Assignment 7: Formative Evaluation Report

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Formative Evaluation Report

Background

       A print-based instructional lesson was developed as a self-paced lesson for faculty and staff seeking to learn how to create a professional portfolio. The lesson described the procedures necessary for an adult learner to create a PDF portfolio. This print-based lesson took no more than 30 minutes to follow and complete. Learners were provided with sample content to create PDF portfolio. After successfully completing the lesson, learners developed a customized and organized PDF portfolio comprised of multiple files assembled into an integrated PDF unit.

Purpose

       The purpose of this assignment is to report on the formative evaluation for the print-based instructional lesson on creating a PDF portfolio. This evaluation focused on the one-to-one evaluation phase, and included evaluations from a design expert, a subject matter expert, and three learners.

Method

Design. As stated above, the formative evaluation for the print-based instructional lesson focused on the one-to-one evaluation phase. The subject matter expert and design expert were contacted via email to partake in the evaluation process. Both experts were e-mailed the instructional material and questions (Appendix E & F) A face-to-face meeting was scheduled with both experts to record their interview responses. The feedback provided by the experts was typed onto a word document and used as a reference to make necessary changes to the instructional materials prior to the learners using the print-based instructional lesson. Three adult learners with different levels of software knowledge were identified and contacted to complete the instructional lesson in a designated computer lab during a scheduled time. Each learner

completed the self-paced lesson while instructional designer observed and recorded their performance (Appendix G). After each learner completed the print-based instructional lesson, they filled out a lesson evaluation form (Appendix H) and provided feedback about their experience in creating a PDF portfolio.

Expert Review

Subjects. A design expert and a subject matter expert were utilized in the formative evaluation process. The subject matter expert was an instructional designer that had been in the training and development field for over 7 years, the subject matter expert had training and instructional design experience, and was proficient in using various software including the Adobe Acrobat 9 Pro to create PDF portfolios for numerous purposes. The design expert was also an instructional designer with over 15 years' experience in training and design. The design expert was also familiar with an assortment of software including the Adobe Acrobat 9 Pro and had experience in the instructional design process.

Instruments. Both experts were e-mailed a copy of the draft instructional materials along with the formative evaluation procedure outlined in the protocol (Appendix A) .Several open ended questions were asked in a face-to-face interview to both expert reviewers (Appendix E & F). These questions provided valuable feedback on the overall quality and effectiveness of the instructional lesson.

Procedure. Prior to beginning the formative evaluation process, both experts where contacted by phone and asked to participate in reviewing the instructional materials for the PDF portfolio lesson. Then an e-mail was sent to each expert with the instructional materials and the formative evaluation procedure outlined (Appendix A). Each expert had one week to review the lesson and then had face-to-face interviews where they provided feedback on the instructional materials.

Each expert was asked a set of questions (Appendix E & F), and each interview was recorded in a Word document. Feedback provided by both experts was used to make any necessary changes to the instructional materials prior to the learner interacting with them.

First Learner Review

Subjects. The first learner was a novice user that had basic computer and software knowledge. This learner had used Microsoft Office and Outlook, but had never created anything using intermediate or advanced software and had never used the Adobe Acrobat 9 software. In relation to the target audience, this learner was considered a novice, who had little to no experience using new technologies. This learner represented the below average user with the least amount of experience and comfort with technology compared to the target audience.

Instruments. A face-to-face interview was conducted with the novice learner and we acquired feedback on the instructional materials. While interacting with the activity, the observer assessed the learner's performance using the learner observation checklist (Appendix G). Upon completion of the assessment activity, the learner was given the lesson evaluation form (Appendix H). The form provided feedback on the learner's experience with the print-based instructional lesson and demonstrated a reflection of the instructional materials impact on the learner. The assessment, evaluation and feedback were used to measure the instructional materials' effectiveness.

Procedure. The learner will came to a computer lab at a scheduled time to complete the self-instructional lesson. The instructional designer then stated a disclosure about the formative evaluation procedure that was included in the learner review protocol (Appendix D). The learner completed the self-instructional lesson, including the final assessment activity, and the instructional designer used the learner observation checklist (Appendix G) to assess the learner's

performance. Upon completion of the final assessment activity, the learner was asked to complete the lesson evaluation form (Appendix H).

Second Learner Review

Subjects. The second learner was an average experience with computers and software. This learner had heard of Adobe Acrobat 9, but had never created a PDF portfolio. In relation to the target audience, this learner would be an intermediate user, who had some experience using some software, but does use any advanced software. This learner represented those within the target audience that were comfortable with a computer and had some experience in using technologies and a few different software.

