

# University of North Florida



**Active leaders and responsive partners within diverse learning communities**

## **EME 2040: Introduction to Educational Technology**

**C**andidate dispositions for the development and demonstration of ethical and professional attitudes and beliefs.

**O**n-going, active reflection on professional practice.

**M**ulticulturalism through educators who value diversity and advocate for the success of all students within diverse learning communities.

**P**rofessional growth of pre-service and experienced educators and other helping professionals.

**A**cademic programs that are rigorous, standards-based, and model and apply innovative and enduring ideas about teaching and learning.

**S**cholarship for advancement of the professional knowledge base.

**S**ervice to the University, P-12 schools, the profession, and the community.

## Syllabus

Course Number:	EME 2040
Course Title:	Introduction to Educational Technology
Number of Credit Hours:	3
Required or Elective:	Required
Term:	Spring 2007
Day and Time:	Monday/Wednesday 3:00—4:15 PM
Location:	15/1105
Course web site:	<a href="http://blackboard.unf.edu">http://blackboard.unf.edu</a>
Professor/Instructor:	Dr. C. Cavanaugh
Office:	50/2820
Office Hours:	MW 1—3 PM; R 2—4 PM, others by appointment
Telephone:	904-620-1751
Email Address:	<a href="mailto:c.cavanaugh@unf.edu">c.cavanaugh@unf.edu</a>
Instructor web site:	<a href="http://www.unf.edu/~c.cavanaugh">http://www.unf.edu/~c.cavanaugh</a>

### Required Text/Materials

- *Integrating Educational Technology into Teaching*, 4th ed. 2006. Roblyer, ISBN 0-13-119572-7, with DVD
- USB flash/key drive, at least 64MB, for storage and transport of course files
- Plus free subscriptions to:
  - **THE Journal**. Subscribe at <http://www.thejournal.com>
  - **Technology and Learning**. Subscribe at <http://www.techlearning.com>
  - **Converge**. Subscribe at <http://www.convergemag.com>
  - **Edutopia**. Subscribe at <http://www.edutopia.org/magazine/index.php>

### Course Description

As an introduction to the technology for learning in K-12 settings, the course includes a survey of educational hardware and software. Course topics include: web-based resources, Mindtools including concept mapping, spreadsheets, and databases, multimedia production, evaluation of educational resources, hardware, and assistive technology.

In consonance with the conceptual framework, this course will be focused on the acquisition of knowledge and skills for designing and teaching effective standards-based lessons that integrate technology for PreK-12 grade levels.

### Course Goals

In this course, candidates will develop and demonstrate dispositions of ethical and professional technology using educators as they learn skills and methods for integrating technology for the achievement of all students.

Candidates will use technology to reflect on their learning with technology.

### Diversity Considerations

The course includes the topic of assistive technology.

### Technology Considerations

Instruction is enhanced using online resources and electronically delivered reading, presentations, and quizzes.

Candidates are required to create assignments using a wide range of technology, including word processor, spreadsheet, database, presentation software, web page editors, scanners, digital cameras, and other means, and to submit assignments electronically. Candidates also participate in reflective discussion via online synchronous and asynchronous communication tools.

Assignments will be completed using software versions located on the computers in the class lab, including but not limited to: Windows XP, Microsoft Office 2002/XP, Internet Explorer, Mozilla Firefox, Picasa, nVU and Inspiration.

## Course Objectives

### Objective Matrix

The Objectives Matrix describes the learning objectives for this course in terms of the knowledge, skills, dispositions, and impact on K-12 learners that each student is expected to master in this class.

Course Objective	Knowledge	Skill	Disposition	Impact
1. Use basic computer functions to demonstrate essential knowledge and skills for practical application of technology.	☐	☐		
2. Use appropriate terminology to assess hardware and software for professional and personal use.	☐	☐		
3. Create, save, and transmit word processing documents that include text, graphics, and tables/columns for communication within the classroom and the community.	☐	☐		
4. Evaluate the format and appearance of documents and presentations to demonstrate the role of media in effective communication.	☐		☐	
5. Create and use a database incorporated with a word processing program for efficiently storing and manipulating data in an organized manner and producing individualized correspondence.	☐	☐		
6. Use computer peripherals and other technologies related to specific disciplines to provide sources that address different modalities for teaching and learning.	☐	☐		
7. Create and use a spreadsheet for storing and calculating data, and creating charts and graphs.	☐	☐		
8. Create and present a hypermedia program for linear or nonlinear presentations of information for both teacher and student productivity.	☐	☐		
9. Access online resources for facilitating communication, locating teaching materials, and delivering instruction.	☐	☐		
10. Troubleshoot basic computer problems to keep hardware and software available for use.	☐	☐		
11. Know the basic principles of computer ethics and legalities to ensure compliance by professionals and students with laws, guidelines, licenses, and security in the use of all media.	☐		☐	
12. Use additional educational technology to enhance presentation of electronic resources and to learn about new technologies.	☐	☐		

## Course Assignments, Expectations and Grading Procedures

### GRADING PROCEDURES

Course grades are based on activities, projects, quizzes and lab assignments. Assignments may be turned in during class meetings in print or on disk, or they may be placed in Blackboard using the assignment link. Use the “Add” feature of Blackboard’s Digital Dropbox to put a backup copy of the file in your dropbox.

**Grading Criteria:** Grades are computed on a percentage scale. (A ≥ 90%; B ≥ 80%, C ≥ 70%, D ≥ 60%. F > 60%)

	Quantity	Value each	Total value
Labs	13	30	<b>390</b>
Online forum	8	10	<b>80</b>
WebQuest	1	100	<b>100</b>
Professional Development Plan	1	100	<b>100</b>
Class assignments	Variable		
<b>TOTAL</b>			<b>~670</b>

**Assignment details and rubrics:****Online forum:**

In Blackboard, use the Discussion Forum tool to respond to each discussion topic. Responses should be professional, since they are visible to all students in the course, but may be conversational in tone, in keeping with the casual nature of online discussion. Be sure to completely answer the discussion question, and follow guidelines of netiquette. Be especially sensitive when responding to the entries of other students. Responses should be one or two paragraphs.

**Labs:**

All labs may be turned in on paper or electronically to Blackboard or on disk.

**1. Website evaluation**

Use the web site evaluation form located in Blackboard's Course Materials or the textbook's website to review 3 educational web sites on the theme of your WebQuest. The form may be printed and turned in on paper, or it may be completed electronically and sent to Blackboard. Include a half-page (word processed, single spaced, font size 12, 1 inch margins) summarizing your judgment of the value of each page for educational use in your WebQuest.

