Grades 9-12

**Benchmark A:** Formulate advanced search strategies, demonstrating an understanding of the strengths and limitations of the Internet, and evaluate the quality and appropriate use of Internet resources

**Grade Nine**

*Search Strategies*

1. Identify multiple directories and search engines matching curricular need (e.g., given an assignment, use knowledge of tools to pick an appropriate tool to search for information).

2. Construct search strategies focused on the retrieval of specific search results by incorporating Boolean operators (“AND,” “OR,” “NOT”) and adjacency/proximity techniques.

3. Compare and chart the search results from multiple Web sites to check for consistency of information (e.g., compare data on acid rain from more than one site).

*Web Site Evaluation*

4. Establish criteria for evaluating the information retrieved through Internet searching (e.g., author’s expertise, bias, coverage of topic, timeliness).

**Grade Ten**

*Search Strategies*

1. Construct an effective search strategy to retrieve relevant information through multiple search engines, directories and Internet resources.

*Web Site Evaluation*

2. Employ a systematic approach to judge the validity of Web information matched against the defined information need (e.g., researching an author through the Web requires finding biographical information plus criticisms of the author’s works).

3. Examine the information retrieved through Internet searching for authenticity of information, bias, currency, relevance and appropriateness.

**Grade Eleven**

*Search Strategies*

1. Demonstrate the use of parentheses for nesting search terms to alter retrieval strategies through multiple Internet resources.

*Web Site Evaluation*

2. Develop a systematic approach to judge the value of the retrieved Web information.

**Grade Twelve**

*Search Strategies*

1. Synthesize search results retrieved from a variety of Internet resources to create an information product for a targeted audience.

2. Incorporate defined field searching by initiating a search string identifying the desired field of information to be retrieved (e.g., search author or title).

*Web Site Evaluation*

3. Critique research retrieved through the Internet for authority, accuracy, objectivity, currency, coverage and relevancy.
Benchmark B: Evaluate choices of electronic resources and determine their strengths and limitations.

Grade Nine

Electronic Resources

1. Integrate search strategies within the electronic resource that targets retrieval for specific information needs (e.g., limit by date of publication, focus on specific format such as image, sound file).

2. Review strengths and weaknesses of various types of electronic resources for research need (e.g., compare subject-specific magazine database to general online index of articles).

4. Select a specific database for an assignment and explain why it is the appropriate one to use (e.g., in researching a particular author, use a literary database of biographical and critical information about writers).

Grade Ten

Electronic Resources

1. Choose a topic, then identify appropriate electronic resources to use, citing the name and date of the resource medium database or archive collection.

2. Research and critique information in different types of subscription (fee-based) electronic resources to locate information for a curricular need.

3. Investigate tools within electronic resources to generate search strategies (e.g., use a thesaurus to identify subject terms for improved retrieval of information).

Grade Eleven

Electronic Resources

1. Modify a search through the use of different key words and other techniques specific to an electronic resource (e.g., online database, Web-based index).

2. Integrate online subscription resources and other electronic media to meet needs for research and communication on a routine basis.

3. Differentiate coverage of electronic resources to select information need.

4. Support choices of free and fee-based Web information used to create a class project.

Grade Twelve

Electronic Resources

1. Research information from blogs and RSS feeds

2. Use a variety of technology resources for curriculum and personal information needs (e.g., streaming video, CD/DVD, subscription database).

3. Evaluate technology resources and determine strengths and weaknesses for curricular or personal needs.

4. Select appropriate tool, online resource or Web.
Benchmark C: Utilize the Internet for research, classroom assignments and appropriate personal interests.

**Grade Nine**

*Search Strategies*

1. Identify directories and search engines.
2. Construct search strategies focused on the retrieval of specific search results by incorporating Boolean operators “AND,” “OR,” “NOT” and adjacency/proximity techniques.
3. Compare and chart the search results from multiple Web sites to check for consistency of information (e.g., compare data on acid rain from more than one site).

*Evaluating Sources*

4. Establish criteria for evaluating the information retrieved through Internet searching (e.g., author’s expertise, bias, coverage of topic, timeliness).

**Grade Ten**

*Search Strategies*

1. Construct an effective search strategy to retrieve relevant information through multiple search engines, directories and Internet resources.
2. Narrow or broaden the search strategy by modifying the keywords entered in the original search strategy.
3. Employ a systematic approach to judge the validity of a Web information match against the defined information need (e.g., researching an author through the Web requires finding biographical information plus criticisms of the author’s works).

*Evaluating Sources*

4. Examine the information retrieved through Internet searching for authenticity of information, bias, currency, relevance and appropriateness.

**Grade Eleven**

*Search Strategies*

1. Demonstrate the use of parentheses for nesting search terms to alter retrieval strategies through multiple Internet resources.
2. Create a product on a specific curricular topic that includes annotated Web sites constructed according to a standard style manual (e.g., electronic pathfinder on careers).

*Evaluating Sources*

3. Develop a systematic approach to judge the value of the retrieved Web information.

**Grade Twelve**

*Search Strategies*

1. Incorporate defined field searching by initiating a search string identifying the desired field of information to be retrieved (e.g., search author or title).
2. Track Internet resources for personal and academic needs (e.g., Diigo and RSS feeds).

*Evaluating Sources*

3. Synthesize search results retrieved from a variety of Internet resources to create an information product for a targeted audience.
4. Critique research retrieved through the Internet for authority, accuracy, objectivity, currency, coverage and relevancy.