Instruments. A face-to-face interview was conducted with the intermediate learner and we acquired feedback on the instructional materials. While interacting with the activity, the observer assessed the learner's performance using the learner observation checklist (Appendix G). Upon completion of the assessment activity, the learner was given the lesson evaluation form (Appendix H). The form provided feedback on the learner's experience with the print-based instructional lesson and demonstrated a reflection of the instructional materials impact on the learner. The assessment, evaluation and feedback were used to measure the instructional materials' effectiveness.

Procedure. The learner came to a computer lab at a scheduled time to complete the self-instructional lesson. The instructional designer then stated a disclosure about the formative evaluation procedure which included in the learner review protocol (Appendix D). The learner completed the self-instructional lesson, including the final assessment activity, and the instructional designer used the learner observation checklist (Appendix G) to assess the learner's

performance. Upon completion of the final assessment activity, the learner was asked to complete the lesson evaluation form (Appendix H).

Third Learner Review

Subjects. The third learner used the computer daily and was very familiar with a variety of software. This learner had used the Adobe Acrobat 9 software and had seen PDF portfolios created with the software, but the learner had never created a PDF portfolio with the software. In relation to the target audience, this learner was considered an proficient user, with several years of experience using intermediate to advanced software and who frequently uses and learns new technologies.
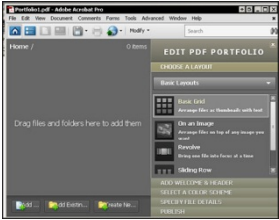
Instruments. A face-to-face interview was conducted with the advanced learner to acquire feedback on the instructional materials. While interacting with the activity, the observer assessed the learner's performance using the learner observation checklist (Appendix G). Upon completion of the assessment activity, the learner was given the lesson evaluation form (Appendix H). The form provided feedback on the learner's experience with the print-based instructional lesson and demonstrated a reflection of the instructional materials impact on the learner. The assessment, evaluation and feedback were used to measure the instructional materials' effectiveness.

Procedure. The learner came to a computer lab at a scheduled time to complete the self-instructional lesson. The instructional designer then stated a disclosure about the formative evaluation procedure which included in the learner review protocol (Appendix D). The learner completed the self-instructional lesson, including the final assessment activity, and the instructional designer used the learner observation checklist (Appendix G) to assess the learner's

performance. Upon completion of the final assessment activity, the learner was asked to

complete the lesson evaluation form (Appendix H).

Results

After reviewing the draft of the instructional materials the SME provided the following comments:

Draft Instructional Material	Design Expert	SME Comment
(Guide cover - p1) You could combine all of these documents into a PDF portfolio.	Change wording from "document" to files for consistency in the document	No Comment
(Handout- p3) A PDF portfolio is a benefit because it will allow one to provide a picture of the learner's development and competencies and will provide prospective employer's with information about a learner's suitability for a position and showcase their abilities.	Remove "is a benefit because it will allow one learner one to provide a picture of the learner's" and change to "allows a learner to provide a picture of his or her".	No comment
(Handout- 4th Heading) What Else Can We Use PDF Portfolios For?	No Comment	Change heading to : "What are the other uses of a PDF portfolio"
Images throughout handout	Include naming or numbering convention by adding titles such as "image *1.0* or *figure 1.2*" on each image.	No comment
1st image	No Comment	Instead of interface, include picture of a final PDF portfolio.
(Instruction for quick tip guide) Instructions: Print & cut out the quick tip guide below and use it as a reference when creating a PDF portfolio. Also, bookmark links at the bottom of this sheet as a resource and for future reference.	Delete the word "print". This handout has already been printed.	No comment
(Quick tips page) Getting started tutorial: PDF Portfolios	No comment	Add web address: PDF Portfolios

The design expert and the SME reviewed and had minimal changes to the material given to them. They both answered "yes" to all questions in the interview questions except the last one. The last question asked: "What other comments, inquiries, or suggestions do you have in regards to the design or experience with the instructional materials?" The SME had "no comment" for the last question and the design expert suggested labeling the images in the guide.

Using the feedback from both the design expert and the SME, the instructional materials were revised before learners utilized them. Below is the feedback from the learners regarding their experience with the revised instructional material.

