



Research in the 21st Century

Professional Development Trainer's Notes

Research in the 21st Century

Vocabulary

- ❖ The following are common vocabulary words to be used with 21st Century Research skills

bibliography – a list of sources

citation – an entry in a bibliography that gives credit to a source

hyperlink – A hyperlink is a word, phrase, or image that you can click on to jump to a new document or a new section within the current document.

Internet research – to use a group of connected computers (Internet) to do a detailed study of a subject to discover new information (research)

query box – a place to type the topic that you would like to research

search engine – a computer program that lets a person search the Internet for specific information

taskbar – an on-screen toolbar that displays the active applications (tasks) as buttons. Clicking on a taskbar button restores the application to its previous appearance.

thumbnail – a small version of a slide or picture

URL – Universal Resource Locator; the address of a Web page on the World Wide Web

Research in the 21st Century

Software Overview (Professional Development Internet Research)

Software: ***Microsoft PowerPoint 2007™, Microsoft Word 2007™ and the school's installed Web Browser***

Prerequisite: Participants MUST have a strong knowledge of Windows ™, Microsoft PowerPoint and Word. They should know how to:

1. Open a program
2. Use the ribbon, tabs, and groups
3. Maximize / minimize windows
4. Highlight text
5. Navigate to Web sites using a Web browser

◇ **Time:** 4 sessions
1 hour per session

◇ **Goals:**

Educational

Participants will:

- Define and narrow research topic
- Conduct research on a specific topic
- Discuss the pros and cons of using information from Wikipedia; Explore Wikipedia sources
- Analyze online sources / information
- Verify information using the Triangle Method
- Verify accuracy of sources
- Paraphrase text
- Organize research findings in an index
- Create a research outline
- Write citations

Technological

Participants will:

- Conduct research using search engines designed for student use
- Use PowerPoint slides to collect research data
- Duplicate a slide template
- Edit a slide to add research data
- Copy and paste text and images from an Internet page to a PowerPoint slide
- Define different types of Websites using URL extensions
- Reorganize the order of information by moving slides in the slide sorter view
- Use PowerPoint Print Preview feature
- Print slides and notes
- Use online citation tools to create citations

Research in the 21st Century



Procedures

Documents:

- ◇ Trainer's Notes for 4 Sessions
- ◇ PowerPoint template file: CE Index.potx
- ◇ PowerPoint sample file: CE Index Example.pptx
- ◇ How to Write a Research Paper in the 21st Century.pdf
- ◇ Narrow Your Topic – Generic.pdf
- ◇ Narrow Your Topic – Deforestation Example.pdf
- ◇ Fact or Fiction.pdf
- ◇ CE Responsible Use Template.pdf

Training Hints:

- ◇ Multiple pieces of software will be used during this unit. Participants will use the Web browser that is installed on their classroom computers to access Websites on the Internet. Determine which Web browser is installed and become familiar with it prior to class.
- ◇ The participants will use Microsoft PowerPoint 2007 to organize their research findings and sources. This method, called the COMPUTER EXPLORERS PowerPoint Index, functions in the same manner as the index cards that have been used in the past to collect and organize information while planning a research paper. A PowerPoint template file, *CE Index.potx*, has been provided with this unit. Using this template ensures that an outline of the paper can be created with a minimum of effort.
- ◇ When the participants use the online citation tool, BibMe, their citations will be downloaded to a Microsoft Word 2007 file on their computers.
- ◇ Trainers MUST create a PowerPoint Index illustrating research collected for the topic of the effect of deforestation due to the timber trade in African on wildlife populations. Although a sample file has been provided with the course materials, the process of creating an index will help the trainer prepare for teaching this class.
- ◇ Trainers should review the COMPUTER EXPLORERS Responsible Use Policy Template provided with this unit. Be prepared to discuss the template. Also be prepared to compare this template to the Responsible Use Policy examples that the participants bring to class in Session 3.
- ◇ Assign teachers to work in pairs on this project. Although they may work on two separate computers, remind them to compare and discuss the steps in the process as they move forward to model cooperative learning.

Research in the 21st Century

Microsoft PowerPoint 2007™

The participants will use PowerPoint to create an index. The PowerPoint features and tools used in class are shown below.

Click on:

To:

| OFFICE BUTTON: | |
|-----------------------|--|
| OPEN | open a file |
| SAVE AS | save a file with a new name and/or file type |
| PRINT | print slides, handouts, notes or outline view |
| PRINT PREVIEW | view and print available print formats |
| MINIMIZE | reduce the size of the open PowerPoint window |
| COPY | copy selected text |
| PASTE | paste selected text |
| VIEW TAB | |
| SLIDE SORTER | view all of the slides at once |
| NORMAL | view one slide at a time |
| | |
| SLIDES | tab located on the left side of the screen; click to see a thumbnail of each slide in the presentation |
| OUTLINE | tab located on the left side of the screen; click to see the information on each slide in an outline. |

Research in the 21st Century



Session 1

Session Overview

- COMPUTER EXPLORERS has updated the commonly accepted process for writing a research paper to take advantage of the computer, the Internet, and Web 2.0 tools. Teachers will have hands-on experience in using these 21st century tools.
- In this first session, the teachers will review narrowing and refining a research topic and use child-friendly search engines to begin their research.
- The teachers will be introduced to the CE PowerPoint technique to organize research data.

