

Technology Integration Training for Teachers

Peter Barron, Kristi Deneke, Lesley Krohn, Brooke Urbina

ISLT 9471: Instructional Systems Design

December 4th 2016

GROUP RESPONSIBILITIES:

Peter Barron	Project Manager	Appendix A/B Weebly Design & Production (Powerpoint) Big Goals & Big Ideas Learning Objectives Needs Assessment Needs Assessment Interview Task Analysis Summative Evaluation Formative Evaluation Learner Analysis
Kristi Deneke	Team Member	Appendix A/B Weebly Design & Production (Adobe Spark) Learning Objectives Needs Assessment Task Analysis Summative Evaluation Formative Evaluation Types of Learning Experiences & Instruction Materials for Training Program
Lesley Krohn	Team Member	Appendix A/B Weebly Design & Production (Blackboard) Learning Objectives Needs Assessment Task Analysis Summative Evaluation Contextual Analysis Materials for Training Program Implementation Plan
Brooke Urbina	Team Member	Appendix A/B Weebly Design & Production (Mindmeister) Learning Objectives Needs Assessment Task Analysis Summative Evaluation

		Implementation Plan
--	--	---------------------

Table of Contents

Group Responsibilities1

I. Desired Results

- A. Broad Goals and Big Ideas.....3
- B. Learning Objectives.....4
- C. Needs Assessment.....6
- D. Task Analysis: Topic Analysis.....7
- E. Task Analysis: Procedure Analysis.....10

II. Evidence of Acceptable Results

- A. Formative Evaluation.....17
- B. Summative Evaluation.....18

III. Learning Experiences and/or Instruction

- A. Learner Analysis.....21
- B. Contextual Analysis.....23
- C. Types of Learning Experiences And/Or Instructions.....27
- D. Materials for Training Program.....28
- E. Implementation Plan.....28

References.....30

Appendices

- A.1 Needs Assessment Instruments.....31
- A.2 Formative Evaluation.....32
- A.3 Summative Evaluation.....32
- A.4 Self Assessment: SAMR Model.....33
- B.1 Project Materials.....34
- B.2 Implementation Plan.....34

I. Desired Results

I-A. Broad Goals and Big Ideas

Technology in the classroom has been progressing ever since there have been classrooms, as well as teachers' implementation and use of this technology. Many schools, depending on their budgets or leadership, have chosen to be either innovators or early adopters of technology, to those who come in with the early or late majority, and even those who come in with the last laggard or holdouts to the technology.

As teachers find new technology in their classroom, whether by choice or by administrative request or other stakeholder demand, where they can differ significantly is how well they implement that technology. Some teachers, regardless of what innovation adoption group they find themselves in, do manage to find novel and engaging uses of this technology, whereas some others only find the barest of uses for it, and others still naturally fall between these two endpoints.

One of the best solutions to address the disparity of quality in teacher use of the technology is to naturally have continuing education that not only educates them on uses of the technology that they had not previously considered, but address teachers who are completely new to the technologies being used.

Our goal for this project is to develop an online-based in-service, using Weebly as an instructional tool and Google Hangouts as an interactive collaboration tool, that teachers can attend at their leisure. The ability to attend Google Hangout meetings for face-to-face interaction, in addition to open access to an online site designed as an instructional tool, will help support teachers new to the various technologies within, but this will also offer innovation to veterans who are looking to refine their use of the technology or look for new approaches within them. We will be focusing on four individual technologies in both common and uncommon use in the Secondary and Higher Education environments:

1. Microsoft Powerpoint and other Presentation Software
2. Student Portfolios and the use of Adobe Spark
3. Collaboration software with Mindmeister
4. Blackboard and other Learning Management Systems

Our goals for this in-service are:

- Goal 1: Participants will assess their own understanding of technology implementation in their classrooms
- Goal 2: Participants will utilize the Weebly tools and practical examples to design and implement new approaches to Presentation software.
- Goal 3: Participants will develop a portfolio using Adobe Spark to use in their classroom with their students
- Goal 4: Participants will be able to understand the benefits of online collaboration with tools like Mindmeister and have prototype ideas established by the end of the in-service
- Goal 5: Participants will utilize tools within the LMS, specifically Blackboard, to support student learning.

I-B. Learning Objectives

Goal 1: Participants will assess their own understanding of technology implementation in their classrooms.

1.1 Participants will assess the effectiveness of their technology integration regarding a specific tool by using the SAMR Model of Integrating Technology as a scoring guide.

Goal 2: Participants will utilize the Weebly tools and practical examples to design and implement new approaches to Presentation software.

2.1: Given examples of various power points on the weebly, the learners will identify which presentation examples exhibit the best learning environments for the intended students.

2.2: Following the instructions on teacher use of presentation software, the participant will be able to construct at least three potential uses of teacher presentation software in their classroom

2.3: Following instruction on student use of presentation software, the participant will be able to construct at least three potential uses of student use of presentation software in their classroom

Goal 3: Participants will develop a portfolio using Adobe Spark to use in their classroom with their students

3.1 Following the instruction of using Adobe Spark, participants will create and share an Adobe Spark Web Story that includes at least 3 different types of content

3.2 Following the instruction of Adobe Spark, participants will share 3 potential uses of Adobe Spark in the classroom for the teacher's use and the student's use.

