

Multimedia Formative Evaluation
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Summary of Evaluations

Relevance	
Instructional Content	
Feedback Received	My Responses
The content within the multimedia program meets the goals and objectives. It matches the performance, conditions and standards well. It appears to be accurate and up to date.	The three evaluators all seem to agree that the instructional content is relevant for the learners and for the objectives. There does not seem to be any instructional (or other) content that is out of place, so there is no need for revisions here.
The overall content of the program matches with the objectives stated in the design document. Learners should be able to use and navigate the Triple-S system at the end of the instructional program.	
As stated in your final document, it is relevant since this is how time will be tracked for employee pay. Is the employee the only one tracking the hours?	
Multimedia Content	
Feedback Received	My Responses
The multimedia used, Flash-based instructional program, is relevant for the goals and match up with the instruction. It provides an easy way for the audience to view and navigate through the program.	The three evaluators find that the multimedia content is relevant for the goals and that it generally makes sense for the subject matter. One evaluator mentioned that the downside to all the screenshots is that maintenance could be an issue should the program be changed. I agree with this assessment, but it is worth the risk because the learners do not have access to a training environment. The Triple-S software is in a stable release at this point, so any changes are likely to be minor and this would be considered a typical part of course maintenance.
The screen shots are very useful (the only downside would be if any changes have been made to the current Triple-S program used by employees, then the screen shots would have to be updated to show the current user interface).	
Visually this is created well. Only necessary items are added to the screen and there is nothing extraneous or distracting on the screen. All elements match up with the purpose of the training. Once the training is complete, I was able to navigate through the program. However, after restarting it I needed to go through the entire program to review a certain portion. This problem	Another evaluator mentioned that closing the program and restarting it required starting over at the beginning. This is true with the course as is, because it is not running from within a Learning Management System (LMS). If the course were to

may not occur as the employee will log in to their account and the site may remember where they left off. If not, this would be helpful for those that will need to review portions of the program.	run in an LMS as intended in the design, bookmarking would be enabled and this issue would not occur.
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Appropriateness	
Instructional Content	
Feedback Received	My Responses
The instructional content is appropriate for the user and subject matter. The level of content is well explained and easy for the intended audience to understand. The pacing is on target and there is no unnecessary information.	The three evaluators all found the instructional content to be appropriate for the audience and subject matter. Nothing seems to be out of place.
The demos are a great way to instruct learners how to use the different screens in Triple-S. I also liked that learners can replay the demos if needed. Feedback was also immediate, great!	
The instructional content is laid out in a well organized manner. Terminology is appropriate for the students that will be using the program.	
Multimedia Content	
Feedback Received	My Responses
The technology used is appropriate. The graphics are clear and easy to read. The computerized voice was a little difficult to understand with some words; however, since they were accompanied by text it provided a means for the user to follow along. The look was simple, but appealing although there was a bit too much white space.	The evaluators agreed that the multimedia content is appropriate for the audience and subject matter. One of the evaluators mentioned that the computerized voice was a bit difficult to understand at times and this is one of the items I will consider for potential revision.
The multimedia content was appropriate. It uses screenshots of the actual program that employees will use, and it is completely appropriate for the age range of the employees (18-65).	An evaluator also mentioned that there is too much white space, but this depends somewhat on the screen resolution of the viewer. Still, it is something to consider for potential revision.
The multimedia was chosen well for this purpose. Being that this is a training module, it does meet the needs as a lecture based activity. There is some interactivity in the latter half as the employee works with a few of the vocabulary words and entering hours on the time sheet. Adding more of the interactivity in the beginning	Another evaluator mentioned that perhaps additional interactivity in the first half of the course would enhance it. I personally find there to be sufficient interaction throughout the course and this is reflected by the other evaluators as well; the interactions used are to acquaint the user

of the program may help those employees who may not be so comfortable with technology and this new method they will need to use.	with the program and where to find the help materials.
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Sufficiency	
Instructional Content	
Feedback Received	My Responses
There is sufficient content and instruction to achieve the goals. It covers the topics well and all of the objectives are addressed. There seems to be no unnecessary content and no information is missing. The practice exercises aid in the understanding of the content and provide feedback.	The evaluators found there to be sufficient instruction to achieve the objectives of the program. They agree that nothing seems to be missing or out of place. One evaluator mentions that perhaps more interactive items should be included, although an interactive element is included for every section of the program.
The instructional content covers the uses of the program very well. All objectives are covered and explained.	
The verbal and visual aspects are effective. It is very clear as to how the employee will use the program. It would be helpful to offer more interactive items as opposed to only a lecture type atmosphere. Perhaps more trials mixed in to the program.	
Multimedia Content	
Feedback Received	My Responses
There is sufficient multimedia to support the instruction and all necessary elements are included. The multimedia, visuals and audio, is well planned and helps with understanding.	The evaluators all found there to be sufficient multimedia. Two of the evaluators mentioned that perhaps there is a need for additional interaction and this could be an opportunity to include a robust practice activity for the end of the course to drive toward the terminal objective.
Learners may need more interaction with the program, as sometimes it is more like a lecture or demonstration. I did, however, think the interaction on the page with entering times was done very well. Great practice and immediate feedback.	One evaluator noted that the Resource menu was empty. This is because the API was built for possible reuse with future courses; however the evaluator did not know this. This evaluator also noted that returning from the Help screen caused the screen to freeze and forced the user to repeat the current section. I could not replicate this issue, but I think what may have happened is that the
The majority of this course is a lecture method. The employee has few chances to interact with the documents. After clicking on the Help screen, this offers tips on the purpose of each button. However on returning to the course, the screen	