SKILLS TO BE COVERED

- Define and narrow a research topic
- Use the defined topic as the query text for searches
- Compare results for different types of search engines
- Use PowerPoint slides to record research data

OPENING DISCUSSION

- How have you had students do research in the past? What tools did you ask them to use to write their papers? What forms did their final project take?
- The steps to writing a paper have not changed since the introduction of computers and the Internet, but the implementation of the steps has been made easier. No longer do parents have to drive their children to the library for extended evenings of research laboriously recorded on stacks of index cards. Students can find and record primary resources on the Internet by going directly to Websites of the Library of Congress, wikis and blogs of scientists, or other reputable archives. And “reputable” is the key word.
- Which search engines do you have your students use? How do you monitor their search process?
- During the first two sessions of this course, you will use a system to find, record, and write information for a term paper on deforestation. In the last two sessions, you will do a hands-on, practical application of the system for use in your classroom.

VOCABULARY REVIEW

bibliography – a list of sources

citation – an entry in a bibliography that gives credit to a source

hyperlink – A hyperlink is a word, phrase, or image that you can click on to jump to a new document or a new section within the current document.

Internet research – to use a group of connected computers (Internet) to do a detailed study of a subject to discover new information (research)

query box – a place to type the topic that you would like to research

search engine – a computer program that lets a person search the Internet for specific information

taskbar – an on-screen toolbar that displays the active applications (tasks) as buttons. Clicking on a taskbar button restores the application to its previous appearance.

thumbnail – a small version of a slide or picture

URL – Universal Resource Locator; the address of a Web page on the World Wide Web

Research in the 21st Century

Session 1

| TRAINER'S NOTES | TEACHER ACTION |
|---|---|
| <p>INTRODUCTION</p> <p>Assign teachers to work in pairs on this project. Although they may work on two separate computers, remind them to compare and discuss the steps in the process as they move forward.</p> <p>Explain: Students have been doing research and writing papers for centuries. COMPUTER EXPLORERS has updated the process to take advantage of the tools available today – in the 21st century.</p> <p>Discuss the purpose of writing research papers. What is the goal? What are the objectives?</p> <ul style="list-style-type: none"> • Use various sources to find information • Synthesize the information • Decide which information is valuable • Communicate the information to inform others • Other ? <p>21st Century skills</p> <ul style="list-style-type: none"> • Using technology tools to gather and present information • Team-building and negotiation • Building critical thinking skills • Practicing global communication • Other ? | <ol style="list-style-type: none"> 1. Discuss the purpose of writing a research paper. How are the goals and objectives the same as in the 20th Century? How are they different in the 21st Century? |
| <p>WRITING A RESEARCH PAPER</p> <p>Distribute: <i>How to Write a Research Paper in the 21st Century</i> to each teacher.</p> <p>Discuss: each step and distribute handouts as appropriate.</p> | |

Research in the 21st Century

Session 1

| TRAINER'S NOTES | TEACHER ACTION |
|--|--|
| <p>WRITING A RESEARCH PAPER, cont.</p> <p>Steps 1 & 2: Define and Narrow a Topic</p> <ul style="list-style-type: none"> • How do you assign research topics in your classroom? • Are the topics dictated by the school's curriculum plan? • Do students work collaboratively? • Does each student/team have the same topic? <p>Do they each investigate a segment of a more general topic, and then combine the segments into one overall research document?</p> <p>Distribute: Narrow Your Topic worksheet (generic)</p> <p>Discuss: As a hands-on research topic, we are going to investigate "deforestation." When narrowing the topic, we will use the 5 W's of newspaper writing:</p> <ul style="list-style-type: none"> • Who • What • When • Where • Why <p>And sometimes we may add "How".</p> <p>Explain: When your students write their topic as a question, they will be more likely to include specific information that contributes to the conclusion, and less likely to go off on a tangent.</p> <p>By adding a potential answer to the question, students may then prove, disprove or add detail to their hypothesis...all contributing to critical thinking skills.</p> | <ol style="list-style-type: none"> 2. Consider how you and/or other teachers assign research topics. Share your philosophy in assigning research topics. 3. Work with your partner to answer the questions on the <i>Narrow Your Topic</i> worksheet using the topic of deforestation as the broad topic. 4. Write your topic on the line at the bottom of the page in the form of a question. Your research paper will answer this question about your topic. 5. Write what you think the answer is to your question. |

