

ActivInspire Training Module

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Section I: Instructional Design Project Overview

I. Introduction

This training module is designed for undergraduate pre-service teachers who are enrolled in Instructional Technology 301: Integrating Instructional Technology. ISTC 301 prepares pre-service teachers to utilize various technologies that play a role in the learning process in a classroom setting. The Promethean Whiteboard is a specific technology that many K-12 classroom teachers use on a daily basis. This training module is designed to familiarize students with the ActivInspire software that accompanies the Promethean Whiteboard. The goal for this training module is for students to be able to use basic navigation tools to utilize the insert backgrounds, insert objects, and the advanced animation features in the ActivInspire software in order to create a flipchart that will be used to teach a self-chosen content area.

II. Front End Analysis

Needs Analysis

According to Brown & Green (2011), a needs analysis is used to identify a particular problem and collect data which assists instructional designers in determining the change that needs to occur, who wants the change, and where the change is taking place. Analyzing this data then assists the designers in developing the most effective instruction to make that change possible. The needs analysis model used for this instruction was Rossett's (1995) five-step needs analysis (as cited in Brown & Green,

2011). This particular model was chosen because many of the steps in this model are appropriate for the types of data which need to be collected for this instructional goal.

The first step in Rossett's (1995) model is to determine the nature of the situation that initiated the current problem (as cited in Brown & Green, 2011). Students participating in ISTC 301 need to complete various projects in order to demonstrate their mastery of the standards associated with the course. One of the technology integration projects is for students to complete a practical teaching experience. This project requires students to teach a specific topic using the Promethean Whiteboard and ActivInspire software. Since many of the students enrolled in this class are not familiar with either of these instructional technologies, a training session needed to be implemented in order to teach these students how to use the technology in order for them to successfully complete the practical teaching experience project.

Rossett's (1995) second step requires instructional designers to identify who possesses the required information for the needs analysis and where can it be located (as cited in Brown & Green, 2011). The individual who possessed vital information to conduct the needs assessment was identified as the professor who taught the ISTC 301 course. This individual was available for consultation during her office hours on the university campus.

The next step in the needs analysis is to select the appropriate tools to gather the required information for the needs analysis (Rossett, 1995, as cited in Brown & Green, 2011). The majority of the information necessary for the needs analysis would be collected through an individual interview with the professor, as well as a group meeting

with the students in the ISTC 301 course. A questionnaire would also be administered to gather further information which would assist with the creation of the training module.

The fourth step in Rossett's (1995) model is the most critical of the entire process. This step requires the instructional designer to apply the decisions assembled during the first three steps and then conduct the actual needs assessment (as cited in Brown & Green, 2011). The needs assessment began with an interview session with the professor of the ISTC 301 course during her office hours. During this session, it was revealed that the students in the class would need to learn the basics of the ActivInspire software in order to create a flip chart (i.e., the template in the ActivInspire software that allows users to create interactive lessons) to teach a self-chosen topic for a project required to complete the course. The professor revealed that she wanted certain features of the software to be demonstrated during the training module so the students would be able to utilize those features during their project presentations. It was also revealed that even though this training module was to be taught synchronously to the ISTC 301 course in a face-to-face setting, it would be beneficial if the training module could be designed in a format which allowed students to access it asynchronously in a computer-based format. The instructional designer would have about a month to design the training module and would have the entire class period to implement the training.

The final step of Rossett's module (1995) is to use the information gathered during the needs assessment to develop a solution to the instructional problem (as cited in Brown & Green, 2011). Information gathered during the needs assessment revealed that: the major instructional problem is that students in the ISTC 301 course have no experience with the ActivInspire software and will need to familiarize themselves with it

in order to complete a required project for the course; the training module will commence during a face-to-face meeting during regular class hours and; the professor would like the training module to be designed in a format that permitted access to the module outside of the classroom for future ISTC 301 students. After analyzing this information, it was determined that the training module will take the form of an ActivInspire flipchart tutorial that provided an introduction to the program and demonstrated how to utilize various features of the software.

