

**Summative Evaluation Plan**  
**Burning a CD Using Roxio Easy CD Creator**

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## **Abstract**

This summative evaluation plan's purpose is to assess the effectiveness of the self-instructional module entitled: Burning a CD Using Roxio Easy CD Creator. This module was implemented in the fall of 2005 with the target audience being University of North Carolina Wilmington faculty members. This plan includes an overview of the instructional package, a summary of the formative evaluation process, a description of the implementation site, and the summative evaluation objectives. Kirkpatrick's Four Levels of Evaluation Model was used to guide this summative evaluation plan. Included in this plan are descriptions of the methods of data collection and analysis. Finally a conclusion has been included which describes how the findings will be interpreted and reported.

## **Introduction**

### **Overview of the Instructional Package**

The instructional package consisted of a 43-slide power point presentation on a CD-ROM and a four-page assessment booklet. Also included was a blank CD-ROM for the learners to use when they did the final assessment at the end of the instructional module. The self-instructional module was designed to teach the target learners how to identify the file they want to burn, find the Roxio Easy CD Creator program, copy (or burn) the file to CD, and then exit the program. The instruction has been broken down into brief chunks to facilitate learning. After each major concept a brief quiz is administered to ensure the learner can successfully complete the specified objective before continuing to the next major concept. Learners have the opportunity to review material and re-take the quiz until mastery has been achieved.

Schank's Learn by Doing Model, also known as Goal-Based Scenarios, was the major instructional strategy used throughout the self-instructional module. This model suggests the use of authentic, real-world scenarios and a process called case-based reasoning. Schank argues that case-based reasoning is the way people become experts and how most experts reason. Experts are able to solve problems quickly by remembering previous experiences or problems and applying those solutions to the current problem or issue. Instead of learning random facts in a de-contextualized context, Case-Based Scenarios are often taken directly from practitioners working in the "real world." This model emphasizes why someone needs to know this information and immediately asks them to apply this knowledge.

Because it is assumed that experience can be transferred using narratives, stories are a major part of this model. Stories are incorporated throughout this model but first occur in the cover story. The cover story is used to set the stage for the whole model. The cover story should be authentic and produce a real world problem that is dynamic and interesting. Stories are often also incorporated in the resources section where experts are called upon to tell stories to the learner in order to advance the experiences upon which the learner can draw.

The cover story for this module was that: A hacker has broken into the UNCW computer network and infected it with a virus. The smart virus targets all computers on the network. The vice chancellor of information technology has recommended that all faculty members back up and label all of their files onto a CD. Unfortunately since there is limited technical support and the virus is fast moving the technical support on campus is only available for short questions. You have been chosen by your department chair to, not only back up your own files, but to help the other faculty members in your department back up their files. As luck would have it a training module was recently created by ITSD to train faculty and staff on how to create CDs.

Schank's Learn by Doing Model is ideal for this self-instructional module because the objective is to train adult learners. In implementing Schank's model it will be important to develop an authentic scenario which will motivate the faculty to complete

the module and learn how to burn a CD.

### **Learner Characteristics**

#### **Entry behaviors:**

The learner's entry behaviors are that they have little to no experience with the Roxio Easy CD Creator software and burning files onto a CD. The learners have worked with CD-ROMS before (both music CD-ROMS and CD-ROMS with data files on them) and have also saved different types of files using the various Microsoft Office programs to other media storage devices (i.e., floppy disks, hard drive, flash drive). They have also used the Internet to find music and play music files on their computers.

#### **Prior knowledge:**

The learners as mentioned above have little to no experience burning a CD. Learners have experience using Microsoft Office, basic working knowledge of the Microsoft XP operating system, knowledge on the basic components of the computer, and possess basic computer skills. They also have experience saving and opening documents to other storage media and using the CD-ROM drive to play various types of CDs.

#### **Attitudes toward content:**

Learner interview results suggest that learners will use this task to further their computer skills and to use in their every day jobs. They know and understand that this is a very relevant task that they should possess and that they will not always have someone to call for such basic technology assistance. Because they have busy jobs and lives, having this self-instructional module CD-ROM will help them learn this skill on their own time and at a location of their choice. Having the module on a CD-ROM with detailed conceptual information, allows the learner to know exactly why they are doing this. It also makes them feel more comfortable because if future questions arise, they will be able to refer back to CD-ROM module.