- 8 Complete all evaluation form items
- 8 Evaluate 3 web sites and include complete Web addresses
- 4 All websites relate to WebQuest theme
- 4 Summary addresses all three web pages
- 4 Summary discusses positive and negative points of each website, and a judgment of value. Include discussion of strengths and shortcomings of the site.
- 2 Summary is properly formatted

**2. WebQuest evaluation**

Use the web to locate a WebQuest that you feel effectively uses educational technology to teach a concept or skill. To identify a WebQuest to evaluate, try one of the following web sites, or use a web search.

<http://webquest.org/> or <http://school.discovery.com/schrockguide/webquest/webquest.html>

Write a one-page paper comparing a web-enhanced lesson with a traditional lesson. Describe the objective of the WebQuest and the target audience. Discuss points from learning theory (such as Gagne's events of instruction, Bloom's taxonomy, or multiple intelligences). Include the link to the WebQuest, and complete your multiple intelligence inventory in class.

- 4 Evidence that you have thoroughly explored the WebQuest
- 4 Describe the objectives of the WebQuest
- 4 Identify the target audience by subject, level, and other features
- 4 Include reference to learning theory
- 5 Provide your evaluation of the effectiveness of the WebQuest at meeting the objectives
- 5 Compare the WebQuest to a non-technology lesson on the same topic.
- 2 Paper is properly formatted
- 2 Multiple Intelligence inventory completed and checked in class

**3. Concept map**

Use software for visually displaying the concept of your WebQuest. Examples include *Inspiration*, *Kidspiration*, *CMap*, *Word Organization Chart*, *Smart Ideas*, or *Visio*. Begin with the main idea/theme/concept of your WebQuest, and branch out to the important sub-topics. Include all topics you expect to address in the WebQuest, and be sure to add connecting labels between the topics on the map.

- 5 Concept map completed using software
- 5 Clear relationship to WebQuest topic
- 10 Logical and complete display of concepts
- 5 Appropriate connections among concepts
- 5 Easily read and free of language errors

**4. Software and game evaluation**

Complete one software evaluation form (located in Blackboard's Assignments area for this lab) for a software program to which you have access or for which you can examine a demo version (see links to demo download sites in Course Materials). Complete one educational game evaluation form for one educational game program or website (see links to

game sites in Course Materials). The forms may be printed and turned in on paper, or they may be completed electronically and sent to Blackboard. **Add a half-page summary** for each program/game stating the value of the program/game for educational use. The software and game you select are not required to be related to your WebQuest theme. It is recommended that you evaluate at least one of the following products because they are in wide use in schools:

- ❖ Comic Life. Free trial download for Mac from <http://mac.sofotex.com/download-128055.html>
- ❖ Ezedia. Free trial download for Windows or Mac from [http://www.ezedia.com/products/downloads/eZediaMX\\_demo/](http://www.ezedia.com/products/downloads/eZediaMX_demo/)
- ❖ Notetaker. Free trial download for Mac from <http://www.aquaminds.com/>
- ❖ Smart Ideas. Free trial download for Windows or Mac from <http://www2.smarttech.com/st/en-US/Products/SMART+Ideas/Free+trial.htm>

- 6 Complete all evaluation form items
- 6 Evaluate 1 software title and 1 educational game
- 4 Describe the software and the game
- 4 Discussion of educational application for resource
- 4 Summary addresses the software and the game
- 4 Summary discusses positive and negative points of each resource, and a judgment of value. Include discussion of strengths and shortcomings of the resource for students.
- 2 Research point: summary and citation for an article that discusses the value of educational software/games for learning

### 5. WebQuest Proposal

Create and turn in a proposal document describing your planned WebQuest. Use 1 inch margins on all sides. Use single spacing between lines, and double spacing between paragraphs. Use a 12-point font size. Include the date justified right, and your name and WebQuest title in the header. Include a bulleted or numbered list and a table. Spell check and proofread. Include an image and at least one link. Discussion should include an introduction to the intended student audience, an overview of the subject areas and topics addressed, a list of the Sunshine State or other standards, the tasks, the steps of the process, supporting resource websites, and the evaluation methods. You can submit your proposal in Blackboard as a word processing document, or you can send me the link to the blog that you create using a free instant blog tool such as Blogger (<http://www.blogger.com/start>) or EduBlogs (<http://edublogs.org/>) or Xanga (<http://www.xanga.com/>)

- 5 Correctly formatted header, margins, spacing, justification, and fonts
- 2 Formatted list and table
- 2 Included image and link
- 3 Identification of target audience, related subject areas, and appropriate Standards
- 3 Comprehensive list of tasks
- 4 Detailed description of processes
- 2 Appropriate list of resource websites
- 4 Evaluation system that addresses the tasks
- 2 Free of language errors
- 3 Research point: summary and citation for an article that discusses the value of learning with word processing

### 6. eBooks

Design a standards-referenced student learning activity using an ebook. The book and activity may be appropriate for inclusion in your WebQuest. You may choose and obtain your ebook from Blackboard or any other ebook source. Use reader software such as Microsoft Reader (<http://www.microsoft.com/reader>) or Palm Reader (<http://www.palmdigitalmedia.com/product/reader/browse/free>) on a desktop, portable or handheld computer. In addition, compile a list of ebooks and their web addresses appropriate for student use.

Ebook student activity including:

- 5 Book title, author, web address
- 5 Subject(s) and level of the activity, Sunshine State Standards met by the activity
- 5 Steps for students
- 5 Learning assessment process

- 10 List of ebooks for students in your grade level or content area

### 7. Data with Spreadsheets and Graphs

Files for both parts of this assignment may be printed or sent to Blackboard.

a. Create a custom gradebook using a spreadsheet program such as *Excel*, *Open Office*, *Works* spreadsheet or *AppleWorks*.

The gradebook should include values and totals for the tasks and evaluations used in your WebQuest.