Research in the 21st Century

Session 1

| TRAINER'S NOTES | TEACHER ACTION |
|---|--|
| <p>WRITING A RESEARCH PAPER, cont.</p> <p>Narrow the focus of the deforestation topic using the blank Narrow Your Topic worksheet so that you are researching aspects of deforestation that are of interest to you.</p> <p>Distribute: Narrow Your Topic – Deforestation Example.doc</p> <p>Discuss: An individual's responses to the questions demonstrate more specific interest in a general topic. Notice how the answers to the questions on the Deforestation handout show that this researcher is interested in how the timber trade has affected wildlife in Africa. Their research will focus on deforestation caused by the timber trade in Africa. In this example, the students will select facts that pertain to how the timber trade's effect on deforestation has affected wildlife in Africa.</p> <p>Do you consider student interests when you assign research topics? How might you assign research topics based on student interest?</p> <p>Step 3: Conduct Research</p> <p>Ask teachers to refer to "How to Write a Research Paper in the 21st Century."</p> | <p>6. Discuss how you filled in the worksheet. How do your responses indicate your personal interests?</p> <p>7. Look at the Narrow Your Topic handout with the deforestation example.</p> |

Research in the 21st Century

Session 1

| TRAINER'S NOTES | TEACHER ACTION |
|--|--|
| <p>WRITING A RESEARCH PAPER, cont.</p> <p>Discuss: Which search engines have teachers found to be the most helpful for students. Are the teachers required to use specific “child-safe” search engines? What is the school’s policy on Internet access and search engines?</p> <p>Explain: If your search doesn’t return many results, make the search text a little broader. For example, instead of “effects of deforestation in Africa and wildlife”, try “deforestation in Africa and wildlife.” Also search for “the effects of the timber trade”. Look for results that fit your topic.</p> | <ol style="list-style-type: none"> 8. Discuss which search engines you have used with students in the past. Why have you used them? 9. Open the Internet browser on your computer. In the Address Bar, type the URL that you prefer using with your students or choose one of these student search engines: <ul style="list-style-type: none"> • www.yahookids.com • www.awesomelibrary.org • www.askkids.com • www.mrdonn.org 10. Search for your specific topic, using the key words in your question. 11. Click on one of the Results in the list. 12. Read the information on the Website. If necessary, click on a link in the article to find more information that you need. 13. Find one fact that pertains to your specific topic. |
| <p>CE POWERPOINT INDEX INTRODUCTION AND EXAMPLE</p> <p>Explain: COMPUTER EXPLORERS has designed a system for students to use PowerPoint to organize the facts and images that they find either in electronic or written formats. Using the specific template allows them to create an outline using PowerPoint tools.</p> | <ol style="list-style-type: none"> 14. Minimize the browser. 15. Start PowerPoint and open the CE Index.potx file. |

Session 1

| TRAINER'S NOTES | TEACHER ACTION |
|--|---|
| <p>CE POWERPOINT INDEX INTRODUCTION AND EXAMPLE, cont.</p> <p>Use a projection system to show the <i>CE Index Example</i> to the class. Point out these sections:</p> <ul style="list-style-type: none"> • Topic • Single Fact or Graphic • Source Information • Notes (Change to the Notes View to make it easier to see the notes - View → Notes View; change the Zoom to 200% to make it easier to see the notes) <p>Emphasize that, just as in using the index cards in the 20th Century, an index slide should have one fact or image on it.</p> <p>Explain: The original <i>CE Index</i> file is a template file containing blank forms that can be used by anyone. When your students save it as their own presentation file, the original template file will still be available for use with another project.</p> <p>Explain: If the teachers are working in pairs on one computer, have both teachers save the file to their own USB drive so that they will have a copy of this sample index.</p> | <p>16. Save the file as a presentation with a new name using these steps:</p> <ul style="list-style-type: none"> • Click on the Office button. • Click on Save as. • In the File <u>n</u>ame box: type your initials <i>after</i> CE Index. • Click on the down arrow on the right side of the Save as type box. • Change the presentation type to PowerPoint Presentation. • Click on Save. |