<p>froze and that section needed to be repeated. This may be something to consider. There was a Resource button, but this was empty. The vocabulary match is an effective tool, however once the word is matched it disappears. Having the words remain with the definitions will help the employee retain key words and their definitions.</p>	<p>screen continued to play in the background behind the Help screen. I will add address this issue in the revision plan.</p> <p>An additional note is that, in the matching activity, the words disappear when they are matched with the definition. I agree that the terms should remain on the screen and I will include this in the revision plan.</p>
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Instructional Events	
Feedback Received	My Responses
<p>The introduction gains the learners attention and informs them of the objectives. It also stimulates their prior knowledge of record keeping. The content is presented in a meaningful and interactive manner and provides guidance to the learning. The program elicits performance through the practice exercises at the end of each section and provides positive feedback about the performance. Online materials and self-help are provided to enhance retention and transfer of knowledge to the actual performance of the goal.</p>	<p>The evaluators seem to agree that the program motivates learners and gains their attention. They seem to find the instructional events effective at driving toward the objectives. One evaluator noted that perhaps the learner should be able to click through the program at their choice; however, I disagree, as the sections of the program align with the steps of the instructional goal, which must be performed in order. If the learner were to access the course in an LMS, as intended, he/she could revisit the program and access any of the topics without going through the entire program. The first time through, however, it needs to be taken in order.</p>
<p>Learners may benefit more from being able to click through the program at their choice (instead of only being allowed to complete the steps in the set order). This may be especially true for learners who already know how to use certain parts of the program, but need to review others (for example, just using vacation time).</p>	<p>One evaluator noted that some of the topics taught early in the lesson should be reviewed later in the course. I agree with this because it would enhance the likelihood of retention and transfer. I will address this in the revision plan.</p>
<p>The employees are entering this training with high motivation being that they are going to be getting paid through this system. The program taps into all types of learners with audio, visual and written language on the screen at one time. Objectives are clearly stated in the beginning. The latter half of the program offers practice of use of the time sheets. The first half displays many steps that the learner is supposed to be remembering. Without knowing the documents in the Training and Development, it would be wise to add a short task</p>	

card stating the steps to log in and proceed to the time sheets. There was a short practice involved regarding this, but at the end of the course a lot of information was taught and the employee may need a refresher.	
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Functionality	
Feedback Received	My Responses
Overall, the program functions well and has a consistent design theme. Graphics, animations, and audio load fairly well. I did have some trouble with the drag and drop matching activity. After 3 attempts, I found that I had to drag to a specific location in order to proceed. The first 2 attempts, the program would not let me move on and I had to go back to the beginning of that section in order to proceed. The other interactive elements worked well. Also, the computerized voice was not as pleasing to listen to as a real voice would have been. Navigation was fairly easy although it would have been nice to have a pause button. The text material was readable and all other aspects loaded and worked properly.	The evaluators found the program to be fully functional and well-designed. Two of the evaluators mentioned that the text-to-speech audio was less satisfying than a human voice would have been, and I would like to experiment further with this in the revision plan. I purchased a high-quality text-to-speech application and voice, but apparently even with high-end products, this technology is still not completely convincing. One evaluator ran into some issues with the matching activity. I think there is some opportunity for improvement in the activity. As mentioned previously, the terms should remain on the screen after the learner matches them with the definitions. Additionally, the 'hit area' should highlight or otherwise change when the user drags the term over it so that it is clear exactly where the match needs to occur from a technical standpoint. I will address this in the revision plan.
The audio recordings, while informative and useful, may be enhanced by using a recording of a regular speaker. The current recording sounds a little choppy and artificial since it uses a computerized voice. Also, I wasn't sure if the menu button was supposed to be more functional (it opened a list of topics, but I was not able to click on any of them).	An evaluator also mentioned that the program could benefit from a pause button, and I completely agree. I will address this in the revision plan.
It is very functional and simple to follow. The buttons are clear as to what to press to move on to the next section. After the project was closed and reopened, I needed to go back through the all of it in order to review a specific section. Yes, the first time through it needs to be completed in the steps you have outlined; however it would be helpful for the employee to have access to certain portions for review.	One evaluator mentioned that the Menu isn't completely functional. Actually, it is functional, but the learner can only click on sections that have been visited. This is to prevent the user from skipping around in the course. The LMS would track participation and allow the user to revisit the course without repeating sections in this manner.