Goal 4: Participants will be able to understand the benefits of online collaboration with tools like Mindmeister and have prototype ideas established by the end of the in-service

4.1 Following the instruction of Mindmeister, participants develop a way for students within one or more of their classes to effectively collaborate

4.2 Following the instruction of Mindmeister, participants will collaborate with other teachers in the same course to develop a way for students from different classes to effectively collaborate

4.3 Following the use of Mindmeister, participants will share their experience with their departments (and others when possible), offering evaluation of the tool and potential "fixes" for any issues they encountered

Goal 5: Participants will utilize tools within the LMS, specifically Blackboard, to support student learning.

5.1 After reviewing the materials in Weebly regarding Blackboard, participants will identify two or more Blackboard tools used to increase student collaboration through participation in instructor-moderated group discussion with 90% accuracy.

5.2 After reviewing the materials in Weebly regarding Blackboard, participants will demonstrate implementation of a Wiki by creating a group Wiki in Blackboard with 100% accuracy.

5.3 After reviewing the materials in Weebly regarding Blackboard, participants will create a Journal assignment in Blackboard by completing a criteria checklist with 100% accuracy.

5.4 After reviewing the materials in Weebly regarding Blackboard, participants will demonstrate embedding a video into Blackboard by inserting a video into a content folder in Blackboard with 100% accuracy.

I-C. Needs Assessment

Our Needs Assessment was planned out to determine the best information and type of learner education to help learners implement technology based solutions into their own classroom. Our assessment would look at the spread of talent in technology available to

middle school, high school and higher education teachers, and the areas that could be focused on to improve it.

The primary group that we looked to in order to perform our needs assessment were our own colleagues among middle school, high school, and higher education student councils. The experience and specialty of the teachers included covered a wide range and variety .

This group was chosen for the variety of experiences and technology skills they could bring to our assessment. Since they actively teach on the field, they have the benefit of direct application to their instruction and classroom setting. Moreover, given the depth of differences between teachers in how they approach their component subjects and methods, this sample group would yield considerably large information set to consider both general technology use and the four component technologies.

Our first primary assessment tool was a survey to assess the overall use of classroom education technology, as well as each of the four component technologies. This was done through the Google Forms tool. The survey was primarily distributed via email contact and a week given out for results to be collected.

In total, we had a response of over sixty participants who responded to our survey, and the responses were illustrative to how we should address both the general in-service and our four component technologies.

Secondary to our primary survey, we elected to selectively interview teachers who were familiar with each of the component technologies. This was done to gage their own experience with the respective technologies, to see what they knew about each of the component technologies. Unlike the general survey, we wanted detailed information that would provide helpful design information for our in-service, as well as feedback on proposed designs on the weebly site.

See Appendix A.1 for the main survey, and see Appendix A.2 for our template for interviews.

I-D. Task Analysis

Prerequisite Analysis

The Needs Analysis Survey will judge our participants abilities in the four individual technologies based on their responses. Based on these responses, participants will be sorted to match beginner, intermediate, and advanced participants together in order that participants can assist each other using the weebly and Google Hangouts.

Topic Analysis

Goal 2: Participants will utilize tools within the LMS, specifically Powerpoint to support participant and student learning.

2.1: What makes good for presentations?

2.1.1: Elements that make up quality and convincing presentations

2.1.1.1: Exploring these elements

2.1.1.2: Best practices to adapt elements to presentations

2.2: Comparing Different Presentation softwares

2.2.1: Examples of Powerpoint, Google Slides, and Prezi Presentations on similar subjects.

2.2.2: Three different subjects will be presented in at least two methods

2.3: Effective Use of Presentation Software as Teachers

2.3.1: Creating Effective Presentations

2.3.1.1: When to use specific Presentation Software

2.4: Effective Use of Presentation Software as Assigned work for Students

2.4.1: Assigning Effective Presentation Work

2.4.1.1: When to use specific Presentation Software

2.4.1.2: How to grade presentation software

Goal 3: Participants will utilize tools within the LMS, specifically Adobe Spark to support participant and student learning with portfolios.

3.1: Using Media within a Portfolio

3.1.1: Examples of Media to be used

3.1.1.2: Media Types: Video, Audio, Images, Web Elements

3.1.2: Importing this media into Adobe Spark

3.2: Uses of Portfolios in Education

3.2.1: Function of a portfolio

3.2.2: How best to use a portfolio

Goal 4: Participants will utilize tools within the LMS, specifically Mindmeister to support participant and student learning.

4.1: Introduction to Mindmeister as a tool

4.1.1: Media Integration

4.1.1.1: Images, Video, Audio

4.1.1.2: Database Research

4.1.2: Collaboration Tools within mind Mindmeister

4.1.2.1: Google Docs integration

4.1.2.2: Live collaboration within active documents

4.1.2.3: Commenting function

4.1.3: Category Organization

4.1.3.1: Arranging Media By Category

4.2: Multiple platform integration

4.2.1: Accessing Mindmeister from PC, Mobile and SmartWatch platforms.

Goal 5: Participants will utilize tools within the LMS, specifically Blackboard, to support student learning.

5.1 Tools for Student Collaboration in Blackboard

5.1.1 Discussion Boards, Wikis, Blogs/Journals, Blackboard IM, Blackboard Collaborate, & Groups

5.1.1.1 Definition and description of each

5.1.1.2 Choosing the right tool

5.2 Utilizing Tools within A Group

5.2.1 Creating Groups

5.2.2 Creating a Wiki in a Group

5.2.3 Creating a Blog

5.2.4 Other tools in the Group setting (File Exchange, Email, etc)

5.3 Journals to Facilitate Student Interaction

5.3.1 Why Journals?

5.3.2 Creating a Journal

5.4 Embedding Media into Blackboard

5.4.1 Types of media

5.4.2 Choosing appropriate media

5.4.3 Embedding media tutorial

I-E. Procedural Analysis

Goal 1: Participants will assess their own understanding of technology implementation in their classrooms.

