

## Developing Classroom Materials for Online Delivery

**Gerald L. Boerner**

Azusa Pacific University &  
Riverside Community College/Norco

## Options for Using Technology in the Classroom

The following schemas present a  
framework for examining the adoption  
of technology into the  
Teaching/Learning Process

## Classrooms & Technology

- For sake of discussion, we identify five general types of classrooms as they relate to the use of technology, especially web-based technologies
- For each type of classroom, we will examine the general approach & the types of technologies used...

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## The Five Classroom Scenarios

- "Low -Tech", Traditional Classroom
- Technology -supported Classroom
- Hybrid Classroom
- Web -supported Classroom
- Online, Web -based Classroom

Let's take a closer look...

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## Scenario #1

- The "Low Tech", Traditional Classroom
  - More traditional lecture methods, discussion groups, hard copy handouts, etc. characterize this classroom
- Technologies:
  - In office, materials may be prepared via computer
  - Classroom presentation via overheads
  - TV/VCR and Overhead are "technology"

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## Scenario #2

- Technology -based Classroom
  - Technology is used to present classroom materials (PPT, Simulations, etc.)
  - Communication via e -mail
  - Syllabus may be posted on web site, from word processing documents
- Technologies:
  - Computer -based presentations, email, etc.

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### Scenario #3

#### The Hybrid Classroom

- Face -to-Face Lectures, Discussion Groups
  - Presentations via Computer, Online, and/or Paper
  - Communication via email, Threaded Discussion Webs, etc.
  - Syllabi AND assignments presented via web pages
- (Cont'd)

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### Scenario #3 (Cont'd)

#### The Hybrid Classroom (Cont'd)

- Testing from computer -generated tests and delivered either via paper or online
- #### Technologies:
- Email and Web Browser essential
  - Some course materials "exported" to HTML format
  - Web becomes essential part of class

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### Scenario #4

#### The Web-Supported Classroom

- Face -to-Face interactions and information sessions ("Lectures") are used when appropriate
  - Online lecture materials (PPT) and content ("Streaming") used for class preparation
  - Most materials (syllabi, assignments, etc.) delivered via web pages
- (Cont'd)

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### Scenario #4

#### The Web-Supported Classroom (Cont'd)

- Threaded Discussions and Chat-type Sessions are integral
  - A "wrapper" online delivery systems like Blackboard.com or eCollege.com are used to create the web-supported environment
  - HTML-friendly programs are used to prepare materials (MS Office, etc.)
- (Cont'd)

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### Scenario #4 (Cont'd)

#### The Web-Supported Classroom (Cont'd)

- Online assessment, grade book, etc. takes the course outside of the classroom walls
- #### Technologies:
- "Wrapper" programs for online course management
  - HTML-based materials
  - Email & Web Browsers (with Plug-ins)

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### Scenario #5

#### The Online Course

- This course is delivered via the web with little or no Face-to-Face contact
  - Online, Course Management Environment is critical
  - Support Essential for developing course, maintaining server hardware & software, and keeping the course up on a 24/7 basis
- (Cont'd)

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### Scenario #5 (Cont'd)

#### The Online Course

- The Advantages:
  - "Anytime, Anywhere" Learning
  - Fits into the schedule of the student
- The Disadvantages:
  - High impact on teacher for both preparation and delivery — up to 10 times the work!
  - Lack of personalization for the students AND teacher — Personality Style Interactions

(Cont'd)

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### Scenario #5 (Cont'd)

#### Technologies:

- Online Delivery Systems
- Online Communications, Testing, Materials Delivery, etc.
- Classroom Presentations using both Static (PPT) and Dynamic ("Streaming") media
- New Teaching/Learning Paradigms

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### Some Teacher Characteristics

#### Examine Yourself on these dimensions:

- Structured vs. Unstructured Approach
- Constructivist vs. "By the Book" Approach
- Interactive vs. Lecture Modes
- Textbook-based vs. Discovery-based
- Individual vs. Group Oriented

#### These teaching styles will determine the most appropriate scenario...

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### Examining the Technologies

The following is a summary of the different technologies that can be used to deliver classroom materials via the Web

### An Overview

#### Major types of Technologies:

- Information Posting
- Basic Classroom Materials
- Supplemental Materials
- Communication & Collaboration
- Classroom Resources
- Assessments (Quizzes, Tests & Surveys)
- Student Work Submissions

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### Information Posting

#### Announcements & Alerts

- Upcoming events and assignments
- Online "wrapper" or free websites like ListBot.com

#### Calendar of Activities

- Course DUE Dates & Special Events
- Online "wrapper" or free websites like eGroup.com

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## Basic Classroom Materials

### Basic Classroom Materials

- Course Syllabus
- Class Schedule of Activities & Assignments
- Instructor Information
- Agendas and Deadlines
- Format for "legal" documents
  - Use Acrobat format (PDF) before posting
  - Prevents changing content!

