**Executive Summary**

Rutland Independent School District is located in a small town. The district is housed entirely in one building for all K-12 students (with the exception of the shop building). The district has an enrollment of approximately 135. The district maintains a Macbook laptop program for the high school and started one iPad2 mobile lab for the elementary grades last year. In the coming year, the district will be adding 2 more iPad labs-one for the junior high and an additional elementary lab. In addition, the district will be providing iPads for all teachers K-12. Elementary teachers have had iPad2s for the past year.

Seven high school and two elementary teachers will be receiving new iPads this fall. The district technology coordinator would like the teachers to maintain and update the new iPads and possibly the iPad labs with a minimum amount of support from him. These teachers have never needed to update or maintain an iPad on their own before. The instruction included within this project would bring those nine teachers up to speed on the basics they need to be able to do for maintenance and introduce them to a few basic applications they may find useful.

**Learning Need**

This project is based on the growing use of technology in the world outside the Rutland School District. In an effort to use technology inside the school in a similar fashion as what students will be expected to do after graduating, the administration has embraced the addition of iPad technology. There are teachers in the building who will not use a technology they themselves don’t understand, so it is important to offer basic training on the tools available on the iPad.

**Project Definition**

**Description of Product**

The final product will be a combination of traditional classroom instruction along with several video tutorials. The material will be partially covered during one to three weekly tech meetings and will be partially asynchronous through video tutorials. The instructor will contact the learners weekly to evaluate learning. Learning will also be evaluated based on the number of times the learners require assistance from the technology coordinator to complete basic maintenance items previously covered. Learners will need to have their iPads and may choose to use their MacBooks to watch tutorial videos. Instruction will be given on basic care and maintenance of the iPads, as well as one dictation application that audience members may use to assist students who cannot type very quickly or struggle with spelling and one application that allows learners to print documents they have typed or resources found through an internet search. The basic care and maintenance instruction may also include mention of a variety of applications for the iPad.

**Goals and Objectives**

The project is an iPad training for high school teachers. The goal of the project is for each teacher to maintain an individual iPad. The individual objectives are that each teacher will do basic maintenance and update installations on their school-issued iPad, will know how to set up and use PrintCentral, and will know how to set up and use Dragon Dictation.

**Audience Description**

All teachers receiving school-issued iPads for the first time will be expected to attend the training. There are teachers who may be more or less interested in the training depending upon how much previous experience they have had with iPads. Most teachers involved with the training have been teaching for many years within the district.

The audience is a group of seven teachers who teach in grades seventh through twelfth. There are also 2 new teachers joining the school this year and receiving iPads to use in the classroom. Several of the teachers have used iPads previously and most of the group currently have school-issued Macbooks (with the exception of the two who are new to the district). One of the teachers new to the district is a recent college graduate who will have her first teaching job in the 4th grade. The second teacher new to the district is an experienced teacher coming from previously working at a colony school.

**Project Design**

**Instructional Goals**

Teachers who complete this training will be able to update an iPad, print from an iPad, and dictate a passage or essay to be typed on the iPad. Teachers will also know where to go to find additional tutorials about iPad functions. The technology coordinator should have fewer questions from teachers about iPad-related maintenance.

**Delivery Environment**

Instruction will be given in person for the first chunk. After the first session, learners will be asked to watch a series of web-based videos available both at school and at home. After approximately one week, learners will meet again during a regularly scheduled tech meeting to collaboratively discuss the videos and ask questions of the instructor. The group will meet two other times to discuss the specific applications included in the content material.

This environment is respectful of the time teachers already spend preparing for the new year and allows them to watch the videos when they have time. It also makes use of a previously scheduled time to discuss technology.

**General Outcomes**

Learners will be able to: install updates to iPads, install applications on iPads, print items from iPads, dictate a written passage using an iPad.

**Assessment Strategies**

The main assessment strategy built into the instruction is the demonstration of skills. Learners will be expected to show that they can install updates and applications, print from the iPad, and use Dragon Dictation. The effectiveness of the training will also be measured by the tech coordinator’s record keeping of iPad-related questions from the group involved with the training throughout the year.