1.1 Teachers will assess the effectiveness of their technology integration regarding a specific tool by using the SAMR Model of Integrating Technology as a scoring guide.

Goal 2: Participants will utilize the Weebly tools and practical examples to design and implement new approaches to Presentation software.

2.1: Given examples of various presentations on the weebly, the participant will identify which presentation examples exhibit the best learning environments for the intended students.

2.1.1: Participants will view examples of PowerPoint presentations, at least three of differing quality with notes on positive and negative points. The same three lessons will be presented in different forms: Among them will be PowerPoint, Prezi, and Google Slides for comparison.

2.1.1.1: The first lesson will focus on a presentation on Roman Numerals between at least two of the three formats

2.1.1.2: The second lesson will focus on a presentation on the history, progress and customer reaction to Windows 10 between at least two of the three formats.

2.1.1.3: The third lesson will focus on a presentation on how to use audio recorder Audacity between at least two of the three formats.

2.1.2: Participants will be presented with a Google Forms survey on the respective three lessons and asked to judge each one for best and worst approaches to the each lesson.

2.2: Following the instructions on teacher use of presentation software, the participant will be able to construct at least three potential uses of teacher presentation software in their classroom

2.2.1: Participants will be presented with instructions on creating novel use of power points, in short YouTube form, with presentation software.

2.2.1.1: Video is embedded on Weebly, but can also be at found:
<https://www.youtube.com/watch?v=HJgeF3ALl0g>

2.2.2: Participants will be presented with form survey to fill out to construct three potential uses of presentation software

2.2.2.1: Video is embedded on Weebly, but can also be at found:
<https://www.youtube.com/watch?v=UPDDmt6W5zg>

2.3: Following instruction on student use of presentation software, the participant will be able to construct at least three potential uses of student use of presentation software in their classroom

2.3.1: Participants will be presented with instructions on how students can have novel use of power points for assignments, in short web lecture form, with noted examples.

2.3.2: Participants will be presented with form survey to fill out to construct three potential uses of presentation software

Goal 3: Participants will develop a portfolio using Adobe Spark to use in their classroom with their students

3.1 Following the instruction of using Adobe Spark, participants will create and share an Adobe Spark Web Story that includes at least 4 different types of content (image, video, button, text, photo grid, or glideshow)

3.1.1 Participants will go to <https://spark.adobe.com/page/V7jUdjAMHeJaE/>

3.1.2 Participants will open another tab and go to <https://spark.adobe.com/>

3.1.3 Participants will create a free adobe account or sign into their account

3.1.4 Participants will create an Adobe Page while they follow along with the tutorial (Adobe Page example)

3.1.4.1 Click the yellow (+) sign

3.1.4.2 Click blue PAGE

3.1.4.3 Click (+) to add a title & type title

3.1.4.4 Click Theme and choose theme for page

3.1.4.5 Click (+) then click on photo

3.1.4.5.1 Select folder from computer and upload (add photo)

3.1.4.6 Click (+) then click on text

3.1.4.6.1 Type in any text that you would like to add

3.1.4.7 Click (+) then click on button

3.1.4.7.1 Type: Adobe Home for the button text

3.1.4.7.2 Type: <http://www.adobe.com/> for the web address

3.1.4.7.3 Click save

3.1.4.8 Click (+) then click on video

3.1.4.8.1 Type the web address that you found to add to your page.
If you don't have one use:

https://www.youtube.com/watch?v=42yuq_1E2K0

3.1.4.8.2 Click Save

3.1.4.9 Click (+) then click on photo grid

3.1.4.9.1 Click upload photos

3.1.4.9.2 Choose more than 3 images you would like displayed

3.1.4.9.3 Click Save

3.1.4.10 Click (+) then click on glideshow

3.1.4.10.1 Click upload photos

3.1.4.10.2 Choose 3 or more images you would like uploaded

3.1.4.10.3 Click save

3.1.4.11 As you scroll down through the 1st image, you will click(+)

3.1.4.11.1 Click (+) then click on photo

3.1.4.11.2 Select folder from computer and upload (add photo)

3.1.4.11.3 Click Save

3.1.4.11.4 Add a caption describing the picture

3.1.4.12 Once you are finished, you will click Preview at the top

3.1.4.12.1 Make any changes you see that are needed

3.1.4.13 Once all changes are made and you are ready to share, click Share

3.1.4.13.1 Choose which ways you would like to share your Adobe Web Page

3.2 Following the instruction of Adobe Spark, participant will share 3 potential uses of Adobe Spark in the classroom for the teacher's use and the student's use.

3.2.1 After creating the Adobe Spark Page, participants will identify at least 3 potential ideas that they can personally use in their own classroom.

3.2.1.1 Participants will respond to the following question in the Weebly forum:
"Identify three ways that a teacher could use Adobe Spark in the classroom"

3.2.2 After creating the Adobe Spark Page, participants will identify at least 3 potential ideas that students can utilize Adobe Spark in the classroom.