#### **Attitudes toward potential delivery system:**

Learners have experienced both live instructional workshops and web-based workshops that have helped them do their jobs and improve their technological skills. Having a self-instructional module CD-ROM is exciting for them because they will not have to take time out of their busy lives to attend a workshop and they will be able to complete the module wherever there is a computer with a CD drive. The CD-based module is convenient for them and they are willing to take the time on their own to work towards obtaining the goal of learning to burn files onto a CD.

### **Summary of the formative evaluation procedure**

This self-instructional module was evaluated formatively on a one-to-one level using three faculty members from UNCW as well as using a small group of 10 faculty and staff members from the university. The instruction was divided into four sections and after

each section is complete, the learner was instructed to complete the assessment for that section. Each section was built on the previous section, so each must be completed sequentially before moving on to the next.

During the module the instructional designers observed the learners, took notes and answered questions. All three of the learners had no trouble navigating through the module since they had all familiar with PowerPoint. Data gathered from this formative evaluation was used improve the module. One of the complaints was that the module's background was similar to the text, making the text difficult to read. After recognizing this as a problem, the background was modified. A higher contrast ratio between the text and background was designed to make the module easier to read.

The revised module was then presented to a small-group of faculty and staff members. Each learner was given a brief explanation of the purpose and organization of the module when they arrived at the site. They were then given both the instructional module presentation CD and the assessment booklet. Learners were instructed to follow all information in the order it was presented and complete assessments when instructed to do so. Everyone was motivated to participate in this learning module. All learners were excited about finally learning how to burn a CD.

When the learners completed their module they then went back and completed the concepts of the module on their own, burning some of their files onto the blank CD provided. When each was finished, they were instructed to open their CD to make sure it worked properly. After doing so, they were instructed to take the exit survey at the end of the assessment packet and return it to the instructors.

In reviewing the results of the assessments, most of the learners had mastered the concepts presented to them and correctly answered all of the assessment questions. There were only two learners who missed one or more questions. These learners demonstrated mastery on all of the other assessments. The questions the learners missed were re-written for clarity and emphasis.

The data collected from the exit surveys was very positive. Learners enjoyed learning how to burn a CD properly. They could either use this skill for backing up files for future use on a CD or burning CDs of pictures or music files for themselves or others to enjoy.

### **Implementation Site Description**

The learners will either be working at their office, which are equipped with computers with a CD drive capable of burning a CD, the Roxio software, Microsoft Office XP, broadband Internet capabilities and access to the school's network, or at home if their computer has the same equipment. The learners will be working independently in their offices. If they have any questions they can ask their colleagues or the Technology Assistance Center for help.

## Summative Evaluation Objectives

This assessment plan is based on Kirkpatrick's Four Levels of Evaluation model but will focus on only the first three levels as described below:

1. **Reaction:** identifies feelings and attitude toward the instruction immediately following deliver
2. **Learning:** determines what and how much knowledge or skill the learner gained
3. **Transfer:** identifies how often the learners are using

## Process

### Methodology

Kirkpatrick's Four Levels of Evaluation Model will be used to guide the summative evaluation process. This model contains four levels: reaction, learning, transfer, and results. Depending on the objectives some levels are may not be needed.

The first level, reaction, is used to assess the immediate feelings learners are having immediately after the instruction has concluded. This type of data is usually gathered using a survey tool. Reaction questions measure the learner's comfort level while participating in the instruction, their confidence in applying the newly acquired skills or knowledge, and attitudes and feelings toward to success or validity of the instruction.

Learning measures the learner's increase in knowledge or skill as a result of the instruction. This level is often best measured by a pre-test before the instruction and post-test after the instruction. When used effectively with valid and reliable test questions, a pre- and post-test are an excellent measure of knowledge or skill acquisition.

Transfer, the third level of Kirkpatrick's model, measures how often if at all the learners are using their newly acquired knowledge and skills in their daily lives. Both surveys and interviews have proven to be successful at measuring transfer. However, instead of only surveying or interviewing the learner, people who interact with the faculty member on a regular basis should also be surveyed. This would include: the faculty member's colleagues, their department chair, the department secretaries, the department's computer consultant, and possibly students who are taking a class with the faculty member.

Results is the fourth level of Kirkpatrick's model and measures how successful the whole training program has been and whether the change has been worth the resource expenditure. This level of measurement is not necessary with this project. This level is included because this model comes from a business/industry setting but in higher

education this level is less important. The previous three levels provide the evaluator with a solid picture of the evaluation procedure.

