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| ***Techniques for Documenting with Proof or Supporting Evidence, and Related Strategies for Problem Solving*****By David Alderoty © 2016****Chapter 2) How to Use 28 Techniques, for Documenting with Proof and/or Supporting Evidence, and the Optimum Utilization of Techniques 1 and 2**[**This e-book presents 28 techniques for supporting the validity of the statements and documents you write**](http://www.TechForText.com/DP/List)**.****Left click on the above for a list of the techniques****This chapter contains a little over 2,500 words****If you want to go to chapter 1, left click on the following link:**[**www.TechForText.com/DP/chapter-1**](http://www.TechForText.com/DP/chapter-1)**To contact the author use David@TechForText.com**[**or left click for a website communication form**](http://www.david100.com/Mail)**Table of Contents, and an Outline of this Chapter**The following is a hyperlink table of contents, as well as an outline of this chapter. If you left click on a blue underlined heading, the corresponding topic or subtopic will appear on your computer screen. Alternatively, you can scroll down to access the material listed in the table of contents, because this chapter is on one long webpage.[PART ONE 4](#_Toc462441300)[Topic 1.) Techniques for Documenting with Proof Or Supporting Evidence, and for Problem Solving 4](#_Toc462441301)[**Subtopic, The Utility, and Limitations of the 28 Techniques, and Basic Strategy for Using Them** 4](#_Toc462441302)[Topic 2.) Technique-1, The Conventional Research and Citation Strategy 6](#_Toc462441303)[**Subtopic, Some Advantages and Disadvantages of Techniques-1, The Conventional Research And Citation Strategy** 6](#_Toc462441304)[**Subtopic, Web-Based Articles for Additional and Supporting Information, for Technique-2** 8](#_Toc462441305)[**Subtopic, Web-Based Videos for Additional and Supporting Information, for Technique‑2** 9](#_Toc462441306)[PART TWO 10](#_Toc462441307)[Topic 2.) Technique 2, Writing from Your Own Knowledge and Experience, and Searching for Published Sources that Support the Statements you Wrote 10](#_Toc462441308)[**Subtopic, Checking and Correcting Your Work, When You are Using Technique-2** 13](#_Toc462441309)[**Subtopic, When to switch from Technique-2, to The Conventional Research and Citation Strategy** 13](#_Toc462441310)[**Subtopic, When You CANNOT Find ANY Supporting Evidence For the Statements You Wrote, From Published Sources** 13](#_Toc462441311)[**Subtopic, Studying Published Material, Before you Start Writing, while you are using Technique-2** 14](#_Toc462441312)[**Subtopic, Studying, Without Using Published Sources, Before or During, the Writing Process, when you are using Technique-2** 16](#_Toc462441313)[**Subtopic, Additional Information from Web-Based Articles** 17](#_Toc462441314)[**Subtopic, Additional Information from Web-Based Videos** 18](#_Toc462441315)**This E-Book Provides Additional and Supporting Information from other Authors, with Web Links**This e-book contains links to web-based articles and videos from other authors, for **additional, alternative, and supporting information.** The links are the blue underlined words, presented throughout this e-book. However, some of these links are to access different sections of this e-book, or material on my own websites. Quotes and paraphrases in this e-book have hyperlinks to access the original source. The quotes are presented in brown text, which is the same color of these words. (The precise text color is RGB Decimal 165, 42, 42, or Hex #a52a2a) Some of the web links in this e-book will probably fail eventually, because websites may be removed from the web, or placed on a new URL. If a link fails, use the blue underlined words as a search phrase, with [www.Google.com](http://www.google.com/). If the link is for a video, use [www.google.com/videohp](http://www.google.com/videohp). The search will usually bring up the original website, or one or more good alternatives. |

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| ***For those who prefer listening, as an alternative to reading, this book is recorded in an audio format.***[***For an audio narration of PART ONE, left click on these words (requires six minutes, and 51 seconds).***](P1.mp3)[***For an audio narration of PART TWO, left click on these words (requires 10 minutes, and 48 seconds).***](P2.mp3) |

