Microsoft Photo Story Training Module

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Abstract

According to the Principal, Ms. Melody Chalmers, Cross Creek Early College High School, located is Fayetteville, NC, is a "progressive, public school of choice located on the campus of Fayetteville State University."(Chalmers, 2010) Adapted from their website, Cross Creek's mission is:

"…to provide a smaller academic environment that fosters growth and success to prepare students for their future by developing relationships, responsibility, and respect through relevant and rigorous coursework."(Chalmers, 2010)

Conversations with Ms. Chalmers indicate that an important aspect of fulfilling this mission is to have teachers utilize new technology in the classroom. Ms. Chalmers mentioned a need for teachers to be proficient in presentation applications other than PowerPoint, specifically MS Photo Story. Surveys and interviews show that only a small percent of the teachers at Cross Creek have used MS Photo Story and a smaller number have been trained in it.

This report describes the analysis, design, development, implementation and evaluation of a self directed module intended to train teachers on MS Photo Story in the classroom.

Analysis:
A needs analysis (Figure I) was conducted to identify the instructional goals. Data for the needs analysis was collected through surveys and interviews. A learner & content analysis (Figure IV) was developed through surveys and an existing environmental analysis. The learner content analysis was used to identify characteristics of the learners and the environment.

Design:
The module was designed based on the outline presented in Dick, Carey & Carey's Introduction to Instructional Design. The design of the instructional model was adapted from Huitt, Monetti, Hummel. The overall goal of the project was an intellectual skill – rule.

Development:
The development phase of the self directed module took place over three weeks using Camtasia 7.

Implementation
The Technology Facilitator at Cross Creek will be responsible for the implementation of the training module. He will also make sure that teachers have MS Photo Story (a free program) downloaded on their computers.

Evaluation
The module was assessed through formative evaluations. After one on one evaluation the module was revised and then evaluated by a group.

Section 1: Theoretical Assumptions

Part 1: Instructional Model

There are a number of different Instructional Models and each model is best suited for different circumstances. The selection of an instructional model occurred after analyzing the conditions and values of the module.

Selection of Instructional Model

Efficiency was a major value in the selection of an Instructional Model. The learners' backgrounds were another important factor in the section of the instructional model. All of the learners are certified teachers but their subjects range from History, Science, English and Spanish. Analysis of the values and conditions of the module determined that they align with the Direct Approach to Instruction and therefore it was selected as the Instructional Model (Figure 2). Direct Instruction provides the opportunity to explore lot of new, procedural knowledge, and then give the learners time to practice.

- Curriculum Alignment (Huitt, Monetti, Hummel, 2009) - Interviews and surveys indicate that our learning goal overlaps with the professional development objectives at Cross Creek. There is a need to utilize new technology and new, creative methods of teachings. If the teachers can demonstrate creating a presentation in MS Photo Story they are likely to use it in their classrooms and challenge their students to use it.

- Student Placement (Huitt, Monetti, Hummel, 2009). - Pre requisite skills have been identified to ensure that all learners will begin the module with fairly uniform skills in the subject area.

Huitt, Monetti & Hummel propose four universal principles of the Direct Approach to Instruction these universal principles were applied to the module:

1. Presentation Phase
    a. review prior learning / skills
    b. state knowledge or skill to be learned
    c. state importance / relevance
    d. clearly explain knowledge or skill to be learned
    e. provide multiple opportunities to demonstrate learner's initial understandings
2. Practice Phase
    a. practice under the guidance and supervision of a teacher
    b. practice under independent conditions
    c. periodically review in order for learners to use their new knowledge and skills
3. Assessment & Evaluation Phase
    a. collect daily data to judge student success
    b. collect longitudinal data
4. Monitoring & Feedback

a. provide cues & prompts
b. provide corrective feedback & reinforcement

Presentation Phase

- **Review** (Huitt, Montetti, Hummel, 20090) – The learners will take a pretest to will help active the prerequisite knowledge necessary to complete the module. Most of the learning outcomes in the prerequisite skills consist of discrimination and verbal information.

- **What** (Huitt, Montetti, Hummel, 2009) – The learner will be presented with the overall goal and the major objectives in the module. The overall learning outcome is a rule so there are a number of sub-goals that the learner must achieve prior to completing the overall goal.

- **Why** (Huitt, Montetti, Hummel, 2009) – The narrator will explain to the learner how MS Photo Story can help them become better teachers. The learner should understand that using new presentation and assessment tools can help engage and motivate students.

- **Presentation** (Huitt, Montetti, Hummel, 2009) - The necessary skills will be clearly explained and organized in sequential relationships supported by visual aids and demonstration. The curriculum will be chunked in a step-by-step sequence with demonstrations followed by outright or embedded assessments.

Practice Phase

After completing the presentation the students will be probed regarding their initial understanding through a variety of higher-level questions (Huitt. Montetti, Hummel, 2009). The questions will be designed to help the learners actively process the information presented in the lesson. The learners will have unlimited wait-time since the module is self directed. Examples of the questions that the learners initially reflect on are; how could you incorporate MS Photo Story in your lesson plans? & how could you create an assessment in which your students will use MS Photo Story? These questions are used to coherence the learner into thinking about new situations and uses for MS Photo Story. The questions will be opened ended and the learner should continue to think about them throughout the practice phase.

During the practice phase of our module the learners will continue to develop their skills through guided and independent practice. The learners will practice the necessary skills of creating a presentation while provided with prompts and cues. The learner will complete a task and then will be provided with questions and reminders so they can make any necessary revisions.