Goal 4: Participants will be able to understand the benefits of online collaboration with tools like Mindmeister and have prototype ideas established by the end of the in-service

4.1 Following the instruction of Mindmeister, participants develop a way for students within one or more of their classes to effectively collaborate

4.1.1 Students go to www.mindmeister.com

4.1.2 Students create an account (Basic is free)

- 4.1.3.1 One student in each group, click on “New Mind Map”
- 4.1.3.2 Choose the template you want to use or choose to start from a blank template
- 4.1.3.3 Click “Share” on the bottom left corner
- 4.1.3.4 Type in the email addresses for the members of the collaboration group
- 4.1.3 Begin adding information to the Mind Map as the task requires
- 4.1.4 Use the tools on the right to enhance the Mind Map

- 4.2 Following the instruction of Mindmeister, participants will collaborate with other teachers in the same course to develop a way for students from different classes to effectively collaborate
 - 4.2.1 Designate a collaboration time to meet with core group
 - 4.2.2 Determine the assignment within the unit that students could benefit from collaboration within the class and with students from other classes
 - 4.2.3 Create a document with instructions for students (Mindmeister)
 - 4.2.3.1 How to create account/login
 - 4.2.3.2 How to share the map with the group
 - 4.2.3.3 How to add required elements to the map
 - 4.2.3.4 How to share completed map with instructor
 - 4.2.4 Create a document with instructions for student collaboration
 - 4.2.4.1 What is the purpose of the assignment?
 - 4.2.4.2 How is the collaboration necessary for success?
 - 4.2.4.3 What is the ultimate goal of the collaboraiton in relation to the assignment?

- 4.3 Following the use of Mindmeister, participants will share their experience with their departments (and others when possible), offering evaluation of the tool and potential “fixes” for any issues they encountered
 - 4.3.1 Designate a time during department meeting to share
 - 4.3.2 Provide samples of how the tool is being used in the content area
 - 4.3.3 Request and accept feedback and address questions

Goal 5: Participants will utilize tools within the LMS, specifically Blackboard, to support student learning.

5.1 After reviewing the materials in Weebly regarding Blackboard, participants will identify 2 or more Blackboard tools used to increase student collaboration through participation in instructor-moderated group discussion with 90% accuracy.

5.1 Tools for Student Collaboration in Blackboard

5.1.1 After reviewing content and files in Weebly, participants will Identify at least 2 tools they can use in their personal classrooms to facilitate student collaboration.

5.1.1.1 Participants will use reflection to respond to the following questions: “Name two Blackboard tools you could use in your classroom to facilitate student collaboration. Why would you choose these two tools over others? Share your suggestions with at least one peer.”

5.2 After reviewing the materials in Weebly regarding Blackboard, participants will demonstrate implementation of a Wiki by creating a group Wiki in Blackboard with 100% accuracy.

5.2 Utilizing Tools within a Group

5.2.1 After reviewing content and files in Weebly, participants will create a group Wiki in a Blackboard shell.

5.2.1.1 Go to www.coursesites.com and login using teacher’s username password or sign up.

5.2.1.2 Click on Create a Course and create a new course, or enter an existing course where teacher is an instructor.

5.2.1.3 Click on Users and Groups in the Course Management menu.

5.2.1.4 Click on Groups

5.2.1.5 Hover over Create and click Random Enroll.

5.2.1.6 Give the Group set a title and description.

5.2.1.7 Under the Tool Availability menu, ensure there is a checkmark next to Discussion Board and Wiki.

5.2.1.8 Set the Wiki to Graded and worth 10 points.

5.2.1.9 Scroll down to Membership and set the number of students per group to 5.

5.2.1.10 Click Submit.

5.3 After reviewing the materials in Weebly regarding Blackboard, participants will create a Journal assignment in Blackboard by completing a criteria checklist with 100% accuracy.

5.3 Journals to Facilitate Student Communication

5.3.1 After reviewing content and files in Weebly, participants will create a Journal assignment in a Blackboard shell.

5.3.1.1 Go to www.coursesites.com and login using teacher's username password or sign up.

5.3.1.2 Click on Create a Course and create a new course, or enter an existing course where you are an instructor.

5.3.1.3 Utilize the Criteria Checklist to create a Journal Assignment.

5.3.1.3.1 Criteria Checklist:

Link to journal appears in Course Menu

Journal entries are indexed weekly

Journal allows for peer views

Journal is worth 20 points

5.3.1.3.2 Hover over Plus sign at top of course menu.

5.3.1.3.3 Click on Tool Link

5.3.1.3.4 Type Reflective Journal in Title box

5.3.1.3.5 Select Journal from Drop Down menu

5.3.1.3.6 Ensure checkmark next to Available to Students and click Submit.

5.3.1.3.7 Click on Reflective Journal in the course menu.

5.3.1.3.8 Click Create Journal.

5.3.1.3.9 Enter a title for the Journal assignment and provide directions in the description box.

5.3.1.3.10 Scroll down and ensure Journal is available

5.3.1.3.11 Click to set journal to index weekly.

5.3.1.3.12 Click boxes to allow users to edit and delete entries, delete comments, and permit course users to view journal

5.3.1.3.13 Click the circle next to grade and enter 20 in the points possible box.

5.3.1.3.14 Click Submit.

5.4 After reviewing the materials in Weebly regarding Blackboard, participants will demonstrate embedding a video into Blackboard by inserting a video into a content folder in Blackboard with 100% accuracy.

5.4.1 Embedding Media into Blackboard

5.4.1.1 After reviewing the material in Weebly regarding

Blackboard, participant will embed a YouTube video into a Content Folder as an Item.

