

Written Assignment 2: Capstone

by
Megan Conners Murtaugh
EDD8010 CRN50763
Curriculum & Program Development

Nova Southeastern University
August 9, 2012

Table of Contents

	Page
Introduction.....	4
Background.....	4
Formal Instructional Design Model.....	4
Rationale.....	5
Instructional Setting.....	5
Needs Assessment.....	5
Learners and Context.....	5
Goal Analysis.....	6
Knowledge and Skills.....	6
Goal Statement.....	6
Learning Domain.....	7
Learning and Performance Context.....	7
Instructional Analysis.....	7
Performance Objectives.....	7
Assessment Instrument.....	8
Instructional Treatment Plan.....	8
Pre-instructional Strategies.....	8
Motivation.....	8
Objectives.....	8
Content Presentation.....	9
Learner Participation.....	10
Assessment.....	10
Follow Through Activities.....	10
Memory Aids.....	10
Transfer of Learning.....	10
Formative Evaluation.....	10
Subjects.....	10
Instrument.....	11
Procedure.....	11
References.....	12

Appendices

A	Hierarchical Analysis Diagram.....	13
B	Podcast Workshop Performance Objectives	14
C	Podcast Workshop Observer Checklist	17
D	Podcast Workshop Storyboard	18
E	Podcast Workshop Learner Survey	19

Written Assignment 2: Capstone

Introduction

The purpose of this assignment is to describe a plan for the creation of an instructional unit requiring 50-100 minutes of instruction. The instructional plan that will be presented is for a workshop on creating an introductory podcast for instructors to use at the beginning of the school year.

As part of the instructional plan, the instructional design model that will be used to construct the proposed workshop with the rationale behind its selection will be presented by the designer. A needs assessment for the proposed workshop will be included as well as the content, objectives, resources and evaluation tools that will be utilized will be discussed.

Background

Geoghegan and Klass describe podcasts as “one of the most exciting and wonderfully disruptive technologies to emerge in recent history” (2007, p.1). Podcasts are electronic recordings that present a single-concept lesson to listeners using audio and still or motion media, lasts between 3 to 10 minutes, and can be subscribed to similar to magazines, journals, or newspapers with automatic delivery (Simonson, 2007).

Formal Instructional Design Model. The formal instructional design model that will be used for this proposal is the Dick and Carey Systems Approach Model (2009). For this instructional design model, there are 10 components to the process. They include identifying instructional goals, conducting instructional analysis, analyzing learners and contexts, writing performance objectives, developing assessment instruments, developing instructional strategies, developing and selecting instructional materials, designing and conducting a formative evaluation, revising instruction, and designing and conducting a summative evaluation.

Rationale. Morrison, Ross Kalman, and Kemp state that “the goal of instructional design is to make learning more efficient and effective and less difficult” (2011, p. 2). Therefore it is important that a systematic process is followed to create and evaluate instruction. The Dick and Carey Systems Approach Model for Designing Instruction was selected for this content because it is simple and includes the basic components of instructional design “analysis, design, development, implementation, and evaluation” (Dick, Carey, & Carey, 2009, p. 3).

Instructional Setting. The instructional plan for this assignment is being prepared for an elementary school in southwest Florida.

Needs Assessment. The type of need assessment conducted for this instructional plan was an expressed needs assessment. Morrison et al. describe an expressed need as one where an individual seeks to modify their ability to conduct a task or activity (2011). During the spring of 2012, the designer met with the principal of a new Science, Technology, Engineering, and Mathematics (STEM) school in the area. The principal would like to offer a podcasting class for elementary students that participate in the afterschool club at the STEM school. First, teachers need training on how to create podcasts to facilitate this activity with students in the afterschool club. Therefore, the instructional plan in this assignment will be geared towards training teachers who will instruct students in the afterschool club how to create a podcast. The principal provided information gathered during the interview process about teachers who would be running the afterschool club with the instructional designer. The teachers expressed a need for training on how to make a podcast as not one of them had created a podcast before.

Learners and Contexts. The participants of this workshop will be teachers certified to teach in elementary education classrooms in the state of Florida. These teachers have experience using digital cameras, recording devices, multi-media software, and the Internet. They have not

created podcasts before but classify themselves as comfortable and experienced using technology for instructional purposes. The setting for the training workshop will be the technology lab of the STEM school. The technology resources that will be used for this workshop include computer stations with preloaded software (PowerPoint and Camtasia), internet connectivity, USB microphone headsets, portable storage devices, and an LCD projector.

