (NFB) • Principles Test Form B (NFB)	1. Take Assessments to see how they have improved.
Week 8	• LSA (Short) • Grammar Test Form A (NFB)	1. Take Assessments
Week 10	• LSA (Short) • Grammar Test Form B (NFB)	1. Take Assessments to see how they have improved.
Week 11	• Missionary Questionnaire (NFB)	1. Fill out online questionnaire
	Teacher Action: Fill out online teacher questionnaire	

Group Instructions (English) — Group 5

Overview

Your district has been selected to participate in a project involving the doctrine, *Preach My Gospel*, and Language assessments administered through the Assessment Tools product in the computer labs. It is very important that your missionaries take the assessments according to the following schedule.

Note: Your specific missionaries will not be taking all of the standard assessments that were available to them in the past. This means that they may hear of other missionaries taking the assessments and come to you to ask why they cannot see the assessments. If you are asked, please let them know that only certain missionaries at the MTC have access to the assessments and that not all have access at this time. Thank you for your patience and help with this matter.

Schedule

Week 1

Assessment Title	Missionary Action
• Entrance Questionnaire	1. Take Assessments
Teacher Action	Encourage your missionaries to take the assessments.

Week 3

Assessment Title	Missionary Action
• Doctrine Test Form B (NFB) • Principles Test Form B (NFB)	1. Take Assessments to see what they have learned.

Week 4

Assessment Title	Missionary Action
• Missionary Questionnaire (NFB)	1. Fill out online questionnaire
Teacher Action	Fill out online teacher questionnaire

Group Instructions (Spanish) — Group 5

Overview

Your district has been selected to participate in a project involving the doctrine, *Preach My Gospel*, and Language assessments administered through the Assessment Tools product in the computer labs. It is very important that your missionaries take the assessments according to the following schedule.

Note: Your specific missionaries will not be taking all of the standard assessments that were available to them in the past. This means that they may hear of other missionaries taking the assessments and come to you to ask why they cannot see the assessments. If you are asked, please let them know that only certain missionaries at the MTC have access to the assessments and that not all have access at this time. Thank you for your patience and help with this matter.

Schedule

Week 1

Assessment Title	Missionary Action
• Entrance Questionnaire	1. Take Assessment

Teacher Action	
	Encourage your missionaries to take the assessments.

Week 4

Assessment Title	Missionary Action
• Doctrine Test Form B (NFB) • Principles Test Form B (NFB)	1. Take Assessments

Week 8

Assessment Title	Missionary Action
• LSA (Short) • Grammar Test Form B (NFB)	1. Take Assessments to see how they have improved.

Week 9

Assessment Title	Missionary Action
• Missionary Questionnaire (NFB)	1. Fill out online questionnaire

Teacher Action	
	Fill out online teacher questionnaire

Group Instructions (Korean) — Group 5

Overview

Your district has been selected to participate in a project involving the doctrine, *Preach My Gospel*, and Language assessments administered through the Assessment Tools product in the computer labs. It is very important that your missionaries take the assessments according to the following schedule.

Note: Your specific missionaries will not be taking all of the standard assessments that were available to them in the past. This means that they may hear of other missionaries taking the assessments and come to you to ask why they cannot see the assessments. If you are asked, please let them know that only certain missionaries at the MTC have access to the assessments and that not all have access at this time. Thank you for your patience and help with this matter.

Schedule

Week 1

Assessment Title	Missionary Action
• Entrance Questionnaire	1. Take Assessment

Teacher Action: Encourage your missionaries to take the assessments

Week 4

Assessment Title	Missionary Action
• Doctrine Test Form B (NFB) • Principles Test Form B (NFB)	1. Take Assessments

Week 10

Assessment Title	Missionary Action
• LSA (Short) • Grammar Test Form B (NFB)	1. Take Assessments to see how they have improved

Week 11

Assessment Title	Missionary Action
• Missionary Questionnaire (NFB)	1. Fill out online questionnaire

Teacher Action: Fill out online teacher questionnaire

Appendix B

Example Doctrine Assessment

1. Which of the following describe the inhabitants of the terrestrial kingdom, according to Doctrine and Covenants 76? (Mark all that apply)
- o I do not know the answer to this question.
- o The honorable men and women of the earth who were blinded by the craftiness of men.
- o Those who were not valiant in the testimony of Jesus.
- o Those who rejected the testimony of Jesus in mortality but afterward received it.
- o Those who were liars and thieves during their life on the earth.

2. Which of the following are characteristics of charity? (Mark all that apply)
- o I do not know the answer to this question.
- o knowing all things
- o being patient in affliction
- o avoiding anger
- o avoiding evil thoughts
- o seeking to excel
- o being kind
- o believing all things

3. Which of the following are results of the Fall of Adam? (Mark all that apply)
- o I do not know the answer to this question.
- o pain
- o temptation
- o agency
- o happiness
- o children
- o death

4. The word atonement means...
- o I do not know the answer to this question.
- o to do for others what they cannot do for themselves.
- o to reconcile with God those who have been separated from Him.
- o to pay a price for sin.
- o to restore something to its original state.

5. "Eternal life" and "exaltation" are the same thing.
- o I do not know the answer to this question.
- o True
- o False

6. The Book of Mormon contains a fulness of the gospel of Jesus Christ in the sense that it contains. . .
- o I do not know the answer to this question.
- o all gospel principles.
- o the doctrines required for salvation.
- o the ordinances of the Church.
- o God's dealings with man.

7. After Christ's death, did early Christians worship on Saturday or Sunday?
   - o I do not know the answer to this question.
   - o They worshipped on Saturday, the traditional Jewish Sabbath.
   - o They worshipped on Sunday, the first day of the week.

8. Because Adam fell, all of us will experience . . .
   - o I do not know the answer to this question.
   - o physical death.
   - o spiritual death.
   - o neither physical nor spiritual death.
   - o both physical and spiritual death.

9. When did the Savior pay for our sins?
   - o I do not know the answer to this question.
   - o in the Garden of Gethsemane
   - o on the cross
   - o in the Garden of Gethsemane and on the cross
   - o in the resurrection
   - o throughout His life

10. As defined in Doctrine and Covenants, to "seal" means to . . .
   - o I do not know the answer to this question.
   - o give a stamp of approval
   - o weld or bind
   - o preserve
   - o exalt

11. According to the Book of Mormon, when miracles cease, it is because of . . .
   - o I do not know the answer to this question.
   - o a lack of priesthood authority.
   - o unbelief.
   - o trials Heavenly Father gives us to test our faith.
   - o All of the above

12. The first person to be baptized was _____.
   - o I do not know the answer to this question.
   - o Jesus Christ
   - o Adam
   - o Moses
   - o John the Baptist
   - o Abraham

13. A definition of truth as defined in the scriptures is:
    - I do not know the answer to this question.
    - eternal understanding
    - wisdom and power
    - knowledge that fills the immensity of space
    - knowledge of things as they are, as they were, and as they are to come

14. After His death and before His resurrection, Jesus Christ . . .
    - I do not know the answer to this question.
    - appeared to His apostles in Jerusalem.
    - appeared to the Nephites and the Lamanites in the New World.
    - preached the gospel in the spirit world.
    - ascended to the Father.

15. Although prophets have many responsibilities, their primary responsibility is…
    - I do not know the answer to this question.
    - to foretell the future.
    - to warn of and condemn sin.
    - to testify of the Savior.
    - to lead the Church.

16. What cleanses us from sin?
    - I do not know the answer to this question.
    - our good works
    - the Savior's Atonement
    - Both of the above

17. What is the primary reason God gives us commandments?
    - I do not know the answer to this question.
    - To help us be happy.
    - To help us learn discipline.
    - To justify the punishments He gives to the wicked.
    - To manage what we do.
    - All of the above

18. Ordinances for the dead were performed in New Testament times.
    - I do not know the answer to this question.
    - True
    - False

19. When paying fast offerings, Church members are encouraged to contribute . . .
    - I do not know the answer to this question.
    - one percent of their income.
    - ten percent of their income.
    - the exact amount saved from fasting two meals.
    - a generous amount (beyond the money saved by not eating two meals) where our means allow.

20. What is the primary mission of the Holy Ghost?
    - I do not know the answer to this question.
    - give us strength to help us do what is right
    - help us recognize the truth and make correct choices
    - bear witness of the Father and the Son
    - comfort us during times of sorrow or affliction

21. When will the wicked be resurrected?
    - I do not know the answer to this question.
    - at the Second Coming
    - in the morning of the first resurrection
    - in the afternoon of the first resurrection
    - in the last resurrection
    - they will not be resurrected

22. Who will have the opportunity to be together forever as husband and wife?
    - I do not know the answer to this question.
    - All who were faithful to their spouse on earth.
    - All who inherit a kingdom of glory.
    - All who inherit the celestial or terrestrial kingdoms.
    - All who inherit the celestial kingdom.
    - All who inherit exaltation in the celestial kingdom.