Assessment & Evaluation Phase

Assessment

After practicing the skills necessary to create a presentation in MS Photo Story the module begins the assessment & evaluation phase (Huitt, Monetti, Hummel, 2009). In this phase the learner will create a presentation in MS Photo Story. The learner is provided a rubric (Figure 3) that explains the criteria of the presentation prior to execution of their presentation. While developing the presentation learner will use the rubric as self guided assessment. Once the learner has completed their presentation they will use the rubric to assess their final product and make any revisions.

The learner will also be objectively assessed through a pre test and then a post-test. During the "review" the learner will take a pre-test on the information they are about to learn. The pre-test consists of 13 multiple choice and true or false questions. At the end of the module the learner will take a post-test to assess the information that they have learned from the module. Like the pre-test, the post-test consists of 13 multiple choice and true or false questions.

Evaluation

A formative evaluation was conducted to improve the instruction after the first and second drafts. The formative evaluation began with one on one with three different learners of varying computer literacy. This evaluation was conducted to identify errors and understand the learners' reaction to the module. Subsequent to the one on one evaluation the module was revised and preceded to the group evaluations phase. Six teachers were divided into two groups of three for the group evaluations. This part of the evaluation served to measure the effectiveness of the changes and identify any remaining problems with the module.

Monitoring & Feedback

The module uses a systematic approach therefore the learner will be provided with corrective feedback throughout the entire instruction. Through correct application of the design elements of DI our module will be effective, efficient and appealing.

Part 2: Learner & Context Analysis

A Learner & Context Analysis was completed through a survey of the teachers and an environmental analysis (Figure 5). The Technology Facilitator for Cross Creek is a member of the team that developed the instructional module and therefore had access to data on the instructional environment. The Learner & Context Analysis (Figure 4) illustrates the learners' prior knowledge, the general characterizes of the learners as well as the instructional environment.

Prerequisite Skills

The Learner Analysis concluded that 100% of the learners have completed the Cumberland County Technology Basic Skills Test with 80% accuracy or higher. The test assesses teachers' basic

computer skills using the Windows XP desktop, Word, Excel and PowerPoint. Specific prerequisite skills were identified in the task analysis flow chart and are listed below:

- Explain the title of a presentation (Verbal Information)
- Discriminate between a title & body of text (Intellectual Skills – Discrimination)
- List the steps of downloading a program (Verbal Information)
- Classify valid sources of information (Intellectual Skill – Defined Concept)
- Discriminate among various resources (Intellectual Skills – Discrimination)
- List other ways to find resources (Verbal Information)
- Demonstrate checking out resources (Intellectual Skills – Rule)
- List presentation needs (Verbal Information)
- Distinguish between computer functions (Intellectual Skills – Discrimination)
- Distinguish between pictures relation to one topic & another (Intellectual Skills – Discrimination)
- List ways to find pictures (Verbal Information)
- Demonstrate taking pictures (Intellectual Skills – Rule)
- Distinguish between various buttons on keyboard (Intellectual Skills – Discriminate)

Section 2: Needs Analysis & Instructional Goals

Part 1: Needs Analysis:

Prior to the design of the instructional module a needs analysis was conducted through interviews with Dr. Melody Chambers and surveys emailed to the teachers at Cross Creek. The needs analysis was used to determine the differences between the current performance and the optimal performance. Once the differences were identified the team determined instructional goals for the module. The needs analysis is located in Figure 1.

Actual Performance

- 11% of teachers at Cross Creek have completed a training session on MS Photo
- 16% of teachers at Cross Creek have used MS Photo Story in some capacity.

Optimal Performance

- 100% of teachers will have completed a training session on MS Photo
- 100% of teachers will recognize appropriate situations to use MS Photo Story.
- 80% of teachers will feel comfortable enough to use MS Photo Story in their classrooms and challenge their students to use it.

Part 2: Instructional Goals

Gagne's Learning Outcomes and Conditions for Learning was used to determine the learning outcomes for the goals and sub-goals. The goals and their learning outcomes are listed below:

Overall Goal:
The learner will demonstrate creating a presentation using MS Photo Story. (Intellectual Skill – Rule)

Sub Goals:

- The learner will demonstrate creating text for the presentation (Intellectual Skill – Rule)
- The learner will demonstrate collecting resource materials (Intellectual Skill – Rule)
- The learner will demonstrate extracting the main ideas (Intellectual Skill – Rule)
- The learner will identify presentation tools (Intellectual Skill – Concrete Concept)
- The learner will discriminate among presentation applications (Intellectual Skill – Discrimination)
- The learner will demonstrate using MS Photo Story (Intellectual Skill – Rule)
- The learner will demonstrate computer skills
- The learner will demonstrate importing pictures
- The learner will identify appropriate amount of text for each slide
- The learner will identify the need for verbal narration
- The learner will demonstrate previewing the presentation
- The learner will choose when necessary to revise the presentation

Section 3: Task Analysis

The Task Analysis flow chart can be found in Figure 6.

Section 4: Performance Objectives & Assessment

After completing the flowchart, performance objectives and assessments were identified for each of the goals and sub goals.

Part 1: Performance Objectives

Overall Goal: The learner will demonstrate creating a presentation using Microsoft Photo Story.

Terminal Objective: Given a topic the learner will demonstrate proficiency in MS Photo Story by creating a presentation in MS Photo Story using a rubric that defines the standards for a high quality presentation.

The goals & sub goals and their corresponding performance objectives can be found in Figure 7.

Part 2: Assessment

Overall Goal: The learner will demonstrate creating a presentation using Microsoft Photo Story.

Terminal Objective: Given a topic the learner will demonstrate proficiency in MS Photo Story by creating a presentation in MS Photo Story using a rubric that defines the standards for a high quality presentation.