Learner Analysis

According to Brown and Green (2011), a learner analysis is conducted in order to gain an understanding of the target populations' pertinent learning characteristics/traits and then apply that data when creating the instruction in an attempt to increase the probability learning takes place. The learner analysis chosen for this instructional project was the Dick, Carey, and Carey (2009) model (as cited in Brown & Green, 2011). This model was chosen due to its general useful information guidelines, as opposed to specific questions, which is sometimes displayed by other models. This model was also chosen for the fact that it addressed issues which the instructional designer felt were pertinent to the creation of training module (e.g., academic motivation, prior knowledge, attitudes toward content, etc.). The data gathered for this analysis was attained through a group meeting with the ISTC 301 class, a questionnaire which the students were required to complete, and an interview session with the professor of the course.

The first area the Dick, Carey, and Carey (2009) model lists is the entry level skills of the target population (as cited in Brown & Green, 2011). This data was gathered using a questionnaire that was completed by the students in ISTC 301, and an interview

with the professor. All of the students currently enrolled in ISTC 301 are pre-service teachers who have already completed the 60 general education credits in order to be accepted into their specific teaching programs. At the time the learner analysis was conducted, the students have already completed over two-thirds of the coursework required for the class. Additionally, the students have already completed numerous projects which required them to use the computer and other technology resources. The questionnaire also revealed that the majority of the students rated themselves as being somewhat skilled in regards to technology.

Step two of the model requires the instructional designer to determine the target population's prior knowledge of the topic being learned (Dick, Carey, and Carey, 2009, as cited in Brown & Green, 2011). This data was gathered via the questionnaire administered to the class during the group meeting. The class was first asked if anyone had any experience with the ActivInspire software. Only 3 of the 17 students in the class raised their hands. This data was investigated further with an item on the questionnaire that required students to write down what features they were familiar with. The data revealed that these three students were only familiar with using the pen, creating text boxes, and inserting shapes. Overall, the data revealed that students in the class have very little experience with the ActivInspire software.

The next area investigated dealt with the learners attitudes/preferences toward the content and the format used to deliver the content (Dick, Carey, and Carey, 2009, as cited in Brown & Green, 2011). This information was also gathered using the questionnaire. A specific item on the questionnaire required students to rate their level of interest to learn the ActivInspire software (1 being no interest and 5 being very interested). The data

revealed that all of these students answered either a “4” or a “5” with the exception of two students that answered “3.” The questionnaire also revealed that the class would be comfortable watching the instructional designer present his flipchart tutorial while the students simultaneously experimented with the software on their own computers.

Individual practice was something students explained was very important to them.

The final area of Dick, Carey, and Carey’s (2009) learner analysis model which was appropriate for this training module was academic motivation. The students who are enrolled in ISTC 301 are identified as willing volunteers. These students have voluntarily signed up to pursue a teacher certification through an accredited college university. In addition to this being a required course for the degree, the students revealed that learning the ActivInspire software is something they felt would be beneficial to them once they begin their professional careers as classroom teachers.

Learning Context Analysis

The training model will take place in a classroom on the university campus. The classroom is equipped with an Elmo document camera, printer, Promethean Whiteboard, and a master computer (installed with ActivInspire software) that is wired to the screen projector. Each student participating in the training module will have a desk and chair. Installed at every desk is a computer for students to utilize. Each of these computers is installed with the ActivInspire software and internet connection.

III. Progression of Problems

In order to assist with the progression of problems for the training module, Merrill’s (2002) Pebble-in-the-Pond model was utilized. This model requires an

instructional designer to create a series of increasingly difficult problems (tasks) for the target population to compete which will assist them in mastering the instructional objective. Each task describes the skills and knowledge necessary for an individual to successfully master the task.

It should be noted that the participating students will engage in this lesson by observing the instructor present an instructional flipchart containing directions on how to successfully complete each task. The instructional flipchart is designed to be accessed by students asynchronously and includes enough instruction for the students to master the objective independently. At the professor's request, the instructional designer will present each flipchart slide while students simultaneously view the flipchart from their own computers.