- 5.4.1.1 Go to www.coursesites.com and login using participant's username password or sign up.
- 5.4.1.2 Click on Create a Course and create a new course, or enter an existing course where you are an instructor.
- 5.4.1.3 Enter the course's content area or create one.
 - 5.4.1.3.1 Create content area: Hover over the plus sign at the top of the course menu.
 - 5.4.1.3.2 Click Content Area.
 - 5.4.1.3.3 Enter Content in name box and click submit.
 - 5.4.1.3.4 Click on Content in course menu.
- 5.4.1.4 Click on current content folder or create one.
 - 5.4.1.4.1 Creating content folder: Hover over Build Content at top of page.
 - 5.4.1.4.2 Click Content Folder
 - 5.4.1.4.3 Enter Module 1 in name box and click submit.
 - 5.4.1.4.3 Click on Module 1 content folder from content area.
- 5.4.1.5 Hover over build content.
- 5.4.1.6 Click Item.
- 5.4.1.7 Enter title of a YouTube video the teacher would like to insert in name box.
- 5.4.1.8 Embed video.
 - 5.4.1.8.1 Open another tab, go to www.YouTube.com and find video to embed
 - 5.4.1.8.2 Click Share underneath video.
 - 5.4.1.8.3 Click Embed and copy embed code.
 - 5.4.1.8.4 Back in Blackboard, click HTML in text box editor.
 - 5.4.1.8.5 Paste embed code in HTML text box.
 - 5.4.1.8.6 Click update. Outline of square should appear in text box.
 - 5.4.1.8.7 Click Submit. Video should appear in content folder.

II. Evidence of Acceptable Results

II-A. Formative Evaluation

Approach 1: Survey workshop participants

A formative evaluation will be added to the end of every tutorial session located on the Weebly. Once our participants go through a particular tutorial (in-service), they will answer a few questions in the form of a google survey to allow us feedback to determine if the training was effective and if we reached our intended goals. It will inform us if we need to make changes to our training, if we are reaching our desired outcome, if the participants feel the training is valuable and what else needs to be added, removed or edited. The formative assessments will also be encouraged to complete at the completion of the first session on each module of the google hangouts.

Questions to include in Google survey to teachers: (Survey link in Appendix A)

- Do you feel that the training was worth your time?
- Do you feel like you learned how to __ (goal trying to reach) _?
- What was a strength of the training?
- What was a weakness of the training?
- Did you like the organization and presentation of the training?
- Was the training easy to follow?
- How much time did it take you to get through the tutorial?
- Were the instructions clear and easy to understand?
- Were you able to successfully complete the instructions from beginning to end without help?

Approach 2: Participant Interview

For our second formative evaluation, we will interview a few participants after they complete the tutorials. We will ask them questions to give them time to share their reactions and thoughts from the training. This will give us a more open ended way to find out if we are hitting our desired goals and objectives.

Questions to ask the interviewees:

- Do you feel this tutorial was helpful for you to use in your classroom?
- What changes should be made to make the training more effective?
- Will you implement what you learned from this training into your classroom?

How will you use this in your classroom?
How will this benefit your students?

II-B. Summative Evaluation

Approach 1: Survey workshop participants

A summative evaluation will be given to the participants following the second Google hangout session for each module and then again given three months following the completion of all tutorials. This will allow us to evaluate if the tutorials were effective, beneficial and a practical way for the participants to add technology to their classrooms.

We will determine if the goals and objectives were met and applied to the classroom by the participants taking this course. We will use a Google survey and ask the participants to submit examples of ways that they have implemented the technology into their classroom to evaluate the online workshop, and score each example against the SAMR Model of Technology Integration. (See Appendix A)

Questions to include in Google survey to teachers: (Survey link in Appendix A)

Do you feel your technology in the classroom has improved since the inservice?
Was the provided materials on each of the modules sufficient to provide quality training?
Was the level of interactivity useful to implement the necessary training?
What could be added to the modules to make them more helpful?
Have you implemented any of the technology into your classroom? If so, which modules and explain how you use it in your classroom.
Which of the four modules was the most useful to your classroom?
Was the class size attending the google hangout feasible for the in-service?
Would you recommend this inservice to a colleague?

Approach 2: Participant Interview

Our second evaluation will come from interviews taken from several of the participants of the in-service, some will be asked following the second session of each module following the google hangout and then some will be asked three and six months following the event. Primarily this will be to evaluate how well the in-service participants have put into practice into their classrooms. If not available in person, these interviews can be accomplished through an email question and answer format, or telephone/in-

person interviews. The interview method was chosen in order to allow participants to provide feedback that may not come up among the Google survey.

Questions to ask the interviewees:

Did you find the technology that you learned about to be useful in your classroom?

Did you feel that you learned enough from the modules to be able to create and use the technology without having to do more research?

What could be added to the modules to make them more helpful?

Have you implemented any of technology into your classroom and if so, how are you using it?

Do you feel that your students have benefited from the use of the technology?

Please explain your answer.

Have your students used the technology?

III - Learning Experiences and/or Instruction

III-A. Learner Analysis

Our in-service and subsequent Weebly site is primarily created for focus on teachers who are involving in teaching grades 7-12, and higher education. The in-service must be designed to appeal the best needs of our learners, and to implement the in-service to best address these needs. Learner factors were considered against contexts including, orienting instructional and transfer. Gathering the data necessary for analysis will be done by both a survey and informal interviews of school administrators and veteran students (those who have been through at least one class with one of our faculty learners)

Learner Factors	Data Collection
<p>Orienting Context</p> <ol style="list-style-type: none"> 1. Among chosen faculty members, what percentage of our potential learners adopts technology innovations as early or late adopters, or who does not use the technology available? 2. How will faculty learners benefit from the in-service and Weebly site? 3. What are demographic factors of our chosen faculty learners? <ol style="list-style-type: none"> a. Age b. Years of Teaching Experience c. Education background d. Subjects taught, subjects trained to teach e. Grade levels taught f. Teaching style preferences 4. What previous education have our learners received in all of our four chosen 	<p>Factors: 1-6, 9: Learner Faculty Survey</p> <p>Factors: 6-8: Interview with the administration, veteran students.</p>

