INSTRUCTIONAL ARCHITECT

Participant Handout – Day 2

Workshop Series Overview

Day 1: Learning the Basics

- Learn how to use the Instructional Architect
- Learn about the National Science Digital Library
- Discuss quality of online resources assessing it
- Begin designing an instructional activity using the Instructional Architect

Between workshop activities:

- 1. Finish designing your instructional activity
- 2. Try it out with students
- 3. Come prepared at the next workshop to share your experiences

Day 2: Integrating Technology and Inquiry Teaching

- Reflect about your experience using the Instructional Architect with your students.
- Review the Instructional Architect
- Introduce inquiry-based activities and review fundamental approaches
- Discuss pros and cons of using inquiry activities in your classroom
- Design an inquiry activity using the Instructional Architect

Between workshop activities:

- 1. Design an inquiry activity using the Instructional Architect
- 2. Try it out with your students
- 3. Write a brief (1-2 page) reflection paper addressing specific questions

Day 3: Continued conversations about technology, quality and inquiry

- Continued discussion about quality of online resources and online learning activities
- Reflect on your instructional activity design and implementation experiences with the Instructional Architect in large and small groups
- Reflect on your use of inquiry in your classroom

Workshop Handouts & Resources

o http://ia.usu.edu/viewproject.php?project=ia:6896

2830 Old Main Hill ◆ Logan, UT 84322 ◆ mimi.recker@usu.edu ◆ Digital Libraries go to School project Funded by a grant from the National Science Foundation (ESI #0554440)









Day 2

1.0: Form Small Groups

- We want to form groups of (3-4), and we don't care how you group up. You'll be doing some group related activities shortly, and you'll be collaborating during the third workshop as well. Don't worry if you are not working on the same kinds of content, as getting the perspective of teachers in other grade levels/disciplines can be helpful at times. It can also be helpful to have someone outside your area to check the clarity of your work.
- When your group is formed, write down the names and email addresses for your fellow group members, then proceed to the small group discussion:

2.0: Small Group Discussion

- Start the discussion with anyone who has implemented their IA project in their classroom
- In turns, have individual group members show their projects (ideally the project they were able to implement in the classroom). Discuss *how* you used or intend to use it as part of your teaching (e.g., in the computer lap, projected in the classroom, with individual students on your own computer, etc . . .). As part of your discussion talk about how it fits in with other learning activities either on or off the computer. As you discuss your IA project, talk about *why you used particular online resources*.
- As you discuss each IA project, think about how well it meets the criteria on the review rubric. Where do the projects do a good job? Where could they be improved? How could the rubric help you when designing your next project? Or how could it help you to revise this one?
- If you were able to use the project in your classroom, talk about how it went. What went well? What problems did you have to overcome? How did you overcome them? What would you do differently next time? (Either in terms of the project itself or the way you used it in your classroom). If you were not able to use the project, discuss any potential problems that you anticipate with it and ways that you plan to overcome those difficulties.

(continued on next page)

2830 Old Main Hill ◆ Logan, UT 84322 ◆ <u>mimi.recker@usu.edu</u> ◆ Digital Libraries go to School project Funded by a grant from the National Science Foundation (ESI #0554440) 2/6









- As you discuss each group member's project, get ready to share your experiences and thoughts with the larger group. We'll begin by focusing on the implementation barriers and successes for any of your projects. Jot down some of your group's ideas here:
- Now we'll get back as a large group to discuss a few highlights.

3.0: Review of Instructional Architect

- To gather resources
- Search NSDL
 - Browse IA projects
 - Copy project
 - Add own resources
- Create new project
- Pick theme
- Add content
- Quick links
- Preview project
- Publish
 - Advanced IA Features http://ia.usu.edu/viewproject.php?project=ia:9060

4.0: Inquiry Oriented Activity

- Within your groups, we're going to spend about 30 minutes doing an inquiry-oriented learning activity. You will not likely have an opportunity to finish the exercise, but that is not the goal.
- As you go through the activity think about the following: What do you think the learning goals are? How effective is the activity at achieving the learning goals? How realistic would it be to do something like this in your classroom? What would be the advantages? What would be the disadvantages?
- Be ready to discuss your experiences and thoughts with the rest of the workshop participants, keeping in mind that they may not have gone through the same exercise so *you'll need to provide a brief summary of the activity*.

