Technology Implementation in the Classroom

Approaches and Tools for Developing Web-Enhanced Lessons
In this course, participants will gain hands-on experience using Web-based tools to develop collaborative, inquiry-based curricula. Participants will take an in-depth look at four Web-based curriculum formats including Hotlists, Treasure Hunts, Multimedia Scrapbooks, and WebQuests. Exemplary curricula in each format will be analyzed, critiqued and evaluated for applicability to participants' own classroom needs. Participants will leave the course with detailed plans for developing Web-enhanced lessons for their own curricula.

Transforming the Classroom with Project-Based Learning
This workshop is designed to familiarize participants with the principles of Project-Based Learning (PBL) and strategies for implementing PBL projects in their classrooms. Throughout this six-week workshop, exemplary projects will be analyzed, critiqued, and evaluated for applicability to participants' classroom needs. Participants will gain hands-on experience developing collaborative, inquiry-based projects that support their curricular goals. Participants will learn to blend PBL and standards-based design strategies to create curriculum units that enhance student learning. Each participant will leave the online workshop with a detailed plan for a PBL project.

Designing a Virtual Field Trip
This workshop will enable participants to use Internet resources to design a "virtual field trip" for their students. Participants will become familiar with the strategies and resources that educators use to design these field trips, as well as tips and tricks to ensure their success. By the end of the workshop, participants will have designed an effective and engaging virtual field trip that is aligned to their state's standards.

The above workshops have been designed and developed by EDC for their EdTech Leaders Online (ETLO) program (http://www.edtechleaders.org). ETLO offers a series of high-quality online professional development workshops for K-12 teachers and administrators focused on specific subject areas and grade levels. These standards-based, project-based workshops are developed and kept up-to-date by leading experts in educational technology. They are designed using the Blackboard course authoring system to be facilitated by trained online facilitators from local educational organizations. Each workshop includes six sessions (one per week for six weeks) and an overview to learning in the online environment. Each session contains online readings, multimedia resources, interactive activities, and focused asynchronous discussions. All course content is provided online in the workshop Website.
**Approaches and Tools for Developing Web-Enhanced Lessons**

**Course Syllabus**

**Catalog Description**
In this course, participants will gain hands-on experience using Web-based tools to develop collaborative, inquiry-based curricula. Participants will take an in-depth look at four Web-based curriculum formats including Hotlists, Treasure Hunts, Multimedia Scrapbooks, and WebQuests. Exemplary curricula in each format will be analyzed, critiqued and evaluated for applicability to participants' own classroom needs. Participants will leave the course with detailed plans for developing Web-enhanced lessons for their own curricula.

**Prerequisites**
This is an introductory course for teachers, technology specialists, curriculum specialists, professional development specialists, or other school personnel. Participants are expected to have regular access to computers. In addition, participants should be proficient with using email, browsing the Internet, and navigating to computer files.

**Goals**
This workshop will enable participants to:

1. Learn about simple but powerful Web-based tools to help enhance curriculum activities
2. Develop a personal collection of Web-based resources for curricular use
3. Learn about Web-based activity formats that match curricular goals
4. Plan a standards-based Web-enhanced lesson for classroom use

**Assessment and Course Requirements**
Each session includes readings, an activity, and a discussion assignment, which participants are required to complete.

**Course Products**
As a final product, students will create a web-enhanced lesson using either a pre-designed template and/or the web-based activity tool, *Filamentality*.

**Discussion Participation**
Participants will be evaluated on the frequency and quality of their discussion board participation. Participants are required to post a minimum of two substantial postings each session, including one that begins a new thread and one that responds to an existing thread. Postings that begin new threads will be reviewed based on their relevance, demonstrated understanding of course concepts, examples cited, and overall quality. Postings that respond to other participants will be evaluated on relevance, degree to which they extend the discussion, and tone.

**Required Readings, Activities and Assignments**

**Session One: Introduction - The Value of the Web**
Participants will read *Working the Web for Education* by Tom March, which provides an overview of using online activities in education.

As an activity for this session, participants will explore and familiarize themselves with the Web by utilizing several search engines geared towards educators to gather web-based resources centered on a topic of their choice. Students will keep a record of the valuable resources they find.

**Session Two: Formats for Web-Enhanced Lessons – Hotlists and Multimedia Scrapbooks**
Participants will preview several pre-selected examples of both Hotlists and Multimedia Scrapbooks.
http://www.edtechleaders.org/documents/wel/hotlistsandscrapbooks.doc
As an activity for this session, participants will review and evaluate the examples listed for both the Hotlists and Multimedia Scrapbooks, pick one of the examples from each category and consider how a teacher using each activity might answer the following questions:

- What is the particular topic/lesson the teacher is teaching?
- What will students learn from this activity?
- How do these formats limit what students learn about the topic?