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## Supplemental Materials

### Handouts

- PowerPoint Presentations online
- Supplemental Instructional Materials (often in Acrobat PDF format)

### Lectures and/or Supplements

- "Streaming" Media (audio, video, etc.)
- Digitized Video [Demo]
- Animations & Simulations

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## Communications & Collaboration

### Communications

- Asynchronous
  - Email (preferably web-based)
  - Threaded Discussions
  - File Sharing
- Synchronous
  - Chat-type conferences
  - Audio and/or videoconferencing

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## Communications & Collaboration (Cont'd)

### Collaboration

- Group Projects
  - Collaborative Research
  - Collaborative Writing
  - Format: Web Pages and/or Site
- Discussions & Interactions
  - Personalize the online experience
  - Sharing information

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## Classroom Resources

### Print References

- Bibliographies
- Online Bookstores
- Library Databases

### Web Site Resources

- Supplemental Information
- Tutorials
- "Starting Points" for Research Beginnings

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## Classroom Resources (Cont'd)

### Database-driven Resources

- "Webliography™" for student-contributed web search information
- Dynamic Reading lists with contributions from students and colleagues
- Bibliographic search engines like BookEnds (Academic Version: \$100)

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## Assessments

- Online Testing
  - Quizzes
  - Examinations
  - Surveys
- Online Gradebook
  - Assessments
  - Assignments and Activities

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## Student Work Submissions

- “Digital” Drop Box
  - Students submit work electronically via one-way FTP via the Browser
  - Eliminates piles of paper and/or disks
  - Time and Date “stamps” the submission

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## Useful Programs for Preparing Online Materials

The programs listed below are the authors' “best bets” from the various categories based on our experience...

## Basic Office Operations

- A good office suite with integral HTML (and/or XML) capabilities
  - Office 2000 (Microsoft — PC)
  - Office 97/98 (Microsoft — PC & Mac)
  - CorelOffice (Corel — PC)
- A good relational database management system — ODBC compliant
  - Access 2000 (Microsoft — PC)

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## HTML/Web Page Editor

- Preference:
    - FrontPage 2000 (Microsoft — PC)
    - Dreamweaver 3 (Macromedia — PC & Mac)
  - Also good:
    - HomeSite (Allaire — PC)
    - Fusion (NetObjects — PC)
- Key feature: Ability to switch between WYSIWYG and HTML modes

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## Graphics Programs


- Presentation Graphics
  - PowerPoint 2000 (Microsoft — PC)

(Also will work with 97/98 on PC & Mac, respectively)
- Graphic Editors — “Basic”
  - Visio 5/2000 (Visio — PC)
  - MacDraw Pro/Clarisc Draw (Clarisc — Mac)
  - Photo Deluxe (Adobe — PC & Mac)

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
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## Graphics Programs (Cont'd)

- Graphic Editors — “Intermediate”
  - PaintShop Pro (JASC — PC)
- Graphic Editors — “Advanced”
  - PhotoShop (Adobe — PC & Mac)
  - Fireworks 3 (Macromedia — PC & Mac)
  - PhotoImpact (Ulead — PC)
- Video Editors
  - Premiere (Adobe — PC & Mac)


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## Converters Software

- Converting Graphics
  - Graphic Workshop (Mind Alchemy — PC)
  - Debabelizer (Equilibrium — PC & Mac)
- Converting Text
  - Conversion Plus (DataViz — PC)
  - MacLink Plus (DataViz — Mac)
  - (Many Office Packages can also do text conversions)


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## Streaming Media Prep

- Real Networks
  - RealPresenter (for PowerPoint)
  - RealSlideShow
  - RealProducer
- Windows Streaming Media
  - PowerPoint Add-In
  - Other Tools...


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## Digitizing Sources

- General Considerations
  - Each digital device will ship with its own software (little uniformity)
  - Required: “Twain”-compliant Driver
- Scanners
- Digital Cameras
- Video Capture Cards


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## Other

- Check back for more...

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## Questions & Answers



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