Research in the 21st Century

Session 1

| TRAINER'S NOTES | TEACHER ACTION |
|--|---|
| <p>THE TRIANGLE METHOD</p> <p>Distribute one <i>Fact or Fiction?</i> handout to each teacher.</p> <p>Discuss: How have you helped your students analyze their research to determine if they have found facts or fiction? What do the students need to consider about their sources to decide if the information on a website is a fact, an opinion or a sales pitch? Should the type of website influence our willingness to accept the information on that website as fact or fiction?</p> <p>Discuss: Will the Triangle Method be useful in your classroom? Do you have other fact verification techniques that you would prefer to use? Encourage the teachers to share their ideas.</p> | <ol style="list-style-type: none"> 17. Work with your partner to complete the chart in Step 1 on the top of the <i>Fact or Fiction?</i> worksheet. 18. Complete the chart in <i>Step 2: Can you trust your source?</i> to use the Triangle Method to verify or disprove your fact. 19. Continue using the Triangle Method until you find a fact that has been verified by three sources. 20. Copy and paste your verified fact and source information to slide 2 in the <i>CE Index</i>. 21. Save your CE Index presentation file after completing each slide. 22. Add two more verified facts and their source data to slides 3 and 4. 23. Copy the slide 1 thumbnail and paste it after slide 4 to add a blank index slide at the end of the presentation. The steps to do this are: <ul style="list-style-type: none"> • <i>Right-click</i> on the slide 1 thumbnail • Click on Copy • <i>Right-click</i> on slide 4 thumbnail • Click on Paste |

Research in the 21st Century

Session 1

| TRAINER'S NOTES | TEACHER ACTION |
|---|--|
| <p>USING WIKIPEDIA IN THE CLASSROOM</p> <p>Discuss: Their thoughts on allowing their students to use Wikipedia articles in their research. Discuss how Wikipedia articles are written from contributions by volunteers who may or may not be subject matter experts. Ask teachers to brainstorm how these articles might be useful for their students. If necessary, point out that Wikipedia articles may be a good source of:</p> <ul style="list-style-type: none">• Ideas to spark more research• Public domain images• Links to more reliable and verifiable sources | <p>24. Go to your Web browser and search for <i>deforestation</i> in Wikipedia.</p> <p>25. Click on an image and read the licensing information to determine whether the image is in the public domain and available for student use.</p> <p>26. Copy and paste an image that has been placed in the public domain to slide 5 and add the source information.</p> <p>27. Explore the blue links within the Wikipedia article and its sources at the end of the article to look for more information that pertains to your refined topic.</p> <p>28. If time permits, add more blank slides and more facts to your index.</p> <p>29. Save your CE Index presentation before closing PowerPoint.</p> |

Research in the 21st Century

Session 1

| TRAINER'S NOTES | TEACHER ACTION |
|---|--|
| SUGGESTED ACTIVITIES | ◇ Try the Advanced search option on Google. The link is located under the right side of the search box. |
| CLOSURE ◇ Ask the teachers to share how they feel the techniques they utilized today will positively affect their students' research techniques. Do they see any negative aspects to its use? | |

Research in the 21st Century

Session 2

NEW SKILLS TO BE COVERED

- Reorganize the order of information in the PowerPoint index by moving the slides in the slide sorter view
- Use PowerPoint Print Preview feature
- Print slides and notes
- Use online citation tools to create a bibliography

OPENING DISCUSSION

- During Session 1 you practiced the CE PowerPoint Technique to organize research for a project about deforestation. What are your thoughts on using these techniques with your students? Do you think they will be receptive to a system that uses PowerPoint to organize their facts and images?
- Today you will learn about web-based citation sites that your students can use to give credit to their sources and create a bibliography.

PRE-CLASS PREPARATION

- Go to www.bibme.org and register for an account using a Yahoo! Mail email address.
- Bring all handouts from Session 1 and distribute as needed.

VOCABULARY REVIEW

bibliography – a list of sources

citation – an entry in a bibliography that gives credit to a source

hyperlink – A hyperlink is a word, phrase, or image that you can click on to jump to a new document or a new section within the current document.

Internet research – to use a group of connected computers (Internet) to do a detailed study of a subject to discover new information (research)

query box – a place to type the topic that you would like to research

search engine – a computer program that lets a person search the Internet for specific information

taskbar – an on-screen toolbar that displays the active applications (tasks) as buttons. Clicking on a taskbar button restores the application to its previous appearance.

thumbnail – a small version of a slide or picture

URL – Universal Resource Locator; the address of a Web page on the World Wide Web

Research in the 21st Century

Session 2

| TRAINER'S NOTES | TEACHER ACTION |
|--|--|
| OPEN POWERPOINT INDEX Distribute: <i>How to Write a Research Paper in the 21st Century</i> to each teacher. | <ol style="list-style-type: none">1. Open Microsoft Office PowerPoint.2. Open your CE Index that was saved in the first session. |
| PARAPHRASE YOUR INFORMATION Explain: This definition of plagiarism, obtained from Dictionary.com, will be used for this class. "the unauthorized use or close imitation of the language and thoughts of another author and the representation of them as one's own original work, as by not crediting the author" Discuss: How do you define plagiarism for your students? Would they understand the Dictionary.com definition? How will you translate this definition into a sentence or an example that will make it clearer for your students to understand? Discuss: How have you taught your students to avoid plagiarizing their sources in the past? What methods do you suggest your students use to make sure they are not plagiarizing their sources? If your students take the time to paraphrase each fact before they begin to write, do you think that will help them to avoid plagiarizing their sources? | <ol style="list-style-type: none">3. Go to slide 2 and click on the Notes Page icon on the View tab.4. Change the Zoom to 100%.5. Read the fact on this slide and type the information in your own words in the Notes box under the slide. |