Assessment: The learner will be asked to demonstrate creating a presentation using MS Photo Story at the end of the module.

Refer to Figure 8 for a goals, objectives & assessments chart.

Part 3: Instructional Strategies

The adapted instructional model is Direct Instruction, refer to "Part: 1 Instructional Model" and Appendix II for an explanation of why the referenced model was selected. The content in the module is sequenced and begins with lower level skills and then combines bottom to top and left to right on the task analysis.

Pre-Instructional Activities (Approx 10 min)

- The learner will take a pre test prior to beginning the self instructional module. The pretest will be on taken on a computer. (Figure 9) The pre test will quiz the learners on the information that will be presented in the module.
- The learner will be presented with the three major goals
    - Identify presentation tools
    - Demonstrate creating text for the presentation
    - Demonstrate proficiency in Microsoft Photo Story
- The narrator will explain to the learner that proper execution of Photo Story in the classroom can make the curriculum more exciting and appealing to students.

Content Presentation & Learning Guidance (Approx 25 min – Including Learner Participation)

The learner will be presented with an overview of the different presentation applications and the pro's & con's of each application. After the learner understands when they would select Photo Story the module will guide the learner in selecting the pictures necessary for their presentation. Once they have mastered selecting the pictures they will be prompted through preparing narration and title each picture. The objectives will be clustered in a combination of bottom to top and left to right on the task analysis flow chart. The learner will be presented with a demonstration of each process.

Learner Participation (Time included above)

The learner will be asked how they can incorporate MS Photo Story into their classrooms and to think about ways their students could use it. They will be in control of the speed of the module. Throughout the module the learner will actively be collecting and preparing the materials necessary to complete the overall goal. At the end of the module the learners will develop their own presentation.

Assessment & Testing (Approx 10 min)

- Prior to beginning the module the learners will take a pre test. The pre test will assess the skills to be taught.
- Assessments will be embedded at the end of each chunk. Learners are challenged to select pictures, prepare narration…etc.
- A post test (Figure 10) will be administered at the end of the module
- The learners will construct a presentation using MS Photo and the will use a rubric to self assess

Follow Through Activities

Those with high scores, 35-50, should have basic knowledge on the process of creating a presentation in MS Photo Story. With this basic knowledge they should feel comfortable enough to incorporate MS Photo Story in their classrooms and assessments. Learners who score lower than 35 should retake the module and seek personal assistance from the Technology Facilitator. The module will be available for all Cross Creek faculty to access from the school or their home.

Section 5: Results of Evaluation

Part 1: One on One Evaluations

For the one-on-one evaluations, I chose three teachers with varying degrees of computer literacy. Each evaluation was conducted on my computer. I did them in order of highest to lowest based on perceived technology literacy.

The first student encountered very few problems. Although he had never used Photo Story before, he had heard me talk about it, and had a rough idea of its capabilities. His suggestions were to change the color of the callouts and add more complexity to the module. I agreed that red callouts (the boxes around certain parts of the module that I wanted the users to notice) was a little too bold, and possibly distracting. I decided to go back into Power Point, figure out the RGB color code for the orange in the background on each slide, and use that same orange in the contrast. I feel like it added a consistent look to the module. Regarding his suggestion for added complexity, I felt like I would need to do the next two one-on-one evaluations before I made up my mind.

The second student has average computer skills, but had been trained on how to use Photo Story 2 years ago. She admits that she has forgotten a lot, and was excited about completing the module. She bombed the pretest, and said the module provided clear directions on how to use Photo Story. Once she got going, she was asking me whether the module was going to teach her how to do certain things (I did not answer her right away because I was trying to minimize our interaction until the end of the module). Regardless, I took her enthusiasm to learn about the program as a good sign. She did not have any suggestions.

The third student is a self-proclaimed computer hater. She would rather teach the whole day without using computer at all, but recognizes that her students appreciate being able to express themselves in various ways, many of which include using a computer. She suggested that we shorten the Pre-Test and Post-Test. She also recommended that we create a rubric. Since one of our Test questions talks about using a rubric, I immediately agreed. Regarding the length of the Pre-Test and

Post-Test, I could see where she was coming from, so I went back and asked the first and second students what they thought about the length of the tests. They both told me that the tests were too long. I then went back and hand-picked the questions that I wanted to keep. I had to do this carefully, to ensure that I still had at least one question for each objective.

Part 2: Group Evaluation

For the small group evaluation, I had six teachers evaluate the module—three at a time. Students 1, 2, and 3 were in the first group; and students 4, 5, and 6 were in the second group. I had to split them up due to time constraints. Students 1 and 3 were of average computer literacy, and student 2 was of below average computer literacy. Student 4 was above average, 5 was average, and student 6 was below average. I should note that all six students are high school teachers, and volunteered for this. They confirmed my suspicion that they would all like to learn more about Photo Story, and possibly incorporate it into their respective classrooms. I understand that it is entirely possible that some of the learners in my full-deployment group may not be eager learners. This may yield different results than the ones described in Figures 10 – 14.

Each of the learners used identical desktop computers with a dual-core 1.86 Ghz processor, 2GB of RAM, an Ethernet connection, and loaded the self-instructional module from my MIT Portfolio website (http://arcmit01.uncw.edu/jad1235/Portfolio/selfinstructionalmodule.html). They were all given a self-assessment rubric, pencil, and pair of headphones. They were instructed beforehand to bring 8 pictures from their favorite vacation (preferably on a flash drive). Five of the six learners complied, and one forgot. I had my eight pictures on hand as a backup, so this was not a problem. Once I read the directions aloud, the learners began (utilizing their headphones, so as to not disrupt the other learners).