23. Although all of the following are actions performed by Christ, which one correctly illustrates Christ's role as our advocate with the Father?
    - I do not know the answer to this question.
    - The Father speaks to man only through the Son.
    - Christ suffered so the Father can mercifully judge us.
    - Christ pleads with the Father on our behalf.
    - Our prayers go to Christ first, and from Him to the Father.

24. We will be judged according to the laws of . . .
    - I do not know the answer to this question.
    - heaven and earth.
    - justice and mercy.
    - charity and forgiveness.
    - sin and righteousness.

25. Instead of animal sacrifice, the Lord now requires as a sacrifice . . .
    - o I do not know the answer to this question.
    - o an honest tithing.
    - o the consecration of all our earthly possessions.
    - o fasting and prayer.
    - o a broken heart and a contrite spirit.

26. An investigator wants to know who receives the Light of Christ. The correct response is everyone who _____.
    - o I do not know the answer to this question.
    - o receives the gift of the Holy Ghost
    - o lives righteously
    - o accepts the gospel
    - o comes to earth

27. Silas lived and died in Europe in the 1500's. He died without hearing the gospel or being baptized; therefore, Silas will . . .
    - o I do not know the answer to this question.
    - o go to the telestial kingdom because he did not receive the gospel and was not baptized.
    - o go to the celestial kingdom because he died without law.
    - o go to the terrestrial kingdom if he was a righteous man, but cannot enter the celestial kingdom.
    - o have a chance to hear and accept the gospel in the spirit world before he inherits a kingdom of glory.

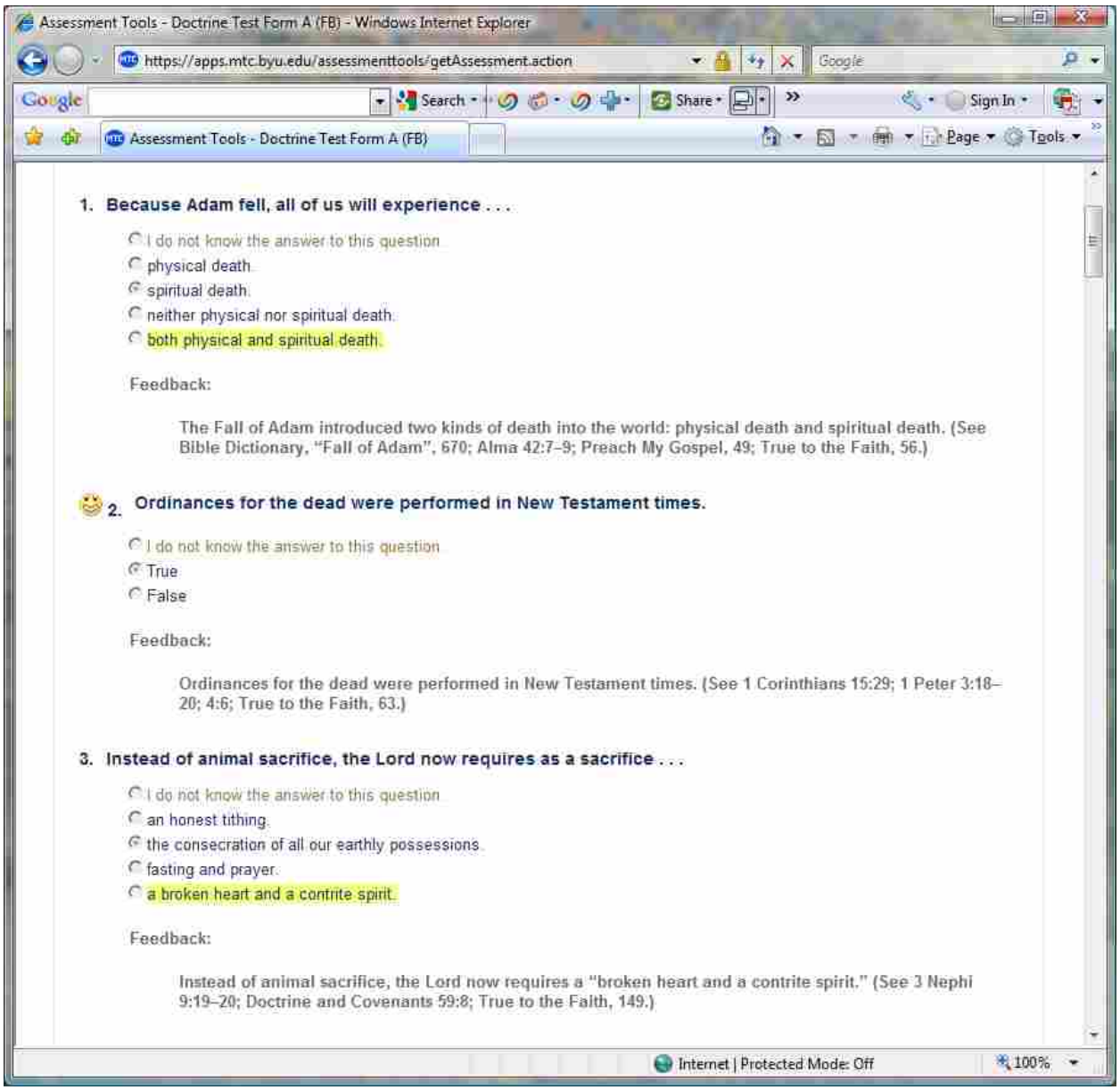
28. What word is defined as Christ's victory over physical and spiritual death?
    - o I do not know the answer to this question.
    - o _____

29. The greatest gift we can receive from God is
    - o I do not know the answer to this question.
    - o _____

30. Separation from the presence of God because of our sins is called.
    - o I do not know the answer to this question.
    - o _____