Goal Analysis

Knowledge and Skills. The skills that will be necessary for learners to complete this podcast workshop include basic computer operation and computer software skills. Pre-requisite skills necessary for this podcast workshop are ability to create slides in PowerPoint software with text and graphics or images, being able to open software programs by using a desktop shortcut, create or locate images such as JPEG or GIF files for project use and write sentences to describe who they are.

Goal Statement. A goal is a general statement of learning expectations as a result of receiving instruction (Smaldino, Lowther, and Russell, 2008). There are four components that should be utilized when writing a goal statement (Dick, Carey, & Carey, 2009). Those four components include who will receive the instruction, what the learners are expected to do as a result of the instruction, the context where the learning will occur, and the tools that will be used to demonstrate learning. When all four components are synthesized into one statement a goal is created.

Goal: The goal of the podcasting workshop is for teachers to learn how to make and produce their own brief (3 minutes or less) self-introductory podcast for use with their students. This goal will take place in the STEM learning lab within their place of employment utilizing computers, PowerPoint, digital images, and Camtasia Software.

Learning Domain. Learning outcomes can be classified into five different categories: (a) intellectual skills, (b) verbal information, (c) cognitive strategies, (d) attitudes, and (e) motor skills (Gagné, 1984). For this workshop, motor skills are required to accomplish the goal of the instruction. However, in order to complete the entire goal of the instruction, the learners need to use the cognitive process of application in order to create the podcast. For this instructional goal domain of learning that is most appropriate for the goal statement is intellectual skills. The learners will navigate a step by step process to successfully create a self-introductory podcast for use with students.

Learning and Performance Context. Learners will be instructed on how to use a step by step process to produce a self-introductory podcast in the STEM learning lab. After the learners have received instruction on the step by step process they will follow the steps in order to produce their self-introductory podcast. Learners will have the opportunity to transfer learning when they conduct the same instruction with students enrolled in the STEM afterschool club.

Instructional Analysis

For this phase in the instructional design process a hierarchical analysis diagram was completed (See Appendix A).

Performance Objectives

Performance objectives are an inclusive compilation of learner accomplishments after receiving instruction (Dick, Carey, & Carey, 2009). A complete table of all performance objectives was created by using the hierarchical analysis diagram as a guide for writing each performance objective (See Appendix B).

Assessment Instrument

As part of the instructional design process, assessment needs to occur to determine if the instruction provided to the learner brings about a change in knowledge or behavior (Dick, Carey, & Carey, 2009). Two assessments necessary for this podcast workshop instruction plan were an entry skills and a performance objectives assessments to check for pre-requisite skills needed to participate in the podcast workshop. Based on the hierarchical analysis diagram a checklist, the Podcast Workshop Observer Checklist, was created to assess both entry skills and performance objectives (See Appendix C).

Instructional Treatment Plan

In order to conduct the podcast workshop, an instructional plan needed to be developed that outlined each component and how the instruction would be delivered. The instructional plan includes pre-instructional activities, the goal and objectives, media, content presentation, learner participation, assessment, and follow through activities for delivering instruction.

Pre-instructional Strategies

Motivation. All of the learners involved in the program requested training to learn how to create podcasts, therefore, they should already have an internal desire to participate in the podcast workshop. In addition, an opening activity will be done in which the presenter of the workshop shares their own self-introductory podcast to get them hooked into the instruction.

Objectives. The goal and objectives of the podcast workshop will be stated at the beginning of the instruction.

Goal. The goal of the podcasting workshop is for teachers to learn how to make and produce their own brief (3 minutes or less) self-introductory podcast for use with their students. This goal will take place in the STEM learning lab within their place of employment utilizing computers, PowerPoint, digital images, Camtasia Software and Youtube as a hosting site.

Objectives. 1) Learners will use 4 digital images and text to create five slides, one of which will be a title slide, to create a PowerPoint presentation for use in the final production of the self-introductory podcast. 2) Learners will compose a brief script between 1 and 3 minutes in length introducing themselves to their students that compliments the images they selected through the use of a storyboard (See Appendix D). 3) Learners will narrate their PowerPoint presentation by using their scripted storyboard and Camtasia screencasting software to record it. 4) Learners will publish their completed screencast to Youtube in order to syndicate their self-introductory podcast.

Media selection. The media that will be used to provide instruction for the self-introductory podcast are text, images, audio, and video.