Figures 10, 11, and 12 all show an item by item objective analysis. That means that each student's performance on each objective (and each item) is shown. We can analyze how many students mastered each objective, as well as individual student performance on the objectives. This is useful when we are looking for outliers. For example, if a student had only mastered 25% of the objectives for Goal 1 (Figure 10), that might be considered an anomaly when compared to the other students. We can also look for objectives that had a very high or very low % of mastery, and further analyze them to find out why.

Figure 13 shows student performance on the Pre- and Post-Test for each objective. This is especially useful when evaluating the validity of test items. If 100% or 0% of students answered a question correctly on the Pre-Test, we would have to ask ourselves whether or not the question was too easy or too hard. For example, the wrong answer choices might be so easy that the question is not really asking what it was meant to ask. In our self-instructional module, however, this was not the case.
From looking at Figure 13 we can see that most objectives saw a gain of 33% between the Pre- and Post-Test. Objective 3.3 actually had a net gain/loss of 0%. Objectives 1.3 and 3.4 only saw gains of 17%. Looking at the whole table at once, it appears that our self-instructional module was effective at training teachers how to use Photo Story.

As we expected, the learners were all over the place on the Pre-Test (see Figure 14). Student #6 only showed mastery of 20% of the objectives on the Pre-Test, while Student #4 showed 90%. The mean Pre-Test score (as a percentage of mastered objectives) was 55%, while the Post-Test was

80%. This indicates a 25% increase upon completion of this module. Four out of six learners showed improvement, and two out of six stayed the same.

Section 2: Coding & Log of Activities

Part 1: Coding

Throughout the report Microsoft is referred to MS and Photo Story is referred to as PS. In Figure 13, we use the abbreviations PR and PS to refer to Pre-Test and Post-Test, respectively. Throughout these reports "we" refers to the three group members: Caitlin Boninti, James Dunn, and Nick Syrpis. The terms *learners*, *students*, and *teachers* all refer to the same group of people. They were the testers of the self-instructional module. They provided recommendations, but did not participate in the production of the module or reports.

Part 2: Log of Activities

The module was analyzed, designed, developed, implemented and evaluated over the course of a semester by the three group members. As a result of proximity meetings had to be held over the phone, Skype and in the group meeting rooms on Wimba. A log of activities and the time spent on them can be found in Figure 15.

Figure 1
Needs Analysis

Actual Performance	• 11% of teachers at Cross Creek have completed a training session on MS Photo • 16% of teachers at Cross Creek have used MS Photo Story in some capacity.
Optimal Performance	• 100% of teachers will have completed a training session on MS Photo • 100% of teachers will recognize appropriate situations to use MS Photo Story. • 80% of teachers will feel comfortable enough to use MS Photo Story in their classrooms and challenge their students to use it.
Needs	• Teachers need to understand how to select a presentation application • Teachers need to be proficient in MS Photo Story • Teachers need to be aware of ways to incorporate MS Photo Story into their classes
Solutions	• Design a self-instructional module for teachers to demonstrate the construction of a presentation in Microsoft Photo Story • Send teachers to conferences • Staff Mentoring • Professional Development Training Classes

Figure 2
Conditions and Values

VALUES	EXAMPLES
Learning Goals	The learners demonstrate creating a presentation using MS Photo Story
Criteria	The learners will be presented with a rubric for assessing their presentation
Methods	The learner will actively participate in the self-directed module by completing assessments and then demonstrate creating the presentation.
Who has Power	The instructor has the power by generating the learning goals

CONDITIONS	EXAMPLES
Content	Understanding how to use MS Photo Story
Learner	High School Teachers with different subject backgrounds and high motivation for learning the information but time constraints
Learning Environment	Self-directed module can be completed at the learners convenience but have a computer with internet access
Instructional Development Constraints	Self-directed, Limited Time, Different subject backgrounds

Figure 3
Rubric

Description of Component	Total Number of Points	Score
Presentation Application -Presentation includes pictures & voice narration	10	
Pictures -Selected 8 pictures relevant to the topic -Imported Pictures in PS	20	
Narration -Narration for each picture -Narration is btw 5 – 15 seconds	10	
Title -You have created an appropriate title for your presentation	10	
Total	50	

Figure 4
Learner & Content Analysis

LEARNER CHARACTERISTICS

General / Demographic Information

Information Categories	Learner Characteristics	Data Resources
Age	100% of learners are over 23 years old. 100% of learners are under 60 years old. The mean age is 37. 2 are under 25 years old 4 are between 25 and 29 years old 2 are between 30 and 34 years old 3 are between 35 and 39 years old 1 is between 40 and 44 years old 1 is between 45 and 49 years old 2 are between 50 and 54 years old 2 are between 55 and 60 years old	Survey
Gender	71% - women 29% - men	Survey
Health or Special Needs	No learners reported any health or special needs.	Survey
Ethnic/Cultural Background	5 are African-American 2 are Caucasian (Hispanic) 10 are Caucasian (non-Hispanic)	Survey
Language	Example: 94% - English as a first language 6% - Spanish as a first language, also fluent in English	Survey

Academic / Educational Information

Education completed	Example: 100% - earned their undergraduate degree 24% - earned a master's degree 0% - earned a Ph.D 11% - earned National Board for Professional Teaching Standards Certificate	Survey
Previous Related Training completed	2 learners completed a 2-hour workshop on Microsoft Photo Story. All learners have viewed a Photo Story presentation.	Survey

Standardized test scores related to topic of this training	Not applicable	Not applicable
Reading Levels	Not applicable	Not applicable
GPA	Not applicable	Not applicable