5.0: Break









6.0 Large Group Inquiry Discussion

- Inquiry, project-based learning, problem-based learning
- Why the interest in problem-based learning?
- Key characteristics and processes of Problem-Based Learning
- Problem-Based Learning Cheat Sheet
- As a large group, bring in experiences from the Inquiry Oriented Activities
 - How well did your activity align with problem based learning? (What problem based learning characteristics did you see? Which ones were not present or different?)
 - How effective was the activity at promoting learning? Would it be better if it were more like problem-based learning? Less like problem-based learning?
- Is this realistic for your classroom? Do you have learning goals that would align well with problem-based learning? What challenges do you think you'd face? What challenges do you think your students would face?
- Use of Problem-Based Learning within Instructional Architect
 - Problem-Based Learning "shell", just copy and edit: <u>http://ia.usu.edu/viewproject.php?project=ia:6890</u>

7.0 Design Your Own Problem Based Learning Activity

- If you and one or more of your group members want to collaborate, we encourage you to do so but by no means require it. The primary goal is to have you create another project to use in your classroom. However, if teaming up means creating something only one of you can use then work independently instead—but please do what teachers do best, share your ideas, get and provide feedback.
- Using the problem-based learning "shell" (project ID 6890), and the problem based learning cheat sheet, get ready to design your own problem-based learning activity in the Instructional Architect. *Before you start*, spend some time planning the problem you want your students to engage in. What might the solution look like? How would you anticipate students might arrive at the solution? Use the space below to outline your ideas:
- What would the problem presentation look like? How would you explain it to students without being direct and explicit about the learning goals? How would you make sure they are covering the material you want them to cover? What information would you provide up front? Use the space below to outline your ideas:

2830 Old Main Hill ◆ Logan, UT 84322 ◆ mimi.recker@usu.edu ◆ Digital Libraries go to School project Funded by a grant from the National Science Foundation (ESI #0554440) 4/6









- Where might the students go astray? Given your problem presentation, where do you anticipate students might depart from your intended goals? How would you re-direct and focus their efforts? Use the space below to outline your ideas:
- What problem-based learning characteristics would you have to ignore and why? Use the space below to outline your ideas:
- Now that you've finished some pre-planning, go ahead and start creating your problem-based learning activity within the Instructional Architect.

8.0: Optional Final Session 4

- May 6, 4pm-5pm. If you attend, you will receive a \$25 gift card.
- The purpose of this optional session is to provide feedback on your workshop experiences.

2830 Old Main Hill ◆ Logan, UT 84322 ◆ mimi.recker@usu.edu ◆ Digital Libraries go to School project Funded by a grant from the National Science Foundation (ESI #0554440)









5/6

Between workshop activities

You have an option of receiving either 1 USU credit at the 5000 course level, or receiving 7 re-licensure points. If you want the licensure points you must attend all of the workshops and complete the pre-survey and post-survey. If you are interested in the USU credit you must do the same and complete all of the between workshop activities:

- Pre-survey (already done)
- Attend and participate in Workshop 1 (already done)
- Complete between workshop activities: (already done)

Attend and participate in Workshop 2. Wednesday, March 25 from 4pm-6:30pm (already done)

- **Be prepared to share** your Instructional Architect Project(s), and your experiences with implementing them in the classroom (already done).
- Complete between workshop activities:
 - Create a new Instructional Architect project. If appropriate for your content and student needs, use a problem-based learning approach within the project. Make the project public, then use it with your students.
 - Write a paper (1-2 pages double spaced) reflecting on your experiences with this workshop, with the Instructional Architect, and with problem-based learning. As part of your reflection paper address the following questions:
 - List the URLs (e.g., <u>http://ia.usu.edu/viewproject.php?project=ia:15</u>) for the IA projects you created throughout the workshop experience.
 - Highlight or star the URL in the list above of any projects you implemented in your classroom
 - Describe the successes and difficulties encountered in designing and implementing the activity.
 - Describe how you could use these resources in your classroom in the future.
 - Discuss problem-based learning. Is this something you envision using in the future? Why or why not? What drove your decision to use or not use problem-based learning after the 2nd workshop?
 - If you used problem-based learning, how did that change your approach to creating the Instructional Architect project? For example, did you use different resources? Structure the project differently?
 - The goal of this workshop is to empower teachers with the skills and tools necessary to effectively integrate technology into their teaching practice. In your opinion, how effective is the workshop at accomplishing this goal? What could be improved? What worked well?

Attend and participate in Workshop 3. Wednesday, April 22 from 4pm-6:30pm.

- **Be prepared to share** your Instructional Architect Project(s), and your experiences with implementing them in the classroom
- Complete post-survey

Questions? Email: Brooke Robertshaw brooke.r@aggiemail.usu.edu

2830 Old Main Hill ◆ Logan, UT 84322 ◆ <u>mimi.recker@usu.edu</u> ◆ Digital Libraries go to School project Funded by a grant from the National Science Foundation (ESI #0554440) 6/6