Participants will also make a Hotlist relevant to one of the topics they teach using the Eduhound Hotlist builder.

**Session Three: Formats for Web-Enhanced Lessons – Treasure Hunts and WebQuests**

Participants will explore several examples of both Treasure Hunts and WebQuests.

As an activity for this session, participants will compare the four formats: Hotlists, Treasure Hunts, Multimedia Scrapbooks, and WebQuests. They will consider the different reasons they would use each as a classroom activity to help students learn about the subject matter and they will begin thinking about topics that could be enhanced by these web-based activities.

**Session Four: A Deeper Look at WebQuests**

Participants will learn more about the design of WebQuests by examining several WebQuest Design Patterns on the Bernie Dodge website. They will view several examples and templates for WebQuests that can be modified to fit specific learning goals.

As an activity, participants will begin to think about how they might organize students and include WebQuests into the curriculum.

**Session Five: Planning and Evaluation of Web-Enhanced Lessons**

In this session, participants will learn how to plan and evaluate an effective web-enhanced lesson. They will learn what to look for in selecting web-based resources and participants will view rubrics that will help them to evaluate a WebQuest before using it in class.

As an activity, participants will begin planning their own lessons using a template provided within the course.

**Session Six: Creating a Web-Enhanced Lesson**

Participants will read the following which will introduce them to an online tool that will help them create a web-enhanced lesson.

- **Guide to the different Filamentality activity formats**
- **Filamentality Instructions Sheet**

As an activity for this session, participants will use the templates to finalize their lesson, and then make it accessible on the Web.
Transforming the Classroom with Project-Based Learning

Course Syllabus

Catalog Description

This workshop is designed to familiarize participants with the principles of Project-Based Learning (PBL) and strategies for implementing PBL projects in their classrooms. Throughout this six-week workshop, exemplary projects will be analyzed, critiqued, and evaluated for applicability to participants' classroom needs. Participants will gain hands-on experience developing collaborative, inquiry-based projects that support their curricular goals. Participants will learn to blend PBL and standards-based design strategies to create curriculum units that enhance student learning. Each participant will leave the online workshop with a detailed plan for a PBL project.

Prerequisites

This is an introductory course for teachers, technology specialists, curriculum specialists, professional development specialists, or other school personnel. Participants are expected to have regular access to computers. In addition, participants should be proficient with using email, browsing the Internet, and navigating to computer files.

Goals

This workshop will enable participants to:

1. Learn about principles of PBL
2. Develop a collection of web-based PBL resources to support curricular planning
3. Learn how to develop PBL activities to support curricular goals
4. Learn to utilize technology in the planning, implementation, and assessment of Project-Based Learning
5. Develop techniques to help students effectively participate in Project-Based Learning
6. Plan a standards-based, technology-enhanced PBL project for classroom use
7. Participate in an online collegial network

Assessment and Course Requirements

Each session includes readings, an activity, and a discussion assignment, which participants are required to complete.

Course Products

As a final product, participants will complete a Project-Based Learning template to generate a complete plan for a project-based unit to be implemented in the coming school year.

Discussion Participation

Participants will be evaluated on the frequency and quality of their discussion board participation. Participants are required to post a minimum of two substantial postings each session, including one that begins a new thread and one that responds to an existing thread. Postings that begin new threads will be reviewed based on their relevance, demonstrated understanding of course concepts, examples cited, and overall quality. Postings that respond to other participants will be evaluated on relevance, degree to which they extend the discussion, and tone.

Required Readings, Activities and Assignments

Session One: What is Project-Based Learning?
Participants will read the following articles to learn about the basic principles of Project-Based Learning, and explore the outcomes made possible in a classroom structured around PBL.

- Project-Based Learning: A Primer
• Building a Bridge to Knowledge for Every Child
  http://glef.org/php/article.php?id=Art_288

As an activity for this session, participants will watch and reflect on a series of video clips from a George Lucas Educational Foundation documentary called Learn & Live. The story documents a technology-enhanced PBL project in a fourth and fifth grade classroom at the Clear View Charter School in Chula Vista, CA.
  http://glef.org/php/article.php?id=Art_631

Participants will also review several of the Exemplary Projects listed on the Techscape PBL and Design Center website (http://www.wested.org/pblnet/exemplary_projects.html) as they think about how each project reflects, or fails to reflect, the key characteristics of PBL.

Participants will use the video and this session's readings to explore the differences between traditional teaching and Project-Based Learning and to analyze their own teaching practice.