Specific Characteristics

Entry Skills	100% of learners completed the Cumberland County Technology Basic Skills Test with 80% accuracy or higher. The Test assesses teachers' basic computer skills using the Windows XP desktop, Word, Excel, and PowerPoint.	Survey
Previous or current knowledge / experience of / with topic area	2 have completed training on Photo Story 15 have not yet completed training on Photo Story 3 have used the program in some capacity 15 have never used the program 6 have 0-4 years of teaching experience 3 have 5-9 years of teaching experience 5 have 10-14 years of teaching experience 1 has 15-19 years of teaching experience 2 have 20-24 years of teaching experience	Survey
Attitudes toward content	9 are very excited about learning Photo Story 5 are neutral about learning Photo Story 2 are not excited about learning Photo Story 1 is very unexcited about learning Photo Story	Survey
Attitudes toward organization and training Division	All teachers are expected to conduct professional throughout the year. They are all members of the training division.	Principal's comment

Motivation for Instruction (ARCS)	Example: **Attention:** 100% of employees report they have an attention span of more than 10 minutes 82% report they have an attention span longer than 20 minutes. 65% report they have National statistics show that the average attention span for people in this strata range from 20 to 30 minutes. **Relevance** The learners will have to use the knowledge and skills immediately in their jobs, thus the topic is very relevant to their job performance. **Confidence** 76% of learners have high level of confidence in their ability to complete the task. However the other 24% are unsure about their prior knowledge and experiences and anticipate having a hard time completing the task. **Satisfaction** Not applicable (yet)	Survey National Research
Attitudes Towards potential delivery system	6% have taken an online class 82% have done some form of online training 24% are excited about completing a self-instructional module 18% are neutral about completing a self-instructional module 58% are not excited about completing a self-instructional module	Survey

Learning Styles & Group Characteristics

Visual / auditory preference	**Perception of Information:** Visual - 100% responded as being highly visual regarding the perception of information. Auditory - 100% also reported auditory (i.e. through words and sounds) as a tool in the perception of information.	Survey

Sensory / intuitive	**Types of Information Preferentially Perceived:** Sensory (external) - 59% responded as preferring sensory information. Intuitive (internal) - 41% responded as preferring internal information perception (i.e. through hunches and insights - the "aha" effect).	Survey
Actively / reflectively	**How Information is Processed:** Actively - 71% preferred processing information through physical engagement/discussion. Reflectively - 29% preferred to ponder/reflect as a means of processing information.	Survey
Sequentially / globally	**How progress towards understanding takes place:** Sequentially - 53% preferred to take a series of related steps in progressing towards understanding. Globally - 47% preferred to take a series of related steps in progressing towards understanding.	Survey
General group characteristics Heterogeneity Size Overall impression	There are 17 teachers in this group. Overall, they are interested in learning many different tools in their classrooms, including Photosotory. Most have done some training online, but not taken an online class. They are skeptical about the effectiveness of a self-instructional module. They prefer to have an instructor present to answer questions and offer help.	Survey analysis, informal conversations

Instructional Environment / Context

Managerial supervisory support	The principal has mandated that every teacher be trained on Photo Story.	Not applicable
Availability of needed technology **Hardware** **Software**	There are 17 teachers. Each teacher has been issued a laptop with a built-in microphone. As a backup, we have 24 desktop computers and 2 microphones for now. Photo Story has been installed on all of the desktop computers. Only 3/17 teachers have installed Photo Story on their laptops. This will be a requirement prior to the self-instructional module.	Not applicable
Availability of needed Resources	No other resources are needed.	Not applicable
Physical aspects of site for implementation	We will have access to the computer lab. This is a desirable environment because of the large desks, good wireless connections, multiple Ethernet ports (as a backup), and windows that open (Fayetteville State controls the heater, not Cross Creek. This room is the most comfortable in the building).	Not applicable

Social aspects of site	This room is large enough to accommodate the entire faculty.	Not applicable
Relevance of skills to workplace	It is expected that all Cross Creek teachers know how to use Photo Story.	Mandate from the principal

Figure 5
Portion of Environmental Analysis

Current Situation
110 student laptops and 22 desktops
129 licenses of Microsoft Office
3 Wireless G routers
1 part-time Instructional Technology Facilitator 1 full-time Instructional Liaison
22 Ethernet ports
6 laptop carts