### **Implementation Plan**

The instructional package is designed to be delivered via CD-ROM. Reaction surveys, and a survey cover letter, will be included in the printed assessment packet all learners will receive along the CD-ROM. The surveys should be completed and returned to a campus address immediately after the learners complete the module. The pre- and post-tests, designed to measure learning will be delivered via the Internet using a program called Select Survey. The results of these tests can easily be accessed anywhere a Internet connection is present. A few weeks after taking the self-instructional module, faculty learners as well as their department chair, colleagues, department secretary, and computing consultant will receive a survey and possibly an interview request to evaluate the transfer of the training.

### **Data Collection Plan**

The assessment plan is based on a task analysis showing the objectives of the training and domains of learning outcome. To measure reaction a ten question survey will be included in the instructional package. Question answers will be based on a likert scale from 1-5 with 1 being strongly agree and 5 being strongly disagree. Numbers allow each answer to be quantified and easily compared with other learner's answers.

Learning will be measured using a pre- and post-test method. The gap between the pre- and post test is an excellent measure of the learning. The data from the pre- and post test will be gathered using a program called Select Survey.

Transfer will be measured through surveys and interviews not only with the learners but also with their colleagues, students, and support staff. The link to the web-based surveys will be sent to selected individuals and selected interviews will obviously be conducted in person with an evaluator reading from a list of five or ten questions.

Validity and reliability will be top priorities when designing the assessments to ensure the evaluators receive high quality data.

### **Data Analysis Plan**

Data from the reaction survey will be evaluated using the likert 1-5 scale. Within this scale strongly agree is represented by 1 and strongly disagree is represented by 5. This data will be analyzed using SPSS for patterns, the standard deviation, and mean.

The pre- and post-tests will also be analyzed using SPSS for patterns, the standard deviation, and mean. In addition, the pre and post-tests will be compared to determine the difference and amount of learning.

The transfer data will be more difficult to analyze quantitatively since it was gathered in a more narrative form. This data will be analyzed qualitatively to identify patterns and determine what percentage of learners have been successful at transferring their newly acquired skills to their everyday lives. A rubric will be used to evaluate the responses.

## **Conclusions**

After the completion of a thorough data analysis and interpretation, the instructional designers will be able to identify any weaknesses in the self-instructional module and determine the appropriate next steps. The results could indicate the need for a complete re-design of the self-instructional module or that the course is well-designed and implemented and meeting the proposed performance objectives. The results from this summative evaluation report will be submitted to the director of Client Services from ITSD. She will decide if the implementation should continue or if the deficiencies are too great.

## **Appendix A: Task Analysis**

*(All prerequisite skills are notified by italics)*

- 1.0: Faculty will demonstrate finding and locating the file(s) they want to burn
  - 1.1: Faculty will demonstrate finding the My Documents folder*
  - 1.2: Faculty will demonstrate finding the file(s) to be copied*
  - 1.3: Faculty will identify the type of file they want to burn*
- 2.0: Faculty will demonstrate finding the Roxio program
  - 2.1: Faculty will identify the Roxio program
  - 2.2: Faculty will demonstrate how to locate the Roxio program
  - 2.3: Faculty will identify that the program is open and active
    - 2.3.1: Faculty will identify if the icon is on the desktop
      - 2.3.1.1: Faculty will demonstrate double clicking the Roxio icon on the desktop
    - 2.3.2: Faculty will identify if the icon is not on the desktop
      - 2.3.2.1: Faculty will demonstrate the steps to get to the program
- 3.0: Faculty will demonstrate copying a CD
  - 3.1: Faculty will demonstrate finding the source files in the Roxio upper window in the “My Documents” folder
  - 3.2: Faculty will demonstrate dragging the files they want to use into the lower window
  - 3.3: Faculty will identify where they can change/re-name their CD
  - 3.4: Faculty will demonstrate how they would label their CD
  - 3.5: Faculty will identify the location of the CD drive*
  - 3.6: Faculty will demonstrate placing a blank CD in the CD drive for burning
  - 3.7: Faculty will demonstrate pushing the record button to begin the burning process
- 4.0: Faculty will demonstrate how to exit the program

## Appendix B: Data Assessment Plan

Domain Objective #	Verbal Info	Intellectual Skills				Cognitive Strategy	Motor Skill	Attitude	Total
		Discrm.	Concepts	Rules	Problem Solving				
1.0				1				1	
1.1				1				1	
1.2				1				1	
1.3			1					1	
2.0				1				1	
2.1			1					1	
2.2				1				1	
2.3			1					1	
2.3.1			1					1	
2.3.1.1				1				1	
2.3.2			1					1	
2.3.2.1				1				1	
3.0				1				1	
3.1				1				1	
3.2				1				1	
3.3			1					1	
3.4				1				1	
3.5			1					1	
3.6				1				1	
3.7				1				1	
4.0				1				1	
<b>% of test</b>	<b>0%</b>	<b>0%</b>	<b>33.3%</b>	<b>66.7%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>21 (100%)</b>

