How to <u>Efficiently</u> Write a Technical Report

Step 1. Assign Page Counts

- a. Collect all guidance and evaluation criteria
 - Final Report Guidance
 - Evaluation Criteria
- b. Estimate total pages
 - 1 page Executive Summary
 - 20 pages Main Body
 - Acknowledgements and References
 - Appendices including source code
- c. Assign page counts in proportion to evaluation criteria
 - $25\% \rightarrow 5$ pages
 - $10\% \rightarrow 2$ pages
- d. Team review before going forward

Step 2. Page Map

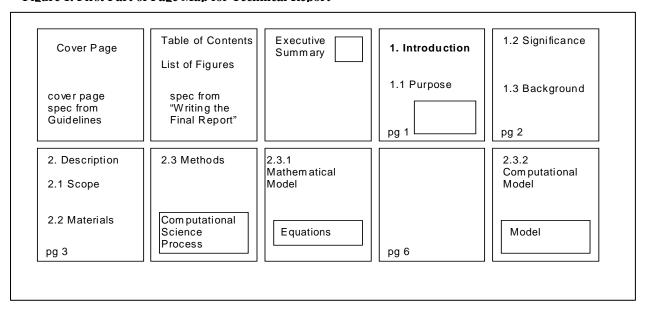
- Layout pages and put headings on pages with the number of blank pages determined from the page count.
- b. Cut out evaluation criteria and other guidance. Tape on appropriate page.
 - Underline or highlight key phrases. Use for subheadings/paragraphs.
 - Write subheadings as bulleted list spaced out on the page allocation.

- No wasted effort or text
- Don't start writing yet it comes last
- Think of the reviewers! Don't make them hunt for things
 - c. Decide on "graphics with a target of a) popular science 1 graphic per page, or b) formal science 1 graphic for every 2 or 3 pages.
 - Graphics can be pictures, simulation results, *flowcharts*, tables, text boxes, equations, etc.
 - Consider using "cherry box" on Executive Summary page like the text box on the upper right corner of this page.
 - d. Team review before going forward. Review should focus on whether the page map answers the requirements and evaluation criteria.

Step 3. Assign Graphics and Writing

- a. Match to team member skills
- b. Usually should create graphics first
- c. Target project work efforts towards filling in needed material.
- d. Fill in just the space allocated.

Figure 1. First Part of Page Map for Technical Report



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- e. Reviewers generally only absorb graphics captions and first lines of paragraphs
- f. Usually should take your last paragraph (conclusion) and move to front
- g. Adjust page counts when needed, but try to maintain proportion relative to evaluation criteria.
- h. Always start sections at top of page even if some blank space is left.

Step 4. Review Periodically as a Team

- a. Keep review constructive and try to find a place for all input (no wasted effort).
- b. Material that does not fit might be put into an appendix.
- c. Table of Contents, List of Figures, Indexes, Bibliography, and Acronym/Definition pages all add a professional touch and makes the reviewers job easier.

Step 5. Friendly Outside Review Team

- a. Give report and evaluation criteria to a review team and ask for top ten comments.
- b. Great role for parents or teachers.

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