The first problem in the training model requires the students to open the ActIvinspire software and create a flipchart by clicking the Open New Flipchart icon on the ActivInspire dashboard. The students will first observe the instructional designer demonstrate how to do this on the promethean Whiteboard, then will need to perform the task on their own computers. The instructor will also explain other useful navigation features/interface options such as the page browser, select tool options, toolbox, and object browser which is described in the instructional flipchart.

The second problem requires students to insert various backgrounds into the flipchart slides. The students will observe the instructor locate background in the ActivInspire resource browser under Shared Resources > Backgrounds. After the instructor demonstrates how this task is completed, the students will be asked to locate and insert three different backgrounds from the ActivInspire resource browser. The

professor of the class and the instructor will walk around the room to make sure each student is able to complete this task.

Inserting objects such as hyperlinks, web-images, text, and shapes into the flipchart slides will entail problem number three. To begin, the instructor will model the process of locating and inserting hyperlinks, web-images, text, and shapes into the flipchart. The process for searching for images on the Internet, and then saving and locating them on a computer hard drive will also be demonstrated. After the instructor demonstrates these steps, the students will be asked to insert a hyperlink of their choice, a web-image of their choice, and a shape from the ActivInspire toolbox. As with the second problem, the professor and instructor will walk around the classroom and make sure students have successfully completed this step.

In the fourth problem, students will need to use the advanced animation features of locking images, layering objects, and the magic eraser, and then incorporate them into flipchart slides. Each of these advanced features will be explained and then demonstrated by the instructor. The features will need to be taught in order due to the fact that successful use of the magic eraser is contingent on the layering and locking of objects being performed correctly. Once the students have observed the instructor model the advanced animation features, they will be required to incorporate them into their own flipcharts.

End Problem

For the end problem, students will have the remainder of the class period to create a new flipchart that incorporates all of the features demonstrated in the previous four problems in order to teach a self-chosen content area. Completing this assignment will

provide an opportunity for the students to apply the skills they have learned from the training module. Students will be graded on their incorporation of:

- Opening a flipchart
- A background for each flipchart slide
- Inserting a text box, an image, and a hyperlink
- Successfully locking an image and layering objects appropriately so the magic eraser can be utilized

The students will also need to demonstrate these features by utilizing them in the context of teaching a topic of their choice. The students will not have any guidance from the instructor or professor and must create their flipcharts independently. This assignment will prepare the students for when they must create their practical teaching experience projects.

The project will be graded out of ten points. Two points will be given for successful integration of each feature, with two points given for students utilizing the features to teach a certain topic. One point will be given if students do not completely demonstrate the task (e.g., they only lock the images and do not layer any of the objects). Zero points will be given if students do not incorporate the any features from a task.

IV. Standards

The standards used for this project were taken from the International Society for Technology in Education-National Educational Technology Standards for Teachers (ISTC-NETS*T) and the Maryland Teacher Technology Standards (MTTS). These standards were included in the ISTC 301 syllabus.

Standard	Link to Training Module
ISTE-NETS*T IAB, IIBC; MTTS 5, 7: Learn how to use a variety of technology and media resources	<i>Problems 1, 2, 3, &4:</i> Students learned how to use features included in the ActivInspire software for the Promethean Whiteboard.
ISTE-NETS*T II ABDE, III ABCD, IV ABC ; MTTS 5, 7: Gain experience in planning to integrate technology into the classroom curriculum	<i>Problem 5 (end problem):</i> Students crate a flipchart in way that replicates how they would do so as a classroom teacher.
ISTE-NETS*T IIAB; MTTS 1, 2, 3, 4, 5, 6, 7: Design a multimedia project to present curriculum information.	<i>Problem 5 (end problem):</i> Students create a flipchart using the ActivInspire software to teach a self-chosen content area.
ISTE-NETS*T VABCD; MTTS 1, 2, 3, 4, 5, 6, 7: Prepare to use technology independently throughout their education and their careers.	<i>Entire Process:</i> Students will learn and familiarize themselves with the skills necessary to create flipcharts using the ActivInspire software.

