Instructor’s Guide
Fall 2004

This curriculum was designed for delivery in a face-to-face environment, although it is currently being extended for delivery as an online course. Through our experiences, we have found it is crucial to present the face-to-face workshop in a computer lab where everyone has access to their own computer with Internet capabilities. 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?)

**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)
- 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 create an Instructional Architect project specifically geared towards my audience and their needs. 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.”

**Getting Started**
- To create a feeling of cooperation and willingness to contribute throughout the workshop, I spend about three minutes per person and have them introduce themselves. I model this approach by introducing myself. Typically I’ll write three to five questions on the white board I want them to answer such as:
  1) Name
  2) Where you work
  3) Position
  4) Comfort level with technology
  5) Hardware in the classroom.
- Answering these questions gives me one more opportunity to fine-tune my target audience analysis by incorporating the participants’ responses. Additionally, it creates a comfortable environment so participants will be willing to share their projects they create during the workshop.
- Explain Informed Consent and get required signatures.
- Administer pre-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.
- Give the participants a demonstration of an Instructional Architect project. This gives participants a general sense of what they will be creating and a solid idea of how their final projects will appear. Show them the project you have created for this workshop. On the handout, I refer to project number 1945; you should
replace 1945 with the project number associated with the project you have specifically created for this workshop. Walk the participants through the project, giving them 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.

Introduction to Utah Education Network, Digital Libraries & Searching
- It is important that participants are familiar with relevant state core objectives, digital libraries, and searching techniques. At this point in the workshop, I spend some time demonstrating Utah Education Network (UEN – http://www.uen.org/) and National Science Digital Library (NSDL – http://www.nsdl.org/). Allow participants some time to explore relevant resources.

Creating an 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 tabs in Mozilla or Firefox; one tab with a completed Instructional Architect project (usually the one I created for the workshop) and one tab with a blank Instructional Architect project. Walk the participants through the steps sequentially, while tabbing between the completed and evolving projects, and have them recreate the project together. This is a good way for participants to see how all the pieces fit into the whole.

Designing your Instructional Webpages

Creating your Instructional Webpage(s)
- 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 two benefits; 1) it encourages participants to take the workshop seriously and create projects they are proud of and use online learning resources that are of high quality and 2) it allows the other participants to see what resources are available and promotes collaboration and sharing among participants.
- Administer Post-survey
Sample Schedule

9:30 – 9:45  Introductions

9:45 – 9:50  Informed Consent (in folders)

9:50 – 10:15  Pre-survey (ia.usu.edu/survey)

10:15 – 10:35  Introduction to Instructional Architect (link from IA #1945)

10:35 – 11:00  Intro to UEN, Digital Libraries and Searching

11:00 – 11:15  Creating an IA Project

11:15 – 11:30  Designing your Instructional Webpage(s) (crayons)

11:30 – 12:30  Lunch

12:30 – 1:45  Creating your Instructional Webpage(s) using IA

1:45 – 2:40  Sharing

2:40 – 3:00  Post-survey
Getting Started

- Informed Consent
- Pre-survey: ia.usu.edu/survey

Activity: Introduction to Instructional Architect: Fifth Grade Fractions

- Resources required: Computers
- Objective: Students will be able to understand how instructional webpages and online resources can be used in a classroom.

I would like everyone to imagine that we are in a fifth-grade math class and working on fractions. Imagine that as a teacher, you have found some great online learning resources that you’d like to share with your students. One way to easily direct your students to these resources is through a free tool called Instructional Architect. I have created an example using fraction resources appropriate for fifth graders. Go to the following webpage and follow the instructions.

ia.usu.edu

Click on browse and type in the project number: 1945

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Section 1: Introduction to UEN, Digital Libraries & Searching

**UEN** (Utah Educational Network) [uen.org](http://uen.org)

**NSDL** (National Science Digital Library) [nsdl.org](http://nsdl.org)

- **Resources required:** Computer, access to the UEN and NSDL
- **Objective:** Students will be able to effectively use the UEN and NSDL to find core objectives as well as search and locate online resources for use in their instructional webpages.

We will have a brief overview and introduction of the UEN and NSDL websites. I will show you the navigation and the basic functionality of the sites. We will spend some time working on searches and how to search/browse within the NSDL.

**Activity:** Look at the UEN website and explore core objectives. Examine methods of searching the NSDL for resources. Let us imagine that we are a fifth grade teacher and we are trying to find resources that would align to the **Utah State fifth grade math core, Standard I, Objective 4:** Use fractions to communicate parts of the whole.

1. Search the NSDL ([nsdl.org](http://nsdl.org)) by the search tab looking for fractions.
   - Resource: Math Forum
2. Search the NSDL by collections
   - Resources: National Library of Virtual Manipulatives
   - Search for fractions

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Section 2: Creating an IA Project – ia.usu.edu

- Resources required: Computer, access to Instructional Architect
- Objective: Students will be able to create effective instructional webpages using Instructional Architect.

I will walk you through the interface of IA and show the various methods of using IA for creating instructional projects using web-based learning resources. You will look at an existing example of an instructional webpage created using IA. You will register with IA using a username and password. Some key components to remember when creating instructional webpages in IA:

- Project Overview – the information is helpful and informative
- Page Introduction – includes some type of instructions or outline for students
- All resources must have some type of introduction or instruction
- Resource debriefing must be used appropriately (sometimes this means it is blank!)

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Section 3: Designing your Instructional Webpage(s)

- Resources required: Paper & Crayons
- Objective: Students will design (not develop) a lesson or instructional unit to develop in IA.

Activity: Select a **state core standard** (if you need help selecting a standard, visit UEN.org) and begin to design your instructional webpage(s) on paper. Briefly search using IA to see what resources are available then draw/sketch an outline of your instructional webpages using the paper and crayons provided. You may want to work iteratively; search for available resources, roughly sketch how those resources will be included in your Instructional Architect project, search for additional resources, modify your sketch, etc. You will have 15 minutes to complete a brief design.

Things to consider:
- Do you need an attention activity? □ Yes □ No
- What type of instructional webpage would you like to create? Check those that apply.
  - Lesson
  - Resource List
  - Practice
  - Lab
  - Group activity
  - Homework or assignment
  - Supplementary instruction
  - Other _____________
- Where will students use the instructional webpages? Check those that apply.
  - In the classroom
  - In the library
  - In a computer lab
  - With a substitute teacher
  - At home
  - Other _____________
- How many pages will you need? How will they be organized?

- What instructions need to be included?
  - Overviews
  - Instructions
  - Resource introductions
  - Debriefings
  - Conclusion
  - Conclusion

- What types of instructional activities are you going to include?
Section 4: Creating your Instructional Webpage(s) using IA

- Resources required: Computer with Internet connection
- Objective: Students will create their instructional webpage(s) following their design outlines from the previous activity.

Activity: Now it is time to create instructional webpage(s) using Instructional Architect. The project should contain at least three unique online resources. You will have the opportunity to share your instructional webpages at the end of the workshop. Please use this time to get help from the IA staff.

Post-survey: ia.usu.edu/survey

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