



## The 7 C's of Technical Report Writing

Society of American Military Engineers  
Student Mentoring Program Workshop

## Complete



- Plan the report
- Follow specifications and evaluation
- **NO binding**
- Submit five unbound copies three-hole punched



## Clear

- Outline the report
- Design the report
- Use paragraphs with topic sentences
- Use transitions
- Connect ideas.
- Use iterative writing: write, review, revise



## Concise

- Report limit 20 pages
- Appendix unlimited for graphics and tables
- Condense, no redundancy
- Use tables and illustrations or bulleted lists instead of paragraphs

Figure	Description
1	Population Table
2	Housing Table (OEDC)
3	Map of Location
4	Aerial Photograph of Site
5	Topographical Map
6	Site and Lot Map (OEDC)
7	Site Plan
8	Floor Plan
9	Building Cross-section
10	Typical Wall Section
11	Electrical Plan
12	Community Center Plan
13	Cost Estimate
14	Site Elevation Grid
15	Gantt Chart



## Consistent

- Write in a single voice
- First person active: "We collected the surveys."
- Avoid the passive voice: "The surveys were collected."
- Use consistent verb tense
- Use uniform spacing

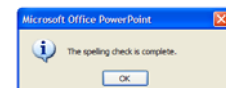


## Correct

- Check all data tables, totals, and drawing dimensions
- Use proper grammar, punctuation and spelling
- List all sources used
- Do not plagiarize.

Figure 13  
Cost Estimate

Building Cost Estimate	Item	Quantity	Unit	Unit Price	Cost
Individual Unit					
Base Cost	1102 S.F.		\$100		110,200
Build-in Garage	1 Each		\$150		150
Individual Unit Subtotal					110,350
All Buildings					
Residential Units	35 Each		\$117,832		4,124,116
Community Center	2,450 S.F.		\$100		245,000
Building Cost Subtotal					4,369,116
ADD 30% for Misc.					1,310,735
Building Cost Total					5,679,851



## Considerate

- Know your audience
- Follow report requirements and evaluation closely
- Use visual appeal
- Make report reader-friendly:
  - Use color if possible
  - Use white space
  - Use graphics and pictures
- Generate interest
- Define technical terms when first used



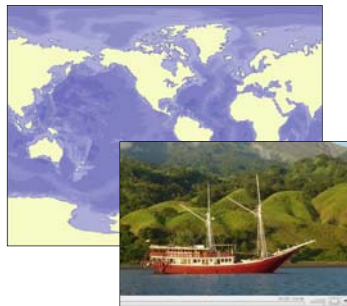
## Convincing

- Draw the reader in
- Use persuasive language
- Sell your project
- Provide examples
- Demonstrate project is relevant and feasible



## The 7 C's of Technical Writing

- Complete
- Clear
- Concise
- Consistent
- Correct
- Considerate
- Convincing



## Program Website

- Google: PKI Nebraska SMP  
<http://www.pki.nebraska.edu/simp/new/>
- Archives
- SMP Manual



## SMP Manual

- Submittals (page 3 and 4)
- Written Proposal (pages 5 and 6)
  - Due: March 8, 2013 at 5:00 pm
  - Five (5) copies unbound
  - Three-hole punched
  - Electronic copy (PDF preferred) for winning teams



## Written Proposal

- Format
  - 8 ½ x 11 Double sided for text
  - (Optional) 11 x 17 single sided for figures
- Pages
  - Written report 20 page limit
  - Double sided so 10 sheets of paper
  - Appendix optional and unlimited pages

## Required Elements

- Title Page
- Project Problem Statement
- Recommendations (Project Solution)
- Action Plan for Implementation
- Team Organizational Chart
- Process Description (Journey)
- Lessons Learned
- Acknowledgements

## SMP Manual

- Presentation
- Appendix
  - Evaluation Forms
  - Rubrics

**Innovation**  
Innovation is the introduction of something new, for example a new idea, method, or device. The team demonstrates innovation in the selection, development or solution of their project. Innovation may include any of the following:

- A unique, imaginative, "outside the box" solution for the needs of their project
- An improvement of an existing technological product or system
- Use of "cutting edge" technologies or materials for their project
- A unique way of using common technology or materials for their project
- The development of a solution for a future need or project

Rating	Category	Interpretation
4	Outstanding	Project and/or that have not only met the project's constraints but also the project's objectives.
3	Very Good	Project and/or that have not only met the project's constraints but also the project's objectives.

**Minimum team evaluation rubric**

Team Name: \_\_\_\_\_

Project Title: \_\_\_\_\_

Project Description: \_\_\_\_\_

Project Objectives: \_\_\_\_\_

Project Constraints: \_\_\_\_\_

Project Evaluation: \_\_\_\_\_

Project Rubric: \_\_\_\_\_

## Problem Statement

- What is the problem?
- Who do you want to help?
- Who has needs?
- Who will benefit?
- Why is the project needed?
- What is the demand?
- What is lacking?
- What are the challenges?
- What needs to be fixed?
- What needs to be created?
- What is your objective?
- What is the purpose?
- What will be accomplished?
- What is the reason?
- How will your project be useful?
- Where did the idea come from?
- What is the origin of your idea?
- How did you come up with the idea?
- Why are you doing this project?
- What value will your project add?
- How will it make a difference?
- Why invest in this project?

**Your Turn**  
Try writing your problem statement



## Selling Your Project

- Answer questions from pages 7 and 8
  - Why is your project important?
  - Who does it benefit?
  - What need does it address?
- Write a final sales pitch

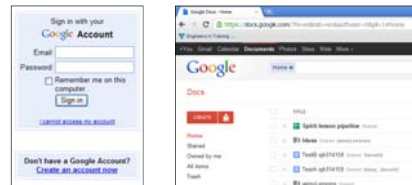
## Journey and Lessons

- Document your project
  - What did you do today?
  - To whom did you talk?
  - What did you learn?
- Tell your story
- Journal about each step
- Journal each day



## Google Documents

- Create, edit and upload quickly
- Access and edit from anywhere
- Share changes in real time



## Evaluation of Reports

- Look over reports
- Evaluate using form
- Pick one criteria
- Share evaluations

The form is titled 'PROPOSAL PHASE EVALUATION FORM'. It includes sections for 'SCHOOL NAME', 'SCHOOL CODE', 'PROPOSAL TITLE', and 'PROPOSAL NUMBER'. There are several checkboxes and a table with columns for 'Criteria', 'Score', and 'Comments'. The table has 10 rows for evaluation criteria.

## Program Schedule

- |                |                  |
|----------------|------------------|
| • Oct 12, 2012 | Submittal 1      |
| • Oct 13, 2012 | Workshop         |
| • Feb 6, 2013  | Submittal 2      |
| • Mar 1, 2013  | Submittal 3      |
| • Mar 8, 2013  | Written Proposal |
| • Apr 11, 2013 | Competition      |

Good Luck