Content Presentation. The presenter will use a pre-recorded self-introductory podcast to show learners what their intended learning outcomes encompass for the podcast workshop. Next, the presenter will demonstrate the step by step process of creating the self-introductory podcast. First, the presenter will display a flashdrive (one type of portable storage device) to show learners where the images for the podcast are stored. Second, the presenter will project the storyboard that was created to guide the creation of the PowerPoint presentation. Third, the presenter will open a previously created PowerPoint file that contains the title slide, four slides with images and any accompanying text that will be used for the podcast and select slideshow start from the beginning. Fourth, the presenter will open Camtasia and demonstrate how to drag and resize the recording screen to include all of the slideshow in the recording area. Fifth, the presenter will press the F9 button on the keyboard and begin recording the narration for the podcast. Sixth, the presenter will show the learners how to save the Camtasia recording. Next,

the presenter will click on the Publish & Share button located at the top of the Camtasia toolbar to provide the remaining steps of publishing the recording to the learners' Youtube account for syndication.

Learner Participation. After watching the demonstration provided by the presenter, the learners will follow the same sequence to create their own self-introductory podcast for use with their students.

Assessment. The pre-test assessment that will be used prior to instruction is the entry skills checklist (See Appendix C). The post-test assessment that will be used after the learner has completed the performance objectives is the Podcast Workshop Assessment (See Appendix C).

Follow Through Activities

Memory Aids. A recording of the workshop will be provided to learners to reference in the future should they need help recalling the steps they completed in the process.

Transfer of Learning. Once learners have completed their own self-introductory podcast they will conduct the same instruction with the students enrolled in the STEM afterschool club.

Formative Evaluation

The formative evaluation process typically involves three steps, a clinical evaluation, a small group evaluation and a field trial (Dick, Carey & Carey, 2009). For the self-introductory podcast workshop, the formative evaluation will focus on the small group evaluation involving five individual learners (Dick, Carey & Carey, 2009).

Subjects. The learners will consist of five elementary education teachers that work at a STEM school. These learners will be responsible for instructing their afterschool club members how to create a podcast. All of the learners have experience with instructional

technology and possess the pre-requisite skills necessary to complete the instructional workshop. However, they lack the knowledge of how to produce a podcast.

Instrument. The instrument that will be used to collect data about the learners' experiences with the instruction provided to them in the self-introductory podcast workshop will be a survey Podcast Workshop Learner Survey (See Appendix E) containing five closed questions and one open ended questions regarding their experience in the workshop.

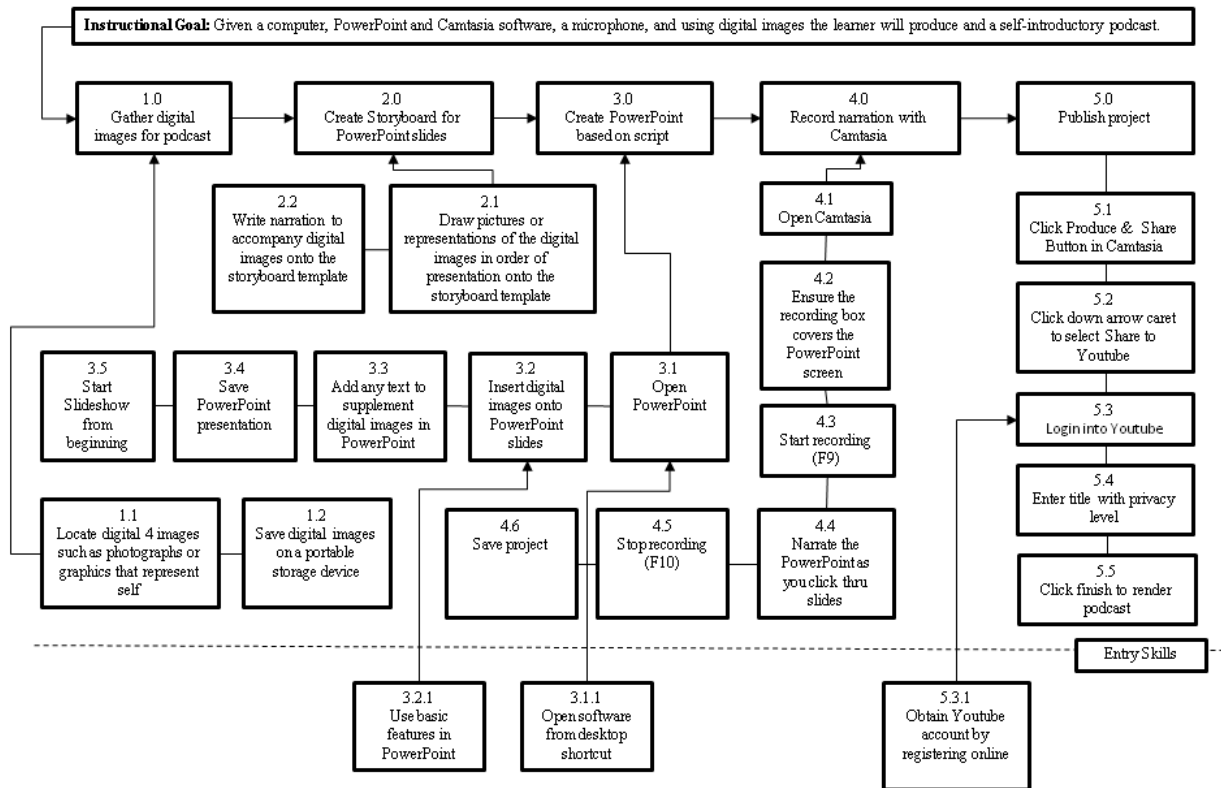
Procedure. After completing the self-introductory podcast workshop, learners will be given a brief survey titled Podcast Workshop Learner Survey (See Appendix E). The presenter will leave an envelope for the participants to place their survey in on a table in the back of the learning lab so they may turn them in confidentially. The presenter will review and analyze the data provided by the learners through the Podcast Workshop Learner Survey. Suggestions and comments will be considered when revising instruction for future delivery of the workshop.