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| ***PART ONE*****Topic 1.) Techniques for Documenting with Proof Or Supporting Evidence, and for Problem Solving**|||This e-book describes and explains 28 [**techniques**](http://www.dictionary.com/browse/technique) for documenting with proof and/or supporting evidence, and for related strategies for problem solving. These techniques can be used to support the validity of the statements you write. A list of the 28 techniques can be seen, by left clicking on the following URL [**www.TechForText.com/DP/List**](http://www.TechForText.com/DP/List)**Subtopic, The Utility, and Limitations of the 28 Techniques, and Basic Strategy for Using Them**|||The techniques do **not** have universal utility, and **you must choose the techniques that are appropriate for your writing project.** Each of these techniques has its utility, and limitations. However, you can use multiple techniques in the same document, and sometimes more than one technique in the same argument. Some of these techniques, when **used properly** will result in excellent proof and/or supporting evidence. This includes deductive and inductive reasoning, electronically recorded evidence, and citations from reliable published sources. However, a few of the techniques usually produce weak supporting evidence, such as personal observations, and experiences. When this is the case, you can use additional supporting evidence, such as photographs, videos, or experimentation that confirms the observations.  In this chapter two of the techniques are discussed in detail, which are as follows:* Technique-1, The Conventional Research and Citation Strategy, topic 2
* Technique 2, Writing from Your Own Knowledge and Experience, and Searching for Published Sources that Support the Statements you Wrote, topic 3
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| **Topic 2.) Technique-1, The Conventional Research and Citation Strategy** |||Technique-1 is the conventional research and citation strategies that students frequently used to write term papers. This technique is often used for research papers, PhD theses, and academic journal articles. In scientific journals, it is used with experimental evidence. Professional authors often use this technique to write scholarly articles and books. The technique involves searching for information from reliable published sources, such as journal articles, periodicals, newspapers, etc. The student or writer **extracts relevant information** from the sources. This information provides two primary purposes. **First,** it is a source of information to write a term paper, research report, dissertation, article, book, or any other document. **Second**, the information from the published sources is used to create citations, involving quotes and/or paraphrases. This is used to support the validity of one or more of the following: **a** **thesis**, **theme**, **topic heading**, **paragraphs, or any statement or information in a document.** Structure of the citations, are generally based on a specific citation style, such as, [**MLA**](https://owl.english.purdue.edu/owl/resource/747/01/), [**APA**](https://owl.english.purdue.edu/owl/resource/560/01/), or [**CMS**](https://owl.english.purdue.edu/owl/resource/717/01/). **Subtopic, Some Advantages and Disadvantages of Techniques-1, The Conventional Research And Citation Strategy**|||Even if you have, little or no knowledge in a subject, you can still write about it, with the conventional research and citation strategy. This is because it is based on searching for information from published sources. Technique-2 is a good learning strategy, because the research and writing is likely to facilitate the learning process. However, the conventional research and citation strategy in the school environment can be problematic, **if most of the assignments are limited to this technique**. The research, and related quotes and paraphrases, can discourage the students from writing original material. This may also interfere with the development of creativity skills. Another difficulty occurs with this technique, when instructors **overemphasize** incidental structural components, such as the layout of the paper, and how to cite sources based on a specific citation style. This overemphasis can interfere with learning how to write interesting and useful material.  The structural components of a paper are **not** as important, as developing good writing skills. This is because structural components can easily be changed to any configuration, or citations style, after a paper is completed, such as with Microsoft Word or similar software. This is frequently done by editors, when books and articles are accepted for publication. **Subtopic, Web-Based Articles for Additional and Supporting Information, for Technique-2**|||[The following is a very good resource for all aspects of writing, including APA, MLA, or the Chicago manual of style: **Purdue Online Writing Lab (OWL)**](https://owl.english.purdue.edu/owl)[Writing a Research Paper OWL Purdue](https://owl.english.purdue.edu/owl/resource/658/1/)[MLA Formatting and Style Guide(OWL)](https://owl.english.purdue.edu/owl/resource/747/01/)[(APA) American Psychological Association (OWL)](https://owl.english.purdue.edu/owl/resource/560/01/)[Chicago Manual of Style (OWL)](https://owl.english.purdue.edu/owl/section/2/12/)[Tips and Examples for Writing Thesis Statements (OWL)](https://owl.english.purdue.edu/owl/resource/545/01/)[Writing