<p>technologies</p> <ol style="list-style-type: none"> 5. What input from learner faculty will help us build our in-service and Weebly site? 6. Will individual attendance be required at an in-service, or will studying the Weebly site be sufficient? 7. What motivations will faculty learners have for attending the in-service or use Weebly site? What motivations can be given to faculty learners to encourage participation? 8. What goals will administrators have for the in-service and Weebly site? 9. What goals will faculty learners have for the in-service and Weebly site? 	
<p align="center">Instructional Context</p> <ol style="list-style-type: none"> 1. Depending on the technology innovation adoption of individual faculty learners, do they perceive a need for the in-service? 2. Would they prefer an individual approach or a common in-service? 3. What is the schedule for evaluations and additional support for faculty learner instruction? 4. Of the four technologies offered within the in-service and Weebly, which is considered the most important for instructional purposes? 5. Are there specific approaches to the in-service, Weebly, or other approach that either faculty learners or administrators would appreciate? 	<p>Factors 1-2, 5: Learner Faculty Survey</p> <p>Factors 3-5: Interview with the administration, veteran students.</p>
<p align="center">Transfer Context</p>	

<ol style="list-style-type: none"> 1. Will the faculty learners believe that in-service and Weebly will be beneficial to their teaching technique and implementation? 2. Will faculty learners have practical opportunities to use the new technologies demonstrated in the in-service and Weebly? <ol style="list-style-type: none"> a. Would the learner faculty prefer time during the in-service for practical opportunity? 3. What would be reasonable methods of improving learner faculty participation? 	<p>Factors 1-2, 2a: Learner Faculty Survey</p> <p>Factor 3: Interview with the administration, veteran students.</p>
--	--

III-B. Contextual Analysis

Contextual analysis was explored for the participants who will be completing any portion of the online workshop. Data collection will occur in the following ways:

- Data Collection #1: Pre-implementation Survey in Google Survey
- Data Collection #2: Pre-implementation Interviews
- Data Collection #3: Post-tutorial Google Survey – Taken after Completing each Tutorial
- Data Collection #4: Post-tutorial Interviews
- Data Collection #5: Post-workshop Survey in Google Survey – 3 Months after Completing Online Workshop
- Data Collection #6: Post-workshop Interviews – 6 Months after Completing Online Workshop

Questions for each of these resources have been developed and are attached in Appendix A. The contextual analysis has been divided into orienting, instructional, and transfer contexts and is demonstrated below.

Orienting Context	Data Collection Information
--------------------------	------------------------------------

<p>Learner Factors</p> <ul style="list-style-type: none"> • What grade level do the participants teach? • How would the participants rate themselves in understanding of new technology? • Have the participants ever had a poor experience implementing technology in their classrooms? • Would the participants be more willing to utilize technology with instruction specific to their instructional needs? 	<p>Data Collection #1: Pre-implementation Survey in Google Survey</p>
<p>Immediate Environment Factors</p> <ul style="list-style-type: none"> • Do the participants work in a 1:1 computer or device technology environment? 	<p>Data Collection #1: Pre-implementation Survey in Google Survey</p>
<p>Organizational Factors</p> <ul style="list-style-type: none"> • Do the participants have support for adoption and adaption from their administration? 	<p>Data Collection #1: Pre-implementation Survey in Google Survey</p>

Instructional Context	Data Collection Information
<p>Learner Factors</p> <ul style="list-style-type: none"> • Do the participants have experience with PowerPoint or other presentation software? • Are the participants currently utilizing PowerPoint in their classrooms? • Are the participants asking students to create PowerPoint presentations? • Do the participants have experience creating portfolios? • Have the participants ever utilized portfolios as an assignment for 	<p>Data Collection #1: Pre-implementation Survey in Google Survey</p> <p>Data Collection #2: Pre-implementation Interviews</p>

<p>students and if so, in what context?</p> <ul style="list-style-type: none"> ● Are the participants familiar with Adobe Spark or have they utilized other portfolio software in the past? ● Do the participants use online collaboration tools with their students, including research projects? ● Are participants familiar with Mindmeister.com? ● What Blackboard tools would the participants be most interested in utilizing in their classrooms? ● How do the participants feel the use of presentation software in education can be improved? ● What are the perceived student attitudes regarding PowerPoint or other presentation software? ● Do participants feel portfolios would be beneficial to their students? ● What would a collaborative program need to do in order for participants to begin using it in the classroom? 	
<p>Immediate Environmental Factors</p> <ul style="list-style-type: none"> ● What learning management systems are available to the participants and how are they currently being used? ● Is the training presented in a manner that is easy to follow? ● Are instructions clear and easy to understand? ● Are participants able to complete the training from beginning to end without help? 	<p>Data Collection #1: Pre-implementation Survey in Google Survey</p> <p>Data Collection #3: Post-tutorial Google Survey</p>
<p>Organizational Factors</p>	<p>Data Collection #3: Post-tutorial Google Survey</p>

<ul style="list-style-type: none"> ● Was the organization and presentation of the training effective? ● Was the training delivered in a timely manner? ● Were the materials presented sufficient to meet the goals of the workshop? ● Were the modules provided interactive? 	<p>Data Collection #5: Post-workshop Google Survey</p>
--	---

Transfer Context	Data Collection Information
<p>Learner Factors</p> <ul style="list-style-type: none"> ● Are teachers able to utilize something they learned from the online workshop in their classrooms? ● Are the participants more comfortable with the use of technology in the classroom after completing the workshop? ● Which of the four modules was most beneficial to the participants? 	<p>Data Collection #5: Post-workshop Google Survey</p> <p>Data Collection #6: Post-workshop Interviews</p>

The following assumptions are made based on the Learner and Contextual Analyses:

- Participants will be mostly certified secondary teachers and some college professors.
- Participants will have varying degrees of familiarity with technology in the classroom.
- Some participants will be highly experienced with one or more of the tools discussed, but may have very little if any experience with others. Therefore, some participants may only have interest in one or two of the modules provided.