Appendix C

Example Doctrine Assessment Feedback


Assessment Tools - Doctrine Test Form A (FB) - Windows Internet Explorer
https://apps.mtc.byu.edu/assessmenttools/getAssessment.action
Assessment Tools - Doctrine Test Form A (FB)
1. Because Adam fell, all of us will experience . . .
I do not know the answer to this question
physical death.
spiritual death.
neither physical nor spiritual death.
both physical and spiritual death.
Feedback:
The Fall of Adam introduced two kinds of death into the world: physical death and spiritual death. (See Bible Dictionary, "Fall of Adam", 670; Alma 42:7–9; Preach My Gospel, 49; True to the Faith, 56.)
2. Ordinances for the dead were performed in New Testament times.
I do not know the answer to this question
True
False
Feedback:
Ordinances for the dead were performed in New Testament times. (See 1 Corinthians 15:29; 1 Peter 3:18–20; 4:6; True to the Faith, 63.)
3. Instead of animal sacrifice, the Lord now requires as a sacrifice . . .
I do not know the answer to this question
an honest tithing.
the consecration of all our earthly possessions.
fasting and prayer.
a broken heart and a contrite spirit.
Feedback:
Instead of animal sacrifice, the Lord now requires a "broken heart and a contrite spirit." (See 3 Nephi 9:19–20; Doctrine and Covenants 59:8; True to the Faith, 149.)
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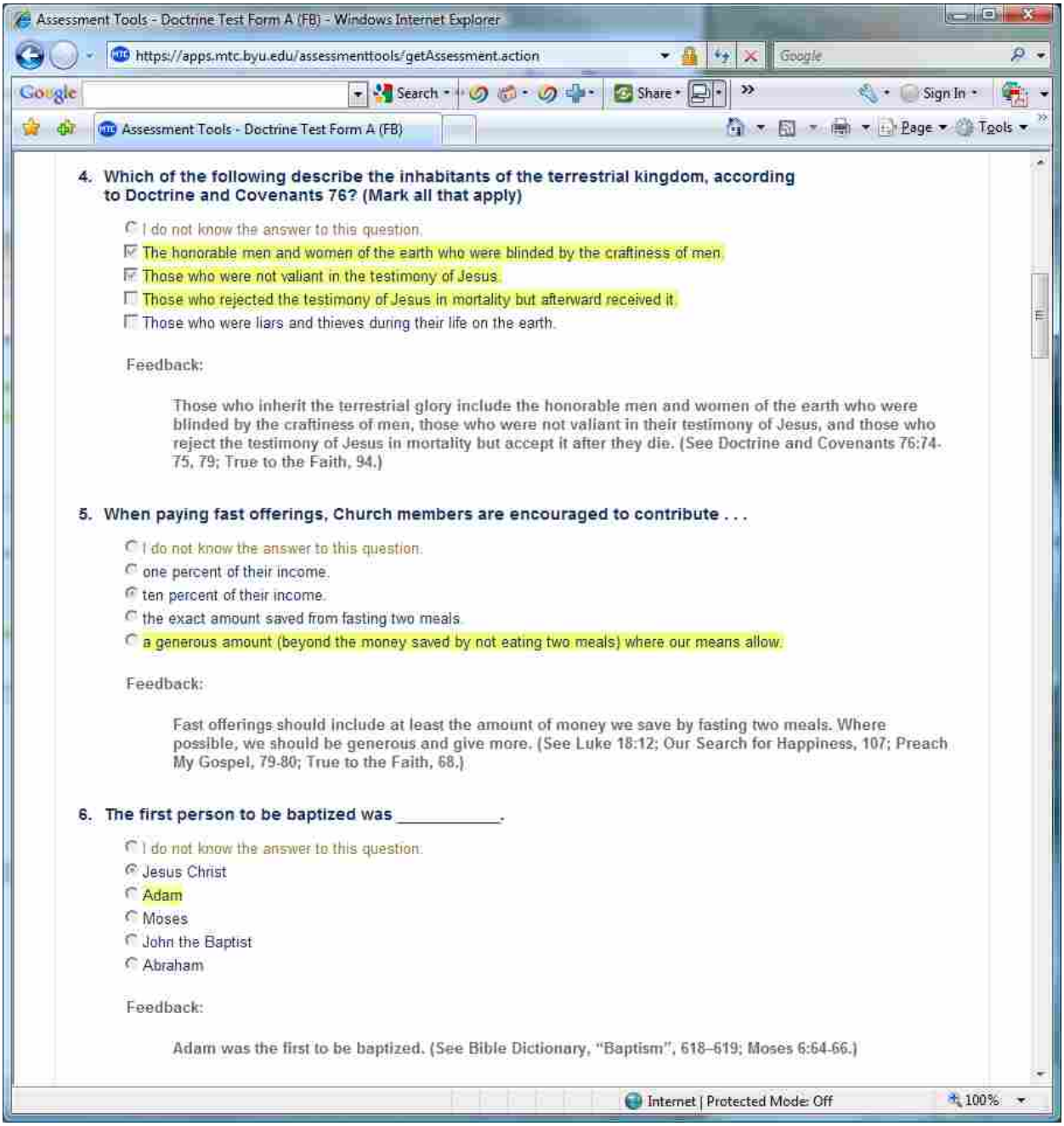
Assessment Tools - Doctrine Test Form A (FB) - Windows Internet Explorer
https://apps.mtc.byu.edu/assessmenttools/getAssessment.action
Assessment Tools - Doctrine Test Form A (FB)
4. Which of the following describe the inhabitants of the terrestrial kingdom, according to Doctrine and Covenants 76? (Mark all that apply)
I do not know the answer to this question.
The honorable men and women of the earth who were blinded by the craftiness of men.
Those who were not valiant in the testimony of Jesus.
Those who rejected the testimony of Jesus in mortality but afterward received it.
Those who were liars and thieves during their life on the earth.
Feedback:
Those who inherit the terrestrial glory include the honorable men and women of the earth who were blinded by the craftiness of men, those who were not valiant in their testimony of Jesus, and those who reject the testimony of Jesus in mortality but accept it after they die. (See Doctrine and Covenants 76:74-75, 79; True to the Faith, 94.)
5. When paying fast offerings, Church members are encouraged to contribute . . .
I do not know the answer to this question.
one percent of their income.
ten percent of their income.
the exact amount saved from fasting two meals.
a generous amount (beyond the money saved by not eating two meals) where our means allow.
Feedback:
Fast offerings should include at least the amount of money we save by fasting two meals. Where possible, we should be generous and give more. (See Luke 18:12; Our Search for Happiness, 107; Preach My Gospel, 79-80; True to the Faith, 68.)
6. The first person to be baptized was _____.
I do not know the answer to this question.
Jesus Christ
Adam
Moses
John the Baptist
Abraham
Feedback:
Adam was the first to be baptized. (See Bible Dictionary, "Baptism", 618–619; Moses 6:64-66.)
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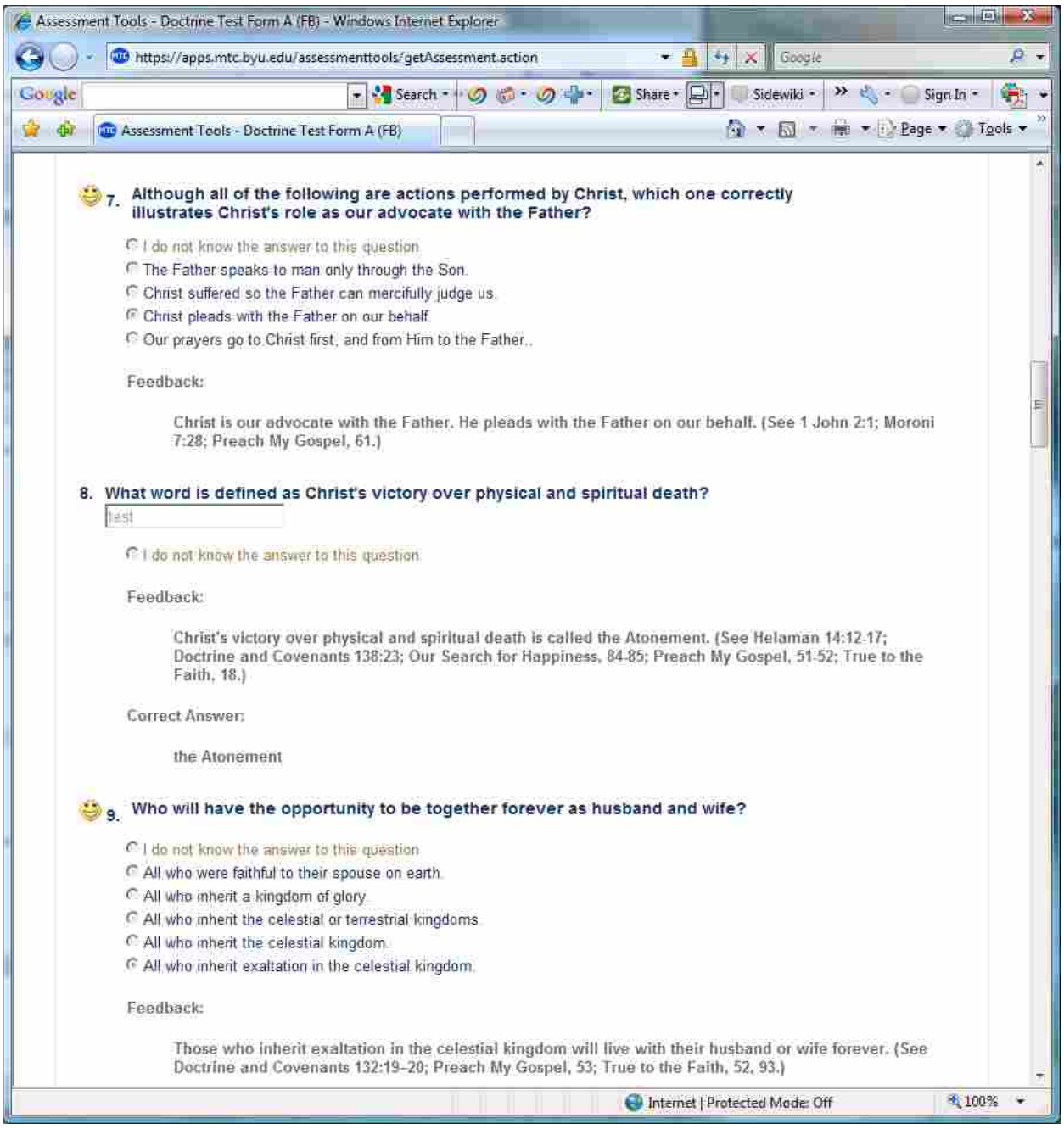
Assessment Tools - Doctrine Test Form A (FB) - Windows Internet Explorer
https://apps.mtc.byu.edu/assessmenttools/getAssessment.action
Assessment Tools - Doctrine Test Form A (FB)
7. Although all of the following are actions performed by Christ, which one correctly illustrates Christ's role as our advocate with the Father?
I do not know the answer to this question
The Father speaks to man only through the Son.
Christ suffered so the Father can mercifully judge us.
Christ pleads with the Father on our behalf.
Our prayers go to Christ first, and from Him to the Father..
Feedback:
Christ is our advocate with the Father. He pleads with the Father on our behalf. (See 1 John 2:1; Moroni 7:28; Preach My Gospel, 61.)
8. What word is defined as Christ's victory over physical and spiritual death?
test
I do not know the answer to this question
Feedback:
Christ's victory over physical and spiritual death is called the Atonement. (See Helaman 14:12-17; Doctrine and Covenants 138:23; Our Search for Happiness, 84-85; Preach My Gospel, 51-52; True to the Faith, 18.)
Correct Answer:
the Atonement
9. Who will have the opportunity to be together forever as husband and wife?
I do not know the answer to this question
All who were faithful to their spouse on earth.
All who inherit a kingdom of glory.
All who inherit the celestial or terrestrial kingdoms.
All who inherit the celestial kingdom.
All who inherit exaltation in the celestial kingdom.
Feedback:
Those who inherit exaltation in the celestial kingdom will live with their husband or wife forever. (See Doctrine and Covenants 132:19–20; Preach My Gospel, 53; True to the Faith, 52, 93.)
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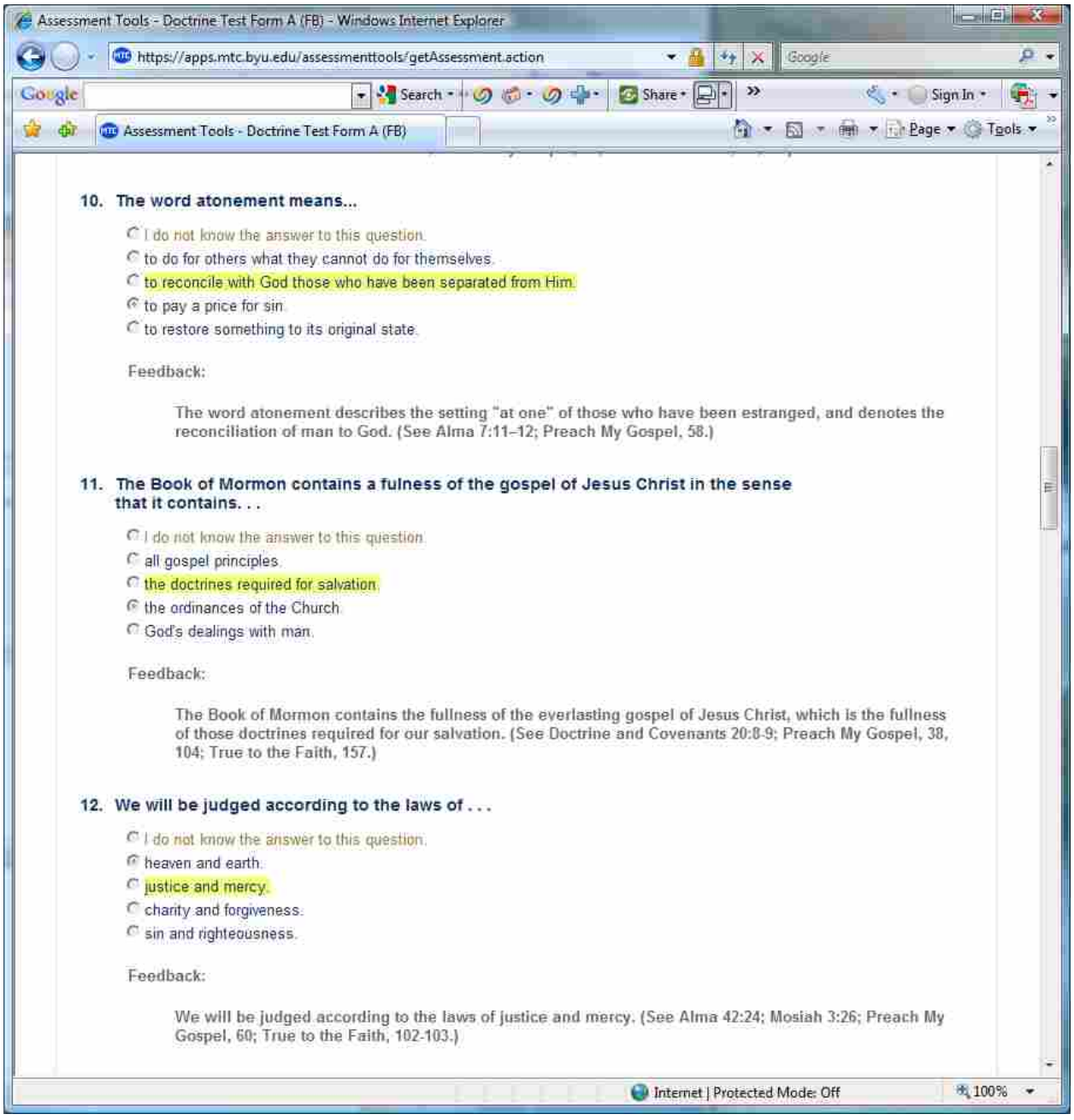