1. Begin with a blank workbook or sheet.
2. Type a heading for the gradebook in a cell at the top of the sheet, giving your name and the date, plus your WebQuest title.
3. In a row near the top, type column headings. Include student names, and at least 5 assignments, plus any other information such as student numbers.
4. Base each grade on a 100-point scale.
5. Assign grades for each student and each assignment.
6. In a column to the right of the grades, calculate the grade average for each student. Insert an Average function for the first student, and select the range of cells with grades to average. Fill down the average function for each student.
7. Below the column for each assignment, insert an average function for the assignment.
8. Provide a bar graph showing student averages.

b. Create a table and plot using data related to an academic content area (the data may have a relationship to your WebQuest topic) using a student data tools such as *InspireData* (free demo at <http://www.inspiration.com>), Tom Snyder *Graph Club* or *Graph Master* (free demo at <http://www.tomsnyder.com/products/products.asp?Subject=Math>), Google Spreadsheet (requires a free account at <http://spreadsheets.google.com>) or the online *Create a Graph* website from the US Department of Education, at <http://nces.ed.gov/nceskids/graphing/>.

#### A. Spreadsheet:

- 4 Column headings that match WebQuest items
- 4 Grades entered for each student
- 4 Averages computed for each student
- 4 Bar graph included for student averages
- 3 Research point: summary and citation for an article that discusses the value of data tools for learning

#### B. Table and plot:

- 4 Academic content data entered in table
- 5 Appropriate plot type created

#### *Extra credit:*

For 5 extra points, try a commercial gradebook program. *Grade Machine* may be downloaded for Windows or Macintosh from [http://www.mistycity.com/grademachine/gm\\_demo.html](http://www.mistycity.com/grademachine/gm_demo.html) ; and *Grade Quick* demos are located at <http://www.gradequick.com/demos.html>

After you download, install and run the program, create a class with at least 5 students, and at least 5 assignments. Print out the class report to turn in. Use these commands for *Grade Machine*: New class--type names. Assign--type assignments. Window--Scores--type scores. Report--Group--Preview--Print.

### 8. Database

Using the database program of your choice, create a short database of at least 6 students and their possible accomplishments while completing your WebQuest. Use the database to create a certificate of completion or achievement for students. Merge the letter/document with the database. For each student entered, include the name, a note about how the student performed in your WebQuest, and the date you entered it into the database.

- 9 Database includes required categories
- 9 Database includes 6 entries
- 10 Report or merged document
- 2 Free of language errors

9. Digital Storytelling

Create a collection of audio and image files to use in a digital storytelling assignment. Keep all files in your Blackboard dropbox or on a portable storage medium. Use the checklist you receive to describe the files you use in the assignment. Put the files into a MS *PhotoStory* or Apple *iPhoto* file, and turn in the completed movie file. You may use the resulting movie in developing your WebQuest. *PhotoStory* software may be downloaded at no cost from

<http://www.microsoft.com/windowsxp/using/digitalphotography/photostory/default.msp>

- 4 Original images from different sources: scanner, digital camera, drawing program
- 3 Audio recording using microphone
- 3 Audio clip from CD
- 3 Downloaded image (may be an animation)
- 3 Downloaded audio file
- 3 Image edited using software such as *Picasa*
- 3 Audio edited using software such as Audacity
- 2 Educational theme
- 6 Completed *PhotoStory* or *iPhoto* movie file

10. Digital Video

Create a digital movie about an educational topic. The movie may be edited using Microsoft *Movie Maker* (free for Windows XP from <http://www.microsoft.com/windowsXP/moviemaker/downloads/moviemaker2.asp>) , *iMovie* (free for Mac OS X from <http://www.apple.com/imovie/>), or any other video editing software. You may use the media provided in class, or you may use your own media from sources such as a video camera, a digital camera, a scanner, audio recording, web downloads. The movie will be at least 1 minute long, and will include motion sequences, still images, and sound (spoken, music and/or sound effects). Effects such as transitions and special effects are optional. Your movie must have at least one title screen for the opening. The topic may relate to the theme of your WebQuest. Export the movie to a CD or DVD, or send your file to Blackboard. Make sure you keep a copy of the movie file.

- 4 At least 1 minute in length
- 3 Title(s)
- 4 Motion sequences
- 4 Still images
- 4 Sound track
- 4 Original media
- 4 Unified story or message start to finish
- 3 Educational theme

11. Presentation

Create an electronic presentation introducing your WebQuest to students. You may use *PowerPoint*, *HyperStudio*, *Ezedia*, *OpenOffice*, *Appleworks*, or other software such as *mPower*. The presentation must include: at least 6 slides, cards or screens; at least 2 pictures not from the program's built-in clipart; at least 2 links, either within the presentation or to an external resource; text; any other media you choose, including animation, sound or video (Recall that images and WAV sounds become embedded in the presentation file, but other audio and video files do not, so be sure to include such files with the presentation if you use them).

- 6 At least 6 slides
- 3 At least 2 images
- 3 At least 2 links
- 3 Text
- 4 Follows presentation design principles
- 5 Provides a clear and engaging overview of the WebQuest
- 2 Free of language errors
- 4 Research point: summary and citation for an article that discusses the value of multimedia for learning

12. Web page

Create the first two pages of your WebQuest. Include an overview of the WebQuest concept on the first page, and the task details on the second page. The web page lab requires: at least 2 web pages linked together, at least one image of

any type, web links other than the links between the pages, text with at least 2 different types of formatting. Turn in your lab files on disk, in print, or online. Please do NOT submit this assignment in Blackboard because of the number of files needed for this lab. If you place your web pages on the web, you can turn in the link to the pages instead of the files. Use your choice of web page editing/authoring software (*Nvu*, *Netscape Composer*, *Microsoft FrontPage*, *Dreamweaver*, HTML, or others). Do NOT use *Word*, *Publisher*, *PowerPoint* or other software that converts files to web pages. The free *Nvu* program can be downloaded from <http://www.nvu.com/download.php>, and instructions are available at the site. Blackboard has steps for *FrontPage Express* which you will receive on a CD in class.

- 4 Two pages
- 4 Links between the pages
- 4 Web links
- 2 Image
- 2 Text with formatting
- 4 WebQuest overview
- 4 WebQuest task
- 4 Appropriate software used
- 2 Free of language errors

### 13. Tech Teach

You will teach a technology skill to another person (someone is not and has never been in EME 2040 or any other technology course). The person may be another student, a family member, an acquaintance or a faculty member. Document the need for the person to have the skill, the methods you used to teach the skill, and the outcome of the teaching. Have the person write a short paragraph explaining what he or she gained from the teaching, and include a sample of work from the person before and after the teaching or a screen capture of the person's work.