Instructional Material	Novice Learner	Intermediate Learner	Expert Learner
(Pg. 5) – Assemble PDF Portfolio, -Add Files (Pg. 7) – Add	Bold button text throughout instruction for action to be more visible.	No Comment	No Comment
(Pg. 6, Step 3 Heading) Customize properties	No Comment	Capitalize Step 3 heading to be the same as the rest	No Comment
(Pg. 6, under add a welcome page) Click in the boxes to add content.	Step 3 under welcome page instruction is a little vague. Add more detail such as" title text."	No Comment	No Comment

Each learner completed the "Lesson Evaluation Form". The novice, intermediate, and expert learner indicated they agreed with each of the ten statements included in the survey. The Novice and Intermediate learners did not have any additional comments. The expert leaner commented, "Great instruction, easy to use and follow. Going to be making many PDF portfolios!"

Discussion

The review by the SME and instructional designer prior to learners interacting with the instructional materials allowed me to modify the materials to facilitate instruction. Each comment was carefully considered and all the suggestions were implemented. A revised set of instructional materials was given to all three learners. A few more suggestions on how to improve the instructional were given by both the novice and intermediate learner on the revised instructional materials. The comment and suggestions are relevant and will be implemented in the second revision of the instructional materials.

All three learners successfully completed the instructional lesson in thirty minutes or less. The expert learner finished the lesson the quickest, in seventeen minutes. It is possible that as learners interact with the instructional materials multiple times the production time may decrease from thirty minutes depending on the size of the project. As they become familiar with the steps in the process they can use the quick tips guide and the resource links as a reference and reminder to the learners on how to create future PDF portfolios.

Appendix A: Overall Plan

Appendix B: Design Expert Formative Evaluation Protocol

Appendix C: Subject Matter Expert Formative Evaluation Protocol

Appendix D: Learner Formative Evaluation Protocol

Appendix E: Design Expert Interview Questions

Appendix F: Subject Matter Expert Interview Questions

Appendix G: Learner Observation Checklist

Appendix H: Lesson Evaluation Form

Appendix I: Learner Survey

APPENDIX A: OVERALL PLAN

Phase	Evaluator	Date	Target	Instruments
Expert Reviews	Design expert	April 6, 2012	Goal & Objectives Assessment Instructional Strategy	Design Expert Interview Questions
	Subject matter expert	April 9, 2012	Goal & Objectives Assessment	Subject Matter Expert Interview Questions
One-to-One Evaluations	Novice Learner	April 11, 2012	Lesson Content Assessment	Learner Observation Checklist Lesson Evaluation Form
	Intermediate Learner	April 13, 2012	Lesson Content Assessment	Learner Observation Checklist Lesson Evaluation Form
	Expert Learner	April 16, 2012	Lesson Content Assessment	Learner Observation Checklist Lesson Evaluation Form

Appendix B: Design Expert Formative Evaluation Protocol

The design expert will read the script below via e-mail and will receive the instructional materials to be reviewed attached in the e-mail.

"Hello (name of design expert). Thank you for participating in the formative evaluation of this self-instructional lesson on how to create a PDF portfolio. The goal of this lesson is for an adult learner to create a PDF portfolio. Please review this instructional material prior to our meeting. The purpose of our meeting will be to provide me with feedback on your experience and the design of the lesson and the instructional materials, the meeting will be conducted in an interview format."

The interview question responses will be recorded by the instructional designer. To conclude the interview, the instructional designer will say the following:

"(Name of design expert), thank you again for your participation in this formative evaluation process. Your feedback is valuable information that will help improve this lesson and the instructional materials. If you have any additional feedback, please feel free to email me at: sg204@nova.edu."

Appendix C: Subject Matter Expert Formative Evaluation Protocol

The design expert will read the script below via e-mail and will receive the instructional materials to be reviewed attached in the e-mail.

"Hello (name of subject matter expert). Thank you for participating in the formative evaluation of this self-instructional lesson on how to create a PDF portfolio. The goal of this lesson is for an adult learner to create a PDF portfolio. Please review this instructional material prior to our meeting. The purpose of our meeting will be to provide me with feedback on your experience and the design of the lesson and the instructional materials, the meeting will be conducted in an interview format."

The interview question responses will be recorded by the instructional designer. To conclude the interview, the instructional designer will say the following:

"(Name of subject matter expert), thank you again for your participation in this formative evaluation process. Your feedback is valuable information that will help improve this lesson and the instructional materials. If you have any additional feedback, please feel free to email me at: sg204@nova.edu."

Appendix D: Learner Formative Evaluation Protocol

On the day of the interview, the instructional designer will use the following script to describe the evaluation process in the computer lab:

"(Name of learner), thank you for participating in the formative evaluation of this self-instructional lesson. You will be completing this lesson using only the printed instructions, the materials provided and the computer in front of you. I will be observing you performing each task and assessing your ability to complete each task with a checklist."