III-C. Types of Learning Experiences And/Or Instructions

A direct instruction program has been created inside a Weebly website with tutorials on how to implement different forms of technology into the classroom. The tutorials provide hands-on tutorial lessons on implementing Mindmeister, different types of

presentation software (Prezi, Powerpoint), Adobe Spark and Blackboard into a classroom setting. These modules are independent of each other and can be accessed at any time since they can be found on the website. Although these four sessions are independent of each other, they are all aimed to increase technology use in the classroom. Participants can administer the tutorials at any time from any computer with internet access. Each module should last under an hour. Each module contains specific objectives associated with the specific tutorial. Participants will complete the tutorials at their own pace on their own time. Each module will have two optional Google hangout sessions that participants have the options to sign up and attend. For each module, an instructor will be available for questions, comments, feedback, troubleshooting, collaboration and evaluation. Participants can sign up for the modules they choose. During each Google hangout session, time will be allowed for participants to discuss ways they might be able to implement the technology into their classrooms.

<https://www.mindmeister.com/802637998/org-chart>

III-D. Materials for Training Program

A sampling of materials have been developed and incorporated into a Weebly site titled “Technology Integration”. The Weebly site houses several pages, which describe a variety of ways to implement technology in the classroom via Mindmeister, presentation software such as Prezi, portfolio creation in Adobe Spark, and facilitating student interaction in Blackboard. The course samplings include tutorial videos from YouTube; examples of presentations using PowerPoint, Google Slides, and Prezi and an instructional video describing the presentation software; a step by step self-guided tutorial on creating a page in Adobe Spark; and a combination of tutorial YouTube videos and embedded documents guiding participants through the use of various Blackboard Tools.

See Weebly site for sample items: <http://isdproject.weebly.com/>

III-E. Implementation Plan

Prior to a full-scale release of the online workshop, there will be a trial run implemented to ensure all features function properly and that the workshops provide quality training for those involved.

After the trial run is complete, the training will be presented during before school in-services. Teachers will be encouraged to sign up based on their interest and may choose to participate in all four modules, but may also choose to only participate in some modules, based on interest. Each module of training will contain a formative and

summative evaluation and scheduled Google Hangouts. These synchronous presentations will be scheduled as eight initial sessions, two for each module, but they may also be made available, as needed, according to participant demand. There will be no charge for the training, and asynchronous access to the online materials will be available 24/7 through the training period.

The amount of time required for the training will vary individually depending on how many modules the participant is interested in completing; however, participants can expect to spend around one hour to work through each module, and around one hour for each of the Google Hangout sessions; two sessions per module. Participants will be able to work at their own pace through as many of the modules as they would like, and participants are encouraged to explore the modules prior to the Google Hangout sessions. During the sessions, participants can share their experiences with others and ask questions or troubleshoot with an instructor.

Interested participants will need internet access and a computer, as these will not be provided by the trainers. Participants may choose to work from the school network or may access the training from their homes. A link to the Weebly will be provided to all interested parties and may be distributed via district email.

The online workshops will be available throughout the school year as per the Implementation Schedule.

See Appendix B.2.2 for the Implementation Schedule.

References

- Clark, D. R. (2011) Learning with Artifacts. Retrieved from <http://www.nwlink.com/~donclark/learning/artifacts.html> (Accessed: November 26, 2016)
- Clark, D. R.. (2010) Learning Strategies or Instructional Strategies. Retrieved from <http://www.nwlink.com/~donclark/hrd/strategy.html> (Accessed: November 26, 2016)
- Frey, B. A., & Birnbaum, D. J. (2002). Learners' perceptions on the value of PowerPoint in lectures. Retrieved from <http://proxy.mul.missouri.edu/login?url=http://search.proquest.com/docview/62198772?accountid=14576>
- MindTools Editorial Team. (1996). Kirkpatrick' four-level training evaluation model: Analyzing training effectiveness. MindTools. Retrieved from <https://www.mindtools.com/pages/article/kirkpatrick.htm> (Accessed: November 3, 2016)
- Nalder, J. (2009). Digital mind-mapping and visual organisers. A journey into new digital learning possibilities. *Primary & Middle Years Educator*, 7(1), 7-11. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=f5h&AN=40520389 &site=ehost-live>
- Savoy, A., Proctor, R. W., & Salvendy, G. (2009). Information retention from PowerPointTM and traditional lectures. *Computers & Education*, 52(4), 858-867. Retrieved from <http://proxy.mul.missouri.edu/login?url=http://search.proquest.com/docview/61908904?accountid=14576>

Appendices

A.1 Needs Assessment Instruments

Google Form Surveys

A.1.1 Needs Assessment Survey

<https://docs.google.com/forms/d/e/1FAIpQLScjKxfTXoGBU2cCEOUC2cBB0cQs8J0MVJyEqM3ju9o9BkCr4A/viewform#responses>

A.1.2 Needs Assessment Interview

While we tended to specialize our individual interviews for or respective technologies, there were some basic questions and guidelines we agreed to follow.