Research in the 21st Century

Session 2

| TRAINER'S NOTES | TEACHER ACTION |
|--|--|
| <p>REORGANIZE THE INDEX</p> <p>Explain: When your students have finished conducting their initial research, they should rearrange the order of the facts by rearranging the order of the slides in the slide sorter. Consider:</p> <ul style="list-style-type: none"> • Rearranging the slides will help your students think further about their facts. • This exercise will also help them to see if they have any gaps in their facts and discover any areas that require further research. • Students can now reorganize and add sub-topic slides to break their facts into information sections. • The topics for a presentation on deforestation might be reorganized and then have sub-topic slides added to break the information into the following sections: <ul style="list-style-type: none"> • Wildlife affected • African environment • Timber Trade • Current Situation • Contributing Factors. • A sub-topic slide may not include any information in the notes page; it could simply be a divider to organize the succeeding slides or it could contain the topic sentence for the new section. | <ol style="list-style-type: none"> 6. With slide 2 selected, click on the Slide Sorter icon on the View ribbon. 7. Change the Zoom to 100%, if necessary, to make it easier to see all of the slides on the screen at one time. 8. Rearrange the slides as desired and move on when you feel that the information is in the best order. 9. Return to Normal View. 10. Copy the slide 1 thumbnail and paste it after slide 4. Use this slide to add another fact that further explains the fact on slide 4. Title the fact: Additional Info for Slide 4. 11. Add sub-topic slides to break your facts into information sections. 12. <i>Right-click</i> on a slide's thumbnail and click New Slide to insert a blank slide. 13. Add information section titles to the blank slides. |

Research in the 21st Century

Session 2

| TRAINER'S NOTES | TEACHER ACTION |
|---|---|
| <p>WRITING A RESEARCH PAPER, cont.</p> <p>Step 4: Create An Outline</p> <p>Explain: PowerPoint has an outline function which automatically creates an outline from the text on the slides.</p> <p>Discuss:</p> <ul style="list-style-type: none"> • What information do you see in the PowerPoint outline? • Does this look like an outline that a student would normally create for a research project? • If printed, would this outline be useful as a place to write notes? | <p>14. Add at least one more slide and new fact to a section.</p> <p>15. Remember to save the presentation with the new order before moving on to the next step.</p> <p>16. Have PowerPoint automatically create an outline of your index using these steps:</p> <ul style="list-style-type: none"> • Click on Normal on the View tab. • Click on the Outline tab. <p>17. Follow these steps to print using the Print Preview Outline View option:</p> <ul style="list-style-type: none"> • Click on the Office button. • Click on Print. • Select Outline View in the Print What: box. • Click on the OK icon. <p>18. Consider whether or not the outline has enough information to make it useful as a writing tool.</p> <p>19. Use the Slide Sorter on the View ribbon to rearrange the order of the slides. Return to the Norm View and then click on the Outline tab to look at the outline's new order.</p> |
| <p>PRINT OPTIONS</p> <p>Explain: Your students will find having a printed copy of their index slides with their paraphrased notes useful when they begin to write their research paper.</p> | <p>20. Follow these steps to print using the Notes Page option:</p> <ul style="list-style-type: none"> • Click on the Office button. • Hold your arrow over Print but do not click. • When the Print menu appears on the right, click on Print Preview. • Click on the down arrow in the Print What: box and select the Notes Pages option. • Click on the Print icon. <p>21. Save your PowerPoint file .</p> |

Research in the 21st Century

Session 2

| TRAINER'S NOTES | TEACHER ACTION |
|---|--|
| <p>WRITING A RESEARCH PAPER, cont.</p> <p>Step 5: Write the Introduction</p> <p>Discuss:</p> <ul style="list-style-type: none"> • What information do you feel is important for your students to include in their project's introductory paragraph? • The introductory paragraph is the place where your students will state their thesis and the purpose of their research paper clearly. This paragraph should: <ul style="list-style-type: none"> • Include the chief reason that they are writing the paper. • Indicate how they plan to approach the topic: a factual report, a comparison, or an analysis of a problem. • Explain briefly the major points they plan to cover in their paper. • Include reasons why the readers should be interested in the topic. • Sometimes opening with a startling statistic is a good way to grab the reader's attention. The following example illustrates how an opening sentence can grab the reader's attention before stating the writer's thesis: <p><i>Nearly thirty-six million acres of forest are destroyed each year, roughly the size of the state of New York or the country of Greece. The timber trade's desire for more money has destroyed the forests and affected the wildlife of Africa.</i></p> | <p>22. Open Microsoft Word and write a short introductory paragraph for your paper on deforestation.</p> <p>23. Save your introduction.</p> <p>24. Share your introductory paragraph with the class.</p> |