*The recording form for the district technology coordinator can be found in the document: FinalProjectReportingForms.*

**Content Organization**

Learners will first learn about the basic functions of an iPad, including how to set up an Apple ID, syncing to a computer, connecting to a wireless signal, purchasing and installing applications, and deleting applications. Learners will then be introduced to Atomic Learning, where they can watch tutorials about setting up a mail account, typing on the iPad, syncing a calendar from their computer on to the iPad, how to use the App Store, and the accessibility features available. After watching videos, learners will download PrintCentral and will be walked through how to use the application. Learners will also then download Dragon Dictation and be shown how to use the application.

**Content Sources**

The district technology coordinator will offer content suggestions. Content in the form of tutorial videos from Atomic Learning will also be used.

**Instructional Strategies**

The content will be broken into three chunks of instruction with the first chunk being the largest and requiring both face-to-face time and time online. Each lesson will begin with an introduction of what the learner should be able to demonstrate by the end of the lesson and an opportunity to share knowledge with the rest of the group. Next learners will be shown how to complete a skill and be asked to complete the skill shown on their own iPad. Learners will be shown 3-4 skills at a time and be asked to follow the steps to perform the skill with each new skill set shown. There will be time for learners to work together in partners or groups of three within the lesson.

**Standards**

ISTE Standard 3. Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society.

ISTE Standard 5. Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources.

These standards were found at: <http://www.iste.org/Libraries/PDFs/NETS-T_Standards.sflb.ashx>

**Media**

The media included in this instruction involves video tutorials made by outside experts. Atomic Learning was founded in 2000 by professionals in technology education and offers tutorials in several aspects of the field. The tutorials included in this instruction can be found at the following URL: <http://www.atomiclearning.com/k12/ipad_ios5>.

**Evaluation and Testing Plans**

The instruction will be offered to three middle school teachers who have limited knowledge of iPads. The evaluation will be conducted using the planned tutorial videos and the same face-to-face instruction planned for the learner group. The evaluation will be completed approximately a month prior to the beginning of the school year.

**Overall Interface and Navigation**

A portion of instruction is available online at <http://www.atomiclearning.com/k12/ipad_ios5>. Users may use any web browser available to watch the videos, including Internet Explorer if they are watching from home. Videos on Atomic Learning are divided into sections with each section further divided into smaller topics. The learners will be given specific video identification numbers, such as B1 that they need to watch, but may choose to watch others as well. The ‘back’ and ‘forward’ buttons within the browser may be used to navigate from each video back to the main directory page.

**Development Tools**

The tools used to develop the online portion of the instruction were previously used by outside experts, thus there were no tools used in the development of this particular instruction.

**Delivery Platform**

The instruction included in this product was designed for Mac users, however, the online tools can be used on either Mac or Windows operating systems.

**Usability**

The technology coordinator as well as other ‘teacher experts’ will be available to assist during the face-to-face portion of the instruction. Learners will be able to contact these same individuals through use of the district’s iChat program and email, whether watching the online videos at home or at school.

**Production Documents**

**Treatment**

|  |  |
| --- | --- |
| **Content Chunk** | **Treatment Ideas** |
| Introduction | Reflect on what is already known about iPads |
| Objectives | Explicitly tell learners the goals of the instruction.  Ask learners to set their own goals for iPad usage in their classrooms |
| iPad Basics | Ask learners to demonstrate to their neighbors what they already know.  Present examples of what is expected of each learner (setting up Apple ID, etc.).  Use teacher ‘experts’ as examples of what to do.  Ask learners to demonstrate to the instructor how to complete a task in the content. |
| PrintCentral | Ask learners to share a time when they’ve found something they’d like to print on the internet or typed something they’d like to print.  Share that printing can be done from the iPad as well.  Link the previously learned skill of downloading applications with searching for and downloading a specific application-PrintCentral.  Demonstrate how to use the application and show features. |
| Dragon Dictation | Ask learners to bring a favorite passage to dictate.  Link previous learning by asking learners to again download a specific application.  Show learners how to dictate a passage and ask each to do so.  Ask each learner to use PrintCentral to print what they have dictated. |
| Review | Provide links to additional information.  Ask learners to demonstrate to students how to use the iPad and how to use PrintCentral and Dragon Dictation. |