V. Formative and Summative Evaluation Plan

Formative Evaluation

Instructional designers use formative evaluations in order to gather specific data which informs them on how the instructional design (ID) process is progressing (Brown & Green, 2011). The formative evaluation model used for this instruction was created by Smith and Ragan (2004). Smith and Ragan’s model contains four stages of evaluation: design reviews, expert reviews, learner validation, and ongoing evaluation (as cited in Brown & Green, 2011, p. 162). This model was chosen because the stages included the model fit the needs of the instructional designer for this particular training module.

The first stage in this model, design reviews, requires instructional designers to verify the accuracy of the data gathered before the actual instruction is created (Smith &

Ragan, 2004, as cited in Brown & Green, 2011). After the front-end analysis was completed, the results were discussed with the professor of the ISTC 301 course. The instructional designer and professor analyzed the results and decided that the best approach for instruction would be to create an ActivInspire learning tutorial (which covers each learning task) using a flipchart in the ActivInspire software. Additionally, it was decided that the instructional designer would present this flipchart tutorial in the actual class in order to demonstrate how the tasks are performed. Creating a flipchart tutorial would also allow the participating students, as well as future students, to access the training module at their own leisure outside of the classroom.

Expert reviews are the next step in this model. These reviews are conducted after the instruction has been created to ensure that the instruction is accurate before it is presented to the learners (Smith & Ragan, 2004, as cited in Brown & Green, 2011). Once the flipchart tutorial was created, the instructional designer shared the flipchart with the professor. The instructional designer opened the flipchart on the Promethean Whiteboard in the classroom where the instruction would take place, and the entire presentation was reviewed. Some minor changes were made in regards to font size and placement of text, but overall, the professor deemed the flipchart satisfactory. The flipchart was then uploaded to the ITSC 301 Blackboard homepage; where students would be able quickly download the file once the instruction takes place.

The final two stages in Smith and Ragan's (2004) model are learner validation and ongoing evaluation (as cited in Brown & Green, 2011). The instructional designer conducted these evaluations both during and after the training module. During the training module, questions students asked were written down by the instructional

designer. After the instruction had concluded, the questions were analyzed to determine if they were the result of missing information on the flipchart tutorial. If the questions asked were due to missing information, the instructional designer revised the flipchart in order to address this absent information.

At the conclusion of the training module the instructional designer asked the participating students for feedback on how they felt the instruction went. Students revealed that the instruction was very helpful and they would continue to use the skills learned during the tutorial in the future. There was no negative feedback and no students provided any suggestions for the instructional designer.

Summative Evaluation

A summative evaluation is used to gather data about the effectiveness of the instructional intervention after it has been implemented (Brown & Green, 2011). Data from summative evaluations assist the instructional designer in determining whether or not the client's goals were met, and if the actual instructional intervention brought about the desired change in the learners. For this instructional situation, Kirkpatrick's Four Levels of Evaluation (1994) was used as the summative evaluation model (as cited in Brown & Green, 2011). This model was chosen due its popularity among instructional designers, and its clear and concise levels, which the instructional designer felt would be applicable for this instructional situation.

The first level in Kirkpatrick's (1994) model is the *reactions* level (as cited in Brown & Green, 2011). In the reactions level, instructional designers gather data on the participants' reactions to the instruction. Two different methods were used to gather this data. The first method was a group discussion with the students, which was conducted

shortly after the conclusion of the instructional intervention. The instructional designer asked the students how they felt about the presentation of the training module. The students revealed that they were satisfied with the approach the instructional designer took. The students explained that being able to watch the instructional designer model each step and then have the opportunity to practice the step themselves was extremely beneficial. The second method used to gather data was an interview session with the professor of the class. This interview was conducted to see if any of the students revealed any feedback about the instruction which was not disclosed during the group discussion. The professor claimed that no new feedback was given.