Tips: Thesis Statements](http://www.cws.illinois.edu/workshop/writers/tips/thesis/)[Harvard College Writing Center](http://writingcenter.fas.harvard.edu/pages/developing-thesis)[How to Write a PhD Thesis](http://newt.phys.unsw.edu.au/~jw/thesis.html)[How not to write a PhD thesis](https://www.timeshighereducation.com/news/how-not-to-write-a-phd-thesis/410208.article)[How to Write a Research Paper](http://www.wikihow.com/Write-a-Research-Paper)[How to Write an A+ Research Paper](http://www.aresearchguide.com/1steps.html)[THE WRITER'S HANDBOOK University of Wisconsin System](http://writing.wisc.edu/Handbook/PlanResearchPaper.html)[How To Write A Dissertation](https://www.cs.purdue.edu/homes/dec/essay.dissertation.html)[Finishing your PhD thesis: 15 top tips](http://www.theguardian.com/higher-education-network/blog/2014/aug/27/finishing-phd-thesis-top-tips-experts-advice) [Write a Research Paper](https://explorable.com/write-a-research-paper)[ESC Online Writing Center](https://www.esc.edu/online-writing-center/resources/research/research-paper/)[Writing Research Papers, Rice University](http://www.ruf.rice.edu/~bioslabs/tools/report/reportform.html)[How to do Graduate-level Research, Dr. Bhaskar Krishnamachari](http://www.ece.rutgers.edu/~pompili/index_file/extra/HowToDoResearch_ANRG_WP02001.pdf)[Citation styles](http://www.plagiarism.org/citing-sources/citation-styles/)**Subtopic, Web-Based Videos for Additional and Supporting Information, for Technique‑2**|||[How To Write A Research Paper! (8 simple steps)](https://www.youtube.com/watch?v=oPobmEZ4lfs)[How To Write A Research Paper Fast](https://www.youtube.com/watch?v=UiTaxAfIBPg)[PhD Thesis Planning and Writing.mp4](https://www.youtube.com/watch?v=P1glZe0iVb8)[How to write a research paper](https://youtu.be/P1glZe0iVb8)[Some reflections on writing - especially dissertations](https://www.youtube.com/watch?v=LlEeTsHBj98)[Writing a dissertation](https://www.youtube.com/watch?v=1hVNF_8S6Ok)[Doctoral Thesis Proposal Writing: 5 Tips for perfecting writing](https://youtu.be/daYQLz-cITw) |

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| ***PART TWO*****Topic 2.) Technique 2,** **Writing from Your Own Knowledge and Experience, and Searching for Published Sources that Support the Statements you Wrote**|||Technique-2 is useful when you are knowledgeable in a specific topic or subject, and you are capable of explaining it to others in writing. With this technique, you are using your own reasoning, creativity, knowledge, and experience to write part of or all of a document. **With this technique, you search for reliable published material that directly or indirectly agrees with your writing.** With some exceptions, this involves searching for supporting information from reliable published sources, **AFTER** you have written a **statement**, a **paragraph**, a **subtopic**, a **topic**, or an entire **document**. **To support the material you wrote, you could simply add relevant quotes, or paraphrases from the published sources, similar to the conventional research and citation strategy**. This can result in the document that looks like a conventional research paper, or academic article, especially if you use a popular citation style, such as [**MLA**](https://owl.english.purdue.edu/owl/resource/747/01/), [**APA**](https://owl.english.purdue.edu/owl/resource/560/01/), or [**CMS**](https://owl.english.purdue.edu/owl/resource/717/01/).  However, finding published sources that contain the right subject and wording to optimally support, the statements you wrote, might be problematic. Even if you manage to find appropriate published sources, it may be difficult or impossible to extract quotes or paraphrases that coincide with the **statements you wrote**. There is a solution to this problem described below. **There is an alternative way of supporting the material you wrote without using quotes or paraphrases.** **Specifically, you can refer your readers to published sources that directly or indirectly agrees with your work**. This can involve a list of books, chapters of a book, articles, websites, and/or videos that you are using to support your work. This material can sometimes provide additional information for your readers. When this is the case, you should state this, which can be done in the title, or in the main body of the text such as web-based material, for additional and supporting information. However, if your list only contains supporting information, you should indicate this as well. If you are writing only a few pages, you can place the list of supporting material at the end of the document. If you are writing a lengthy document, such as a book, it is best to place the list at the end of the chapters, topics, or subtopics. In some cases, it may be best to place the supporting material underneath a statement you have written. This is especially useful, when the validity of your statement is likely to be questioned by some of your readers.  **Sometimes there may be important information in a book, article, or website that you have on your list of supporting materials.** You can emphasize this information, by quoting it, and placing it next to the title of the source, such as the following example. “The Supreme Court… claiming that documents for these purposes are not only hard copy documents, but include diskettes, videos, movies and documents stored on computers.” See [Definition of document expanded](http://uk.practicallaw.com/0-101-4355?q=&qp=&qo=&qe=)You can place the quote before the title, or after the title. With this example, I started with the quote, as can be seen from the above. This is followed by the title of the source, which is a web-based article. The title was converted into an active hyperlink to access the article directly. With this quote, I wanted to emphasize an expanded definition of document that applies to computers and the electronic format. Thus, I highlighted the word document in yellow.**Subtopic, Checking and Correcting Your Work, When You are Using Technique-2**|||You can use the published sources you found to check your work for errors, and overall quality. When this is done, in some cases it may necessitate revising the material that you have written, to make corrections or improvements. While revising, if you paraphrase, or if you think you might have paraphrased inadvertently, you should credit the authors using any appropriate citation style.**Subtopic, When to switch from Technique-2, to The Conventional Research and Citation Strategy**|||If you are constantly making errors, or finding published material that appears to be better than your work, it might be best to switch to the conventional research and citation strategy. This can be done, for part of or all of your document. With the conventional research and citation strategy, it might be easier and quicker to write a document. This is because you examine the published sources before you write. This makes it easy to write statements that are accurate, and coincide with the published sources. Paraphrasing and using quotes is much easier than creating your own original statements from scratch.**Subtopic, When You CANNOT Find ANY Supporting Evidence For the Statements You Wrote, From Published Sources**|||If you are unable to obtain supporting evidence for the statements in your document from published sources, your work may be either incorrect or original. If you are writing about a technique, or strategy, supporting evidence is not necessary. If you want to, you can tell the readers, to try this technique, and see if it works for you. This raises the question, if you are not writing about a technique, and cannot find supporting evidence in published sources, what do you do. If you have any type of good supporting evidence or proof, your statement(s) are probably correct. In such a case, include your proof, or supporting evidence with your statement(s). In addition, you can indicate to your readers that your work appears to be original, based on your research. This ideally should include a list of the sources you searched. However, if you do not have any supporting evidence for your statements, you can indicate that they are speculations, possibilities, and/or hypotheses that require experimental research. Another alternative is to exclude the statements that you cannot support with proof or evidence. In some cases, this might require choosing another topic for your writing project.**Subtopic, Studying Published Material, Before you Start Writing, while you are using Technique-2**|||To clarify the following paragraphs, I am presenting a brief review of technique‑2. The main idea of this technique is to write your **own original material** based on your knowledge and experience. Published sources are used after the writing is completed, to find evidence to support the validity of the statements you wrote. A slight variation of technique-2, involve studying published sources before you write a topic or a subtopic. This involves mastering published material, to the point where you thoroughly understand it, and do not need any notes to write about it. This is usually feasible if you already have some knowledge in the material you are studying. **If you think you might be inadvertently paraphrasing, from the material you studied, credit the relevant author(s). This can be done with just about any citation styles such as** [**MLA**](https://owl.english.purdue.edu/owl/resource/747/01/)**,** [**APA**](https://owl.english.purdue.edu/owl/resource/560/01/)**, or** [**CMS**](https://owl.english.purdue.edu/owl/resource/717/01/)**.**  If any of the following applies to your study of published material, you should credit the author(s), because you might be inadvertently paraphrasing: * You need notes from the published sources to write your document
* You are periodically, checking with the published sources, as you write your topic.