**User Scenario**

This is a user scenario for the 3rd chunk, which takes place after instruction about iPad basics and PrintCentral:

The learner is now expected to know how to open the App Store, search for a specific application, download, and install it. In this lesson, the learner will be asked to find Dragon Dictation in the App Store. After finding it, they will need to install it on the iPad. The instructor will show an example of how to use the application and give learners the opportunity to ask questions. The learners will then be asked to read a passage to the program (they may leave the room to do so for clarity of audio and then return), open their dictation in PrintCentral, and print the document they’ve created to the nearest printer. The instructor will be in the room/area to answer questions.

**Templates**

Instruction will be consistent in the way it is presented, but there will not be any templates for written information required, as all instruction will be hands-on.

**Required Specifications**

Learners will be required to bring their iPads to the instruction. They will be required to be able to connect to the internet wirelessly with their iPads and may choose to bring a computer that can connect to the internet as well. For the section involving PrintCentral, participants will need to be able to connect to a printer wirelessly. To use Dragon Dictation, learners will need to have a working microphone on their iPad and may choose to use a microphone that plugs in to the iPad. The instructor will need to be able to project the screen of the iPad being used as demonstration onto a large screen so the learners can see it.

**Media Assets Needed**

The main media being used will be the projection of the instructor’s iPad screen. The other media used in this training is copyrighted by Atomic Learning. The school district this training has been designed for owns subscription rights to the tutorials needed for the training.

**Prototype**

This is a basic layout for the first lesson dealing with iPad basics.

* Learners will start the first lesson by sharing what they already know about iPads.
  + Depending upon the level of knowledge, the instructor may share basic tips such as what each button does, how to zoom in and out, and how to switch pages on the home screen.
* The instructor will first walk the learners through how to set up the iPad to connect to a wireless network.
* The instructor will then demonstrate how to create an Apple ID using iTunes.
  + Learners will be expected to complete this task after the demonstration. The instructor and other iPad ‘teacher experts’ will be available to assist anyone who has problems with the task.
  + After setting up an Apple ID, learners will be encouraged to browse the App Store. Once each teacher has found an application they would like to download, the instructor will demonstrate how to download and install it on the iPad.
* The instructor will then show the web URL for the Atomic Learning iPad tutorial page.
  + Learners will be asked to watch tutorial videos related to setting up an email account on the iPad, syncing calendars, and several different accessibility functions before the next meeting. Learners will also be asked to download PrintCentral and Dragon Dictation before the next session.
* At the end of the lesson, the instructor will ask the learners to write down any questions they had about what they learned that day or questions they have about iPads in general.

**Develop & Deliver**

**Learner Materials**

The learner materials for this product include information about gaining access to Atomic Learning tutorials for members, a listing of specific tutorial videos to watch, and a listing of other websites to visit with information about iPads as well as information about iPad applications and uses in education. This information will be given to the audience on the first day of the training in the form of a handout. All other information will be given to learners in the form of demonstrations and hands-on work experience.

Learners will also be given the opportunity to submit comments after instruction. They will be given a post-video tutorial form and a post-unit form to fill out. These forms will be the same as those given during the pilot test. The same compiler document as that used in the pilot test can be used to compiler audience reaction to the unit.

*The learner materials handout can be found in the document titled: LearnerMaterials.*

*The feedback forms for the learners can be found in the document titled:PostInstructionFeedbackForms.*

*The data compiler for learner feedback surveys can be found in the document titled: PilotTestSurveyCompiler.*

**Instructor Materials**

Much of the instruction will be hands-on demonstrations. The instructor is expected to already have an extensive knowledge of the iPad and the two applications involved in this training. The instructor materials however, provide several tips about the parts of the training and the information about Atomic Learning. The instructor materials also include basic lesson plans for all three face-to-face lessons.