- 3 Description of person taught
- 4 The person's need for the teaching
- 3 Description of the skill taught
- 4 The methods used
- 7 Documentation/sample of performance before and after teaching
- 7 Statement from person
- 2 Free of language errors

### *Personal Professional Development Plan*

A hallmark of the professional educator is a high value placed on continuous improvement of knowledge and abilities. Teachers reflectively determine areas for growth and then develop professional development plans to identify steps that will lead to improvement. Professional development plans may address any area of teaching competency.

The state of Florida has developed an inventory of technology skills to assist teachers in identifying areas for growth in educational technology. The skills included on the inventory reflect skills of the ISTE National Educational Technology Standards for Teachers (NETS-T). In addition, documentation of technology skill is required of students in teacher education programs and is required of practicing teachers under No Child Left Behind.

This semester-long assignment has four parts:

- Take the Inventory of Teacher Technology Skills at in the first week of class. Turn in your pretest full score report with areas for improvement (scores below 90 for a section) highlighted. [20 points]
- Write a personal technology development plan using a template adapted from Florida school districts. Choose 3 areas for improvement based on the pretest scores. If four or more section scores were above 90, then choose areas for improvement based on syllabus topics. [10 points]
- Document your progress on the plan. Attach samples of work, such as print-outs of labs, screen captures of your work, or narrative descriptions of your learning efforts. [30 points=10 points per item]
- Take the Inventory of Teacher Technology Skills in the last two weeks of class to show your growth. [20 points]
- Show improvement or maintain level in the six sections of the post-test. [20 points]

Detailed steps:

In the first session of class, visit <http://www.flstar.org/university/> to take the Inventory of Teacher Technology Skills. Use Internet Explorer as your web browser. The inventory takes about 30 minutes. To begin, choose:

- District: UNF
- School: 01
- Email: your UNF email address using your N number (please choose carefully because email addresses look alike!)
- Password: password

When you complete the inventory, record your full Indicator Report (not the Score Report). To do this, either:

- Print the report to turn in with your plan.
- Copy the report text, paste it into a word processing file, and save the file to submit with your plan.
- Save the web page to submit with your plan.

\* Highlight three areas for improvement, and add areas if four or more test areas scored above 90.

Use the Professional Development Plan template file provided in Blackboard to develop a plan to improve your skills in three of the six areas, for example Productivity and Research.

Submit, either on paper or electronically in Blackboard, your indicator Report and your plan for approval.

After your plan is approved, begin following the steps in your plan, documenting your progress with items you complete, or journals reflections on your activities.

After you have completed your plan, in the last two sessions of class, take the Inventory again. Submit your completed plan, your evidence and/or reflections, and your two Indicator Reports.

Use the Professional Development Plan template file provided in Blackboard to develop a plan to improve your skills in two of the six areas, for example Productivity and Research. Submit, either on paper or electronically in Blackboard, your indicator Report and your plan for approval. After your plan is approved, begin following the steps in your plan, documenting your progress with items you complete, or journals reflections on your activities. After you have completed your plan, in the last two sessions of class, take the Inventory again. Submit your completed plan, your evidence and/or reflections, and your two Indicator Reports.

**WebQuest:**

Through the semester you will develop a WebQuest to teach a concept or skill from the Sunshine State Standards at a specific grade level. The WebQuest will include an introduction, the tasks, the process, the evaluation, and a conclusion. For information on the development process, see <http://projects.edtech.sandi.net/profdev/webquest.html> , <http://webquest.sdsu.edu/webquest.html> , [http://www.education-world.com/a\\_tech/tech011.shtml](http://www.education-world.com/a_tech/tech011.shtml)

	Beginning	Developing	Accomplished	Score
<b>Overall Aesthetics</b> (This refers to the WebQuest page itself, not the external resources linked to it.)				
<b>Overall Visual Appeal</b>	0 points There are few or no graphic elements. No variation in layout or typography. OR Color is garish and/or typographic variations are overused and legibility suffers. Background interferes with the readability.	3 points Graphic elements sometimes, but not always, contribute to the understanding of concepts, ideas and relationships. There is some variation in type size, color, and layout.	6 points Appropriate and thematic graphic elements are used to make visual connections that contribute to the understanding of concepts, ideas and relationships. Differences in type size and/or color are used well and consistently.	
<b>Navigation &amp; Flow</b>	0 points Getting through the lesson is confusing and unconventional. Pages can't be found easily and/or the way back isn't clear.	3 points There are a few places where the learner can get lost and not know where to go next.	6 points Navigation is seamless. It is always clear to the learner what all the pieces are and how to get to them.	
<b>Mechanical Aspects</b>	0 points There are more than 5 broken links, misplaced or missing images, badly sized tables, misspellings and/or grammatical errors.	3 points There are some broken links, misplaced or missing images, badly sized tables, misspellings and/or grammatical errors.	6 points No mechanical problems noted.	
<b>Introduction</b>				

<p><b>Motivational Effectiveness of Introduction</b></p>	<p>0 points The introduction is purely factual, with no appeal to relevance or social importance OR The scenario posed is transparently bogus and doesn't respect the media literacy of today's learners.</p>	<p>5 points The introduction relates somewhat to the learner's interests and/or describes a compelling question or problem.</p>	<p>10 points The introduction draws the reader into the lesson by relating to the learner's interests or goals and/or engagingly describing a compelling question or problem.</p>	
<p><b>Task</b> (The task is the end result of student efforts... not the steps involved in getting there.)</p>				
<p><b>Connection of Task to Standards</b></p>	<p>0 points The task is not related to standards.</p>	<p>4 points The task is referenced to standards but is not clearly connected to what students must know and be able to do to achieve proficiency of those standards.</p>	<p>8 points The task is referenced to standards and is clearly connected to what students must know and be able to do to achieve proficiency of those standards.</p>	
<p><b>Cognitive Level of the Task</b></p>	<p>0 points Task requires simply comprehending or retelling of information found on web pages and answering factual questions.</p>	<p>5 points Task is doable but is limited in its significance to students' lives. The task requires analysis of information and/or putting together information from several sources.</p>	<p>10 points Task is doable and engaging, and elicits thinking that goes beyond rote comprehension. The task requires synthesis of multiple sources of information, and/or taking a position, and/or going beyond the data given and making a creative product. See <a href="#">WebQuest Taskonomy</a>.</p>	
<p><b>Process</b> (The process is the step-by-step description of how students will accomplish the task.)</p>				
<p><b>Clarity of Process</b></p>	<p>0 points Process is not clearly stated. Students would not know exactly what they were supposed to do just from reading this.</p>	<p>4 points Some directions are given, but there is missing information. Students might be confused.</p>	<p>8 points Every step is clearly stated. Most students would know exactly where they are at each step of the process and know what to do next.</p>	
<p><b>Richness of Process</b></p>	<p>0 points Few steps, no separate perspectives presented.</p>	<p>3 points Some separate perspectives presented. More complex activities.</p>	<p>6 points Several different perspectives are presented.</p>	
<p><b>Resources</b> (Note: you should evaluate all resources linked to the page, even if they are in sections other than the Process block. Also note that books, video and other off-line resources can and should be used where appropriate.)</p>				
<p><b>Relevance &amp; Quantity of Resources</b></p>	<p>0 points Resources provided are not sufficient for students to accomplish the task. OR There are too many resources for learners to look at in a reasonable time.</p>	<p>4 points There is some connection between the resources and the information needed for students to accomplish the task. Some resources don't add anything new.</p>	<p>8 points There is a clear and meaningful connection between all the resources and the information needed for students to accomplish the task. Every resource carries its weight.</p>	
<p><b>Quality of Resources</b></p>	<p>0 points Links are mundane. They lead to information that could be found in a classroom encyclopedia.</p>	<p>3 points Some links carry information not ordinarily found in a classroom.</p>	<p>6 points Links make excellent use of the Web's timeliness and colorfulness. Varied resources provide enough meaningful information for students to think deeply.</p>	
<p><b>Evaluation</b></p>				
<p><b>Clarity of Evaluation Criteria</b></p>	<p>0 points Criteria for success are not described.</p>	<p>5 points Criteria for success are at least partially described.</p>	<p>10 points Criteria for success are clearly stated in the form of a rubric. Criteria include qualitative as well as quantitative descriptors.</p>	