10. The word atonement means...

- I do not know the answer to this question.
- to do for others what they cannot do for themselves.
- to reconcile with God those who have been separated from Him.
- to pay a price for sin.
- to restore something to its original state.

Feedback:

The word atonement describes the setting "at one" of those who have been estranged, and denotes the reconciliation of man to God. (See Alma 7:11–12; Preach My Gospel, 58.)

11. The Book of Mormon contains a fulness of the gospel of Jesus Christ in the sense that it contains. . .

- I do not know the answer to this question.
- all gospel principles.
- the doctrines required for salvation.
- the ordinances of the Church.
- God's dealings with man.

Feedback:

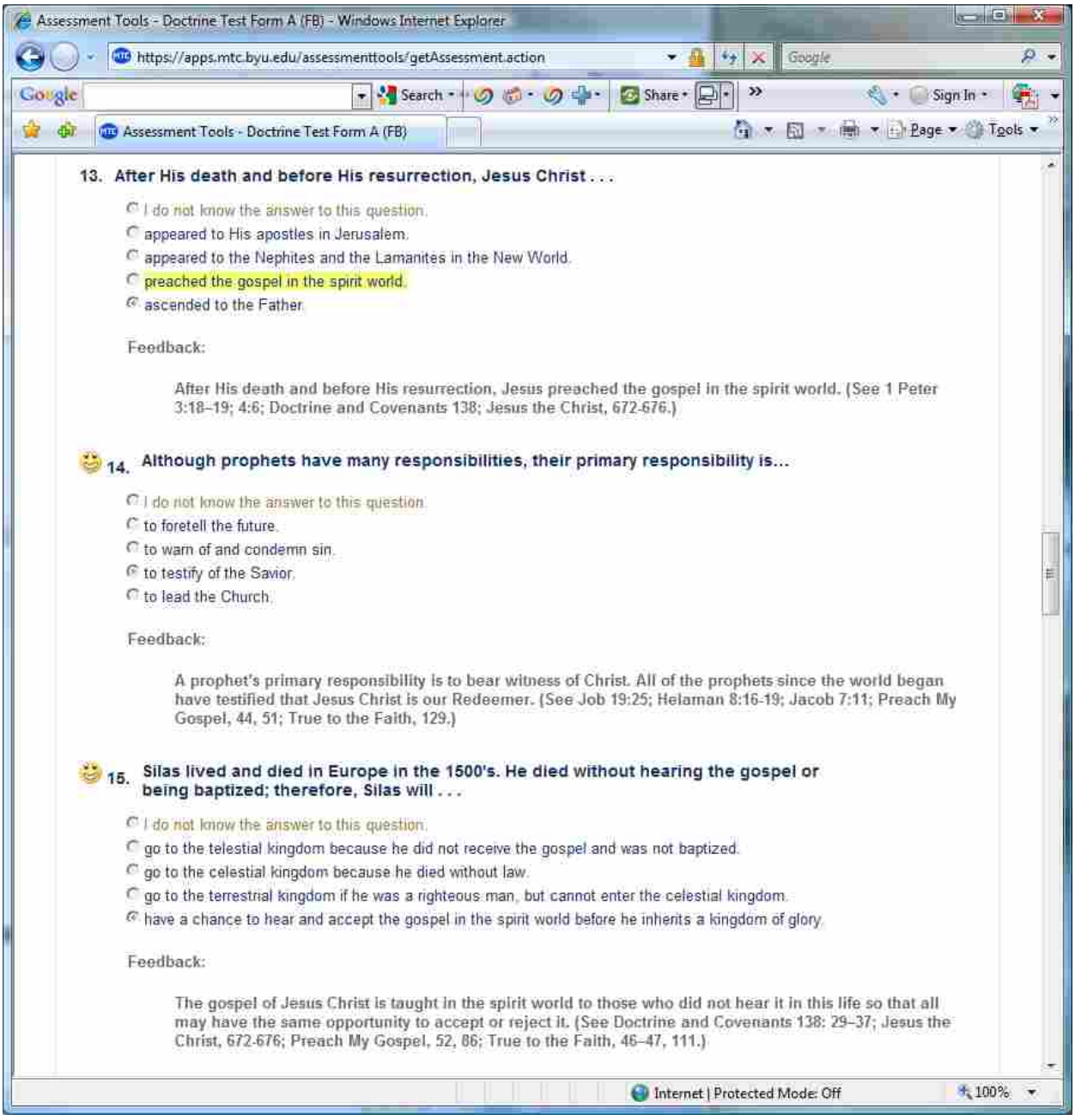
The Book of Mormon contains the fullness of the everlasting gospel of Jesus Christ, which is the fullness of those doctrines required for our salvation. (See Doctrine and Covenants 20:8-9; Preach My Gospel, 38, 104; True to the Faith, 157.)