*The instructor materials can be found in the document titled: InstructorMaterials.*

**Pilot Test**

I would conduct a pilot test with three middle school teachers from two other districts. These teachers have worked with iPads before, but have never needed to maintain and update one; for this reason and out of respect for the time of the test group, I would offer a limited segment pilot test. I would ask the test group to go through the first lesson and review the videos about iPad basics. I would ask the group to offer comments about the instruction within the lesson and the value of the video tutorials. Among other things, I would like to know if forty minutes of face-to-face instructional time on iPad basics is adequate before asking learners to do asynchronous learning. I would also like to know if the test group found the videos helpful enough to replace more face-to-face learning. The first opportunity for the test group to offer feedback would be at the end of the face-to-face instruction. The second opportunity would be approximately one week after the face-to-face session when the evaluator would email test group participants another feedback form.

*The feedback forms for this pilot test can be found in the document:* *PilotTestFeedbackForms.*

**Formative Evaluation Report**

After conducting the pilot test and receiving the results of the post-instruction and post-video tutorial surveys, I would then compile the data using an Excel sheet set up for this purpose. The Excel document is formatted with the yes/no questions from each survey on a separate sheet. The data collected and compiled into Excel spreadsheets will be formatted into charts that allow the evaluator to analyze the answers given for each question. The comments will be inserted in to this document as well, but will not be included in the making of the charts. The data collected from the pilot test will be analyzed and any necessary changes will be made.

*The data compiler for the pilot test surveys can be found in the document titled: PilotTestSurveyCompiler.*

**Delivery of Instructional Materials and Formative Evaluation Results**

The results of the formative evaluation will be delivered four weeks prior to the beginning of the training. Delivery of instructional materials will occur three weeks before the beginning of the school year. The results and materials will be emailed to the superintendent and technology coordinator, with a follow-up email sent two days later if either of them does not acknowledge receipt of the documents.

**Appendix**

*The recording form for the district technology coordinator can be found in the document: FinalProjectReportingForms.*

*The learner materials handout can be found in the document titled: LearnerMaterials.*

*The feedback forms for the learners can be found in the document titled:PostInstructionFeedbackForms.*

*The data compiler for learner feedback surveys can be found in the document titled: PilotTestSurveyCompiler.*

*The instructor materials can be found in the document titled: InstructorMaterials.*

*The feedback forms for this pilot test can be found in the document:* *PilotTestFeedbackForms.*

*The data compiler for the pilot test surveys can be found in the document titled: PilotTestSurveyCompiler.*

*I discussed with the technology coordinator the possibility of including log-in information with this project to allow the evaluator to look at the videos and he would not allow me to include anything of the sort unless I purchased access personally. Two video tutorials can be viewed without logging in at the website link given above.*

*All documents listed above have been included in the dropbox for the final project assignment.*

**Reflective Journal**

**Chapter 8**

* *reflect on your progress, issues you encounter and how you resolved those issues. Include any questions, how you found answers to your questions, explain why you made particular design decision, and how your ideas changed over time.*
* *Summarize the feedback you receive from your collaborative group. You will need to keep track of all feedback received.*
* *Summarize changes made (or not made) from feedback received.*

June 25-I started my define document today. I think I got a lot done, but I ended up a little stuck on the schedule and on adding research to define my instructional problem. I think part of my problem with finding research to add is that I’m close enough to the ‘problem’ that I already know it’s an issue if teachers don’t know how to use the technology available to them.

June 26-I chose not to add any specific outside research to my introduction. I discussed my project with a co-worker who will be one of the individuals receiving an iPad. After my discussion with her, I feel the statement that none of the teachers involved have had any need to update and maintain an iPad is enough of a justification for believing this training is necessary. I will, however, ask my collaborative group if my current project introduction is adequate.

**Feedback:**

One of my group members asked the question of whether or not the teacher who had previously taught at the colony would need more or less training than the others. The truth is, I don’t know. I believe I can address this by asking the audience to demonstrate the skills they already have. I can minimize the time needed to do this by asking the learners to demonstrate their skills to a peer and watching the pairs with the two teachers I haven’t met.