References

- Dick, W., Carey, L., & Carey, J. O. (2009). *The systematic design of instruction* (7th ed.). New York, NY: Allyn & Bacon.
- Gagné, R. M. (1984). Learning outcomes and their effects: Useful categories of human performance. *American Psychologist*, 39(4), 377-385.
- Geoghegan, M. & Klass, D. (2007). *Podcast solutions: The complete guide to audio and video podcasting*. New York: Springer-Verlag.
- Morrison, G. R., Ross, S. M., Kalman, H. K., and Kemp, J. E. (2011). *Designing effective instruction* (6th ed). Hoboken: NJ: John Wiley & Sons, Inc.
- Simonson, M., (2007). Podcasting...or “Seeds floating down from the sky”. *Distance Learning...for Educators, Trainers, and Leaders*, 4(2), 102-103.
- Smaldino, S. E., Lowther, D. L., & Russell, J. D. (2008). *Instructional technology and media for learning* (9th ed.). Upper Saddle River, NJ: Prentice Hall.

Appendix A

Podcast Hierarchical Analysis Diagram



Appendix B

Podcast Workshop Performance Objectives and Assessment

Skill	Performance Objective	Assessment
Goal Statement	Terminal Objective	Assessment
Given a computer, PowerPoint and Camtasia software, a microphone, and using digital images the learner will produce and a self-introductory podcast	Given a computer, PowerPoint and Camtasia software, a microphone, and using digital images the learner will produce and a self-introductory podcast	The assessment for this learning objective is the Podcast Workshop Observer Checklist (PWOC) to be completed by the observer as the learner accomplishes each step in the procedure. (PWOC included below)
1.0 Gather digital images for podcast	<i>Note sub-step objectives shown below</i>	<i>Note sub-step objectives shown below</i>
1.1 Locate 4 digital images such as photographs or graphics that represent self	1.1 Learner has in their possession 4 images such as photographs or graphics that represent self when they arrive for the workshop.	Observer will note on the PWOC that the learner brought 4 images such as photographs or graphics that represent self with them when they arrived for the workshop.
1.2 Save digital images on a portable storage device	1.2 Learner has in their possession 4 images such as photographs or graphics that represent self when they arrive for the workshop on a portable device.	Observer will note on the PWOC that the learner brought 4 images such as photographs or graphics that represent self with them when they arrived for the workshop on a portable device.
2.0 Create Storyboard for PowerPoint slides	<i>Note sub-step objectives shown below</i>	<i>Note sub-step objectives shown below</i>
2.1 Draw pictures or representations of the digital images in order of presentation onto the storyboard template	2.1 Learner draws pictures or representations of the digital images in order of presentation onto the storyboard template.	Observer will note on the PWOC that the learner drew pictures or representations of the digital images in order of presentation onto the storyboard template.
2.2 Write narration to accompany digital images onto the storyboard template	2.2 Learner writes narration to accompany digital images onto the storyboard template.	Observer will note on the PWOC that the learner writes narration to accompany digital images onto the storyboard template.
3.0 Create PowerPoint based on script	<i>Note sub-step objectives shown below</i>	<i>Note sub-step objectives shown below</i>