## Appendix C: Assessment Plan

Objective	Type of Learning Outcomes	Types of Assessment	Assessment Strategy
1.0: Faculty will demonstrate finding and locating the file(s) they want to burn	Rules	Formal Supply Items Short Answer	After looking at your files, what kinds of files could you burn onto a CD? Are there any in your My Documents folder?
<i>1.1: Faculty will demonstrate finding the My Documents folder</i>	Rules	Formal Supply Items Short Answer	Where is the My documents folder icon located on your computer?
<i>1.2: Faculty will demonstrate finding the file(s) to be copied</i>	Rules	Formal Selection Items Multiple Choice	What types of files could you find in your my documents folder?  A. Music Files B. Data files C. Picture files D. All of the above
<i>1.3: Faculty will identify the type of file they want to burn</i>	Concepts (Concrete)	Formal Selection Items Multiple Choice	Where would we find the suffix to identify what type of file it is?  A. At the beginning of the file name B. At the end of a file name
2.0: Faculty will demonstrate finding the Roxio program	Rules	Informal Observation	Close out of the program. Now from the beginning, go through the steps to find the Roxio program and open it.
2.1: Faculty will identify the Roxio program	Concepts (Concrete)	Formal Selection Items Multiple Choice	What does the Roxio icon look like? (Show pictures of icons)
2.2: Faculty will demonstrate how to locate the Roxio program	Rules	Formal Supply Items Short Answer	What are the two ways to find the Roxio program on your computer?
2.3: Faculty will identify that the program is open and active	Concepts (Concrete)	Formal Selection Items Choose one	Take a look at the screen shot of the open Roxio program. Does your screen look like the picture?

			__Y __N
2.3.1: Faculty will identify if the icon is on the desktop	Concepts (Concrete)	Formal Selection Items Choose one	Take a look at the Roxio icon. Is it on your desktop?  __Y __N
2.3.1.1: Faculty will demonstrate double clicking the Roxio icon on the desktop	Rules	Formal Selection Items Choose one	Did you double click on the correct icon?  __Y __N
2.3.2: Faculty will identify if the icon is not on the desktop	Concepts (Concrete)	Formal Selection Items Choose one	Take a look at the Roxio icon. Is it on your desktop?  __Y __N
2.3.2.1: Faculty will demonstrate the steps to get to the program	Rules	Formal Supply Items Short Answer	If the icon is not located on the desktop, how you do find the program to open it?
3.0: Faculty will demonstrate copying a CD	Rules	Formal Supply Items Short Answer	List the steps to burn a file onto a CD.
3.1: Faculty will demonstrate finding the source files in the Roxio upper window in the "My Documents" folder	Rules	Formal Selection Items Matching	On the picture of the Roxio program, which letter represents where to find your source files?  A,B,C,D
3.2: Faculty will demonstrate dragging the files they want to use into the lower window	Rules	Formal Selection Items Matching	On the picture of the Roxio program, which letter represents where to drag your files to burn them?  A,B,C,D
3.3: Faculty will identify where they can change/re-name their CD	Concepts (Concrete)	Formal Selection Items Matching	On the picture of the Roxio program, which letter represents where you would change the name of your CD?  A,B,C,D
3.4: Faculty will demonstrate how they would label their CD	Rules	Formal Supply Items Short Answer	Why is it important to label your CD?
3.5: Faculty will identify the location of the CD drive	Concepts (Concrete)	Formal Selection Items Multiple	Where on the computer is the CD drive located?  A. On the Monitor

		Choice	B. On the tower C. Behind the computer
3.6: Faculty will demonstrate placing a blank CD in the CD drive for burning	Rules	Formal Selection Items Choose one	Do you know where and when to put your blank CD into the computer?  __Y __N
3.7: Faculty will demonstrate pushing the record button to begin the burning process	Rules	Formal Selection Items Multiple Choice	Which picture represents the record button in Roxio?  (Show pictures of buttons)
4.0: Faculty will demonstrate how to exit the program	Rules	Formal Selection Items Choose one	Did you properly exit the Roxio program?  __Y __N

## Appendix D: Pre-test and Post-test items

### Pretest:

1. Where is the My documents folder icon located on your computer?

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2. What types of files could you find in your my documents folder?

