A Lesson in Effective Technical Presentations

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General Tips:
- Engage your audience
  - Eg: Start off with something that can connect everyone (Thanksgiving Break)
- Make a Plan
  - Calculate timeline/schedule
  - Set aside plenty of time so you are not rushed
- Communicate Results
  - Technical Reporting
    - Paper, poster, presentation, oral presentation
- Medium
  - Paper, slides, audio, video, computer interlink, poster board
  - HAVE A BACKUP

Technical Writing:
- Generally non-opinionated
- Content = make sure it is worth reading
- Organization = user-friendly, subheadings
- Style = clear and concise, use shorter wording
- Format = accessibility is key
- Visuals = A MUST
- Audience
  - Primary audience = those who request the document for decision or action
    - Address them with the longer document
  - Secondary audience = those who carry out or continue on with project
    - Address them in supplement with appendices and/or glossary
  - Level of Technology of Audience Members
    - Highly Technical = do not need any definitions
    - Semi Technical = some definitions needed
    - Non-Technical = clear but not long definitions
• Practice disseminating =
  ■ Practice explaining it to other people who are not in your profession
    • Helps impact more people and get funding
    • If you can describe your topic to kindergarteners = you really understand your stuff

• Drafting
  ○ Brainstorm
  ○ Narrow it down to the BEST information = the stuff that provides strongest impact/support
  ○ Purpose = ask yourself this

• Rough Draft
  ○ Abstract = brief overview
    ■ Why is your topic important, objectives, briefly explain methods, succinctly state results/conclusions/recommendations
    ■ NO “We present the results and recommendations here” etc
    ■ Abstract is important for getting conferences and papers accepted
  ○ Intro, body, results, conclusion
  ○ Part often forgotten = suggestions section
    ■ Analyze problem, what can be improved, what is the next step, lessons learned
  ○ Title page = name of project, name, supervisor, code, date
  ○ Table of contents
  ○ References
  ○ Definitions:
    ■ Parenthetical, sentence, expanded, acronyms
  ○ Visual aids =
    ■ Depict relationships, LABEL, condense info
  ○ Appendices
    ■ Instrument specifications (eg calibration of instruments used)
    ■ Computer programs
    ■ Glossary

Posters:
  ○ Keys:
    ■ Start conversations, graphic, ordered, focused = a single message, advertisement of your work, summary of your work, essentially an “elevator conversation” = don’t have three hours to explain information
  ○ Use plain language, no jargon or acronyms
○ Interpret your findings for your audience = answer “what does that really mean?”
○ An abstract can HELP
  ■ DO NOT put it on your poster though
  ■ Use it as an outline
  ■ Have copies of abstract with contact info near poster as takeaways
○ Title = be able to read from 15-20 ft away = STANDOUT
○ Do not need to include your whole name = use initials
○ Sequencing of information = can number and letter sections to make this clear
○ Normal text = readable from 6 ft away
○ Use only 2-3 colors = pastels and grays are easy to look at for long time
○ BALANCE WHITE SPACE
○ REVISE MULTIPLE TIMES (at least twice)
○ Bar charts = can make relatively smaller since data easy to get when look at
○ Prepare 30 sec, 2 min, and 5 min tours of your poster for different people
○ Get feedback from members
○ Cue cards (notes on phone even)
○ Leave a pen and paper pad next to poster to invite comments from viewers
○ On handouts = include miniature of the poster
○ QR codes can be used on posters and handouts

• Oral
  ○ Seminars, tech presentations, speeches
  ○ Impromptu, memorized, reading, extemporaneous
  ○ 10 min plus 3 min for questions
  ○ Eye contact
  ○ Read audience feedback
    ■ If losing them = tell a joke
    ■ If someone asks a question you do not know the answer to =
      ● “Let me get back to you on that”
      ● “Can we take it offline?”
  ○ Dress professionally = people take you more seriously, wear something that makes you feel good about yourself too
  ○ Do not be afraid to admit ignorance = do not bullcrap the audience
  ○ Anticipate audience questions (you can even plant a question asker to start the Q&A off)
  ○ Use moderate volume, just pause versus saying “umm”
  ○ Appear relaxed
  ○ Use a conversational tone = realize that people in the audience are just that: people, just like you
○ Connect to audience on high level versus nitty gritty
  ■ Focus on the end product
  ■ Try to depict the nitty gritty visually
○ Ask audience members name, where from, discipline etc at the start

Random:
  ● Check out https://www.youtube.com/watch?v=ZDvizNvaOzY

Quotes:
  ● “When you get your foot in the door, SHINE.”
  ● “Have a great day growing your brains.”