

# INSTRUCTIONAL

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# ARCHITECT™

## **Instructor's Guide-Short Workshop**

This curriculum is designed for delivery in a face-to-face environment using primarily a Problem-Based Learning (PBL) approach. Through our experiences, we have found it is crucial to present the face-to-face workshop in a computer lab where everyone has their own computer with Internet access. It is also helpful if the facilitator has a projector to show the participants systematic keystrokes and mouse movements.

The worksheets presented below cover the following sections:

### **Before the Workshop**

Conduct a Target Audience Analysis and determine the characteristics and demographics of workshop participants and workshop environment. Some things to determine include the following:

#### **Workshop Participants**

- Current position (Pre-service teachers, In-service teachers, School Library Media Specialists, Curriculum Coordinators, etc.)
- Subject area taught (Math, Science, Technology, Foreign Languages, etc.)
- Comfort level with technology, specifically Internet usage (Do they currently use the Internet? How often? In the classroom, at home, or both?)
- Existing information technology skills
- Self efficacy beliefs (belief in one's capabilities to produce desired outcome)
- Technology availability (Do they have computers in their classroom or do they use a computer lab? If they have computers in their classroom, how many and do the computers have Internet access? How often are computers incorporated into their curriculum? Do they have Internet access at home? Dial-up or high-speed?)
- Preferred classroom atmosphere
- Number of participants (Ideal is 8 – 16)
- Motivation level (Why are they taking this workshop? Is it optional or mandatory? Who is paying for their workshop fees?)
- Instructional problem – get participants to think about an instructional problem that they'd like to solve as part of

the class. Perhaps there's some content that their students typically struggle with, or something that is not covered well but current instructional materials. Get a few of them to tell you about those problems so you can use them as examples in searching for and aggregating resources.

### **Workshop Environment**

- Projector availability (This is a necessary piece of equipment. Ensure that the facility will have one available or bring your own.)
- Internet access (This is mandatory. Participants will be searching for resources on the Internet and saving their Instructional Architect projects on the Instructional Architect server.)
- Type of computer lab (Mac or PC) – If Javascript is enabled on the web browsers your life will be a lot easier.
- How many computers? There needs to be a 1:1 ratio for computers:participants.
- Location and travel directions
- Time constraints; how long is the workshop? (Ideal is 5 – 7 hours)
- Note: Printers are optional

I revise the **Instructional Activities** to represent the educational needs of my participants. This helps set a certain level of excitement among the participants, i.e., "I'm going to be able to create something similar for my use in my classroom.. today!" (see the "Instructional Problem" bullet above.

## **Instructor's Guide: Day One**

### **Getting Started**

- Sign-in Sheet: Have participants sign in before they start the workshop.
- Informed Consent: Explain Informed Consent and get required signatures.
- Pre-survey: Administer pre-survey found at [ia.usu.edu/survey](http://ia.usu.edu/survey). Be sure to have participants write down their identification on the first page of their Participant Handout. Stress that their email address should be their first choice of an identifier, and the birthday/social security number combination the second choice (If they pick one of the two it will be far easier for us to help them remember it for the post-survey). I usually allow about 15-20 minutes for participants to fill out the survey. Let them know about this time constraint so they can monitor their responses appropriately. I would also suggest you walk around and keep everybody moving along and answer any questions they may have.
- Communication Options: Spend some time discussing various communication options for future homework assignments. How can team members share their comments about other team members' projects in a written format? Emphasize that they

will be asked to do this in between the two workshop sessions. Allow the group to brainstorm communication methods. Here are some suggestions: 1) Comment on projects through this new IA feature, 2) Blog (expertvoices.nsd1.org), 3) Email, 4) IM, and 5) Discussion boards.

### **Introduction to the National Science Digital Library (NSDL)**

- Give a brief explanation about the NSDL, specifically that it is a portal to other libraries. At the beginning of 2006, there were over 1 million resources from over 500 participating libraries. AMAZING!!! And all designed for educational purposes. There is a great section for your participants called First Time Users. In the interests of time, don't spend a lot of effort here, since this is a collection you can search from right within IA.

### **Introduction to the Instructional Architect (IA)**

- Student Login: Give the participants a demonstration of an Instructional Architect project by having them login as your student. Emphasize that they will be setting up a similar account for their students to use. This gives participants the "big picture." I have my students login as Dawson101 and use one of my public projects that is most applicable to the group. Give the participants time to explore and experiment with the outstanding online learning resources you have included. Providing exciting resources, which are targeted to your audience, will help motivate the participants and increase the quality of the projects they will create at the end of the workshop.
- Browsing: Demonstrate the option of browsing existing Instructional Architect projects using the Search Keyword option, Author's Last Name, Title, etc. Allow students to explore on their own.