3.1.1 Open software from desktop shortcut (entry skill)	3.1.1 Learner will open specified software by clicking on a desktop shortcut.	Observer will note on the PWOC that the learner opened specified software by clicking on a desktop shortcut.
3.1 Open PowerPoint	3.1 Learner will open PowerPoint software by clicking on a desktop shortcut.	Observer will note on the PWOC that the learner opened PowerPoint software by clicking on a desktop shortcut.
3.2.1 Use basic features in PowerPoint (entry skill)	3.2.1 Learner can use basic features in PowerPoint.	*This skill was a pre-requisite that was observed previously.
3.2 Insert digital images onto PowerPoint slides	3.2 Learner inserts a single digital image onto each PowerPoint slide.	Observer will note on the PWOC that the learner inserted a single digital image onto each PowerPoint slide.
3.3 Add any text to supplement digital images in PowerPoint	3.3 Learner adds text to supplement each digital image in PowerPoint.	Observer will note on the PWOC that the learner added text to supplement each digital image in PowerPoint.
3.4 Save PowerPoint presentation	3.4 Learner saves PowerPoint presentation to portable storage device.	Observer will note on the PWOC that the learner saved PowerPoint presentation to portable storage device.
3.5 Start Slideshow from beginning	3.5 Learner starts slideshow by clicking on the slideshow button marked start from beginning.	Observer will note on the PWOC that the learner started slideshow by clicking on the slideshow button marked start from beginning.
4.0 Record narration with Camtasia	<i>Note sub-step objectives shown below</i>	<i>Note sub-step objectives shown below</i>
4.1 Open Camtasia	4.1 Learner will open Camtasia software by clicking on a desktop shortcut.	Observer will note on the PWOC that the learner opened Camtasia software by clicking on a desktop shortcut.
4.2 Ensure the recording box covers the PowerPoint screen	4.2 Learner will drag edges of recording screen to ensure the recording box covers the PowerPoint screen.	Observer will note on the PWOC that the learner dragged edges of recording screen to ensure the recording box covers the PowerPoint screen.
4.3 Start recording (F9)	4.3 Learner will start recording by pressing F9 on the keyboard.	Observer will note on the PWOC that the learner started recording by pressing F9 on the keyboard.

4.4 Narrate the PowerPoint as you click thru slides	4.4 Learner will narrate the PowerPoint as they click thru each slide.	Observer will note on the PWOC that the learner narrated the PowerPoint as they click thru each slide.
4.5 Stop recording (F10)	4.5 Learner will stop recording by pressing F10 on the keyboard.	Observer will note on the PWOC that the learner stopped recording by pressing F10 on the keyboard.
4.6 Save project	4.6 Learner will save Camtasia project to portable storage device by clicking File Save As to enter an appropriate title.	Observer will note on the PWOC that the learner saved Camtasia project to portable storage device by clicking File Save As to enter an appropriate title.
5.0 Publish project	<i>Note sub-step objectives shown below</i>	<i>Note sub-step objectives shown below</i>
5.1 Click Produce & Share button in Camtasia	5.1 Learner will produce podcast by clicking Produce & Share button in Camtasia software.	Observer will note on the PWOC that the learner produced podcast by clicking Produce & Share button in Camtasia software.
5.2 Click down arrow caret to select Share to Youtube	5.2 Learner will click down arrow caret to select Share to Youtube.	Observer will note on the PWOC that the learner clicked down arrow caret to select Share to Youtube.
5.3.1 Obtain Youtube account by registering online (entry skill)	5.3.1 Learners will obtain a Youtube account by registering online.	*This was a pre-workshop activity completed by the technology specialist.
5.3 Login into Youtube	5.3 Learners will log in to their Youtube account.	Observer will note on the PWOC that the learner logged in to their Youtube account.
5.4 Enter title with privacy level	5.4 Learners will type title with an unlisted privacy level selected.	Observer will note on the PWOC that the learner typed title with an unlisted privacy level selected.
5.5 Click finish to render podcast	5.5 Learners will click the finish button to render their podcast.	Observer will note on the PWOC that the learner clicked the finish button to render their podcast.

Appendix C

Podcast Workshop Observer Checklist (PWOC)

This assessment is a checklist to be used by the observer to assess the performance of the learner in a procedure based lesson. The observer will watch the learner as they complete the sequential procedures listed below to produce a self-introductory podcast for use with students.