Strengths & Weaknesses

Following is a summary of the above feedback in terms of specific strengths and weaknesses:

Strengths	Opportunities for Improvement
<ul style="list-style-type: none">Instructional & multimedia content are relevantInstructional & multimedia content are appropriateInstructional & multimedia content are sufficientStrong designGood functionalityEasy to useClosely simulates the performance contextNo extraneous elements includedUses multisensory approachPlenty of practiceFeedback is immediate & helpfulAddresses all the instructional events	<ul style="list-style-type: none">Narrator voice – improve quality by adjusting settings or utilize human voice actorsWhite space – reduce by editing code to fill the learner's screen and scale based on the user's resolutionSynthesis interaction – include a new interactive screen that takes the user through the entire goal process, driving toward the terminal objectiveHelp Screen – add code to pause the current screen before overlaying the help screen contentsPause button – add code and button to allow the user to pause display of the current screenMatching activity – update to make the target hit areas highlight when the user drags the term over the definitions and keep the term visible after the match occurs

Summary of Revisions

Computerized Voice

I purchased a high quality text-to-speech engine and voice for this project based on the quality of the demonstrations and features available. The evaluators and I found the quality to be acceptable, but two of the evaluators mentioned it was less pleasing than a human voice would have been. I will first attempt to adjust the audio settings and voice configuration, as well as edit the pronunciation of any unusual words, to see if the resulting product is more realistic. If not, I would select a voice actor, record the narration, clean the audio files, and reincorporate them into the Flash movies.

White Space

The amount of white space on the screen is highly dependent on the user's resolution. To ensure the maximum amount of screen real estate is used, I would add an ActionScript function that automatically resizes the screen contents to fit the available screen area and scale all the items at the percentage rate

that makes the sense for each common screen resolution. I think this would eliminate any potential issues with whitespace at some resolutions.

Synthesis Interaction

While I felt the number of interactions included in the course was sufficient, the evaluators brought up some good points about this. To give the learners more exposure to the overall topics, to drive toward the overall terminal objective, and to provide refreshers of points covered early in the lesson, I would build a final interactive exercise that encompasses most of the prior points of the course. I would create an additional Flash screen, build an interactive exercise similar to the others in the course but that covers all of the major goal steps. I would create all the necessary screen elements, perform the screen captures, build the scenario, write and record the audio script, and incorporate all these components into a complete screen. Then I would incorporate this new screen near the end of the course, right before the conclusion screen. This screen would give additional practice and feedback, and would likely enhance the likelihood of successful retention and transfer to the workplace. It could also be a scored interactive item and used as a primary means of assessment for the course.

Help Screen

The help screen functions as intended, but one evaluator noted that when she returned from the help screen, the screen froze. I was unable to replicate this, but I think the issue is really that, when the user accesses the Help screen, the screen contents continue to play behind it. To prevent this, I would edit the ActionScript code such that pressing the Help button would halt the current screen activity before the Help screen overlay appears. Then, when the user closes the Help screen, the underlying screen would return to motion as normal.

Pause Button

I agree that one of the greatest opportunities for enhancement is to introduce a Pause button for all screens. I would create an ActionScript function that halts all screen activity and audio playback. I would then create a Pause button, add it to the user interface, and associate it with the new ActionScript function. This would then allow the user to pause playback during the lesson in case they need to slow the pace, walk away from the computer, or perform another action during the course.

Matching Activity

The matching activity could use some enhancements as well. First, I would modify the invisible hit areas so that, when the user drags a term over a definition, the definition glows. This will make it more obvious exactly where the program is expecting the terms to be dropped in order for the answer to be accepted. Second, I would modify the terms so that, when the user successfully makes a match, the term remains visible next to its definition. This will help the user mentally associate the terms with the correct definition and will likely aid retention.

Reflection

As a final thought, the evaluation process was extremely helpful. In my professional practice, our organization tends to know the importance of having evaluations, but the fast-paced business world tends to send us off to the next project without capitalizing on the opportunity to revise the current project first. Even though our company follows the ADDIE model, rarely do revisions occur as a part of the evaluation process, but rather tend to be part of later course maintenance. I hope to use what I've learned in this course and in the ITMA program to drive change in my organization in this regard.