The next level in Kirkpatrick's (1994) model is *learning* (as cited in Brown & Green, 2011). In the learning level, the instructional designer analyzes data to determine whether or not the participants' knowledge or skills changed due to the instructional intervention. In order to gather data to address this level, the results of the end problem were analyzed. In the end problem, students were required to create a new flipchart that incorporated all of the features demonstrated in the previous four problems in order to teach a self-chosen content area. Students' flipcharts were then graded according to a rubric created by the instructional designer. The rubric was based on a ten point scale, which was divided into five sections: create a flipchart, insert background, insert object, insert animation, and lesson integration. Students earned two points for fully incorporating each section, one point for partially incorporating it, and zero points for not incorporating it at all. The data revealed that out of the 17 students that participated in the instruction, 13 students earned the full 10 points and 4 students earned 9 points. The

results show that students were able to successfully demonstrate the instructional objective taught.

The third level of Kirkpatrick's (1994) model is *transfer* (as cited in Brown & Green, 2011). Here, the instructional designer determines whether the skills acquired during the instructional intervention are being used by the learners in their-real world environment. In order to gather data for this level, the students' practical teaching experience projects were analyzed. The project required students to teach a specific topic using the Promethean Whiteboard and ActivInspire software. After analyzing the projects, it was determined that all of the students had successfully taught lessons which incorporated the features learned in the ActivInspire training module. The professor of the course was very pleased with the projects and felt that the training module was a success.

The final level of Kirkpatrick's (1994) model is *results* (as cited in Brown & Green, 2011). This level requires instructional designers to evaluate the instructional intervention's effectiveness in business measures (e.g., increased sales). Since the instruction in this learning module took place in a college setting, this step was not completed.

Section II. Sample of the Lesson

VI. Selection of Pebble

The fourth pebble of the ActivInspire training module will be used is used for the sample lesson. This pebble requires students to, "use the advanced animation features of locking images, layering objects, and using magic eraser, and then incorporate them into

flipchart slides.” This pebble was chosen because it is the most complicated pebble prior to the end problem.

VII. Task Analysis

In the ID process, a task analysis is used in order to determine what content and/or tasks will make up the instruction (Brown & Green, 2011). The task analysis model used for this instruction is Jonassen, Hannum & Tessmer’s (1998) task analysis process. This model was chosen because the functions of the task analysis are appropriate for this instructional situation.

The first function is *inventory tasks*, which can be described as identifying the tasks that are necessary for instruction (Jonassen, Hannum & Tessmer, 1998, as cited in Brown & Green, 2011). As described earlier, the task for this pebble requires students to use the advanced animation features of: locking images, layering objects, and using the magic eraser, and incorporate them into flipchart slides.”

Jonassen, Hannum & Tessmer’s (1998) second function is *describing tools*. This function requires the instructional designer to describe the task(s) more elaborately (as cited in Brown & Green, 2011). Locking images is a feature in ActivInspire that allows the user to permanently insert an object or image. Once the image has been locked, it can no longer be moved around with the mouse or the ActivInspire pen. The layering objects feature allows users to determine which objects will cover one another if both objects are placed on top of one another. For example, the user inserts a brown paper bag image and an apple image into the flip chart. The user decides to make the paper bag on the top layer. Once this is done, when the user moves the bag on top of the apple, the apple can no longer be seen. The final feature taught in this task is the magic eraser. The magic

eraser allows users to erase the image on the top layer, which then reveals the image on the bottom.

The third function in Jonassen, Hannum & Tessmer's (1998) task analysis model is *selecting tasks*. This function is included so the instructional designer can prioritize the tasks and choose the tasks that are the most appropriate (as cited in Brown & Green, 2011). The tasks in this pebble were chosen due to the fact that they are very useful features when attempting to teach an academic topic. Having the ability to hide answers behind objects is something that teachers find very useful when presenting a flipchart on a certain academic topic. This task was selected over other features because both the instructional designer and professor felt that students would benefit from learning this task when creating their practical teaching experience project.

