Preparing Presentations (Oral & Poster)

UROP has compiled this list of resources that can help in preparing both oral and poster presentations. Being able to effectively present data, background, and results to different audiences is an important skill for all researchers to obtain. They are available from the UROP library, GT Library, or on-line. UROP library materials can be checked out by coming to the UROP office. Please contact UROP for availability.

* Alley, Michael. **The Craft of Scientific Presentations : Critical Steps to Succeed and Critical Errors to Avoid**. New York: Springer, 2003.

The author uses as examples of good and poor presenters very famous 'science' names, such as Einstein, Oppenheimer, Boltzmann, Bohr - (I assumed so that the reader can feel that if these big names had problems/strengths then it's ok for me to be learning). In addition, he continually comes back to the space shuttle *Challenger* explosion as examples of ways to not present information and the potential consequences of not being a good presenter of information. He focuses on the most critical errors that occur in presentations but is very good at stating an error and then the proper way to fix the problem. In doing so, he is able to cover in depth the big pitfalls that presenters typically make, but does not over-write about them, either. The presentation format primarily discussed is an oral PowerPoint style presentation, but there is an appendix chapter on poster presentations and designing posters effectively. The book covers structuring your talk in depth, how to prepare the speaking part of the presentation, why and how to tailor the talk to the expected audience (especially if it is a mixed audience of experts and non-experts), effectively using visual aids (from overheads to PowerPoint -type slides to models and demonstrations), creating effective, visually pleasing slides has several practical tips, and oral delivery. The chapter "Critical Error 5" should definitely be read by anybody preparing an oral presentation and may be read alone. This is best for those who have given at least one presentation or who has a first presentation prepared and who has practiced delivering it formally so that the book's suggestions make sense and allow for self-critique or for those who have seen a few presentations - both good and bad.

Available From: UROP Office, GT Library

* Perelman, Leslie C., Paradis, James, and Barrett, Edward. **The Mayfield Handbook of Technical & Scientific Writing**. Mountain View, Calif.: Mayfield Pub. Co., 1998.

The handbook acts as a reference guide to everything about technical and scientific writing - from the structure and planning of different document types to how to construct sentences. One nice thing about this handbook is how the authors frequently will give a 'rule' and then show examples of 'bad' usage and comparative 'good' usage of that specific example. The authors even do this when comparing weak versus improved paragraph examples. Chapter 3 "Elements of Technical Documents" is very useful in writing research reports as it breaks down and then explains what should be in each section of a paper (abstract, introduction, materials and methods, conclusion, etc). This can be a great help for those students who seem to be struggling with the concept of writing a more professional scientific report/paper/thesis. While this isn't a book written to be read in one sitting, but to be used more as a reference when writing difficulties arise (whether getting started or revising), it is a very valuable reference to refer students to use when encountering needing writing help. It has chapters on mechanics of writing (such as acronyms, inserting equations, and capitalization), punctuation, nouns, verb order, and sentence structure. There is a chapter on proper usage of commonly misused words with explanations of which is most appropriate in specific instances (such as good/well, accept/except, and affect/effect/impact). That chapter alone is worth recommending this book to your student when revising papers.

Available From: UROP Office, GT Library, Online

http://www.mhhe.com/mayfieldpub/tsw/home.htm

* Silyn-Roberts, Heather. **Writing for Science and Engineering Papers, Presentations, and Reports**. Oxford ; Boston: Butterworth-Heinemann, 2000.

Are you a post-graduate student in Engineering, Science or Technology who needs to know how to: Prepare abstracts, theses and journal papers Present your work orally Present a progress report to your funding body Would you like some guidance aimed specifically at your subject area? This is the book for you; a practical guide to all aspects of post-graduate documentation for Engineering, Science and Technology students, which will prove indispensable to readers. Writing for Science and Engineering will prove invaluable in all areas of research and writing due its clear, concise style. The practical advice contained within the pages alongside numerous examples to aid learning will make the preparation of documentation much easier for all students.

Available From: GT Library (e-book)

http://www.library.gatech.edu:2048/login?url=http://www.engineeringvillage.com/controller/servlet/OpenURL?genre=book&isbn=9780750646369

* Strunk, William, and White, E. B. **The Elements of Style**. 4th ed. Boston: Allyn and Bacon, 2000.

