

ONLINE SEARCHING SKILLS

Part 3

Instructional Strategy for Development Part of Lesson Plan

LOCATION: Library

INSTRUCTORS: Library Media Specialist (Librarian) and Content/Classroom Teacher

UNIT TECHNICAL REQUIREMENTS AND ADAPTATIONS:

1. Computers: one-two students per computer
2. Internet Connection
3. On-Line Library Catalog
4. Projector and Display Screen
5. VCR

Technical Adaptations: For instructional settings with fewer computers, students may pair up and stagger research times. A projector and display screen are assets to time constraints, but small rotating groups may suffice if necessary, and at times be preferable for specific learning styles.

OTHER MATERIALS:

Worksheets (Lessons 6-12) will serve dual functions: Ongoing assessment of students' comprehension and progress, and compilation of useful search terms and project resources. These documents should be saved in students' project folders for ongoing resource reference.

Worksheet A: "Bibliography" will record bibliography notes such as author, title, date, publisher, and website address.

Worksheet B: "Searching Terms" will compile useful search terms.

Internet Sites (listed in individual lesson plans)

LESSONS 1 & 2: INTRODUCTION OF RESEARCH TOPIC & ESSENTIAL QUESTIONS

Teacher Presentation of Content: Subject/Homeroom teacher and librarian will introduce research topic using multimedia and print resources, along with class discussions involving tapping prior knowledge and brainstorming. Resources vary with research topic.

Introductory/Hooking Materials:

Topic Related: Audio/Visual Programs; Books, nonfiction and fiction; Periodical Articles; Internet Sites

LESSON 3: INTERNET ADDRESSES & CITATION: INTRODUCTORY LESSON

Teacher Presentation of Content:

1. Through introductory library presentation and class discussion, the student will understand the parts of an Internet website address, recognize the critical components for source evaluation, and the importance of copyright issues and citation in bibliography format.
2. Using a projector and display screen, and a hard copy, show examples of finished research projects and their accompanying bibliographies to illustrate the use of multiple online databases and resource citation.

Materials: Internet Sites

Multimedia Presentation: Alan November's website on information literacy:

"Information Literacy/Understanding a Web Address"

<http://www.anovember.com/infolit/adress.html>

"Teaching Zack to Think"

<http://www.anovember.com/articles/zack.html>

Teacher Resources: Internet Sites

"A Teacher's Guide to Fair Use and Copyright:

<http://home.earthlink.net/~cnew/research.htm>

"WebTeacher for Macintosh"

<http://www.webteacher.org/macintosh.html>

"WebTeacher for Windows"

<http://www.webteacher.org/windows.html>

"Learn the Net: An Internet Guide and Tutorial"

<http://www.learnthenet.com/english/index.html>

Student Practice/Application

This is an introductory period involving presentation and class discussion. Time permitting, students will explore Alan November's site independently.

Performance Feedback:

Class discussion.

LESSON 4: PREREQUISITE SKILLS TEST: IDENTIFY AND DEFINE THE PARTS OF A BOOK

Teacher Presentation of Content: Through presentation, example, and class discussion, teacher will assess class's mastery of knowledge.

Essential Questions: Why do you need to know the parts of book? How will this knowledge help you in the selection, location, and citation of resources?

Materials: Books

Student Practice/Application

1. Small Group Activity: Using worksheet, identify and Define Parts of a book to group members, including title page, copyright page, table of contents, index, spine, flap and back cover
2. Independent Activity: Fill in worksheet that requires simple identification of title, author, publisher, and date

Materials: Books, Activity specific worksheets for this period only.

Performance Feedback:

Peers, teacher, and worksheet activity will provide performance feedback.

LESSON 5: ALPHABETIZING & NUMBER SEQUENCE

Teacher Presentation of Content:

Lesson may extend into two sessions depending on time allowance.

Teacher will present sequencing activities in a whole class activity format. Teacher will tell brief biography of Dewey and history of Dewey Decimal System, followed by computer activities on Dewey Decimal sites.

Materials:

1. Call Numbers labeled on Post-It Notes/ Chart Paper (optional sequencing skills aid-class activity)
2. “Do We Really Know Dewey?” <http://tqjunior.thinkquest.org/5002/?tqskip=1>
3. “Kidsclick” <http://sunsite.berkeley.edu/cgi-bin/searchkids.pl?keywords=dewey&searchtype=all>
4. “The Dewey Decimal Game” http://iris.nyit.edu/education/studentworks/spring04/edit610/eschuster/deweygame_schuster.swf

Student Practice/Application

Students will:

1. Engage in hands-on activities that reinforce sequencing skills.
2. Explore Dewey Decimal websites and related online interactive activities

Activities:

Alphabetizing and number sequences (grades 4 & 5 only)

1. Cooperative Class Activity: Assign both fiction call numbers (alphabetical sequence) to students, who arrange themselves in proper order. Assess correct and incorrect arrangement.
2. Repeat 3.1 for numerical sequence of nonfiction. Assess correct and incorrect arrangement
3. Optional Variation for 3.1 & 3.2: Class Activity: Hand out call numbers to students, who take turns putting in order on chart. Peers assess correct order in class discussion format.
4. Teacher’s Discretion: Worksheets for Independent practice and assessment of alphabetizing and numerical ordering skills.