In the fourth function, Jonassen, Hannum & Tessmer (1998) state that *sequencing tasks and task components* should be completed. Here, the instructional designer explains the exact sequence the task(s) should occur (as cited in Brown & Green, 2011). For the fourth pebble, the first step which needs to be completed is the locking image feature. This is the most the basic task in this pebble and serves as a foundation for many other advanced ActivInspire features. The next step is the layering feature. After the images have been locked, they can be organized into various layers (i.e., top layer, middle layer, bottom layer). This step is more advanced than simply locking an image, and is another foundation for other advanced features. Lastly, there is the magic eraser tool. This tool can only be utilized once the images have been locked and layered correctly.

The last function of Jonassen, Hannum & Tessmer's (1998) model is *analyzing tasks and content level*. In this function, the instructional designer describes the type of

physical performance or cognitive behavior necessary for the task (as cited in Brown & Green, 2011). This pebble requires students to complete a performance based task. The students need to physically manipulate the ActivInspire software and utilize certain features which are available within the program.

VIII. Instructional Strategy

The following pebble has been formatted into Merrill’s (2002) Tell, Ask, Show, Do format. This pebble is presented in a table for ease of reading.

<p>Tell</p>	<ol style="list-style-type: none"> 1. Tell the class that they will now be learning and practicing the advanced animation features of ActivInspire. 2. Explain to the class that they will first learn about the lock image feature, then the layering objects feature, and finish using the magic eraser. 3. Tell the class that these features serve as a foundation for many other features available in ActivInspire. 4. Tell the class that they will need to utilize the previous learned tasks (e.g. insert object/image) in order to complete this task.
<p>Ask</p>	<ol style="list-style-type: none"> 1. Ask the class once again if they are all comfortable with the previously covered tasks. 2. Ask the class if anyone has ever seen these features performed. 3. Ask the class how they might use these features for classroom instruction.
<p>Show</p>	<ol style="list-style-type: none"> 1. Show the students the flipchart slide which explains the steps to lock an image. 2. Read over each step to the class using the flipchart as a guide. First, tell them to insert an image and highlight it. Next, tell the class to open the object browser. Then, click the icon which says “Locked.” 3. After the steps have been read aloud, demonstrate to the class how to lock an image on a blank flipchart slide.
<p>Do</p>	<ol style="list-style-type: none"> 1. Students insert an image into the flipchart. 2. Students will then open the object browser, select the image, and then click on the “Locked”

	option.
Show	<ol style="list-style-type: none"> 1. Show the students the flipchart slide which explains the steps to layer objects. 2. Read over the steps to the class using the flipchart as a guide. First, tell the class to insert two images (inform them that one must be larger than the other). Next, tell the class to open the object browser. Explain to the class that they need to select one of the images to make sure what it is labeled in the object browser. After this, instruct the students to click and the larger of the two images and drag it to the top layer. Next, lock the image. 3. Perform these steps again in a blank flipchart for students to see.
Do	<ol style="list-style-type: none"> 1. Students insert two images into their flipchart (one being larger than the other). 2. Students open the object browser and select the larger of the two images. 3. Students click and drag the image to the top layer. 4. Students lock the image.
Show	<ol style="list-style-type: none"> 1. Show students the magic eraser flipchart slide. 2. Show students where the toolbox is located, then select the magic eraser. 3. Use the magic eraser on the layered images in the flipchart
Do	<ol style="list-style-type: none"> 1. Students will select the magic eraser from the toolbox. 2. Students will use the magic eraser by clicking it over the images they locked and layered, thus, revealing the hidden image.

VIV. Materials Creation

This pebble will be implemented in the ISTC 301 classroom using an ActivInspire flipchart and Promethean Whiteboard. The instructional designer will present this pebble using a pre-created flipchart that contains directions and examples that focus on how to complete the pebble. Although the flipchart itself contains enough information for

students to complete the objective on their own, the instructional designer will present the lesson since it is the first time it is going to be implemented. As students are watching the instructional designer present the flipchart they will practice the steps on their personal classroom computers using blank ActivInspire flipcharts. The students will have the opportunity to watch the instruction designer model the steps necessary to complete the pebble, then practice the steps on their own computers. Students will be able to ask questions at any time.