Research in the 21st Century

Session 2

| TRAINER'S NOTES | TEACHER ACTION |
|--|----------------|
| <p>WRITING A RESEARCH PAPER, cont.</p> <ul style="list-style-type: none">• How do you communicate this paragraph's value as a way to introduce the topic and their views? <p>Have teachers take turns reading their introductory paragraph to the class.</p> <p>Step 6: Write the Body</p> <p>Discuss:</p> <ul style="list-style-type: none">• Do you think the PowerPoint Index technique provides your students with the materials, information and tools needed to begin writing the body of their paper at this point in the process?• Will this technique provide them the organizational structure that they need to stay on track?• How do you currently monitor this writing step? <p>Step 7: Write the Conclusion</p> <p>Discuss: At this point in the process, the students would write the conclusion to their paper or project. What are your expectations for the conclusion and how do you communicate these expectations to your students.</p> | |

Research in the 21st Century


Session 2

| TRAINER'S NOTES | TEACHER ACTION |
|---|---|
| <p>ONLINE CITATION TOOLS</p> <p>Step 8: Give credit to sources</p> <p>Ask: What resources do you use to teach your students about the importance of a bibliography? How do you share the appropriate format for the citations with your students?</p> <p>Explain: The Internet offers a number of different free citation tools. An online citation tool is useful because it makes sure that the citation format is correct. The citations which are produced will serve as a practical example of how a citation should look and what types of information each citation should contain. These citations can become a valuable teaching tool. Examples of online citation tools include:</p> <ul style="list-style-type: none"> • iCyte, • BibMe • Knightcite. <p>Discuss: Have you used these or any other online citation tools? We are going to practice using the BibMe tool but you may want to explore a few others when you have time. Decide which one you feel will work best for your students.</p> | <p>25. Use your Web browser to go to www.bibme.org.</p> <p>26. Click on the Website tab.</p> <p>27. Copy the URL from your first index slide.</p> <p>28. Click inside the Website URL box.</p> <p>29. Erase the http:// text in the box and then paste your address into it.</p> <p>30. Click on Load Info.</p> <p>31. If you receive a box saying "BibMe is unable to parse the URL", click OK.</p> |




Research in the 21st Century

Session 2

| TRAINER'S NOTES | TEACHER ACTION |
|-------------------------------------|--|
| ONLINE CITATION TOOLS, cont. | <p>32. Copy and paste to add as much information as you can from your PowerPoint Index slide into the BibMe form.</p> <p>33. Click on the Add to My Bibliography button.</p> <p>34. Look at the citation on the right side of the screen.</p>  <p>35. Notice that the bibliography is untitled.</p> <p>36. Click on the pencil after the untitled Bibliography heading.</p> <p>37. Change Untitled to Deforestation & your initials and click OK.</p> <p>38. Create a citation for each of your sources.</p> |

Research in the 21st Century

Session 2

| TRAINER'S NOTES | TEACHER ACTION |
|--|---|
| <p>ADD ONLINE CITATIONS TO A WORD DOCUMENT</p> <p>Discuss: The next step after adding all of the sources is to have BibMe paste the citations to a word processing document.</p> <p>Give teachers the email address and password that you set up prior to class.</p> | <p>39. Start Microsoft Word.</p> <p>40. Return to BibMe and click on the Download button.</p>  <p>41. Click on the Log In button.</p> <p>42. Your trainer will give you the log in information.</p> <p>43. Click on the Download button and then click on Open.</p> <p>44. The file will be opened in a Word document.</p> <p>45. Save the citation Word file.</p> |
| <p>STEP 9: MAKE REVISIONS</p> <p>Discuss: How do you teach the editing steps to your students? Do you feel that they put enough effort into this step? How can you help your students improve their editing techniques?</p> | |
| <p>SUGGESTED ACTIVITIES</p> | <p>◇ Locate and explore other online citation tools to decide which one would be best for your students to use.</p> |

Research in the 21st Century

Session 2

| TRAINER'S NOTES | TEACHER ACTION |
|---|----------------|
| CLOSURE <ul style="list-style-type: none">◇ Ask the teachers if they feel that the PowerPoint Index will work just as well for facts and sources that their students find in books and articles that are not on the Internet. (Students could type directly into PowerPoint saving time and keeping all information in one place.)◇ Engage the teachers in a discussion about the benefits of using the PowerPoint Index Technique. Ask them to share their thoughts on any problems that they may foresee and how they might resolve them.◇ Ask the teachers to bring a copy of their schools' Responsible Use Policy to class for discussion in the next class session.◇ Ask the teachers to bring a research topic that they would assign to their students to the next session. | |