* You just completed studying the published sources, and you immediately start your writing, because you are concerned that you may forget the material.
* You do not thoroughly understand the material you studied
* As you write, you are focusing your thoughts on specific paragraphs or statements from the sources you studied.
* If you are unable to explain the material you studied in your own words
* If you studied only one published source

**Subtopic, Studying, Without Using Published Sources, Before or During, the Writing Process, when you are using Technique-2**|||While using Technique 2, you can carry out various types of study and practice, without using published sources, to assist you before or during the writing process. This might involve one or more of the following:* Drawing diagrams, such as electronic schematics, or engineering diagrams to derive information
* Working out a mathematical sequence or formula on paper, or on the computer screen
* Calculating or testing mathematical concepts using computer software
* Using deductive reasoning to derive mathematical theorems or logical concepts
* Creating a structure, or a device, so you can write about building it
* Evaluating, or testing an entity, so you can write about it
* Carrying out any type of experiment, to obtain information for your writing project
* Carrying out any type of practice, that might assist you with the topic you are writing about
* Carrying out a sequence of steps to learn how to operate a device, before you write instructions
* Carrying out a sequence of movements, such as an exercise routine, before you write about it
* Closely examining, and/or manipulating an object, before you write about it. This might involve various devices to aid in the examination, such as a microscope, telescope, or x-ray machine.
* Examining the internal structure of a complex device, such as the electronic components inside of a computer, to obtain information for a writing project

**Subtopic, Additional Information from Web-Based Articles**|||[How To Write Original Content](http://winnersinnercircle.com/writing/how-to-write-original-content)[How To Write Awesome Original Content: Tips, Tools, & Techniques](http://www.skilledup.com/articles/how-to-write-awesome-original-content-tricks-tools-techniques)[The Nine Ingredients That Make Great Content](https://blog.kissmetrics.com/ingredients-of-great-content/)[12 CONTENT-WRITING SECRECTS OF PROFESSIONAL WRITERS](https://www.quicksprout.com/the-advanced-guide-to-content-marketing-chapter-5/)[22 Ways to Create Compelling Content, by BRIAN CLAR](http://www.copyblogger.com/create-content-infographic/)[Ideas for Creating Content That Are Actually Unique](http://contentmarketinginstitute.com/2014/05/creating-content-thats-actually-unique/)**Subtopic, Additional Information from Web-Based Videos**|||[How to Write & Publish a Non Fiction Book : Creating an Outline & Table of Contents to Write a Non Fiction Book](https://www.youtube.com/watch?v=-iv60imGi9I)[How to Tackle Writing an Outline for a Nonfiction Book](https://www.youtube.com/watch?v=-D3-RupIwgc)[How to Write Better- Writing Tips on Voice, Tense, Perspective, Cliché and Wordiness](https://www.youtube.com/watch?v=ZIVwFRco28Y)[How to Write a Nonfiction Book - 3 Keys to Writing a Non Fiction Book](https://www.youtube.com/watch?v=AgdZJL-wsHk)**If you want to go to chapter 3 of this e-book, left click on the following link:** [**www.TechForText.com/DP/chapter-3**](http://www.TechForText.com/DP/chapter-3) |