X. Learner Evaluation

Since this pebble requires the students to perform a certain skill (i.e., use the advanced animation features in the ActivInspire software), direct testing will be used to evaluate the learners. Direct testing is used when certain skills need to be directly tested in order to determine whether or not a learner is able to perform the skill (Brown & Green, 2011). After the instructional designer has presented the flipchart slides and modeled the steps to complete the tasks, the students will be instructed to perform the tasks. The students will need to insert images into their flipcharts and then lock one of the images. Once the image is locked, they will use the object browser to move the image to the top layer of the flipchart. Students will also use the magic eraser to reveal the bottom image.

As the students are completing these tasks, the professor and instructional designer will walk around the classroom and observe the students perform the tasks. Since this is a college setting, and the students will be creating a new flipchart for grading during the end problem, this pebble does not require a very thorough learner evaluation. Students who are having difficulty are expected to ask questions and take responsibility

for their own learning. The instructional designer will assume that the students are able to complete the tasks if no questions are asked after the students receive ample time to practice the tasks.

References

- Brown, A., & Green, T. G. (2011). *The essentials of instructional design: Connecting fundamental principles with process and practice* (2nd Ed.). Upper Saddle River, NJ: Merrill Prentice Hall.
- Instructional Society for Technology in Education. (2008). *NETS for teachers 2008*. Retrieved May 2, 2012, from <http://www.iste.org/standards/nets-for-teachers/nets-for-teachers-2008.aspx>
- Maryland State Department of Education. (n.d.). *Maryland teacher technology standards*. Retrieved May 2, 2012, from <http://www.mttsonline.org/standards/>
- Merrill, M. D. (2002). A pebble-in-the-pond model for instructional design. *Performance Improvement*, 41(7), 39-44.

