Getting started with communication in RSS

Lab briefings, technical communication, and team skills

Purpose of lab briefings in RSS

• Keep team on track for success with robot knowledge for project
• Demonstrate understanding of lab work to the professors
• Opportunity to ask questions and get answers
• Professional practice
  - you will brief many times in your professional life

Criteria for successful briefings

• Prepare
  – Engineers go to meetings or briefings with a purpose. They prepare to achieve that purpose.
• Focus
  – Briefings are usually focused on status of recent work.
• Summarize tasks accomplished.
  – Provide some evidence or analysis or data.
  – Use graphics intelligently to show information.

Criteria for briefings con’t.

• Present problems to be solved or questions to be answered.
• Maintain a constructive attitude.
  – Be open. Don’t be defensive.
  – Questions often are an important learning opportunity.
  – Questions or problems lead to “next steps” or “work to be done.”

The rubric for briefings

• Focused on relevant work?
• Organized?
• Appropriate level of detail to allow faculty to assess the work?
  – Appropriate graphics?
• Present problems to be solved and work to answer questions?
• Do all members of the team share in the briefing?

Tips for even better briefings

• Put slide numbers on your slides. This helps us comment.
• Bring a PPT print out so that you have an idea of what your faculty is seeing.
• Use simple, informative graphics.
  – No humorous or decorative ones
  – Make font and font size easily readable.
Questions about lab briefings?
• Contribution from faculty? TAs?

Technical communication in general
• Criteria for successful briefings are criteria for technical communication
  – BTW, engineers spend 20% of their time writing and about 40% in oral presentation
• Technical communication is the language of your discipline and of your career, and that’s why we have CI integrated into courses.

Characteristics of technical communication
• Contains specific, substantive information
• Has a practical purpose
• Has more than one reader/listener
  • Concept of audience is important
• Uses formats or types of communication specific to your discipline or workplace
• Uses graphics and visual organization
• Often written or presented collaboratively
  • Influenced by the context of the audience and of the writer or speaker
• Ethical

Audience: your readers and listeners
• Your audience (readers and listeners) have a purpose. They may stop reading or listening if they don’t see or hear what information they need.
  – Implications for focus and organization
• Readers and listeners develop understanding as they read or listen.
  – Implications for pace and sequence of information
• Readers and listeners are influenced by their context.

How can you plan for that audience?
– Highlight the information your reader/listener wants to know.
– Put main points first, not last.
– Eliminate unnecessary information.
– Use a clear, concise style.
– Choose the appropriate informational graphics.
  • always label and explain the graphic.

Questions about technical communication?
• Professors’ comments?
Relevant team skills

- Project management
- Decision-making
- Conflict management and resolution
- Interpersonal communication
  • We are all familiar with these concepts, but it’s knowing when and how to use them that is challenging.

Project management skills

- Task identification
- Work division
  - Work convergence
- Time estimation, planning and scheduling
- Communication between teammates
  - Meetings
- Documentation

Decision-making

- Decision-making styles
  - Consensus?
  - Forcing others to go along with your choice?
  - Based on evidence?
  - The majority rules?
  - Letting one person--the “expert”-- decide?
  - NOT making a decision?

Conflict management

- Ignoring it and hoping it will go away?
- Becoming confrontational?
- Being passive-aggressive?
- Putting the success of the project first and working toward compromise?
- Seeking support from mentors and faculty?

Interpersonal skills

- Listening actively.
- Learning something about your peers as people. Develop a relationship
- Being respectful of the ideas and work of others.
  - In speech, in behavior and whether they are present or not
- Being honest and responsible and reliable.