12. We will be judged according to the laws of . . .

- I do not know the answer to this question.
- heaven and earth.
- justice and mercy.
- charity and forgiveness.
- sin and righteousness.

Feedback:

We will be judged according to the laws of justice and mercy. (See Alma 42:24; Mosiah 3:26; Preach My Gospel, 60; True to the Faith, 102-103.)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13. After His death and before His resurrection, Jesus Christ . . .
I do not know the answer to this question.
appeared to His apostles in Jerusalem.
appeared to the Nephites and the Lamanites in the New World.
preached the gospel in the spirit world.
ascended to the Father.
Feedback:
After His death and before His resurrection, Jesus preached the gospel in the spirit world. (See 1 Peter 3:18–19; 4:6; Doctrine and Covenants 138; Jesus the Christ, 672-676.)
14. Although prophets have many responsibilities, their primary responsibility is...
I do not know the answer to this question.
to foretell the future.
to warn of and condemn sin.
to testify of the Savior.
to lead the Church.
Feedback:
A prophet's primary responsibility is to bear witness of Christ. All of the prophets since the world began have testified that Jesus Christ is our Redeemer. (See Job 19:25; Helaman 8:16-19; Jacob 7:11; Preach My Gospel, 44, 51; True to the Faith, 129.)
15. Silas lived and died in Europe in the 1500's. He died without hearing the gospel or being baptized; therefore, Silas will . . .
I do not know the answer to this question.
go to the telestial kingdom because he did not receive the gospel and was not baptized.
go to the celestial kingdom because he died without law.
go to the terrestrial kingdom if he was a righteous man, but cannot enter the celestial kingdom.
have a chance to hear and accept the gospel in the spirit world before he inherits a kingdom of glory.
Feedback:
The gospel of Jesus Christ is taught in the spirit world to those who did not hear it in this life so that all may have the same opportunity to accept or reject it. (See Doctrine and Covenants 138: 29–37; Jesus the Christ, 672-676; Preach My Gospel, 52, 86; True to the Faith, 46–47, 111.)
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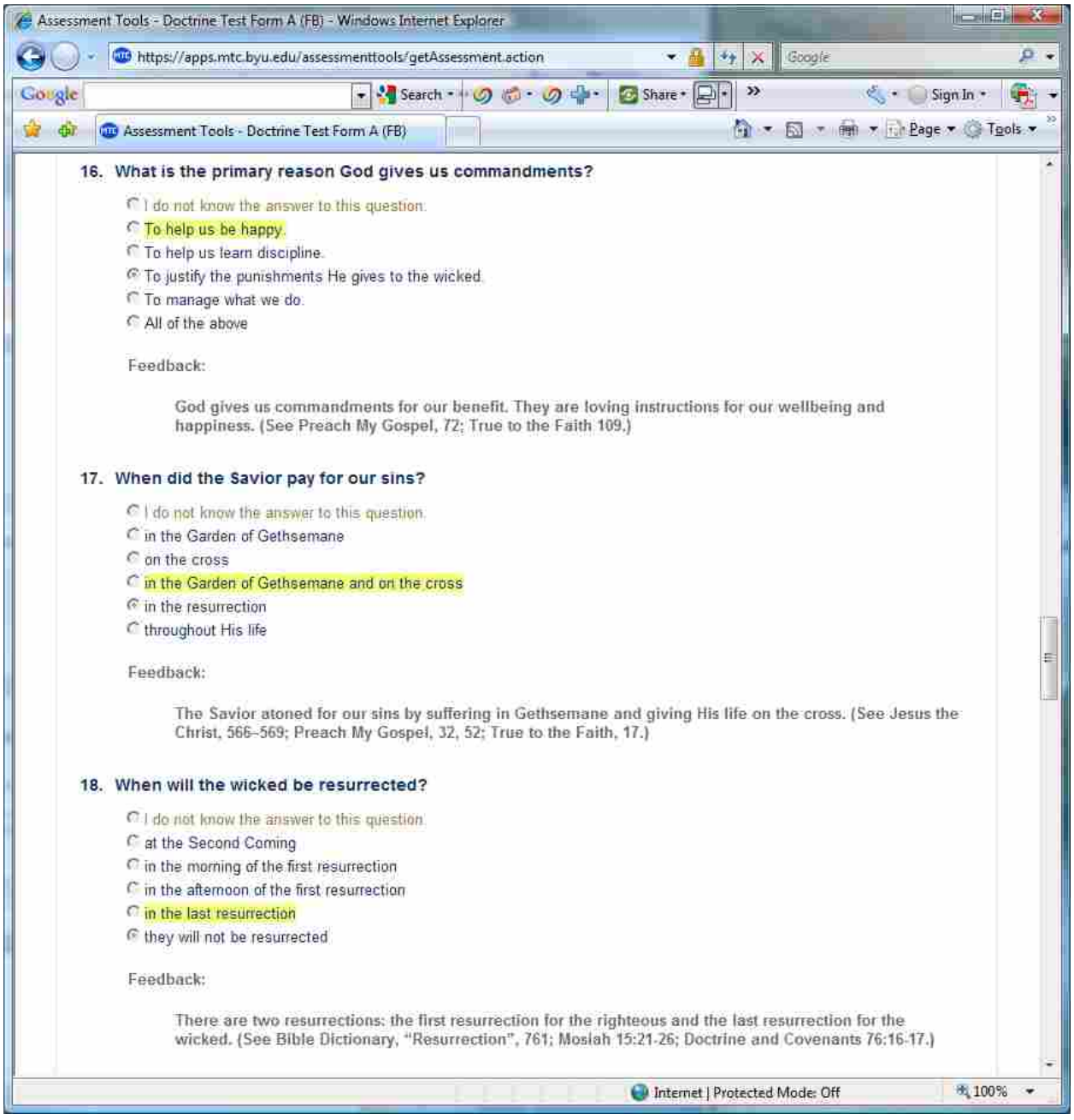


16. What is the primary reason God gives us commandments?

- I do not know the answer to this question.
- To help us be happy.
- To help us learn discipline.
- To justify the punishments He gives to the wicked.
- To manage what we do.
- All of the above

Feedback:

God gives us commandments for our benefit. They are loving instructions for our wellbeing and happiness. (See Preach My Gospel, 72; True to the Faith 109.)

17. When did the Savior pay for our sins?

- I do not know the answer to this question.
- in the Garden of Gethsemane
- on the cross
- in the Garden of Gethsemane and on the cross
- in the resurrection
- throughout His life

Feedback:

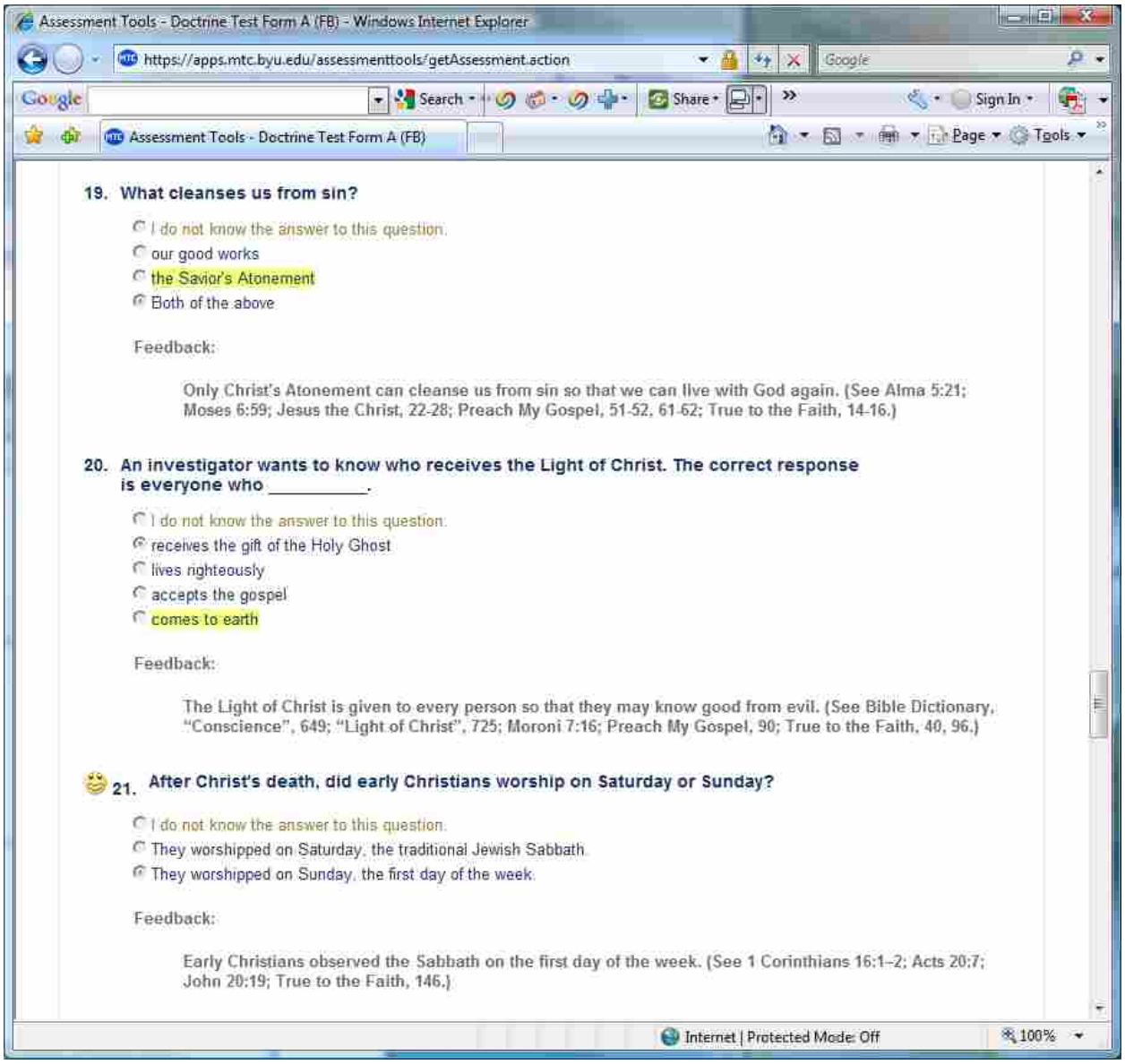
The Savior atoned for our sins by suffering in Gethsemane and giving His life on the cross. (See Jesus the Christ, 566–569; Preach My Gospel, 32, 52; True to the Faith, 17.)