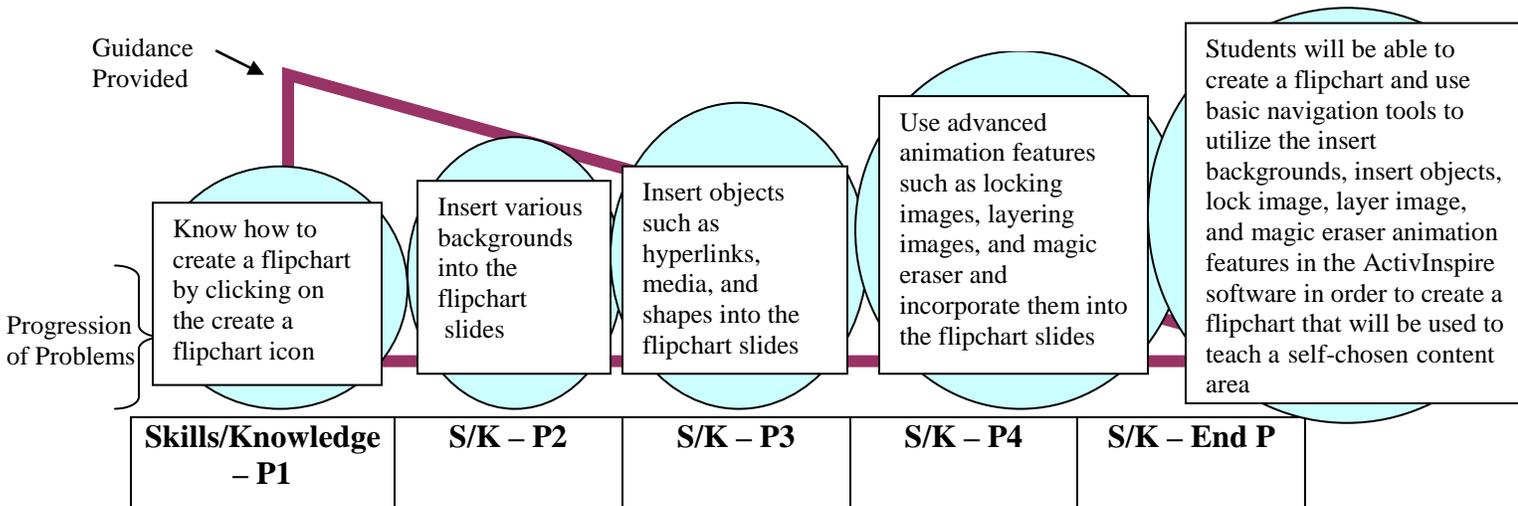
Appendix A

Pebbles Project Graphic Organizer

Instructional Problem: Many pre-service teachers have little to no experience using the ActivInspire software that accompanies the Promethean Whiteboard. This technology is frequently used in school systems and university pre-service teachers need to understand the basics of the software in order to successfully utilize it once they become certified teachers. The students also need to use the ActivInspire software and Promethean Whiteboard in order to complete the practical teaching experience project which is required for the ISTC 301 course.

Instructional Goal: Students will be able to create a flipchart and use basic navigation tools to utilize the insert backgrounds, insert objects, lock image, layer image, and magic eraser animation features in the ActivInspire software in order to create a flipchart that will be used to teach a self-chosen content area.

Learners: ISTC 301.101 students



<p>- Basic familiarity with computer navigational skills such as: use of a computer mouse and keyboard to manipulate the user interface; know how to save and open computer files; ability to locate where current programs are located in the Start Menu and/or desktop</p> <p>- Identify and remember the purpose of interface options/features in ActivInspire such as: the page browser, select tool options, toolbox, and object browser</p>	<p>- Basic familiarity with computer navigational skills (described in P1)</p> <p>- Know that background templates are located in the ActivInspire resource browser under Shared Resources > Backgrounds</p> <p>- Know how to choose and insert the background into the flipchart slide</p>	<p>- Basic familiarity with computer navigational skills</p> <p>- Know how to use a web browser to search for specific images</p> <p>- Know how to save images/files and locate them on a computer hard drive</p> <p>- Use the ActivInspire toolbar to insert various shapes, hyperlinks, and multimedia into the flipchart</p> <p>- Organize multimedia on the flipchart slides</p>	<p>- Basic familiarity with computer navigational skills</p> <p>- Use the object browser feature to layer objects on the flipchart slides</p> <p>- Use the object browser to lock objects in each flipchart slide</p> <p>- Use toolbox to utilize the magic eraser</p>	<p>- Identify and remember the function of navigational tools in the ActivInspire software.</p> <p>- Create a 3 slide flipchart presentation that demonstrates the successful application of features taught in this training module</p> <p>Criteria:</p> <ol style="list-style-type: none"> Open a new flipchart Insert 3 different types of backgrounds Insert a hyperlink, form of media, and shape Successfully lock an image and layer images in order for the magic eraser to work Use these features to teach a self-chosen content area
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Appendix B

ISTC 301 Questionnaire

Directions: Please answer the following questions in order to help me gather data which will assist me in the design of the ActivInspire training module

1. Please indicate your age: _____
2. Sex: Male or Female
3. Reason for attending this course:
4. On a scale of 1 to 5 (1 meaning little to no experience and 5 meaning very skilled), please estimate your level of skill regarding technology:

1	2	3	4	5
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5. Using the same scale, please indicate your level of experience using ActivInspire software:

1	2	3	4	5
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6. If you have experience using ActivInspire software, please explain what features you are familiar with:
7. In order to familiarize myself with a technology like ActivInspire, I would learn most efficiently by:
 - a. Watching someone use the software
 - b. Reading instructions or watching a video tutorial
 - c. Experimenting with the software myself
 - d. Watching someone with experience show me how to use the software as I simultaneously using it
8. Please rate your level of interest to learn ActivInspire

1	2	3	4	5
No interest				Very Interested