The classic book on writing styles and appropriate English grammar is very useful in reinforcing proper writing skills. In fourteen small pages, the writer is able to become familiar with the most common difficulties in English grammar and writing. That alone makes this book worth consulting. However, in addition, this book also offers a chapter on "Elementary Principles of Composition", "Words and Expressions Commonly Misused", "A Matter of Form" on writing sentences to have the greatest effect on the reader with the minimum of words, and "An Approach to Style (with a list of reminders)". This last chapter focuses on writing a document as a whole with such reminders as: "write in a way that comes naturally", "do not overwrite", "do not overstate" and with explanations of how to avoid or improve with each reminder. This is a great book for a brief explanation of English grammar and writing. For a more thorough discussion of sentence structure another book like "Style Lessons in Clarity and Grace" by Williams or other similar books would be more useful.

Available From: UROP Office

* Tufte, Edward R. **The Cognitive Style of Powerpoint**. Cheshire, Conn.: Graphics Press, 2003.

This chapter is about PowerPoint's pitfalls in the way it is currently used both as a way to pass along pertinent complicated data and analysis as an alternative to technical reports and also especially with the use of the bullet point format, graphics, and animation schemes. It offers little specific guidance on crafting effective PowerPoint slide presentations. He explains his belief that MS PowerPoint simplifies and over-simplifies topics so that the important information can be overlooked as meaningless. He uses the Columbia re-entry explosion in 2003 as a very pointed example. This section of the book is very useful in illustrating a number of points of what PowerPoint Presentations should not do. It was surprising to learn that the average PowerPoint slide is of very low quality in terms of number of words and effectiveness of displaying graphics when using the templates or under normal use. Unfortunately, he does not offer any distinctive practical alternative to PowerPoint as a method of presentation communication in a typical talk. However he does suggest that the best presentation would be on MS Word in the form of a 4 pg booklet that is written (with sentences) and graphic illustrations, distributed and read by the audience members who he then leads in a discussion and analysis of the booklet. Other current alternatives may be LaTex. This is an interesting analysis of PowerPoint and how it is being used currently, but does not provide a truly practical guide to craft an effective presentation. This is also is a chapter in the book "Beautiful Evidence" by Tufte (available at the GT Library).

Available From: UROP Office

* Tufte, Edward R. **The Visual Display of Quantitative Information**. 2nd ed. Cheshire, Conn.: Graphics Press, 2001.

This textbook style book demonstrates with a number of historical and modern examples of uses of graphics to tell a statistical story. These encourage the reader to further reflect on their own use of graphical statistics to improve the story that they are trying to tell. The book starts with a historical background on how relatively modern uses of graphs are compared with the history of mathematics. It then goes into discussing graphical integrity - making sure that the

graphs do not perpetuate lies and do tell the complete story. Elegant graphics are used as examples throughout. A key point that he makes throughout is that statistical graph making does not have to be boring, but that one needs to remember that the purpose of a graphic is to describe the data and draw the reader's attention to the importance of that data and so, excess use of gratuitous ink, decorations that clutter the graph (including chart lines) is to be avoided and how to realize when it is sometimes better to present your data as a table. This is a good text to use to demonstrate well designed and poorly designed graphics especially with regards to telling the entire truth and proportion distortion in graphical design and presentation. It also is very handy for examples of how to design effective graphics for PowerPoint oral presentations, poster presentations, for reports, papers, and proposals.

Available From: UROP Office, GT Library

* Turabian, Kate L. **A Manual for Writers of Research Papers, Theses, and Dissertations : Chicago Style for Students and Researchers**. Chicago Guides to Writing, Editing, and Publishing. 7th ed. Chicago: University of Chicago Press, 2007.

The Seventh edition of the Kate L. Turabian *A Manual for Writers* has been revised by Wayne C. Booth, Gregory G. Colomb, and Joseph M. Williams (authors of *The Craft of Research* (also reviewed) to update this writing classic with the changes since the 6th edition and to also include a beginning section entitled "Research and Writing: from Planning to Production" adapted from their book *The Craft of Research*. This manual is divided into 3 parts: Part I: Research and Writing: From Planning to Production; Part II: Source Citation; and Part III: Style. Part II: Source Citation gives examples of how to cite a large variety of sources, from unpublished sources (such as dissertations) to interviews to the more common, but equally puzzling at times journals and electronic media. Part III: Style chapters include the topics of proper punctuation, spelling, plurals, possessive words, how to abbreviate, how to write titles of people and organizations, quotation rules and formats, Also handy is the appendix which details proper paper/thesis/dissertation formatting with examples. This book is a great single source reference for those writing longer papers, dissertations, and theses as it has in depth but concise chapters on the main problems and questions that a writer may have when completing a major academic writing project. The citation source style is the Chicago Method style and contains all of the updates from the more comprehensive *The Chicago Manual of Style*, 15th Edition, 2003.

Available From: UROP Office, GT Library