Figure 6
Task Analysis Flow Chart

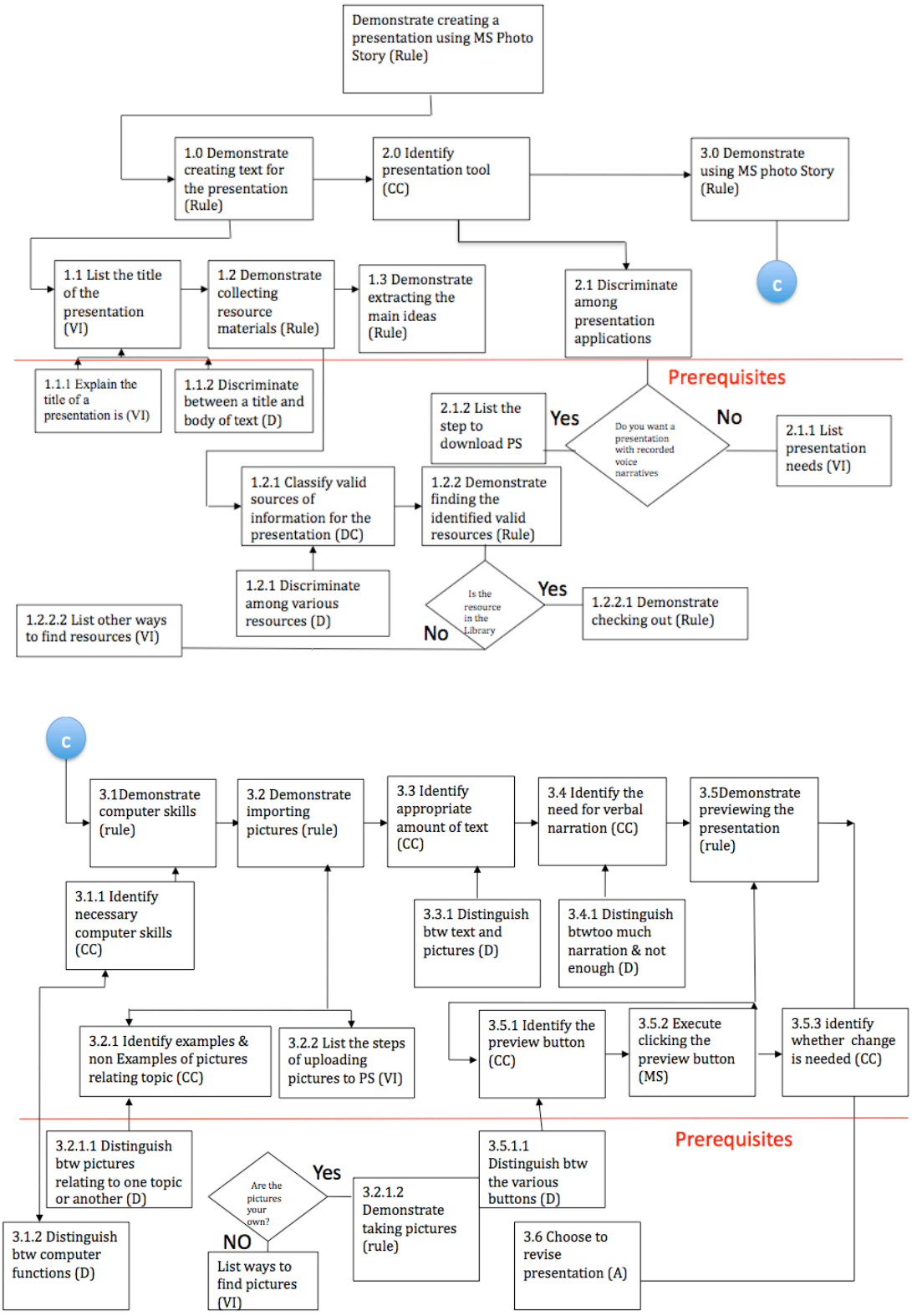

Figure 7
Goals & Objectives

Tasks	Terminal & Target Objectives
1.0 Demonstrate creating text for the presentation	Given the topic "My Favorite Vacation" the learner will demonstrate creating text for a presentation by developing text, relevant to the topic, for 8 slides.
1.1 List the title of the presentation	When provided with instructions, the learner will list the title of the presentation by writing a title that is relevant to the topic of the presentation
1.2 Demonstrate collecting resource materials	Given access to a data base and a topic the learner will demonstrate collecting resource materials by assembling five resources relevant to the topic.
1.3 Demonstrate extracting the main ideas (Rule)	Given resource materials and presentation slides, the learner will demonstrate extracting main ideas by listing them on notebook and labeling each main idea with the title of the slide
2.0 Identify presentation tool (CC)	Given a list of possible presentation needs, a brief description of Photo Story features and a list of various presentation applications, the learner will be able to identify the application that suits the needs best by selecting it onscreen.
2.1 Discriminate among presentation applications (D)	Given a list of various presentation applications and brief descriptions of their features, the learner will be able to discriminate between them and choose by identifying which description is associated with which application
3.0 Demonstrate using MS Photo Story (rule)	Given Photo Story application and directions, the learner will be able to demonstrate integration of previous assessment skills with application tool by creating Photo Story application assessment
3.1 Demonstrate computer skills	Given prior basic computer skills, the learner will be able to discriminate between necessary and unnecessary skills the learner will utilize in creating presentation, by having completed a PSA tutorial.
3.1.1 Identify necessary computer skills (CC)	Given a list of necessary computer skill descriptions required to perform all functions associated with Photo Story, the leaner will be able to identify those skills needed by selecting them on an onscreen list
3.1.2 Distinguish between computer functions (D)	Given a list of necessary and unnecessary computer skills, the learner will be able to discriminate between which skills will or will not be mandatory to use the features associated with Photo Story by selecting them on an onscreen list.
3.2 Demonstrate the ability to import pictures (rule)	Given a theme for what type of visuals to select, the learner will be able to demonstrate ability to import pictures from online websites onto Photo Story by searching the web and applying newly learned skills, without any human assistance.
3.2.1 Identify examples & non examples of pictures relating topic (CC)	Given the theme in 3.2, the learner will be able to identify pictures relating to the topic and those pictures not relating to the topic by selecting them on an onscreen list.