			The evaluation instrument clearly measures what students must know and be able to do to accomplish the task. See <a href="#">Creating a Rubric</a> .	
<b>WebQuest Presentation</b>				
<b>Effectiveness of oral demonstration</b>	0 points No presentation, or web pages are not demonstrated.	3 points Some of the web pages were demonstrated, the pages were incomplete or contained errors, or the demonstration was not clear.	6 points Web pages are complete, free of error, and explanation is clear.	
<b>Placement of files</b>	0 points All files offline	5 points Some files online	10 points All files online	
<b>Total Score</b>				<b>/100</b>

## Florida Educator Accomplished Practices—Preprofessional

**ASSESSMENT:** Uses assessment strategies (traditional and alternate) to assist the continuous development of the learner. The preprofessional teacher collects and uses data gathered from a variety of sources. These sources include both traditional and alternate assessment strategies. Furthermore, the teacher can identify and match the students' instructional plans with their cognitive, social, linguistic, cultural, emotional, and physical needs.

**COMMUNICATION:** Uses effective communication techniques with students and all other stakeholders. The preprofessional teacher recognizes the need for effective communication in the classroom and is in the process of acquiring techniques that she/he will use in the classroom.

**CONTINUOUS IMPROVEMENT:** Engages in continuous professional quality improvement for self and school. The preprofessional teacher realizes that she/he is in the initial stages of a lifelong learning process and that self-reflection is one of the key components of that process. While her/his concentration is, of necessity, inward and personal, the role of colleagues and school-based improvement activities increases as time passes. The teacher's continued professional improvement is characterized by self-reflection, working with immediate colleagues and teammates, and meeting the goals of a personal professional development plan.

**CRITICAL THINKING:** Uses appropriate techniques and strategies that promote and enhance critical, creative, and evaluative thinking capabilities of students. The preprofessional teacher is acquiring performance assessment techniques and strategies that measure higher order thinking skills in students and is building a repertoire of realistic projects and problem-solving activities designed to assist all students in demonstrating their ability to think creatively.

**DIVERSITY:** Uses teaching and learning strategies that reflect each student's culture, learning styles, special needs, and socio-economic background. The professional teacher establishes a comfortable environment that accepts and fosters diversity. The teacher must demonstrate knowledge and awareness of varied cultures and linguistic backgrounds. The teacher creates a climate of openness, inquiry, and support by practicing strategies such as acceptance, tolerance, resolution, and mediation.

**ETHICS:** Adheres to Code of Ethics and Principles of Professional Conduct of the Education Profession in Florida.

**HUMAN DEVELOPMENT AND LEARNING:** Uses an understanding of learning and human development to provide a positive learning environment that supports the intellectual, personal, and social development of all students.

Drawing upon well-established human development/learning theories and concepts and a variety of information about students, the preprofessional teacher plans instructional activities.

**KNOWLEDGE OF SUBJECT MATTER:** Demonstrates knowledge and understanding of the subject matter. The preprofessional teacher has a basic understanding of the subject field and is beginning to understand that the subject is linking to other disciplines and can be applied to real-world integrated settings. The teacher's repertoire of teaching skills includes a variety of means to assist student acquisition of new knowledge and skills using that knowledge.

**LEARNING ENVIRONMENTS:** Creates and maintains positive learning environments in which students are actively engaged in learning, social interaction, cooperative learning and self-motivation. The preprofessional teacher understands the importance of setting up effective learning environments and has techniques and strategies to use to do so including some that provide opportunities for student input into the processes. The teacher understands that she/he will need a variety of techniques and work to increase his/her knowledge and skills.

**PLANNING:** Plans, implements, and evaluates effective instruction in a variety of learning environments. Recognizing the importance of setting high expectations for all students, the preprofessional teacher works with other professionals to design learning experiences that meet students' needs and interests. The teacher candidate continually seeks advice/information from appropriate resource (including feedback), interprets the information, and modifies her/his plans appropriately. Planned instruction incorporates a creative environment and utilizes varied and motivational strategies and multiple resources for providing comprehensible instruction for all students. Upon reflection, the teacher continuously refines outcome assessment and learning experiences.

**ROLE OF THE TEACHER:** Works with various education professionals, parents, and other stakeholders in the continuous improvement of the educational experiences of students. The preprofessional teacher communicates and works cooperatively and families and colleagues to improve the educational experiences at the school.

**TECHNOLOGY:** Uses appropriate technology in teaching and learning processes. The preprofessional teacher uses technology as available at the school site and as appropriate to the learner. She/he provides students with opportunities to actively use technology and facilitates access to the use of electronic resources. The teacher also uses technology to manage, evaluate, and improve instruction.