1. When attending teacher in-services on technologies in the classroom, what did you find most useful and least useful in how the information was presented?
2. Do you prefer in-services that are in-person with presenters or self-guided with prepared materials and at your own pace?
3. What elements would you include to capture and hold teacher attention within an in-service?
4. Regarding [The individual technology], what elements or techniques within that technology would you use to best inform other teachers on how to use it?

A.1.3 Needs Assessment Responses

https://docs.google.com/forms/d/1pOuzUV2xMSaQ1SAw2kJSRd_pYg4fq2MSapu0LsyhGtI/edit#responses

A.2 Formative Evaluation

Google Form Surveys

A.2.1 Formative Evaluation Google Survey:

<https://docs.google.com/forms/d/1xfXnu9RL6kQiY-AsAxGeRDmgrp-Xb28uKhytIX6ujNXo/edit>

A.2.2 Formative Evaluation Questions to ask the interviewees:

Do you feel this tutorial was helpful for you to use in your classroom?

What changes should be made to make the training more effective?

Will you implement what you learned from this training into your classroom?

How will you use this in your classroom?

How will this benefit your students?

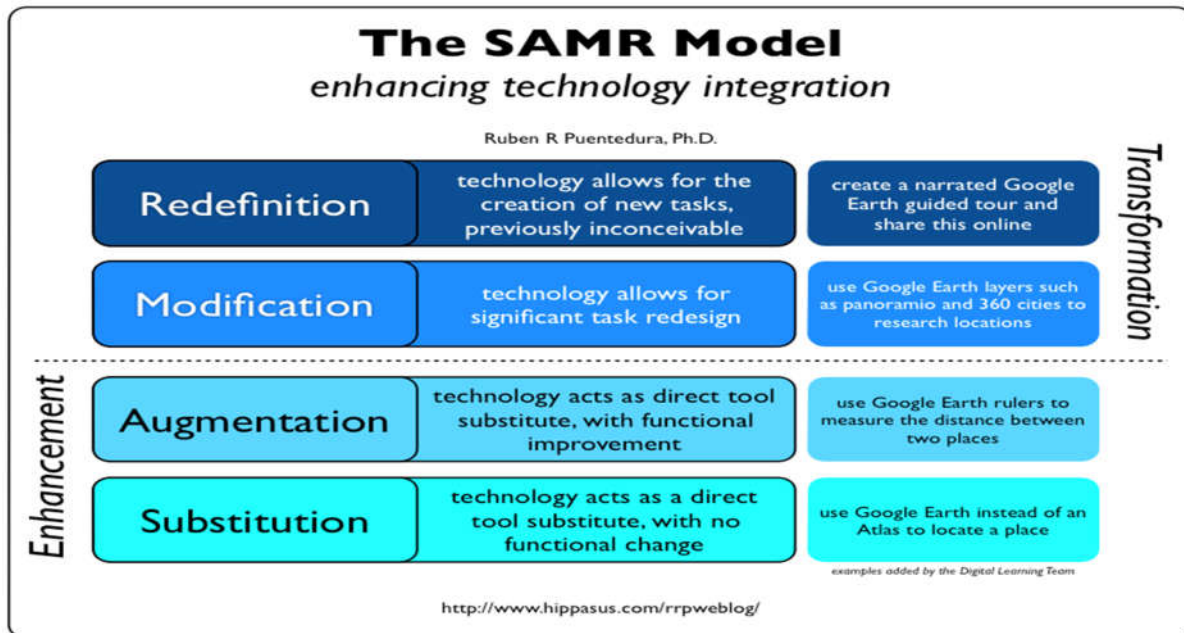
A.3 Summative Evaluation

Google Form Surveys

A.3.1 Summative Evaluation Survey:

https://docs.google.com/forms/d/1QnNYMtYxzwRN_aeXwbgpQQR6WV2mpdN9nOIk5eEqNI4/edit?ts=5833d267

A.4 Self Assessment: SAMR Model of Technology Integration



B.1 Materials

B.1.1 Materials created for Training

- <http://isdproject.weebly.com/>

B.2 Implementation Plan

B.2.1 Choosing Participants

As described in the Needs Analysis, this group was chosen for the variety of experiences and technology skills they could bring to our assessment. Since they actively teach on the field, they have the benefit of direct application to their instruction and classroom setting. Moreover, given the depth of differences between teachers in how they approach their component subjects and methods, this sample group would yield a considerably large information set to consider both general technology use and the four component technologies.

B.2.2 Implementation Schedule

Before School In-service - Teachers will be introduced to each of the four modules; teachers will then sign up based on interest. They can choose to participate in just modules they're interested in or all four. Each module of training will contain a formative and summative evaluation, self-evaluation from each participant, and two scheduled Google Hangouts.

- September/October - Module 1
 - Google Hangout in Sept
 - Formative Evaluation
 - Google Hangout in Oct
 - Summative Evaluation
- November/December - Module 2
 - Google Hangout in Nov
 - Formative Evaluation
 - Google Hangout in Dec
 - Summative Evaluation
- Jan/Feb - Module 3
 - Google Hangout in Jan
 - Formative Evaluation
 - Google Hangout in Feb
 - Summative Evaluation

- March/April - Module 4
 - Google Hangout in March
 - Formative Evaluation
 - Google Hangout in April
 - Summative Evaluation

B.2.3 Celebration of Success

When closing out the project at the end of the school year, participants will have the opportunity to celebrate their successes with integrating technology. Experiences and ideas will be shared with faculty that may not have been participating. Sharing these successes gives recognition to the participants while encouraging future participants to join the endeavors of integrating technology into the classroom.