3.2.2 List the steps of uploading pictures to Photo Story (VI)	Given the pictures that are examples of topic, the learner will be able to state or list the steps involved with uploading those pictures into Photo Story using a PC desktop
3.3 Identify the appropriate amount of text (CC)	Given instructions on how to clarify content of slides through written information, the learner will identify which images they will write captions and/or headings for, while noting through written word why they did or did not add text to each slide.
3.3.1 Distinguish between text and pictures	Given instructions to discriminate between text and pictures, the learner will be able to discriminate between text and pictures by selecting them onscreen
3.4 Identify when verbal narration is needed (CC)	Given instructions on how to clarify content of slides through verbal narration, the learner will be able to identify which the need for which slides will benefit from the inclusion of audio files by recording oral narration using microphone, and by including brief reason why narration was needed within the verbal narration included in the slides.
3.4.1 Distinguish between too much narration and not enough (D)	Given a set of standard rules for the amount of narration to be used in presentations, the learner will be able to differentiate between the use of too much or too little narration by selecting the variations onscreen
3.5 Demonstrate the ability to preview the presentation (Rule)	Given instruction on how to activate the PSA preview capabilities, the learner will demonstrate the ability to activate the preview feature by clicking all the appropriate places and will also give oral presentation to fellow students describing rationale behind decisions.
3.5.1 Identify the preview button (CC)	Given instruction, the learner will be able to identify the onscreen preview button by selecting it onscreen
3.5.2 Execute clicking the preview button (MS)	Given instruction to do so, the learner will show they can move the onscreen cursor in towards the preview button and then clicking the onscreen button by left-clicking the mouse button
3.5.3 Identify whether change is needed (CC)	Given a preview of their product, the learner will identify any changes that need to be made and apply those changes post tutorial
3.6 Decide whether or not you need to revise your project (D)	Having been given a peer review, the learner will discriminate between which slides need to be revised and will give suggestions for improvement to other students through peer review process.

Figure 8
Goals, Objectives & Assessments

Tasks	Terminal & Target Objectives	Assessments
1.0 Demonstrate creating text for the presentation	Given the topic "My Favorite Vacation" the learner will demonstrate creating text for a presentation by developing text, relevant to the topic, for 8 slides.	From the topic "My Favorite Vacation," develop text that is relevant text for 8 slides
2.0 Identify presentation tool (CC)	Given a list of possible presentation needs, a brief description of Photo Shop features and a list of various presentation applications, the learner will be able to identify the application that suits the needs best by selecting it onscreen.	From the list of descriptions of needs, Photo Shop features and other presentation tools, click on the presentation tool that best match up with the needs.
2.1 Discriminate among presentation applications (D)	Given a list of various presentation applications and brief descriptions of their features, the learner will be able to discriminate between them and choose by identifying which description is associated with which application	From the list of applications and included features, choose the description that matches the application.
3.0 Demonstrate using MS Photo Story (rule)	Given Photo Story application and directions, the learner will be able to demonstrate integration of previous assessment skills with application tool by creating Photo Story application assessment	From the given Photo Story application directions, create an assessment using the software and integrate subject matter and prior knowledge of creating assessments.
3.1 Demonstrate computer skills	Given prior basic computer skills, the learner will be able to discriminate between necessary and unnecessary skills the learner will utilize in creating presentation, by having completed a PSA tutorial.	Given prior knowledge of basic computer skills and a list of computer skills, choose which skills will be required to create presentation assessment using Photo Story
3.2 Demonstrate the ability to import pictures (rule)	Given a theme for what type of visuals to select, the learner will be able to demonstrate ability to import pictures from online	With the theme given, search online websites and demonstrate importing pictures you choose onto

	websites onto Photo Story by searching the web and applying newly learned skills.	Photo Story.
3.3 Identify the appropriate amount of text (CC)	Given instructions on how to clarify content of slides through written information, the learner will identify which images they will write captions and/or headings for, while noting through written word why they did or did not add text to each slide.	Using the instructions provided, identify which slides require captions, write captions for those slides and give reason for not adding captions to slides that were not included (if that applies).
3.4 Identify when verbal narration is needed (CC)	Given instructions on how to clarify content of slides through verbal narration, the learner will be able to identify which the need for which slides will benefit from the inclusion of audio files by recording oral narration using microphone, and by including brief reason why narration was needed within the verbal narration included in the slides.	Using the set of instructions given, indentify slides requiring audio narration, record narration for those slides using the microphone provided and give reason why narration was or was not utilized.
3.5 Demonstrate the ability to preview the presentation (Rule)	Given instruction on how to activate the PSA preview capabilities, the learner will demonstrate the ability to activate the preview feature by clicking all the appropriate places and will also give oral presentation to fellow students describing rationale behind decisions.	With the instruction provided, activate the preview feature and provide oral presentation to peers that describe the rationale behind the decisions used in the presentation.

Figure 9
Test Questions

ABOUT THE TOOLS

1. True or False: It is necessary to create a rubric when using Photo Story 3 as an assessment tool. **T** or F
2. Which of the following presentation tools is available via free download?
    a. PowerPoint 2010
    b. Adobe Captivate 5
    c. Photo Story 3
    d. None of the above
3. Which of the following presentation tools does not include the option to create voice narration?
    a. PowerPoint 2010
    b. Windows Live Movie Maker
    c. Photo Story 3
    d. Adobe Captivate 5

CREATING A THEME

4. It is a good idea to use generic topics for student presentations because
    a. Students like generic topics
    b. It is easier to create rubrics for them
    c. It is a good way to familiarize students with Photo Story 3
    d. It is easier to manage as an instructor
5. After you have selected a theme for your presentation, what is the next step
    a. **Find pictures for your presentation and save them in your picture file**
    b. Import pictures into Photo Story 3
    c. Select the picture frame options
    d. Select the audio toggle