### Assignment Objectives:

Legal and ethical issues: respond to cases and create educators' guides by applying knowledge of legal and ethical issues in educational technology, including copyright, fair use, netiquette, online safety, and others. **THIS IS A CRITICAL TASK!**

Course Objective(s): 1, 9, 10, 11, 12  
 Florida Educator Accomplished Practice(s): 6, 12  
 ISTE Competency(ies): I. A, B. VI. A, D.

Technology evaluations: use evaluation rubrics to judge the merits of educational software, web sites and other technology for use in K-12 instruction.

Course Objective(s): 1, 2, 7, 9, 10, 12  
 Florida Educator Accomplished Practice(s): 12  
 ISTE Competency(ies): I. A, B. 2. C

Concept map: Use software for visually displaying the concept of your WebQuest.

Course Objective(s): 1, 4, 6, 9, 11  
 ESOL Objective(s): 12. Apply content-based ESOL approached to instruction. 17. Evaluate, adapt and employ appropriate instructional materials, media, and technology for ESOL in the content areas at elementary, middle and high school levels.  
 Florida Educator Accomplished Practice(s): 8, 10, 12  
 ISTE Competency(ies): I. A, B. 2. A, D, E. III. C.

WebQuest Proposal: use basic and advanced features of word processing software to produce a document for classroom use.

Course Objective(s): 1, 3, 4, 7, 9, 10, 12  
 Florida Educator Accomplished Practice(s): 2, 12  
 ISTE Competency(ies): I. A, B. V. A, B, C, D

Spreadsheet: use basic and advanced features of spreadsheet software to produce a spreadsheet for classroom use.

Course Objective(s): 1, 2, 6, 10, 12  
 Florida Educator Accomplished Practice(s): 12  
 ISTE Competency(ies): I. A, B. V. A, B, C, D

Database:

Course Objective(s): 1, 2, 5, 8, 12  
 Florida Educator Accomplished Practice(s): 12  
 ISTE Competency(ies): I. A, B. V. A, B, C, D

eBooks: Read an electronic book, evaluate your experience by responding to a survey, and post a short review of the ebook.

Course Objective(s): 1, 2, 7, 9, 10, 12  
 Florida Educator Accomplished Practice(s): 8, 12  
 ISTE Competency(ies): I. A, B. 3. B

Digital Storytelling: download, create, and edit digital images, sounds, animations, and video.

Course Objective(s): 1, 2, 7, 9, 10, 12  
 Florida Educator Accomplished Practice(s): 12  
 ISTE Competency(ies): I. A, B.

Digital video: create a digital video and record it to optical disk.

Course Objective(s): 1, 2, 7, 9, 10, 12  
 Florida Educator Accomplished Practice(s): 12  
 ISTE Competency(ies): I. A, B.

Presentation: use basic and advanced features of presentation software to produce a multimedia presentation for classroom use.

Course Objective(s): 1, 2, 8, 9, 10, 12  
 ESOL Objective(s): 12. Apply content-based ESOL approached to instruction. 17. Evaluate, adapt and employ appropriate instructional materials, media, and technology for ESOL in the content areas at elementary, middle and high school levels.  
 Florida Educator Accomplished Practice(s): 2, 12  
 ISTE Competency(ies): I. A, B. V. A, B, C, D

Web page: use basic features of web editing software to produce and publish a set of web pages for instructional use.

Course Objective(s): 1, 2, 8, 9, 10, 12  
 Florida Educator Accomplished Practice(s): 2, 12  
 ISTE Competency(ies): I. A, B. V. A, B, C, D

Tech Teach: teach a technology skill to someone, document your methods, and provide samples of work and a statement from your "student".

Course Objective(s): 1, 2, 7, 9, 10, 12  
 Florida Educator Accomplished Practice(s): 12  
 ISTE Competency(ies): I. A, B. 2. A, E.

Instructional plan/WebQuest: use your knowledge of learning styles and learning theory to produce a lesson, unit or other instructional plan such as a WebQuest, designed to meet Sunshine State Standards in technology-enhanced classroom.

Course Objective(s): 1, 2, 7, 9, 10, 12  
 Florida Educator Accomplished Practice(s): 8, 10, 12  
 ISTE Competency(ies): I. A, B. II. A, B, C. IV. C. V. A, B, C, D

Professional development plan: diagnose areas of strength and need in technology skills, develop and enact a plan for growth, and document your progress.

Course Objective(s): 1, 3, 4, 5, 7, 8, 9, 11  
 Florida Educator Accomplished Practice(s): 12  
 ISTE Competency(ies): I-VI

The Florida Department of Education Professional Education certification exam includes the following technology competencies, which are addressed in this class:

**Knowledge of strategies for the implementation of technology in the teaching and learning process (Technology)**

1. Identify appropriate software to prepare materials, deliver instruction, assess student achievement, and manage classroom tasks.
2. Identify appropriate classroom procedures for student use of available technology.
3. Identify policies and procedures for the safe and ethical use of the Internet, networks, and other electronic media.
4. Identify strategies for instructing students in the use of search techniques, the evaluation of data collected, and the preparation of presentations.

In addition, the following **Subject Area** exam competencies are addressed in this course:

- Identify ways that calculators, computers, and other technology can be used in instruction. (Elementary)
- Identify the purposes and functions of common computer software (e.g., word processor, spreadsheet, database, multimedia, communication, and publishing). (Elementary)
- Identify ways technology can be used by students to represent understanding of science concepts. (Elementary)
- Identify telecommunications terminology, processes, and procedures. (Elementary)
- Demonstrate knowledge of legal and ethical practices as they relate to information and technological systems (e.g., copyright, privacy, and plagiarism). (Elementary)
- Identify assistive technology and alternative communication systems to facilitate communication. (Special education)
- Identify and demonstrate knowledge of computer-based processes, equipment, technology, and materials used for visual learning or for computer-generated imagery. (Art)
- Select appropriate resources for a classroom activity (e.g., manipulatives, mathematics models, technology, other teaching tools). (Middle/secondary math)
- Select appropriate manipulatives, mathematical models, or technology for teaching particular mathematics concepts (e.g., tiles for teaching area, graphing calculators for teaching algebra). (Middle/Secondary math)
- Identify nontextbook resources (e.g., technology, media, community) for use in social science instruction. (Middle/secondary social studies)
- Select strategies for implementing technology in music instruction. (Music)
- Identify media resources and technology (e.g., sound recording and reproduction systems, visual aids) for instructional purposes. (Music)
- Identify current technological resources for accessing information on physical activity and health. (PE)
- Identify appropriate uses of technology in the instructional process. (PE)
- Identify strategies, including technology, for presenting social studies processes and concepts. (PreK/Primary)
- Identify strategies, including technology, for presenting science processes and concepts. (PreK/Primary)
- Identify activities that support the development of both fine and gross motor skills. (PreK/Primary)
- Identify strategies, including technology, for presenting health, safety, and nutrition instruction, processes, and concepts. (PreK/Primary)
- Identify strategies, including technology, and processes for presenting visual arts, music, drama, and dance. (PreK/Primary)