18. When will the wicked be resurrected?

- I do not know the answer to this question.
- at the Second Coming
- in the morning of the first resurrection
- in the afternoon of the first resurrection
- in the last resurrection
- they will not be resurrected

Feedback:

There are two resurrections: the first resurrection for the righteous and the last resurrection for the wicked. (See Bible Dictionary, "Resurrection", 761; Mosiah 15:21-26; Doctrine and Covenants 76:16-17.)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19. What cleanses us from sin?
I do not know the answer to this question.
our good works
the Savior's Atonement
Both of the above
Feedback:
Only Christ's Atonement can cleanse us from sin so that we can live with God again. (See Alma 5:21; Moses 6:59; Jesus the Christ, 22-28; Preach My Gospel, 51-52, 61-62; True to the Faith, 14-16.)
20. An investigator wants to know who receives the Light of Christ. The correct response is everyone who _____.
I do not know the answer to this question.
receives the gift of the Holy Ghost
lives righteously
accepts the gospel
comes to earth
Feedback:
The Light of Christ is given to every person so that they may know good from evil. (See Bible Dictionary, "Conscience", 649; "Light of Christ", 725; Moroni 7:16; Preach My Gospel, 90; True to the Faith, 40, 96.)
21. After Christ's death, did early Christians worship on Saturday or Sunday?
I do not know the answer to this question.
They worshipped on Saturday, the traditional Jewish Sabbath.
They worshipped on Sunday, the first day of the week.
Feedback:
Early Christians observed the Sabbath on the first day of the week. (See 1 Corinthians 16:1–2; Acts 20:7; John 20:19; True to the Faith, 146.)
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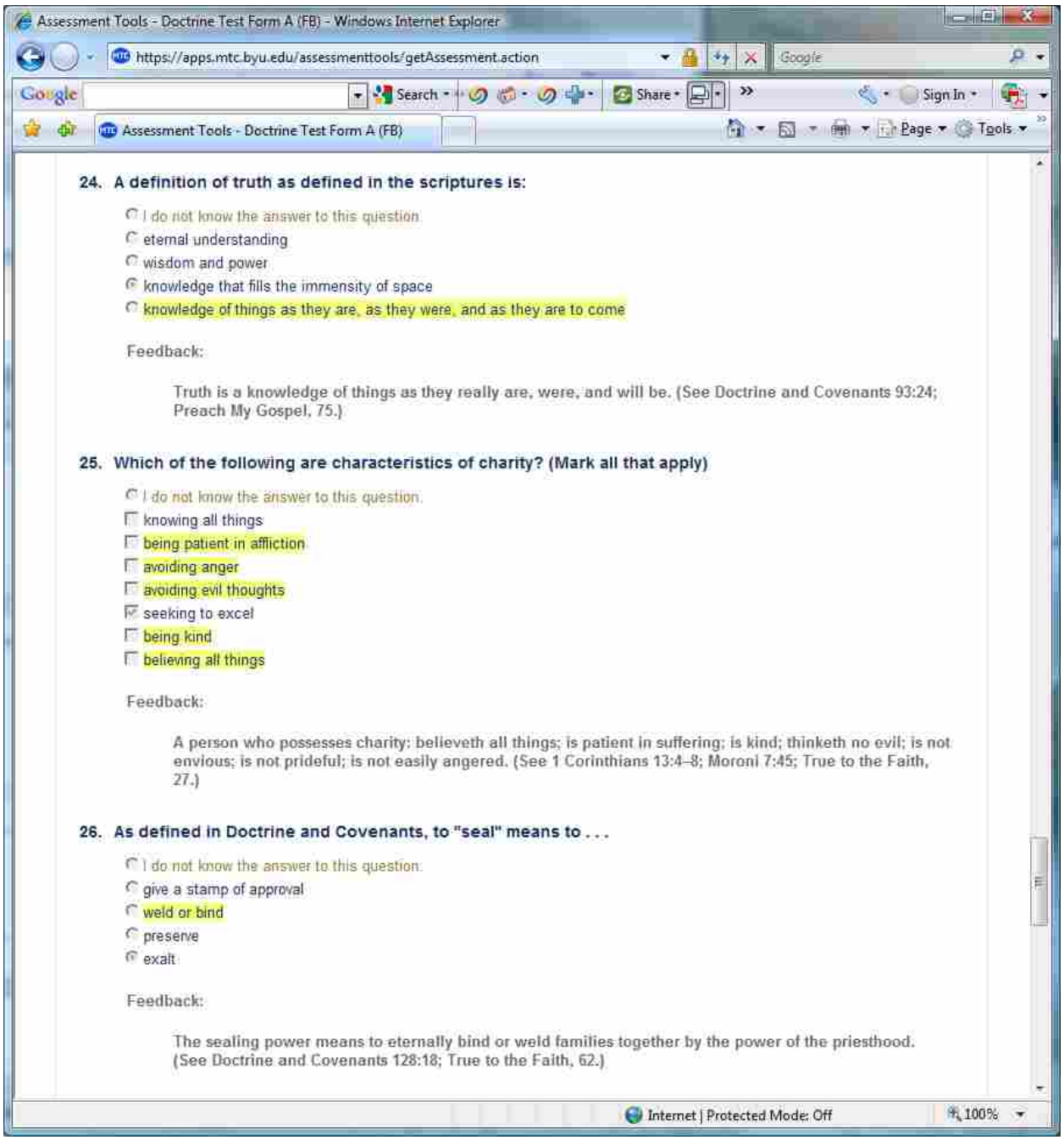


24. A definition of truth as defined in the scriptures is:

- I do not know the answer to this question
- eternal understanding
- wisdom and power
- knowledge that fills the immensity of space
- knowledge of things as they are, as they were, and as they are to come

Feedback:

Truth is a knowledge of things as they really are, were, and will be. (See Doctrine and Covenants 93:24; Preach My Gospel, 75.)