Identify and Define the Dewey Decimal System

1. Independent Activity: Go to Dewey Decimal online Flash Game:
http://iris.nyit.edu/education/studentworks/spring04/edit610/eschuster/deweygame_schuster.swf and/or ThinkQuest, “Do We Really Know Dewey?” <http://library.thinkquest.org/5002/>
2. Small Group Activity: Using Dewey Decimal chart, match 2 random titles to Dewey categories. Create call number. Present to class.
3. Class discussion evaluates small group choices.

Performance Feedback:

1. Sequencing performance will be assessed and corrected by peers and teachers.
2. Peers and/or teacher will correct worksheets.
3. Online game feedback.
4. Class discussion will follow on-line activities.

LESSON 6: ON-LINE CATALOG INTRODUCTION & BASIC SEARCH

Teacher Presentation of Content:

1. Using a display screen for presentation, or in a rotation of small groups, teacher will demonstrate on-line catalog basic search using: keyword, title, author, and subject; material record; holdings screen (e.g. call number, title, author, location, available copies).
2. Brainstorming session for research topic search terms: subject, keyword, author, title.
3. Instruct students to open and save "Project Search Terms" worksheet template to project folders.
4. Instruct students to open and save "Bibliography" worksheet template to project folders.
5. Explain function of worksheets as documents useful to project for assessment and compilation of search terms and resources.
6. Instruct students to conduct basic search using terms relevant to research project.
7. Remind students to save search terms and useful resources.

Materials:

1. Display screen and projector
2. Computerized library catalog
3. Worksheets (see materials notes at beginning of unit)

Student Practice/Application

The student will:

1. Record search terms relevant to research project.
2. Conduct a basic search using the online library catalog in a hands-on activity.
3. Interpret and record relevant catalog information for research topic,
4. Locate material on library shelves.
5. Compile and save list of search terms and resources (bibliography).

Performance Feedback:

1. Teacher checks worksheets.
2. Teacher/student consultation on search terms.
3. Did student find useful research materials?

LESSON 7: ON-LINE CATALOG: ADVANCED SEARCH

Teacher Presentation of Content:

1. Using a display screen for presentation, or in rotation of small groups, teacher will demonstrate Boolean search terminology, catalog browse function, and catalog website search option.
2. Brainstorming session for research topic search Boolean terminology.
3. Small group activity: brainstorm for, and evaluate Boolean terminology
4. Instruct students to apply search strategy to their own topics, using Inspiration software, worksheets, and Graphic Organizer

Materials: Display screen, projector, computerized library catalog, website subscription service, worksheets, Internet

Internet Resource:

Graphic Organizers (Schools of California Online Resources for Education)

<http://www.sdcoe.k12.ca.us/score/actbank/torganiz.htm>

Software:

Inspiration Software, Inc.

Student Practice/Application

The student will:

1. Using Venn diagrams, record Boolean search terminology relevant to research project.
2. Conduct an advanced catalog search using Boolean terminology and browse functions.
3. Access project related websites using catalog Internet search option.
4. Record and save project relevant search terminology on document in project folder.
5. Interpret and record relevant catalog information for research topic,
6. Locate material on library shelves.
7. Record useful resources onto bibliography document.

Performance Feedback:

1. Peer feedback on search terminology
2. Teacher checks worksheets.
3. Teacher/student consultation on search terms.
4. Did student find useful research materials?
5. Class discussion on search strategy tips.

LESSON 8: SEARCH ENGINES AND DIRECTORIES

Teacher Presentation of Content:

1. Using video, teacher will introduce search engines and strategies
2. Class discussion reviewing video and focusing on research strategies relevant to research projects.
3. Allow time for project related Internet searches.

Materials: Internet Connection

Video

"Internet Searching Skills." Library Video Company.

<http://www.libraryvideo.com>. 23 Minutes.

Student Practice/Application

Using worksheets and search terms developed in earlier lessons, students will define, describe, and conduct a basic search on one general search engine, one specialized search engine, and one Internet directory:

Worksheets will require students to:

1. Identify and describe search engines.
2. Identify and describe one specialized search engine.
3. Conduct a basic search on one search engine.
4. Conduct a basic search on one specialized search engine.
5. Conduct a search using an Internet directory.
6. Record new search terms and resources onto worksheets.

Performance Feedback:

1. Peer feedback on search terminology
2. Teacher checks worksheets.
3. Teacher/student consultation on search terms.
4. Did student find useful research materials?
5. Class discussion on search strategy tips.