### **Register and be guided through the creation of a simple IA Project**

- Registration process: Complete the registration process found at ia.usu.edu. Remember, registration is free and allows users to save their projects on the IA server for future modification. You can use IA as a guest, but there are no guarantees that projects will remain intact.
- When teaching participants how to create an Instructional Architect project, it is beneficial to model the process. I have done this by opening two browser windows; one window with the Instructional Architect project I created for the workshop and one window with a blank Instructional Architect project. Walk the participants through the steps sequentially, alternating between the completed and evolving project, as they recreate the project together. This is a good way for participants to see how all the pieces fit into the whole.

### **Gather resources**

- Walk participants through the different ways to gather resources (search NSDL, browse IA projects, and add your own resources). Be sure you are familiar with the navigation for moving resources and creating folders.

### **Create advanced IA projects**

- Encourage participants to share their individual projects on the projector at the end of the workshop. This is extremely effective way to wrap up the session. I have never had a problem getting people to share and I believe that is because I set the appropriate tone during the workshop. Everyone is expected to share and there is a cooperative tone throughout the workshop. This has quite a few benefits: 1) it encourages participants to take the workshop seriously, 2) participants create projects they are proud of and use high-quality online learning resources, 3) it allows the other participants to see what resources are available, and 4) you promote collaboration and sharing among participants.

### **Homework**

- Discuss homework assignment and answer any questions.

## **Instructor's Guide: Day Two**

The intent of this portion of the workshop is to follow-up on the previous training; assess participant's feelings and observations about the workshop training, the IA, and the NSDL; and to provide further instruction to participants in ways to include online resources and the IA as part of their content instruction and to go over the materials created by participants after the first workshop.

The workshop is broken down into different sections. Whole-group participation, small-break out groups, and the post surveys will be conducted. Inform the participant that there will be a time that they can show and discuss the projects they created with others at their specific grade levels.

### **Review**

- Review previous day of training.

### **Introduction**

- Thank everyone for coming back to the second half of the training. Give an overview for the day's workshop.

### **Whole Group Reflection**

- Reflection: The workshop will start with a whole group reflection. Guide the discussion for the group to reflect upon their experience with using online resources and the IA. Here are some guiding questions:
  1. What was your overall experience with using online resources and the IA?

2. What were your successes with using online resources and the IA? Specific barriers and enablers need to be identified.
  3. Any other thoughts you may want to share with the group?
- Collect the reflection papers from the participants.

#### **Small Group Break-out Session**

- Group Share: Using the same groups as the first workshop, participants will show and discuss their projects and give feedback to each other. Once they have completed the small group share, each group will determine which projects they'd like to share with the whole group. Ask participants to share the following information regarding each project they're demonstrating.
  1. Why they chose a particular project
  2. Students' reactions to the projects
  3. What they would do differently the next time they implement their IA project in a classroom

#### **Whole Group Activity**

- Each group will share their selected Instructional Architect projects with the whole group including answering the three previous questions. Facilitate discussion regarding how to implement similar projects in other areas.
- Remind the whole group that they should behave as students and ask questions if needed as they are guided through the small group's IA project.
- Collect the feedback papers about each group's projects.

#### **Small Group Break-out Session**

- Place participants into groups according to where they are seated. (Group 1: 5<sup>th</sup> grade, Group 2: middle school, and Group 3: primary group.)
- Group 1 and 2 (5<sup>th</sup> grade and Middle School) will work on pedagogy. The intent of this group is to further examine ways to incorporate use of online resources and the IA into content pedagogy. Have a small discussion about other ways of incorporating the IA into instruction.
  - 5<sup>th</sup> grade- Have the teachers come up with one content area that is coming up soon or is to be covered in the fall. Have them create an IA project with multiple resources or improve an existing IA project with the goal being that each group member will be able to use the project next fall.
  - Middle School-Have these teacher develop IA projects for concepts that are coming up soon or that occur in the early fall or rework an existing IA project. This will provide projects for use in their classroom now or in the fall.
- Group 3 (Primary group) will work on mechanics. The intent of this group is to provide more support for those who need more practice with the IA and to make them more competent users.

The group will go over how to find and save resources as well as how to create and publish IA projects.

**Wrapping up**

- Post-survey: Administer post-survey
- Feedback on the training
- Contact us if they have further questions.