Entry Skills*	
<input type="checkbox"/>	3.1.1- learner opened specified software by clicking on a desktop shortcut.
<input checked="" type="checkbox"/>	3.2.1- Learner can use basic features in PowerPoint. (previously assessed)
<input checked="" type="checkbox"/>	5.3.1- Learners will obtain a Youtube account by registering online. (previously assessed)
Produce Self-Introductory Podcast	
<input type="checkbox"/>	1.1- learner brought 4 images such as photographs or graphics that represent self with them when they arrived for the workshop.
<input type="checkbox"/>	1.2- learner brought 4 images such as photographs or graphics that represent self with them when they arrived for the workshop on a portable device.
<input type="checkbox"/>	2.1- learner drew pictures or representations of the digital images in order of presentation onto the storyboard template.
<input type="checkbox"/>	2.2- learner writes narration to accompany digital images onto the storyboard template.
<input type="checkbox"/>	3.1- learner opened PowerPoint software by clicking on a desktop shortcut.
<input type="checkbox"/>	3.2- learner inserted a single digital image onto each PowerPoint slide.
<input type="checkbox"/>	3.3- learner added text to supplement each digital image in PowerPoint.
<input type="checkbox"/>	3.4- learner saved PowerPoint presentation to portable storage device.
<input type="checkbox"/>	3.5- learner started slideshow by clicking on the slideshow button marked start from beginning.
<input type="checkbox"/>	4.1- learner opened Camtasia software by clicking on a desktop shortcut.
<input type="checkbox"/>	4.2- learner dragged edges of recording screen to ensure the recording box covers the PowerPoint screen.
<input type="checkbox"/>	4.3- learner started recording by pressing F9 on the keyboard.
<input type="checkbox"/>	4.4- learner narrated the PowerPoint as they click thru each slide.
<input type="checkbox"/>	4.5- learner stopped recording by pressing F10 on the keyboard.
<input type="checkbox"/>	4.6- learner saved Camtasia project to portable storage device by clicking File Save As to enter an appropriate title.
<input type="checkbox"/>	5.1- learner produced podcast by clicking Produce & Share button in Camtasia software.
<input type="checkbox"/>	5.2- learner clicked down arrow caret to select Share to Youtube.
<input type="checkbox"/>	5.3- learner logged in to their Youtube account.
<input type="checkbox"/>	5.4- learner typed title with an unlisted privacy level selected.
<input type="checkbox"/>	5.5- learner clicked the finish button to render their podcast.

*All entry skills must be met with 100% proficiency prior to producing self-introductory podcast. If any of the entry skills are not met with 100% proficiency then the learner should seek instruction for necessary entry skills before continuing with the workshop.

Appendix D

Podcast Workshop Storyboard

Title slide

A storyboard layout for a title slide consisting of two horizontal rectangular boxes. The top box is wider than the bottom box, and they are centered horizontally relative to each other.

Slide 2

A storyboard layout for Slide 2, consisting of a large rectangular box divided into two horizontal sections. The top section is labeled "Image" and the bottom section is labeled "NARRATION:".

Slide 3

A storyboard layout for Slide 3, consisting of a large rectangular box divided into two horizontal sections. The top section is labeled "Image" and the bottom section is labeled "NARRATION:".

Slide 4

A storyboard layout for Slide 4, consisting of a large rectangular box divided into two horizontal sections. The top section is labeled "Image" and the bottom section is labeled "NARRATION:".

Slide 5

A storyboard layout for Slide 5, consisting of a large rectangular box divided into two horizontal sections. The top section is labeled "Image" and the bottom section is labeled "NARRATION:".

Appendix E

Podcast Workshop Learner Survey

Directions: Please indicate the response that describes your level of agreement with each statement listed below in regards to the instruction you received in the self-introductory podcast workshop by circling the corresponding number.

Not Applicable	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
N/A	1	2	3	4	5

1. The process used for creating the self-introductory podcast was sequential.

N/A 1 2 3 4 5

2. The Camtasia software was easy to use to record narration of my PowerPoint and to publish my podcast on Youtube.

N/A 1 2 3 4 5

3. I feel confident that I will be able to instruct the students in the STEM afterschool club.

N/A 1 2 3 4 5

4. The instruction provided was useful to me.

N/A 1 2 3 4 5

5. I will definitely create another podcast to use with my students after participating in this workshop.

N/A 1 2 3 4 5

Please provide any comments or suggestions below that you feel may be helpful in revising this workshop for future presentations. Thank you.