LESSON 9: INTERNET SEARCHING: ADVANCED SEARCH

Teacher Presentation of Content:

1. Using a display screen for presentation, or in rotation of small groups, teacher will demonstrate advanced Internet search strategies including Boolean terminology, phrasing, date, and page specific options.
2. Brainstorming session for advanced strategies related to research projects.

3. Small group activity: brainstorm for, and evaluate advanced search strategies.
4. Instruct students to apply search strategy to their own topics, using Inspiration software and worksheets

Materials: Display screen, projector, and computers with Internet connection.

Student Practice/Application

The student will conduct advanced Internet searches using Boolean operators and advanced options:

1. Navigate to and apply advanced strategies including phrasing, date, and page specific options
2. Apply Boolean terminology
3. Record top 3 results
4. Record one site that links to this site.
5. Keep record of new search terms and useful resources.

Performance Feedback:

1. Small group discussion and peer feedback on search terminology.
2. Teacher checks worksheets.
3. Teacher/student consultation on search terms and resources.
4. Did student find useful research materials?
5. Class discussion on search strategy tips.

LESSON 10: UNDERSTANDING URLs

Teacher Presentation of Content: Using a display screen for presentation, or in rotation of small groups, teacher will use Alan November's "Information Literacy" and Kathy Schrock's "ABC's of Web Evaluation" to introduce and explore web evaluation techniques

Materials:

1. Display screen, projector, and computers with Internet connection.
2. November, Alan. "Information Literacy/Understanding a Web Address." <http://www.anovember.com/infolit/address.html> and "Teaching Zach to Think." <http://www.anovember.com/articles/zack.html>
3. Schrock, Kathy. "ABC's of Web Evaluation." <http://kathyschrock.net/abceval/>
4. Web Evaluation Rubric
5. Pre-selected websites for evaluation (option: students use websites from bibliography document/worksheet)

Student Practice/Application

Using pre-selected websites, the student will recognize, define, interpret, and record the parts of an Internet website address within the framework of a website evaluation rubric

1. Identify and define parts of an Internet address, including hypertext transfer protocol, domain name, and suffix
2. Identify bibliography components of a website including author, date, and publisher or sponsoring organization.
3. Explain critical elements in source evaluation.
4. Conduct website evaluation using a rubric

Performance Feedback:

1. Small group discussion and peer feedback on web evaluation rubrics.
2. Teacher checks rubrics.
3. Class discussion and summary of results.

LESSON 11: RESEARCH PROJECT: SEARCHING FOR RESOURCES

Teacher Presentation of Content: Teacher gives brief outline of expectations – Students will:

1. Conduct independent project related searches for Internet resources.
2. Record new search terms to saved search terms document.

3. Evaluate resources within web evaluation rubric.
4. Compile list of resources onto bibliography document.

Materials:

1. Computers with Internet connection.
2. Web Evaluation Rubric
3. Helpful Sites for Research Projects:

“Enchanted Learning”

<http://www.enchantedlearning.com/Home.html>

“Fact Subject Index”

<http://www.refdesk.com/facts.html>

Student Practice/Application

Using learned strategies and an evaluation rubric, the student will search the Internet and analyze results for valid resources:

1. Apply basic and advanced search strategies using a variety of search engines and directories.
2. Interpret URLs for source analysis.
3. Conduct an evaluation rubric.
4. Analyze credibility, relevance, and usefulness of site to research project.
5. Compile list of resources onto bibliography document.

Performance Feedback:

1. Teacher/student consultation.
2. List of compiled resources.

LESSON 12: COPYRIGHT, CITATION, AND BIBLIOGRAPHY FORMATS

Teacher Presentation of Content: Teacher reviews copyright issues for class discussion. Optional activity: “Copyright Issues Hunt.” Using projector and display screen, introduces students to preferred bibliography format. Demonstrates use of Landmark’s “Citation Machine” for creating proper bibliography format.

Materials:

1. Display screen, projector, and computers with Internet connection.
2. O’Hora, Cindy. “Copyright Issues Hunt” <http://homepage.mac.com/cohora/ext/copy.html>
3. “A Teacher’s Guide to Fair Use and Copyright” <http://home.earthlink.net/~cnew/research.htm>
4. Landmark’s “Citation Machine” http://www.landmark-project.com/citation_machine/index.php

Student Practice/Application

Students will compile a list of credible online resources for research project and cite them in proper bibliography format.

1. Apply search strategies and use evaluation rubrics to determine usable resources.
2. Identify and record author, date, and publisher or sponsoring organization.
3. Record in proper bibliography format.

Performance Feedback:

Teacher/Librarian-Student consultation on list of credible, relevant, and usable sources for research project listed in proper bibliography format.

Final Project Presentation Format Software Options:

1. iMovie
2. eZediaMx
3. Mpower5