25. Which of the following are characteristics of charity? (Mark all that apply)

- I do not know the answer to this question.
- knowing all things
- being patient in affliction
- avoiding anger
- avoiding evil thoughts
- seeking to excel
- being kind
- believing all things

Feedback:

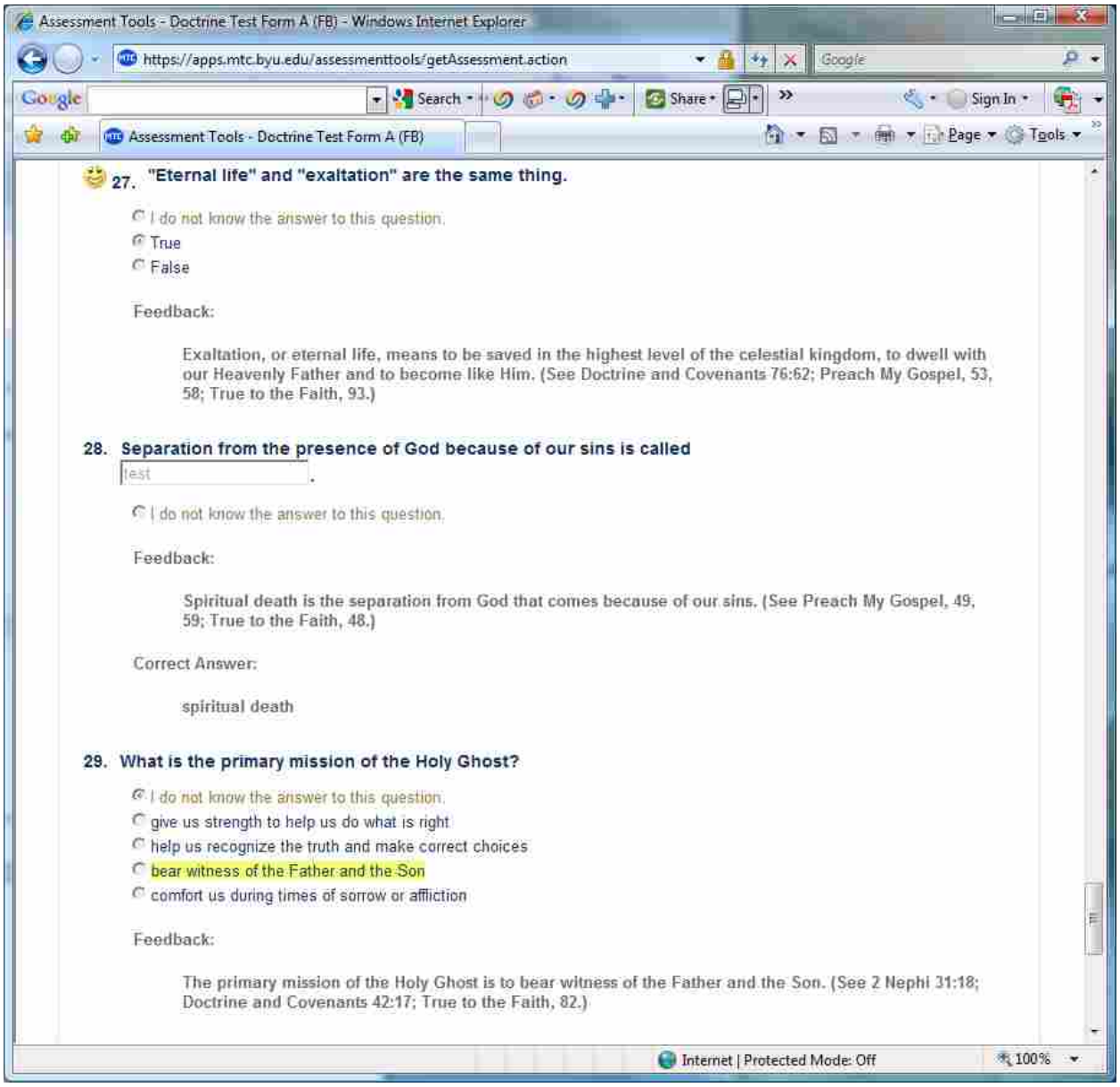
A person who possesses charity: believeth all things; is patient in suffering; is kind; thinketh no evil; is not envious; is not prideful; is not easily angered. (See 1 Corinthians 13:4–8; Moroni 7:45; True to the Faith, 27.)

26. As defined in Doctrine and Covenants, to "seal" means to . . .

- I do not know the answer to this question.
- give a stamp of approval
- weld or bind
- preserve
- exalt

Feedback:

The sealing power means to eternally bind or weld families together by the power of the priesthood. (See Doctrine and Covenants 128:18; True to the Faith, 62.)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https://apps.mtc.byu.edu/assessmenttools/getAssessment.action
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27. "Eternal life" and "exaltation" are the same thing.
I do not know the answer to this question.
True
False
Feedback:
Exaltation, or eternal life, means to be saved in the highest level of the celestial kingdom, to dwell with our Heavenly Father and to become like Him. (See Doctrine and Covenants 76:62; Preach My Gospel, 53, 58; True to the Faith, 93.)
28. Separation from the presence of God because of our sins is called
test
.
I do not know the answer to this question.
Feedback:
Spiritual death is the separation from God that comes because of our sins. (See Preach My Gospel, 49, 59; True to the Faith, 48.)
Correct Answer:
spiritual death
29. What is the primary mission of the Holy Ghost?
I do not know the answer to this question.
give us strength to help us do what is right
help us recognize the truth and make correct choices
bear witness of the Father and the Son
comfort us during times of sorrow or affliction
Feedback:
The primary mission of the Holy Ghost is to bear witness of the Father and the Son. (See 2 Nephi 31:18; Doctrine and Covenants 42:17; True to the Faith, 82.)
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Appendix D

Missionary Questionnaire for Groups 1 and 2

1. How many times did you complete the PMG Doctrine Assessment?
   - o I did not do this assessment
   - o I did part but not all of it
   - o 1 time
   - o 2 times
   - o 3-4 times
   - o 5 or more times

2. How helpful was the PMG Doctrine Assessment for you personally?
   - o It was a waste of time.
   - o It was somewhat helpful.
   - o It was quite helpful.
   - o It was very helpful.
   - o It was absolutely essential.

3. How many times did you complete the PMG Principles Assessment?
   - o I did not do this assessment
   - o I did part but not all of it
   - o 1 time
   - o 2 times
   - o 3 - 4 times
   - o 5 - 6 times
   - o 7 or more times

4. How helpful was the PMG Principles Assessment for you personally?
   - o It was a waste of time.
   - o It was somewhat helpful.
   - o It was quite helpful.
   - o It was very helpful.
   - o It was absolutely essential.

5. Which of the following did you do in the feedback sections at the end of each assessment? (Mark all that apply)
   - ☐ Read through the items I missed.
   - ☐ Wrote down answers to the items I missed.
   - ☐ Wrote down references to items that I wanted to learn more about in the future.
   - ☐ Took notes on questions that I had for my teachers.
   - ☐ Glanced through the questions I got correct/incorrect but didn't really look at the feedback.
   - ☐ Looked up the references listed in Preach My Gospel, the scriptures, and/or missionary library.

6. How helpful was the feedback you received? It was a waste of time.
   - o It was somewhat helpful.
   - o It was quite helpful.
   - o It was very helpful.

- o It was absolutely essential.

*How effective is each of the following methods for helping you learn **specific points of doctrine**?*

	Not effective	Somewhat effective	Quite effective	Very effective
7. Listening to a teacher	O	O	O	O
8. Reading the scriptures	O	O	O	O
9. Reading other books or materials	O	O	O	O
10. Doing the doctrine assessment	O	O	O	O

*How effective is each of the following methods for helping you learn **specific principles from Preach My Gospel**?*

	Not effective	Somewhat effective	Quite effective	Very effective
11. Listening to a teacher	O	O	O	O
12. Reading sections from *Preach My Gospel*	O	O	O	O
13. Reading other books or materials	O	O	O	O
14. Doing the *Preach My Gospel* principles assessment	O	O	O	O

*Please indicate whether you **agree or disagree** with the following items.*

	Strongly disagree	Disagree	Undecided	Agree	Strongly Agree
15. Taking assessments helps me learn some important things.	O	O	O	O	O
16. Taking assessments makes me feel frustrated or discouraged.	O	O	O	O	O
17. Taking assessments motivates me to work harder.	O	O	O	O	O
18. It is hard for me to accept constructive feedback or criticism.	O	O	O	O	O
19. Taking assessments has given needed variety to my learning.	O	O	O	O	O
20. I had some bad experiences with tests in school.	O	O	O	O	O
21. The assessment tools are not very helpful or useful for me.	O	O	O	O	O
22. Taking assessments helps me find out what I don't know so I can learn it.	O	O	O	O	O
23. Taking assessments helps me keep track of my progress.	O	O	O	O	O
24. I would prefer not to have any tests or assessments at the MTC.	O	O	O	O	O
25. I like getting feedback on assessments, but I don't like numerical scores.	O	O	O	O	O

26. What benefits, if any, have you received from using the online Assessment Tools?

27. What problems or challenges did you experience in using the online Assessment Tools?

Appendix E

Missionary Questionnaire for Groups 3-5

1. How many times did you complete the PMG Doctrine Assessment?
   - o I did not do this assessment
   - o I did part but not all of it
   - o 1 time
   - o 2 times
   - o 3-4 times
   - o 5 or more times

2. How helpful was the PMG Doctrine Assessment for you personally?
   - o It was a waste of time.
   - o It was somewhat helpful.
   - o It was quite helpful.
   - o It was very helpful.
   - o It was absolutely essential.

3. How many times did you complete the PMG Principles Assessment?
   - o I did not do this assessment
   - o I did part but not all of it
   - o 1 time
   - o 2 times
   - o 3 - 4 times
   - o 5 - 6 times
   - o 7 or more times

4. How helpful was the PMG Principles Assessment for you personally?
   - o It was a waste of time.
   - o It was somewhat helpful.
   - o It was quite helpful.
   - o It was very helpful.
   - o It was absolutely essential.