Research in the 21st Century

Session 3

NEW & REINFORCED SKILLS TO BE COVERED

- Select a topic to assign to their students for a research paper
- Narrow the topic and then use it as the query text for searches
- Create a PowerPoint Index to collect and organize facts and images

OPENING DISCUSSION

- You have now had the opportunity to use a 21st Century approach to conducting research. Do you feel this technique will help your students write more meaningful research projects?
- Today you will select a topic that you may want to assign to your students for a research project. You will practice these 21st Century techniques as you refine and then research your selected topic.
- Although you will work on your own research topic today, you should continue to collaborate with your partner to remember and recreate the steps that were used in the first two sessions. Working on your own topic will help you become more prepared for your own students' research projects.

VOCABULARY REVIEW

bibliography – a list of sources

citation – an entry in a bibliography that gives credit to a source

hyperlink – A hyperlink is a word, phrase, or image that you can click on to jump to a new document or a new section within the current document.

Internet research – to use a group of connected computers (Internet) to do a detailed study of a subject to discover new information (research)

query box – a place to type the topic that you would like to research

search engine – a computer program that lets a person search the Internet for specific information

taskbar – an on-screen toolbar that displays the active applications (tasks) as buttons. Clicking on a taskbar button restores the application to its previous appearance.

thumbnail – a small version of a slide or picture

URL – Universal Resource Locator; the address of a Web page on the World Wide Web

Research in the 21st Century

Session 3

| TRAINER'S NOTES | TEACHER ACTION |
|--|--|
| <p>WRITING A RESEARCH PAPER</p> <p>Steps 1 & 2: Define and Narrow Your Topic</p> <p>Give each student a copy of both the <i>Research in the 21st Century</i> and <i>Narrow Your Topic-Generic</i> handouts.</p> <p>Review: Think about the questions that we discussed in Session 1 as you select a topic for your students.</p> <ul style="list-style-type: none"> • How do you assign research topics in your classroom? • Are the topics dictated by the school's curriculum plan? • Do students work collaboratively? • Does each student/team have the same topic? • Do they each investigate a segment of a more general topic, and then combine the segments into one overall research document? | <ol style="list-style-type: none"> 1. Concentrate your efforts on steps 1, 2 and 3 of the <i>How to Write a Research Paper in the 21st Century</i> handout. 2. Select a research topic that is appropriate to use with your students. 3. Add this broad topic to the top of the <i>Narrow Your Topic</i> handout. 4. Use the <i>Narrow Your Topic</i> handout to refine your topic to make it reflect your interests. 5. Answer all of the questions on the handout and write your more specific topic in the form of a question incorporating at least two of the answers. 6. Also write what you <i>think</i> the answer to your question will be. |
| <p>USE POWERPOINT INDEX TEMPLATE</p> | <ol style="list-style-type: none"> 7. Start PowerPoint and open the <i>CE Index</i> template file (<i>CE Index.potx</i>). 8. Click on the slide 2 thumbnail. 9. Type your refined research topic after the Research Topic heading at the bottom of slide 2. 10. Save this file as a PowerPoint Presentation using a unique filename. |

Research in the 21st Century

Session 3

| TRAINER'S NOTES | TEACHER ACTION |
|--|--|
| RESPONSIBLE USE POLICY Distribute: The COMPUTER EXPLORERS Responsible Use Policy. Discuss: Compare and contrast the teachers' Responsible Use Policy with CE's Responsible Use Policy | 11. Share your school's Responsible Use Policy with the class. 12. Discuss how this policy affects your class and how you monitor and implement this policy. |
| CONDUCT RESEARCH Step 3: Conduct Research Discuss: Use the details in step 3 of the <i>How to Write a Research Paper in the 21st Century</i> handout to guide your research efforts. | 13. Consider the search engines used in Session 1. Select at least two different search engines for use by your students. 14. Research your topic using the search engines you have selected for student use. 15. Add four or five facts or graphic images to your index. Remember to add only one fact or image per slide. 16. Use the Triangle Method to verify each fact. 17. Use the Notes section under each slide to paraphrase the fact on that slide. 18. Remember to keep slide 1 blank so that you may use it to add more slides to your index. 19. Save your index after completing each slide. |

Research in the 21st Century

Session 3

| TRAINER'S NOTES | TEACHER ACTION |
|--|--|
| SUGGESTED ACTIVITIES | ◇ Continue to add more facts to your index to support or disprove your thesis from the <i>Narrow Your Topic</i> worksheet. |
| CLOSURE ◇ Suggest that the teachers make notes on how they would like to implement these 21 st Century Research Techniques into their own classrooms. ◇ Ask the teachers to think about how they will organize their research into information sections and to bring a list of their anticipated sub-topics to the next class. | |

