* Secondary sources: Information about a topic that has been shared through print, recorded media, or presentations. Secondary sources provide researchers and readers with the background information they need by establishing the professional and intellectual context for an issue or problem.
* Books and other printed sources provide well-supported and tested information about a topic, but by definition, the information is often dated.
* The library’s catalog is a road map to its collection of books, periodicals, and other material; it is an alphabetical list by author, title, and subject.
* majority of college and university libraries offer sophisticated online catalogs that can be searched at the library or remotely from home or office.
* The online catalog often has additional features such as keyword and Boolean searching and information about whether a book is available or checked out.
* The rules for searching online catalogs vary depending on the computer program used by the library.
* The online catalog’s Help screen is the best guide to search techniques
* Author or Title Search
* Subject Search
* Keyword Search: This strategy is probably your best choice because it allows you to scan through all the fields in a book’s library record—author field, title, subject headings, dates—to locate books that match your request.
* library catalog may also include advanced strategies such as Boolean searching, positional operators, and truncation.
* A Boolean search outlines the relationship of words and phrases using simple AND, OR, NOT statements
* Positional operators stipulate the relative location of each term within the record. For example, you can often specify that terms must be adjacent or within a certain number of words
* Truncation allows for variant spelling or plurals. For example, in some catalogs entering wom\*n retrieves records including either of the words woman and women.
* Periodicals are publications that are issued on a regular basis, usually weekly, monthly, or quarterly. The term encompasses:
* Popular magazines that take commercial advertising, such as Time, Science, and National Geographic
* Professional and scholarly journals such as IEEE Transactions on Professional Communication and Technical Communication Quarterly
* If your research topic demands the most current information, newspapers provide an excellent source
* E-mailing results from a search in an electronic database is an efficient and accurate way to collect the information you need to document your research and build your workscited pag
* Company Directories: most companies now produce sophisticated Web sites about their services and products
* advantages to using a specialized subject-based encyclopedia or dictionary rather than a general one in that the articles target a more scholarly audience, assume greater subject expertise, and reference more scholarly materials in their bibliographies.
* Once you develop a systematic approach to evaluating sources, you will quickly recognize both the high- and low-quality Web sources:
* Obscured authorship: Often a Web designer is credited as the author when in fact an organization or a corporation is the real source.
* Out-of-date information: The Web is littered with abandoned and unmaintained Web sites. A high-quality Web site displays the date prominently.
* Subtle and obvious bias: Many Web sites are elaborate advertisements promoting products, services, causes, or points of view. Data manipulation, false arguments, and unsubstantiated opinions are common.
* Poor-quality links: Links from a high-quality Web site usually lead you to other valuable sites; links from a poor-quality site usually lead you to other poor quality sites. Spending time examining the links helps you determine the quality of the site.
* Flawed style and design: Well-organized and accessible Web sites support the research process. Although there are many cases of good research in poorly designed sites, be aware that extracting the information from overly complex sites drains away your research time.
* The Web is made up of millions of Web pages, each uniquely identified by an address or Uniform Resource Locator (URL). This address often contains important clues to the Web site’s authorship, country of origin or domain, or the type of organization sponsoring the site.
* Options for searching include the following:
* Searching by a specific address, or URL
* Searching by keyword in an index-type search engine or meta-search engine
* Drilling through a subject category using a subject directory
* Using guides to reviewed and recommended Web sites
* Meta-search engines simultaneously use the databases of a number of search engines to respond to a request. The keyword search is forwarded to a variety of search engines; then the database results are collected and displayed.
* Second-generation search engines feature intelligent agents designed to help refine your question by providing suggestions and alternate lines of inquiry. Other second-generation search engines provide continual updating services using push technology that stores your search profile, runs searches, and reports results automatically.
* Primary research: Data collected by the researcher through interviews, focus groups, surveys, laboratory experiments, or field observations. Primary sources also include original works such as diaries, company reports, and correspondence, as well as documents that are the subject of analysis, such as user’s manuals and Web sites.
* Quantitative research collects data that can be represented in numbers.
* Research is valid if it measures what it was designed to measure.
* Research is reliable if it can be repeated with the same results.
* Qualitative data cannot be represented in numbers. Instead, qualitative research analyzes words, images, processes, or objects.
* Interviews: Technical communicators often interview subject matter experts (SMEs) to learn about products or processes that they are documenting, and they should interview users to learn how to improve the usability of products or processes. Because many technical communication students conduct interviews as part of their research, this chapter provides detailed advice for preparing for interviews.
* Focus groups: Technical communicators may also meet with focus groups—that is, small groups of employees or clients—to learn about issues related to the design of products, Web sites, or documentation. Preparing to work with focus groups is much like preparing for interviews, although you will be recording discussion and interaction among the group members.
* Field observations: Technical communicators may go into the field to watch clients use equipment or software on-site, so that they can learn more about who their readers are and how their readers use equipment, software interfaces, or documentation. You should prepare for field observations by clearly identifying the goals of your research and developing a method to record and classify the information you need for your research question.
* Document analysis: Technical communicators may analyze documents for their quality, using theories of effective communication and usable document design. In your writing classes, you may have been asked to analyze the rhetorical or stylistic characteristics of an essay. This is one kind of document analysis.
* Research is credible if the people interviewed or the processes or examples analyzed are typical of the people, processes, or examples being studied.