Another member of my collaborative group asked if the training was going to continue throughout the year. I thought the statement I had about the training being during one to three tech meetings was clear enough, but I believe I was clearer about this in my chapter 9 document.

**Chapter 9**

June 27-The design document took me longer to write than I expected. I expected that, having written my define document yesterday and the day before, I would be able to write the design document rather quickly. I think the reason the design document took me so long is that I didn’t know how much detail I needed to include. When I was an undergrad and planning instruction for a class I didn’t know very well, I would put a lot of detail into the plan because it made me feel a lot more comfortable presenting my lesson to that class.

However, now I’ve gotten to know my students and I include a lot of detail in IEPs, but I don’t include as much detail in my daily plans anymore. With this project, I’m planning for people I know very well and I could feel comfortable presenting this lesson unit without analyzing my audience as much. So in this project, I’m trying to think about what will make sense to others when I’ve gotten very used to writing lesson units based on what makes sense to me. My collaborative group has been useful for making sure things make sense and I appreciate that.

Feedback:

I added a statement about the number of times instruction would occur to my chapter 9 document. The group member who previously asked about the timeline of my project after reading my chapter 8 document stated she understood the timing better now after having read my chapter 9 document. This group member also commented that she could see the growth in my project from one document to the next.

Another of my group members commented that my audience definition in this document was less detailed than my last. I looked back at my chapter 8 document, and discovered he was right. I will need to add more detail to this audience description before I include it in my final project.

The third member of my group commented that he liked the video aspect of my project because people could work at their own pace. I preferred this idea in my design because at the beginning of the year I find my mind on simply getting the year rolling and learning about my students, not on spending hours in a room listening to a presenter. I also think the beginning of the year is a stressful time to try to do a teacher training that is not self-paced.

**Chapter 10**

June 28-The production document took a lot of time, but there were only a couple parts I was confused on. The first part I wasn’t sure about was the user scenario. I wasn’t sure if I needed to put myself in the position of being a specific learner or if I was looking at the learner in general. I chose to look at a user in general because each learner may react to the instruction differently, but I wanted my scenario to show more of what they would all have the same.

The storyboard/prototype also made me think for a bit. The examples I saw seemed to be of units that included a PowerPoint. My project, however, is very much based on demonstration of skills and won’t have a PowerPoint. I wasn’t sure what to create for a prototype, but I decided to include a basic lesson plan for one lesson.

Feedback:

One of my group members commented in my template section that my audience could benefit from having a handout with step-by-step instructions to follow to complete the given tasks. I think this is a good idea on one hand, because it is a simple way to learn the steps of a task, however, I also know that some of my co-workers would probably not keep the handout or would come to depend on it instead of actually learning how to do the task. Also, the videos offered are very short and to the point, so I don’t know if there is a real need for a handout. I think this is something I will consider as I finish my project.

**Chapter 11**

July 2-3-I took all the pieces of my Chapter 8-10 projects and put them together into one document. Then I started my chapter 11 project by creating the feedback forms needed for the pilot study of the program. I also created an Excel spreadsheet that calculates the data from the feedback forms. This particular part of the project took me a while to complete because it had been a while since I had used Excel formulas and charts. I had several setbacks in creating my chart because the commands to create the chart had changed since I had last used it, but I solved this problem by using the help menu often.

July 4-I worked on the learner materials today. I made a single document with information about log-on information, a listing of specific videos learners need to watch, and additional resources for learners to use for more iPad information and application suggestions. I also included a resource I thought would be helpful for the audience to see-a website about ways to include the iPad in the classroom. Several of the sites I included as extra resources were suggested by the technology coordinator for the district.

July 6-7-I wrote lesson plans for the other two lessons and made the form for the district tech coordinator to record iPad questions on. I was a lot more successful using Excel this time.

I chose not to make a handout for learners with steps to follow for specific tasks. I feel the learners would depend on it rather than remembering how to do things. I also feel the atmosphere of the school would encourage learners to ask for help from others and increase the learning for all.

I was not able to get feedback from my collaborative group on the chapter 11 section of my project due to a lack of internet access..