At the conclusion of the activity, the instructional designer will provide the learner with the lesson evaluation form and state:

"(Name of learner), thank you for participating in the formative evaluation of the self-instructional lesson on creating a PDF portfolio. Your feedback and experience is appreciated, and it will be used to improve the instructional materials for this lesson. Please complete this lesson evaluation form."

Appendix E: Design Expert Interview Questions

1. Are the objectives in the instructional materials appropriate for the target audience? If not, how should they be adjusted?

2. Does the instructional material identify the correct skills necessary to complete this lesson? If not, what skills could be added or should be removed?

3. Are the steps in the instructional materials arranged in a logical sequence? If not, how should they be arranged?

4. Is the instructional material appropriate for the target audience? If not, were the materials too easy or too difficult?

5. Are the images present in the instructional materials precise and adequate for learners to complete the lesson? If not, what images should be included or removed to enhance lesson?

6. Is the learner observation form appropriate for assessing the learner's performance of the lesson? If not, what type of assessment would you recommend to better assess the learning outcome?

7. What other comments, inquiries, or suggestions do you have in regards to the design or experience with the instructional materials?

Appendix F: Subject Matter Expert Interview Questions

1. Are the objectives in the instructional materials appropriate for the target audience? If not, how should they be adjusted?

2. Does the instructional material identify the correct skills necessary to complete this lesson? If not, what skills could be added or should be removed?

3. Are the steps in the instructional materials arranged in a logical sequence? If not, how should they be arranged?

4. Is the instructional material appropriate for the target audience? If not, were the materials too easy or too difficult?

5. Is the vocabulary used in the instructional materials easy to understand and follow? If not, what terms or wording should be modified?

6. Are the images present in the instructional materials precise and adequate for learners to complete the lesson? If not, what images should be included or removed to enhance lesson?

7. Is the learner observation form appropriate for assessing the learner's performance of the lesson? If not, what type of assessment would you recommend to better assess the learning outcome?

8. What other comments, inquiries, or suggestions do you have in regards to the design or experience with the instructional materials?

Appendix G: Learner Observation Checklist

Adobe Acrobat 9 PDF Portfolio Observer Checklist

This assessment will gauge a learner's performance and is a checklist to be used by an observer. The observer will watch a learner as they follow the stepwise procedures necessary to assemble a PDF Portfolio utilizing the Adobe Acrobat 9 Pro software without any assistance from beginning to end. By checking the box in front of the statement, the observer acknowledges the step described was completed successfully without any assistance.

Learner:	
Observer:	
Date:	
Entry Skills	
☐	Learner has logged in to computer, within 60 seconds
☐	Learner located Adobe Acrobat 9 Pro program, within 30 seconds
Open Adobe Acrobat 9 Pro	
☐	Learner has clicked on Adobe Acrobat 9 Pro icon to open program, within 30 seconds
Assemble a PDF Portfolio	
☐	Learner has navigated to the sample files provided, within 90 seconds
☐	Learner has navigated to sample files, within 90 seconds
☐	Learner has added sample files to the PDF Portfolio, within 90 seconds
Customize properties	
☐	Learner has selected a layout, within 90 seconds
☐	Learner has added sample text to welcome page, within 90 seconds
☐	Learner has selected a color scheme, within 90 seconds
☐	Learner has selected columns with file details to display, within 90 seconds
Publish the PDF Portfolio	
☐	Learner saves the document, within 30 seconds

After successfully completing the above assessment, the learner should have a PDF portfolio that contains multiple files assembled into an integrated PDF unit.

Appendix H: Lesson Evaluation Form

Directions: Please read each statement below and select the rating that best describes your experience with the instructional materials used for lesson. Please provide comments and suggestion of your experience with the lesson at the bottom.

	Disagree	Neither Agree nor Disagree	Agree
1. The instructional materials met the criteria of the learning objectives for this lesson.			
2. The written directions were clear and easy to understand.			
3. The images included in the instructional material were helpful in completing the lesson.			
4. The steps provided in the instructional material were presented in a logical order.			
5. The layout of the instructional materials was appealing to look at.			
6. The instruction provided was adequate to create a PDF portfolio.			
7. The instructional materials (the text/images) motivated me to complete the lesson.			
8. The lesson can be completed in thirty minutes or less.			
9. I feel confident that I could complete this lesson again using the instructional materials provided.			
10. I will use the instructional material provided to create another PDF portfolio.			

Comments regarding the instructional materials:

_____

_____