* Research is transferable if the findings can be applied to similar settings or objects.
* Research is dependable if different researchers would probably reach similar conclusions if they applied the same methods to similar populations, processes, or objects.
* Interviews can be valuable primary sources of information in a research project.
* Develop a list of specific objectives for the interview
* Make clear your main objectives when you make contact for the interview.
* Prepare an interview outline.
* Show that you value your interviewee’s time.
* Ask mostly open-ended questions.
* Ask close-ended questions when you need to nail down an answer.
* Use summaries throughout the interview.
* The actual mechanics of this process may influence the accuracy of your note taking. Following are three possible approaches:
* Option 1: Number reference: Using this approach, you begin the interview with a list of numbered questions on your outline page; then, when you take notes, simply list the number of the question, followed by your notes. This approach gives you as much space as you want to write questions, but it does require that you move back and forth between your numbered question list and note page.
* Option 2: Combined question-and-answer page: For this approach, place a major question or two on each page, leaving the rest of the page to record answers to these and related questions that may be discussed. Although this strategy requires considerably more paper and separates your prepared list of questions, it does help you focus quickly on each specific question and answer.
* Option 3: Split page
* Surveys can combine qualitative research and quantitative research.
* Write a precise purpose statement.
* Limit the number of questions.
* Ask mostly objective questions.
* Procedures are considered usable if they are ■ Easy to learn ■ Efficient to use ■ Easy to remember
* With the exception of common knowledge, you should cite sources for all borrowed information used in your final document, including quotations, paraphrases, and summaries.
* Courtesy, ethics, law
* Abstract Guidelines ■ Highlight the main points ■ Sketch an outline ■ Begin with a short purpose statement ■ Maintain a fluid style ■ Avoid technical terms readers may not know
* Informal Document Guidelines ■ Plan well before you write ■ Use letter or memo format ■ Make text visually appealing ■ Use the ABC format for organization ■ Create the abstract as an introductory summary ■ Put important details in the body ■ Separate fact from opinion ■ Focus attention in your conclusion ■ Use attachments for less important details ■ Edit carefully
* ABC Format: Formal Document ■ ABSTRACT: • Cover/title page • Letter or memo of transmittal • Table of contents • List of illustrations • Executive summary • Introduction ■ BODY: • Discussion sections • [Appendixes—appear after text but support the body section] ■ CONCLUSION: • Conclusions (for reports and proposals) • Recommendations (for reports only)
* Transmittal Correspondence Guidelines ■ Place the letter/memo immediately after the title page ■ Include a major point from document ■ Acknowledge those who helped you ■ Follow letter and memo conventions
* Table of Contents Guidelines ■ Make it very readable ■ Use the contents page to reveal document emphases ■ Consider leaving out low-level headings ■ List appendixes ■ Use parallel form in all entries ■ Proofread carefully
* Executive Summary Guidelines ■ Put it on one page ■ Avoid technical jargon ■ Include only the important conclusions and recommendations ■ Avoid references to the document body ■ Use paragraph format ■ Write the executive summary last
* Introduction Guidelines ■ State your purpose and lead into subsections ■ Include a project description ■ Include scope information ■ Consider including information on document organization
* Discussion Guidelines ■ Move from facts to opinions ■ Use frequent headings and subheadings ■ Use listings to break up long paragraphs ■ Use illustrations for clarification and persuasion ■ Place extra detail in appendixes
* Activity report: An informal report, usually directed within your own organization, which summarizes an event or records work on a specific project or during a specific time period
* ABC Format: Activity Reports ■ ABSTRACT: Time period, project, or event covered in report. ■ BODY: List of activities or events • Organization that emphasizes type of activity, by project, or by client • Problems important to reader ■ CONCLUSION: Future actions • Actions for continuing and ongoing activities • Plans for addressing problems or for the time period covered by the next report
* Progress report: An informal report that provides your manager or client with details about work on a specific project. Often you agree at the beginning of a project to submit a certain number of progress reports at certain intervals. The final progress report, submitted when a project is completed, is often called a project completion repor
* ABC Format: Progress Report ■ ABSTRACT: Project and general progress (e.g., second week of a four-week project) • Capsule summary of main project(s) • Main progress to date or since last report ■ BODY: Description of work completed since last report • Organization emphasizes task, chronology, or both • Clear reference to any dead ends that may have taken considerable time but yielded no results • Explanation of delays or incomplete work • Description of work remaining on project(s), organized by task, by time, or by both • Reference to attachments that may contain more specific information ■ CONCLUSION: Brief restatement of work since last reporting period • Expression of confidence or concern about overall work on project(s) • Indication of your willingness to make any adjustments the reader may want to suggest
* Regulatory report: A report written for an external audience—a regulatory agency—asserting and documenting an organization’s compliance with standards and regulations. Regulatory reports may be submitted at required intervals and may use a required format
* ABC Format: Regulatory Reports ■ ABSTRACT: Reference to standards or regulations that are the subject of the report. • Summary of the findings, including statement of extent to which the organization is in compliance • Summary of recommended actions ■ BODY: Detailed information about the findings • Organization that emphasizes required activities or documents • Description of observations • Description of problems observed • Data that support observations ■ CONCLUSION: Summary of degree of compliance with regulations • Recommendations for improvement of compliance • Summary of consequences if problems are not addressed in a timely manner