Reference: <http://www.firn.edu/doe/sas/ftce/ftcecomp.htm>

## Course Policies and Guidelines

### COLLEGE OF EDUCATION AND HUMAN SERVICES POLICIES

1. Americans with Disabilities Act (ADA) Policy. The College of Education and Human Services complies with ADA requirements in making reasonable accommodations for qualified students with disabilities. Students desiring reasonable accommodations should contact the UNF Office of Disabled Services (Founders Hall 2120; telephone: 904/620-2769) and are encouraged to inform the instructor as early in the semester as possible regarding desired accommodations.

2. College Undergraduate Admission Policy. In order to earn credit toward an undergraduate degree in the College of Education and Human Services, students must be admitted to a COEHS undergraduate program of study. Admission to the University does NOT in and of itself constitute admission to a given program of study. Transfer students cannot take more than 14 UNF hours toward any COEHS undergraduate degree without first having been fully admitted into a program of study.

Prior to being considered for full admission into an undergraduate program of study, students must (a) submit acceptable scores on all parts of the College-Level Academic Skills Test (CLAST) and (b) present official transcripts documenting a cumulative undergraduate GPA of 2.5 or better on a minimum of 60 semester hours from a regionally accredited college or university. Students are encouraged to consult the Undergraduate Catalog and/or contact the College's Office of Student Services (Schultz Hall 2305; telephone: 904/620-2530) for information regarding admission to a specific undergraduate program of study.

3. University Enrollment Policy. Only those students who are admitted to the University are entitled to enroll in classes, and only those students who are enrolled in a given course are permitted to attend class meetings for that course. Sitting through a class without registering does not constitute enrollment. Instructors are authorized to bar students who are not enrolled in a course from attending class sessions until evidence of enrollment is presented to the instructor. Even if unenrolled students are allowed via the instructor's oversight to remain in a class, university policy prohibits students from being added to a class roster after the reinstatement deadline. The primary responsibility for assuring that a student is enrolled in a course belongs to the student. Students are therefore encouraged to check their enrollment status several times during each semester with an advisor or via the UNF website.

4. Policies Governing Student Conduct. The University of North Florida has adopted a Student Conduct Code in order to promote responsible behavior for all students and to assure a physically, emotionally, and intellectually safe university community. This code addresses issues that may threaten the safety and order of the university environment and provides procedures and remedies for addressing these issues. Specific issues addressed include, but are not limited to, sexual misconduct; endangerment; harassment; hazing; possession/use of weapons, alcohol, and illegal drugs; damage or destruction of property; malicious mischief; computer misuse; and falsification/fraud. Students who are aware of and/or feel they are victims of any activity in violation of the Student Conduct Code should report the activity to the University Police or the appropriate campus administrator. The conduct code is available in its entirety on the University website at web address <http://www.unf.edu/studentaffairs/handbook/HB2002-2003.pdf>

5. Academic Integrity Policy. The University of North Florida has adopted a strict policy on academic integrity. As noted in the UNF 2003-2004 Undergraduate Catalog (p. 35) and the UNF 2001-2002 Student Handbook (p. 23), violations to academic integrity include, but are not limited to cheating; fabricating and falsifying information or citations; submitting the same work for credit in more than one course; plagiarizing; providing another student with access to one's own work to submit under this person's name or signature; destroying, stealing, or making inaccessible library or other academic resource material; and helping or attempting to help another person commit an act of academic dishonesty. The full policy on academic integrity is available on the University website at web address <http://www.unf.edu/studentaffairs/handbook/HB2002-2003.pdf>

The Academic Integrity Policy affords University instructors authority to assign penalties for these offenses. For example, the instructor may assign a grade of "F" on the assignment in question or for the course. In the case of flagrant violations of the Academic Integrity Policy, the instructor may recommend additional specific penalties to the university administration, including referral for academic counseling, expulsion from a program of study, denying of degree, expulsion from the University, or revocation of a degree already granted.

6. E-mail Policy. The University of North Florida's policy on student e-mail allows academic and service units of the University to use e-mail as the primary means for communicating certain types of information to students. Although individual instructors may determine that "external" (i.e., non-University-provided) e-mail accounts are a suitable means for communicating with students, the University policy specifies that the University-provided e-mail address serve as the "official" e-mail address for purposes of formal electronic communication with students. All students should become knowledgeable of their University-provided e-mail address and either check their account regularly or arrange for all e-mail delivered to their account to be forwarded to an external e-mail account of their choice. Students can find out their e-mail account username, reset their password, and set forwarding options by visiting <http://www.unf.edu/compserv/guidelines/glemail.html>

## INSTRUCTOR POLICIES

- **Attendance: Attendance at each class meeting is required because of the practical, hands-on nature of instruction. After 2 absences from class, the student's course grade will be reduced by 1%, with a 1% reduction for each absence thereafter.**
- Academic integrity: Follow the guidelines of the UNF Student Handbook located at <http://www.unf.edu/studentaffairs/mainpage.html>
- **Assignment and quality of work: Completion of all assignments is expected during the week indicated, and must be submitted by the first class meeting of the following week. Assignments submitted after the due date are considered late, and a 10% reduction in grade will occur for each class day the assignment is late. No late work is accepted after 2 weeks beyond the due date. Lab activities comprise approximately 50% of the course grade.**