Research in the 21st Century



Session 4

NEW & REINFORCED SKILLS TO BE COVERED

- Use the PowerPoint Slide View to rearrange the order of the slides
- Print and edit the outline that PowerPoint automatically creates from the slides
- Use online citation sites to create a bibliography for a research paper
- Begin writing a lesson plan for a 21st Century research project

OPENING DISCUSSION

- You will continue to practice with the 21st Century skills that you started using in the last class as you complete the final steps for writing a research paper.
- You will present your PowerPoint index to the class as you discuss how you would use these techniques with your students.

VOCABULARY REVIEW

bibliography – a list of sources

citation – an entry in a bibliography that gives credit to a source

hyperlink – A hyperlink is a word, phrase, or image that you can click on to jump to a new document or a new section within the current document.

Internet research – to use a group of connected computers (Internet) to do a detailed study of a subject to discover new information (research)

query box – a place to type the topic that you would like to research

search engine – a computer program that lets a person search the Internet for specific information

taskbar – an on-screen toolbar that displays the active applications (tasks) as buttons. Clicking on a taskbar button restores the application to its previous appearance.

thumbnail – a small version of a slide or picture

URL – Universal Resource Locator; the address of a Web page on the World Wide Web

Research in the 21st Century

Session 4

| TRAINER'S NOTES | TEACHER ACTION |
|--|--|
| <p>ADD MORE FACTS</p> <p>Give each student a copy of the <i>How to Write a Research Paper in the 21st Century</i> handout.</p> | <ol style="list-style-type: none"> 1. Start PowerPoint and open the index file that you saved in the last session. 2. Go to Wikipedia and search for your topic. 3. Find three more facts using the Wikipedia articles' notes and citations. 4. Use the Triangle Method to verify the new facts. 5. If you feel the facts are reliable, add them to your index on new slides. |
| <p>PARAPHRASE YOUR INFORMATION</p> | <ol style="list-style-type: none"> 6. Change the View to Notes Page and use the Notes section under each slide to paraphrase the information on that slide. 7. Remember to save after you complete each slide. |
| <p>REARRANGE FACTS ORDER</p> | <ol style="list-style-type: none"> 8. Change to the Slide Sorter View. 9. Change the Zoom to 100%. 10. Click and drag the slides to put the facts in the order you feel will work best for your final project. 11. Save the file. 12. Change back to the Normal view. |
| <p>CREATE AN OUTLINE</p> | <ol style="list-style-type: none"> 13. Click on the Outline tab. 14. Scroll up and down to look at the facts. If you are satisfied with the order, print the outline using these steps: Office Button > Print > Print What: Outline View > OK. 15. If you are not satisfied with the order of the facts in the outline, change back to the Slide Sorter view and rearrange the slides as desired. |

Research in the 21st Century

Session 4

| TRAINER'S NOTES | TEACHER ACTION |
|--|---|
| CREATE AN OUTLINE, cont. | 16. Print the Outline View . |
| PRINT | 17. Print using the Notes Page Print option. |
| CREATE A BIBLIOGRAPHY Remind the teachers of the BibMe login information if necessary. | 18. Open a Web browser and go to www.bibme.org . 19. Create citations and a bibliography for your sources. 20. Download the citations to MS Word. 21. Remember to save your citation. |
| INDEX PRESENTATIONS Use a projection system or have the participants gather at each computer as they share their indexes with the rest of the class. Ask each teacher to conclude by stating how they plan to implement these 21 st Century research techniques with their own students. Encourage all teachers to add their thoughts and observations as the presentations are shared. | 22. Take turns sharing your PowerPoint Index with the rest of the class. |

Research in the 21st Century

Session 4

| TRAINER'S NOTES | TEACHER ACTION |
|---|----------------|
| <p>TEACHING THE CE POWERPOINT TECHNIQUE</p> <p>Explain: If the teachers would like a teaching unit to instruct their students how to do research in the 21st Century, they should email COMPUTER EXPLORERS (info@computerexplorers.com) .We'll send them our lesson plans and support materials to implement in their classroom.</p> <p>Students MUST have a general knowledge of Windows, Microsoft PowerPoint and Word. They should know how to:</p> <ol style="list-style-type: none">1. Open a program2. Use a toolbar, tabs, and pull-down menus3. Maximize / minimize windows4. Highlight text5. Navigate to Web sites using a Web browser <p>Explain: The Curriculum Guide will give them all the information they need to teach this course.</p> <p>CLOSURE</p> <p>◇ Praise the teachers for their hard work and willingness to help their students embrace the 21st Century research techniques that they have explored in this class.</p> | |