- A. Music Files
- B. Data files
- C. Picture files
- D. All of the above

3. Where would we find the suffix to identify what type of file it is?

- A. At the beginning of the file name
- B. At the end of a file name

4. Where on the computer is the CD drive located?

- A. On the Monitor
- B. On the tower
- C. Behind the computer

### Post-test:

#### Section 1 Assessment:

After looking at your files, what kinds of files could you burn onto a CD? Are there any in your My Documents folder?

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#### Section 2 Assessment:

1. What does the Roxio icon look like?

- A.  B.  C.  D. 

2. What are the two ways to find the Roxio program on your computer?

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3. Take a look at the Roxio icon. Is it on your desktop?

\_\_\_Y      \_\_\_N

4. If the icon is not located on the desktop, how do you find the program to open it?

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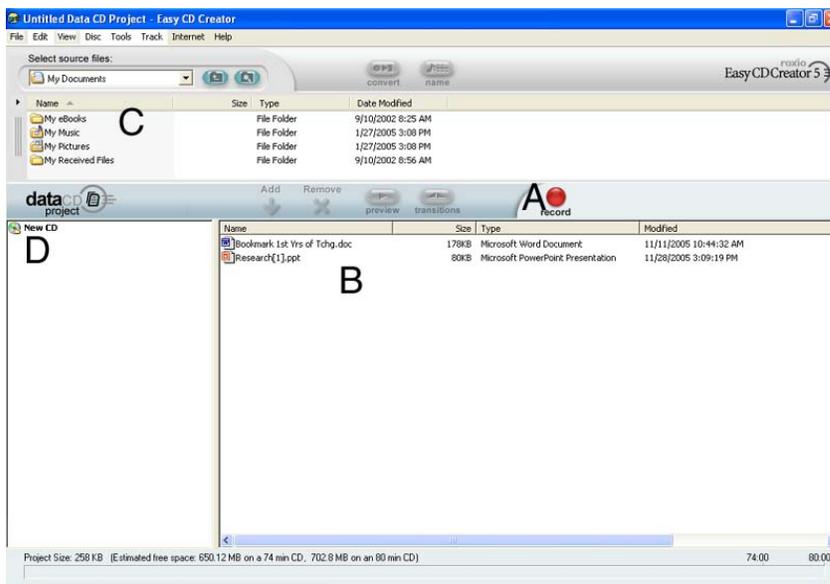
5. Take a look at the screen shot of the open Roxio program. Does your screen look like the picture?

\_\_\_Y      \_\_\_N

6. Close out of the program. Now from the beginning, go through the steps to find the Roxio program and open it.

### Section 3 assessment:

The next three questions deal with the following picture:



1. On the picture of the Roxio program, which letter represents where to find your source files? \_\_\_\_\_

2. Which letter represents where to drag your files to burn them? \_\_\_\_\_

3. Which letter represents where you would change the name of your CD? \_\_\_\_\_
4. Why is it important to label your CD?

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5. Do you know where and when to put your blank CD into the computer?

\_\_\_Y      \_\_\_N

6. Which picture represents the record button in Roxio?

- A.  B.  C.  D. 

7. Now that you have seen the process, list the steps on how to burn a CD:

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#### Section 4 Assessment:

Did you properly exit the Roxio program?

\_\_\_Y      \_\_\_N

#### Final Assessment

At this point you should have completed the instructional module and all the assessments for each of the sections. Your task at this time is to burn files onto a CD using Roxio Easy CD Creator 5 by finding the files in your computer's My Documents folder, opening the Roxio program, dragging those files into the lower window, properly labeling your CD, and burning the files onto a blank CD. Once your CD is burned, open it up and see that it works. Use the checklist below to track your progress.

\_\_\_\_\_ **Find the My documents folder**

\_\_\_\_\_ **Find the files you want to burn**

\_\_\_\_\_ **Find the Roxio program on the computer**

\_\_\_\_\_ **Open the Roxio program**

\_\_\_\_\_ **Find your source files (the files you want to burn) in Roxio**

\_\_\_\_\_ **Drag your files into the lower window**

\_\_\_\_\_ **Label your CD**

\_\_\_\_\_ **Insert a Blank CD into the CD-ROM drive**

\_\_\_\_\_ **Hit the record button to start your progress**

\_\_\_\_\_ **Exit the Roxio program**

\_\_\_\_\_ **Check your CD to make sure it works**

Does everything work? If it does, then congratulations! You now know how to burn a CD using Roxio! Happy burnings in the future!