Session Two: Planning a Project-Based Learning Unit
Participants will examine the characteristics of Project-Based Learning and strategies for analyzing curriculum in light of quality PBL instruction.
  1. How Does Project-Based Learning Work?
     http://www.edutopia.org/modules/PBL/howpbl.php#question
  2. How to Analyze a Curriculum Unit or Project and Provide the Scaffolding Students Need to Succeed,
     Coalition of Essential Schools
     http://www.essentialschools.org/cs/resources/view/ces_res/85

As an activity for this session, participants will view and evaluate two more clips from the Learn & Live documentary. They will also explore the several websites which help inspire teachers to create project-based learning activities that can have an impact on local and global communities. Lastly, they will download and begin work on the Project-Based Learning Template.

• Learn & Live: Student Researchers
  http://glef.org/php/article.php?id=Art_632
• Learn & Live: Learning to Work as a Team
  http://glef.org/php/article.php?id=Art_635
• Summer Sleuths Coaching Project
  http://www2.imsa.edu/programs/pbln/sleuths/
• Nonprofit Prophets
  http://www.kn.pacbell.com/wired/prophets/
• The Jason Project
  http://www.jasonproject.org/
• iEARN
  http://www.iearn.org/
• Project-Based Learning Template

Session Three: Framing Inquiry - The Project-Based Learning Process
Participants will learn about techniques and strategies for designing standards-based projects that foster inquiry-based learning. The readings for this session are based on Understanding By Design by Grant Wiggins and Jay McTighe.
  • Backward Design Process
    http://digitalliteracy.mwg.org/curriculum/process.html
  • Principles of Backward Design
As an activity for this session, they will view another clip from the Learn & Live documentary and they will continue to use the PBL Template to develop their own Project-Based Learning project.

- Live and Learn: The Changing Role of the Teacher
  http://glef.org/php/article.php?id=Art_637

Session Four: Technology in the Design, Structure, and Presentation of Project-Based Learning
Participants will read excerpts from two reports on the role of technology in PBL.

- Laptops for All, George Lucas Foundation
  http://www.edutopia.org/modules/modarticle.php?
- Information Technologies, Hardware and Software: Their Use in Project-Based Learning

As an activity for this session, participants will view and evaluate two clips from the Learning & Living documentary about using multimedia to share research and to present PBL learning outcomes.

- Sharing Research through Multimedia
  http://glef.org/php/article.php?id=Art_633
- The Project's Culmination
  http://glef.org/php/article.php?id=Art_638

They will also continue designing their own Project-Based Learning project by completing Part II of the PBL Template.

Session Five: Assessing Project-Based Learning
Participants will read the following articles to better understand the role of assessment in Project-Based Learning.

- Assessing Student Work with Project-Based Learning (Challenge 2000)
  http://pblmm.k12.ca.us/PBLGuide/AssessPBL.html
- Assessment of PBL
  http://www.gsn.org/web/pbl/plan/assess.htm
- Defining 'Rubric'
  http://pblmm.k12.ca.us/PBLGuide/ThoughtPieces/Rubric.html

As an activity for this session, participants will view and evaluate a clip from the Learning & Living documentary, Assessing Project-Based Work http://glef.org/php/article.php?id=Art_634

Participants will continue to work on their project by completing Part III of the PBL template and use one of the following software tools to create an assessment tool for their Project-Based Learning project.

- Rubistar
  http://rubistar.4teachers.org/
- Project-Based Learning Checklists
  http://www.4teachers.org/projectbased/checklist.shtml

Session Six: Creating Your Own Project-Based Learning Unit
In preparation for implementing their own project-based learning units, participants read about implementing project-based learning in a multimedia project and an excerpt from the ISTE publication Project-Based Learning Using Information Technology.

- ISTE publication Project-Based Learning Using Information Technology.
- Steps for Planning and Implementing a PBL+MM Project
  http://pblmm.k12.ca.us/PBLGuide/Guide/Steps.html

In the Activity section, participants will complete Part IV “Timeline” and Part V, “Sample Project Planning Table for Students” on their PBL Template. Then they will share their unit on the discussion board for collaborative feedback from their colleagues.
Designing a Virtual Field Trip
Course Syllabus

Catalog Description
This workshop will enable participants to use Internet resources to design a "virtual field trip" for their students. Participants will become familiar with the strategies and resources that educators use to design these field trips, as well as tips and tricks to ensure their success. By the end of the workshop, participants will have designed an effective and engaging virtual field trip that is aligned to their state's standards.

Prerequisites
This is an introductory course for teachers, technology specialists, curriculum specialists, professional development specialists, or other school personnel. Participants are expected to have regular access to computers. In addition, participants should be proficient with using email, browsing the Internet, and navigating to computer files.

Goals
This workshop will enable participants to:
1. Become familiar with the different types of virtual field trips
2. Become familiar with locating and using diverse Internet resources that can be used on a virtual field trip
3. Develop strategies for aligning a virtual field trip with existing curriculum and standards
4. Understand how to use Microsoft Word to create and present virtual field trips to students
5. Develop strategies for assessing virtual field trips

Assessment and Course Requirements
Each session includes readings, an activity, and a discussion assignment, which participants are required to complete.