## Tentative Course Schedule

Week	Topics	Reading Due	Assignments Due <i>by the start of class</i>
1. 1/8, 1/10	Learning in the Digital Age Educational tech standards Computer hardware and operating systems, storage Professional development plan pretest	IETT 1	<b>Email the instructor (Wed)</b>
2. 1/17	<i>Monday is a national holiday: no class.</i> Wednesday: Security, legal and ethical issues		<b>Forum 1</b> <b>Print full syllabus from Blackboard</b>
3. 1/22	Monday: Web resources, searching Wednesday: <b><i>No class meeting—follow Blackboard steps for Distance learning</i></b>	IETT 7-8	<b>Professional development plan and pretest score report (Mon)</b>
4. 1/29, 1/31	Educational software: concept mapping Educational software and games	IETT 2-3, 5	<b>Web site evaluation lab (Mon)</b> <b>WebQuest concept map (Wed)</b>
5. 2/5, 2/7	Learning about learning, planning for learning Digital text: word processing, blogs	IETT 4	<b>Software/game evaluation (Mon)</b> <b>Forum 2 (Mon)</b> <b>WebQuest evaluation (Wed)</b>
6. 2/12, 2/14	Digital text: electronic books Data: spreadsheets		<b>WebQuest Proposal (Mon)</b> <b>eBooks lab (Wed)</b>
7. 2/19, 2/21	Databases Multimedia, podcasts, digital storytelling		<b>Forum 3 (Mon)</b> <b>Spreadsheet lab (Mon)</b> <b>Database lab (Wed)</b>
8. 2/26, 2/28	Presentation design	IETT 6	<b>Digital Storytelling (Mon)</b>
9. 3/5, 3/7	Digital video		<b>Presentation lab (Mon)</b> <b>Forum 4 (Wed)</b>
10. 3/12, 3/14	Web page development	IETT 8	<b>Digital Video lab (Mon)</b>
11. 3/26, 3/28	Monday: Web page development Wednesday: <b><i>No class meeting—follow Blackboard steps for Professional development</i></b>		<b>Web page lab (Mon)</b>
12. 4/2, 4/4	Web page production WebQuest production	IETT 9-14 related to topic	<b>Forum 5 (Wed)</b>
13. 4/9, 4/11	<b><i>No class meeting—follow Blackboard steps for Assistive technology, Emerging technology</i></b>	IETT 15	<b>Forum 6 (Wed)</b>
14. 4/16, 4/18	WebQuest production Professional development plan		<b>Forum 7 (Wed)</b> <b>Tech Teach lab (Wed)</b>
15. 4/23, 4/25	Professional development plan WebQuest		<b>Professional Development Plan posttest and progress toward goals</b>
16. 4/30 3-4:50 PM	WebQuest sharing		<b>Forum 8</b> <b>WebQuest</b>

**Reading:**     IETT=*Integrating Educational Technology into Education* by Roblyer

UNF's Final Exam Schedule is located at <http://www.unf.edu/registrar/finals.html>

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- Thornburg, D. D. (1998). Brainstorms and lightning bolts: Thinking skills for the 21st century. San Carlos, CA: David D. Thornburg and Starsong Publications.

## Websites

- Educator Accomplished Practices (AP) <http://www.beaconlc.org/ctech/apwebsite/APpage.htm>
- FL DOE <http://www.fldoe.org/>
- US DOE <http://www.ed.gov/index.jsp>
- FL FCAT <http://www.firn.edu/doe/sas/fcathome.htm>
- Concept Mapping <http://www.mindtools.com/mindmaps.html>
- Code of Ethics and Principles of Professional Conduct of the Education Profession in Florida  
<http://www.firn.edu/doe/bin00061/publications/ethics.pdf>
- Educator Accomplished Practices-Teachers of the 21st Century  
<http://www.firn.edu/doe/bin00061/publications/12practices.pdf>
- Subject Matter Content Standards for Florida Teachers  
<http://www.firn.edu/doe/bin00061/publications/smcstandards.pdf>
- Performance Standards for Teachers of English for Speakers of Other Languages  
<http://www.firn.edu/doe/bin00011/perstand.htm>
- Sunshine State Standards <http://www.firn.edu/doe/cgi-bin/doehome/menu.pl>
- NCATE Unit Standards (National Council for Accreditation of Teacher Education)  
[http://www.ncate.org/2000/unit\\_stnds\\_2002.pdf](http://www.ncate.org/2000/unit_stnds_2002.pdf)
- NCATE Program Standards: Elementary, Secondary <http://www.ncate.org/standard/programstds.htm>
- NCATE Technology Standards <http://www.ncate.org/standard/new%20program%20standards/iste%202001.pdf>
- INTASC Standards (Interstate New Teacher Assessment and Support Consortium) <http://www.ccsso.org/intascst.html>

<p><b>Research Point 3. Spreadsheets, Data Tools</b>          Locate a research study that provides data about the effect of student use of spreadsheets on learning. Give the reference, web address, and conclusion.</p>	<p><b>Research Point 2. Word Processing</b>          Locate a research study that provides data about the effect of student use of word processing on learning. Give the reference, web address, and conclusion.</p>	<p><b>Research Point 1. Educational Software/Games</b>          Locate a research study that provides data about the effect of student use of software on learning. Give the reference, web address, and conclusion.</p>	<p>Your familiarity with the research on educational technology effectiveness will serve you in several ways:</p> <ul style="list-style-type: none"> <li>● As a rationale for making instructional decisions</li> <li>● As a rationale for making resource recommendations</li> <li>● As a foundation when requesting support for projects, such as when applying for grants</li> <li>● Add your own reason!</li> </ul>
<p><b>Research Point 4. The Web</b>          Locate a research study that provides data about the effect of student use of the web on learning. Give the reference, web address, and conclusion.</p>	<p><b>Research Point 5. Multimedia</b>          Locate a research study that provides data about the effect of student use of multimedia on learning. Give the reference, web address, and conclusion.</p>	<p><b>Sources of research in educational Technology:</b>          Apple Articles and Research  <a href="http://www.apple.com/education/k12/curriculumsolutions/research/">http://www.apple.com/education/k12/curriculumsolutions/research/</a>          Educator' Reference Desk  <a href="http://www.eduref.org/">http://www.eduref.org/</a>          ISTE Center for Applied Research in Educational Technology  <a href="http://caret.iste.org/">http://caret.iste.org/</a>          Gateway to Educational Materials  <a href="http://www.thegateway.org/">http://www.thegateway.org/</a>          EdTechNot  <a href="http://www.edtechnot.com/notresearch.html">http://www.edtechnot.com/notresearch.html</a>          UNF library education databases  <a href="http://www.unf.edu/library/guides/basiceducation.html">http://www.unf.edu/library/guides/basiceducation.html</a>          Google Scholar  <a href="http://scholar.google.com">http://scholar.google.com</a>          Blackboard's Course Materials</p>	<p style="text-align: center;"><b>Educational Technology Research Points</b></p> <p>NAME _____</p> <p style="text-align: center;"><b>University of North Florida</b></p> <p style="text-align: center;"><a href="http://www.unf.edu">http://www.unf.edu</a></p>