*How effective is each of the following methods for helping you learn **specific points of doctrine**?*

	Not effective	Somewhat effective	Quite effective	Very effective
5. Listening to a teacher	O	O	O	O
6. Reading the scriptures	O	O	O	O
7. Reading other books or materials	O	O	O	O
8. Doing the doctrine assessment	O	O	O	O

*How effective is each of the following methods for helping you learn **specific principles from Preach My Gospel**?*

	Not effective	Somewhat effective	Quite effective	Very effective
9. Listening to a teacher	O	O	O	O
10. Reading sections from *Preach My Gospel*	O	O	O	O
11. Reading other books or materials	O	O	O	O

12. Doing the *Preach My Gospel* principles assessment	O	O	O	O

*Please indicate whether you **agree or disagree** with the following items.*

	Strongly disagree	Disagree	Undecided	Agree	Strongly Agree
13. Taking assessments helps me learn some important things.	O	O	O	O	O
14. Taking assessments makes me feel frustrated or discouraged.	O	O	O	O	O
15. Taking assessments motivates me to work harder.	O	O	O	O	O
16. It is hard for me to accept constructive feedback or criticism.	O	O	O	O	O
17. Taking assessments has given needed variety to my learning.	O	O	O	O	O
18. I had some bad experiences with tests in school.	O	O	O	O	O
19. The assessment tools are not very helpful or useful for me.	O	O	O	O	O
20. Taking assessments helps me find out what I don't know so I can learn it.	O	O	O	O	O
21. Taking assessments helps me keep track of my progress.	O	O	O	O	O
22. I would prefer not to have any tests or assessments at the MTC.	O	O	O	O	O
23. I like getting feedback on assessments, but I don't like numerical scores.	O	O	O	O	O

24. What benefits, if any, have you received from using the online Assessment Tools?

25. What problems or challenges did you experience in using the online Assessment Tools?

Appendix F

Teacher Questionnaire

1. How much have you used the Teacher Reportal while you have been with your current district of missionaries?

- o I didn't use the teacher Reportal with this district of missionaries.
- o I tried to use it, but I couldn't make sense of it.
- o I used the teacher Reportal once or twice.
- o I used the teacher Reportal several times.
- o I used the teacher Reportal many times.

2. What features of the Teacher Reportal have you found to be especially useful? Mark all that apply.

- ☐ pie charts that summarize the district's responses to an item
- ☐ bar charts for individual missionaries
- ☐ colored bars to show which missionaries are above or below the standard
- ☐ tables
- ☐ comments and other textual information
- ☐ none of these features have been especially helpful to me

3. When do you use the Teacher Reportal? Mark all that apply.

- ☐ In my 30 minute preparation time before class.
- ☐ In my weekly meeting with my companion teacher.
- ☐ In my weekly review of progress meeting (interviews) with the missionaries.
- ☐ At home in my personal time.
- ☐ Other.
- ☐ I don't use the teacher reportal.

The next three questions are about the Missionary Information section of the Teacher Reportal, which gives teachers background information such as the missionaries' pre-mission experience and special needs .

4. When you review the reportal, how much attention do you give to the Missionary Information section?

- o I usually skip over this section
- o I glance at the information in this section.
- o I read all or most of the information in this section
- o I study this section carefully

5. How do you use the Missionary Information section of the Reportal? Mark all that apply.

- ☐ I look at the graphs or tables that show the make-up of the district as a whole.
- ☐ I look at the information about education or seminary/institute for individual missionaries.
- ☐ I look at the amount of pre-mission scripture study or Preach My Gospel study for individual missionaries.
- ☐ I look at the pre-mission languge experience of individual missionaries.
- ☐ I look at iindividual missionaries' pre-mission experience in teaching or doing missionary work.
- ☐ I look at the special needs of individual missionaries.

- ☐ I read the comments and requests of individual missionaries.
- ☐ None of the above

6. How helpful is the Missionary Information section of the reportal for you as a teacher?
   - o a waste of time
   - o somewhat helpful
   - o quite helpful
   - o very helpful
   - o absolutely essential

The next three questions are about the Preach My Gospel section of the Teacher Reportal, which gives teachers information about the results of missionaries' Doctrine and Preach My Gospel Principles assessments.

7. When you review the reportal, how much attention do you give to the Preach My Gospel section?
   - o I usually skip over this section
   - o I glance at the information in this section
   - o I read all or most of the information in this section
   - o I study this section carefully

8. How do you use the Preach My Gospel section of the Reportal? Check all that apply.
   - ☐ I look at the bar graphs that show the results of the district as a whole.
   - ☐ I look at the tables of missionaries' numeric scores.
   - ☐ I look at the Preach My Gospel Doctrine Assessment results.
   - ☐ I look at the Preach My Gospel Principles Assessment results.
   - ☐ I look at the individual items that were missed for the district as a whole.
   - ☐ I look at the individual items that were missed by specific missionaries.
   - ☐ I look at the categories of items that were missed by the district as a whole.
   - ☐ I look at the categories of items that were missed by specific missionaries.
   - ☐ None of the above

9. How helpful is the Preach My Gospel section of the reportal for you as a teacher?
   - o a waste of time
   - o somewhat helpful
   - o quite helpful
   - o very helpful
   - o absolutely essential

The next three questions are about the Language Assessments section of the Teacher Reportal, which gives teachers information about the results of missionaries' Grammar and Language Speaking assessments as well as information on missionaries' language study.

10. When you review the reportal, how much attention do you give to the Language Assessments section?
   - o I usually skip over this section.

- o I glance at the information in this section.
- o I read all or most of the information in this section.
- o I study this section carefully

11. How do you use the Language Assessments section of the Reportal? Check all that apply.
    - ☐ I look at the graphs and tables for the Grammar Assessment.
    - ☐ I look at the categories of grammar principles that the missionaries missed.
    - ☐ I look at the Language Study Checklist.
    - ☐ I look at the Language Study Assessment Scores on the Language Study Checklist.
    - ☐ I look at the Language Study Summary on the Language Study Checklist.
    - ☐ I look at the missionaries' Language Study Goals on the Language Study Checklist.
    - ☐ I look at the Language Speaking Assessment.
    - ☐ I look at the ratings of the district as a whole on the Language Speaking Assessment.
    - ☐ I look at the ratings of individual missionaries on the Language Speaking Assessment.
    - ☐ I listen to missionaries' responses on the Language Speaking Assessment.
    - ☐ None of the above

12. How helpful is the Language Assessments section of the reportal for you as a teacher?
    - o a waste of time
    - o somewhat helpful
    - o quite helpful
    - o very helpful
    - o absolutely essential

The next three questions are about the Other section of the Teacher Reportal, which gives teachers information about missionary usage of the assessments and missionaries' scripture study.

13. When you review the reportal, how much attention do you give to the Other section?
    - o I usually skip over this section
    - o I glance at the information in this section
    - o I read all or most of the information in this section
    - o I study this section carefully

14. How do you use the Other section of the Reportal? Check all that apply.
    - ☐ I look at the tables under Assessment Usage.
    - ☐ I look at the Scripture Study Assessment Ratings from the Scripture Study Checklist.
    - ☐ I look at Missionary Scripture Study Goals from the Scripture Study Checklist.
    - ☐ None of the above

15. How helpful is the Other section of the reportal for you as a teacher?
    - o a waste of time
    - o somewhat helpful
    - o quite helpful
    - o very helpful
    - o absolutely essential

SD = strongly disagree D = disagree ? = undecided A = agree SA = strongly agree

	SA	D	?	A	SA
16. Using the Teacher Reportal helps me focus more on the needs of individual missionaries.	O	O	O	O	O
17. I don't have time to use the Teacher Reportal; other things are more important.	O	O	O	O	O
18. Using the Teacher Reportal helps me be a more effective teacher.	O	O	O	O	O
19. Using the Teacher Reportal gives me a better idea of how my missionaries are doing.	O	O	O	O	O
20. I don't think missionaries should be rated or scored on their performance.	O	O	O	O	O
21. Taking assessments can help missionaris learn.	O	O	O	O	O
22. I adjusted my classroom teaching because of the information on the Teacher Reportal.	O	O	O	O	O
23. I adjusted the way I worked with individual missionaries because of the information on the Teacher Reportal.	O	O	O	O	O
24. The information in the Teacher Reportal is interesting but it doesn't really make a difference in my teaching.	O	O	O	O	O

25. Would you like to have access to the Teacher Reportal with your next group of missionaries?
- o definitely not
- o probably not
- o probably yes
- o definitely yes

26. What problems or challenges did you experience in using the Teacher Reportal?

27. Do you value the information in the Teacher Reportal enough that you would encourage your missionaries to complete the assessments that provide that information?
- o definitely not
- o probably not
- o probably yes
- o definitely yes

28. What suggestions, if any, do you have for improving the Teacher Reportal?