UPLOADING PICTURES

6. Where do you upload pictures from?
    a. Directly from online sources
    b. Directly from your computer picture folder
    c. Directly from your camera
    d. Directly from the Photo Story 3 Mega Widget
7. Which of the following is best-suited for text on each slide?
    a. PowerPoint 2010
    b. Photo Story 3
    c. Windows Live Movie Maker
    d. Apple iMovie
8. Text editing options in Photo Story 3 include all of the following except
    a. All Caps
    b. Color

c. Font Style
d. Size

9. Pictures can be edited
    a. Before they are uploaded
    b. After they are uploaded
    c. Both A and B
    d. Neither A or B
10. True or False: Placement of text captions on pictures can be relocated by selecting text and dragging it. T or **F**

ADDING AUDIO

11. True or False: Audio narration can be recorded in Photo Story 3. **T** or F

PREVIEWING & SAVING

12. True or False: You can preview your presentation at any time by clicking on the Preview button. **T** or F
13. The presentation will be saved as a
    a. VLC file
    b. mp3 file
    c. GIF file
    d. wmv file
14. It important to also save your presentation as a project (.wp3) file for the following reasons EXCEPT:
    a. To be able to add more pictures
    b. To be able to change features added to photos
    c. To be able to publish presentation online
    d. To be able to add sound if you wish

Figure 10
Item by Item Analysis Table: Objective 1

Item by Item Objective Analysis Table: Objective 1						
Objectives	1.1	1.2		1.3	Items	Objectives
Items	10	1	5	4	# (%)	# (%)
Student 1	1	1	0	1	3 (75)	2.5 (83)
Student 2	1	1	1	1	4 (100)	3 (100)
Student 3	1	1	1	1	4 (100)	3 (100)
Student 4	1	1	1	1	4 (100)	3 (100)
Student 5	1	1	1	0	3 (75)	2 (67)
Student 6	0	1	0	0	1 (25)	0.5 (17)
# of Students Correct	5	6	4	4		
% of Students Correct	83	100	67	67		
% Mastering Objective	83	83		67		

Figure 11
Item by Item Objective Analysis Table: Objective 2

Item by Item Objective Analysis Table: Objective 2			
Objectives	2.1	Items	Objectives
Items	3	# (%)	# (%)
Student 1	1	1 (100)	1 (100)
Student 2	1	1 (100)	1 (100)
Student 3	1	1 (100)	1 (100)
Student 4	1	1 (100)	1 (100)
Student 5	1	1 (100)	1 (100)
Student 6	1	1 (100)	1 (100)
# of Students Correct	6		
% of Students Correct	100		
% Mastering Objective	100		

Figure 12
Item by Item Objective Analysis Table: Objective 3

Item by Item Objective Analysis Table: Objective 3										
Objectives	3.1	3.2		3.3	3.4	3.5	3.6		Items	Objectives
Items	6	8	9	7	11	12	13	14	# (%)	# (%)
Student 1	1	0	1	0	1	1	0	0	4 (50)	3.5 (58)
Student 2	1	1	0	1	0	1	0	0	4 (50)	3.5 (58)
Student 3	1	1	1	1	1	1	0	1	7 (88)	5.5 (92)
Student 4	1	1	1	0	1	1	1	1	7 (88)	5 (83)
Student 5	1	0	0	1	1	0	1	1	5 (63)	4 (67)
Student 6	1	0	1	0	0	1	0	1	4 (50)	3 (50)
# of Students Correct	6	3	4	3	4	5	2	4		
% of Students Correct	100	50	67	50	67	83	33	67		
% Mastering Objective	100	58		50	67	83	50			

Figure 13
Student Performance on Pre- and Post-Test

Student Performance on Pre- and Post-Test By Objective																				
Objectives	1.1		1.2		1.3		2.1		3.1		3.2		3.3		3.4		3.5		3.6	
Test	PR	PS	PR	PS	PR	PS	PR	PS	PR	PS	PR	PS	PR	PS	PR	PS	PR	PS	PR	PS
Student 1	0	1	0	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	0
Student 2	0	1	1	1	0	1	1	1	0	1	1	1	0	1	0	0	0	1	0	0
Student 3	1	1	1	1	1	1	1	1	0	1	0	1	1	1	0	1	1	1	0	1
Student 4	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1
Student 5	1	1	1	1	0	0	0	1	1	1	1	0	1	1	1	1	0	0	1	1
Student 6	0	0	0	1	0	0	0	1	1	1	1	1	0	0	0	0	0	1	0	1
% Mastering	50	83	67	100	50	67	67	100	67	100	67	83	50	50	50	67	50	83	33	67
Difference Gain in Score (%)	33		33		17		33		33		17		0		17		33		34	

Figure 14
Pre-Test and Post-Test Data by % of Total Possible Objectives

Pre-Test and Post-Test Data by %		
Student #	Pre-Test	Post-Test
1	60	80
2	30	80
3	60	100
4	90	90
5	70	70
6	20	60
Mean	55	80

Figure 15
Log of Activities

Date/Week	Activities	Estimated Devoted Time
Sept 2nd – 9th	Identified team members and client. Determined overall summary of Module	2.5 hours
Sept. 9th to 29th	Developed questions and emailed survey to teachers and interviewed Principal. Constructed Needs Analysis and identified goals	8 hours
Sept. 29th – 13th	Expert review.	4 hours
Oct. 13th – Nov 1st	Task analysis	20 hours (total including revisions)
Oct 20th – Nov. 10	Developed questions and distributed survey for learner and context analysis	2 hours
Nov. 14th	Identified Performance Objectives	2 hours
Nov. 15th	Identified Assessments	2 hours
Nov. 20th – Dec 5	Instructional module developed	28 hours
Dec. 5 – Dec. 7	Formative evaluation conducted	6 hours

Dec. 1 - Dec. 8 Finalized Reports	9 hours
Total Estimated Time:	**83.5 hours**