Course Products
As a final product, participants will create virtual field trips to use in their own classrooms.

Discussion Participation
Participants will be evaluated on the frequency and quality of their discussion board participation. Participants are required to post a minimum of two substantial postings each session, including one that begins a new thread and one that responds to an existing thread. Postings that begin new threads will be reviewed based on their relevance, demonstrated understanding of course concepts, examples cited, and overall quality. Postings that respond to other participants will be evaluated on relevance, degree to which they extend the discussion, and tone.

Required Readings, Activities and Assignments

Session One: Fitting a Virtual Field Trip into Your Existing Curriculum
Participants will read about the possibilities for virtual field trips in Get Outta Class With Virtual Field Trips http://www.educationworld.com/a_tech/tech071.shtml

As an activity, participants will download the Virtual Field Trip Planner that they will use throughout the workshop to help plan their own virtual field trip. Participants will review the standards for their subject and grade area and complete Part 1 of the Planner.

Session Two: A Virtual Field Trip to Some Virtual Field Trips
Participants will read the following articles:
Categories of Virtual Fieldtrips, which describes the different kinds of virtual field trips to use with students.  http://www.ncsu.edu/meridian/jan99/vfieldtrip/fieldtrips2.html

Take a Museum Field Trip—Without Leaving Your Classroom! This article provides links to several museums, along with suggestions about how to structure a virtual field trip to a museum.  http://www.education-world.com/a_curriculum/curr057.shtml

As an activity, participants will explore the following sites to examine some online virtual field trips.

- With Miles to Go Before I Sleep -- A 3-week virtual journey of the Underground Railroad that classes can participate in year round without cost. http://exchange.co-nect.net/Teleprojects/project/?pid=3&session=r8GZz4Pj6vB
- Virtual Field Trips -- This site contains a collection of virtual field trips created by teachers. http://www.field-trips.org/trips.htm

Session Three: Where Do You Want to Go?
Participants will read Planning a Virtual Field Trip focusing on how one teacher carefully chooses destinations that bring history to "life" in his classroom. http://www.caryacademy.org/historytech/Vol1no1/virtualfieldtripspage1.htm

As an activity, participants will:

- Review Kathy Schrock's virtual field trip evaluation plan. You can use this form to evaluate potential field trips for your students
- Complete Parts 2-3 of the Virtual Field Trip Planner and decide where they would like to take their students on a virtual field trip (Part 2) and which standards will be addressed on the trip (Part 3).

Session Four: Technology for Designing and Presenting the Virtual Field Trip
Participants will read the following articles:

- Technology for Designing Virtual Field Trips
  This reading presents several ideas for how technology can be used in the activities or "stops" on your virtual field trip. http://www.edtechleaders.org/documents/VFT/vft_tools.html
- Technology Tips for Presenting Virtual Field Trips
  This reading presents several ideas for how technology can be used in the delivery or presentation of the trip to your students. http://www.edtechleaders.org/documents/VFT/vft_present.html

As an activity, participants will:

1. Explore the resources in the reading that might be helpful to design a virtual field trip. In Part 4 of the Planner, note which websites (if any) students should use or "visit" on the trip.
2. Start a new Microsoft Word document and practice making hyperlinks and adding images from the Internet. See the "Technology Tools for Virtual Field Trips" reading for directions.

Session Five: Mapping the Trip
Participants will read the following articles:
• Fieldtrips: Experiences for Education
  http://www.buddyproject.org/jfy/teachers/articles/fieldtrip.asp
  This reading provides suggestions of activities that students can do on virtual field trips.

• Teaching Tips for Virtual Field Trips
  http://oops.bizland.com/vtours.htm
  Scroll to the bottom of the page to read the four, brief product ideas for virtual field trips.

• Forms of Alternative Assessment
  http://www.miamisci.org/ph/lpdefine.html

As an activity, participants will:
  1. Search for additional websites or "stops" that can be incorporated into their Virtual Field Trip. Participants will complete Part 5 of the Planner and outline how they plan to use these websites on the virtual field trip.
  2. In Part 6 of the Planner, make note of their ideas for assessing student performance on the virtual field trip (products, performances, journal entries, postcards from the trip, observations, quizzes, tests, academic prompts, and so on).

Session Six: Developing a Plan for Using Handhelds
Participants will read
  Is the Tour Better in Person? This is an easy checklist to use to evaluate a virtual field trip.
  http://school.discovery.com/schrockguide/evaltour.html

As an activity, participants will:
  1. Post their completed Project Planner to the Discussion Board.
  2. Using Microsoft Word, create a virtual field trip to use with their students. Participants should describe where they are going, how they will get there, and any stops along the way. Include graphics to make the virtual field trip look engaging. Participants should feel free to use any model that they saw throughout this workshop.