

OVERVIEW:

- What is communication?
- Why is it important to you?
- What will we do in this class?
- How can you improve?

KEY PRINCIPLE I:

We are always, *always* communicating.

(What do you want to convey?)

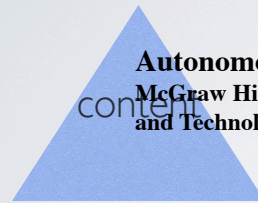
One way in which self-awareness can help us improve our communication is by showing us when we have more choice over our behavior than we might otherwise notice. We are always communicating; therefore, we pretty much always have some ability to influence what it is that we convey to others.

KEY PRINCIPLE 2:



Misinterpretation--gone unremarked upon or unnoticed--results in many kinds of breakdown in collaborative (and other) relationships.

KEY PRINCIPLE 3:
PART CONTENT, PART RELATIONSHIP



Autonomous Passenger Vehicles:
McGraw Hill 2010 Yearbook of Science
and Technology

- Dr. Seth Teller



relationship

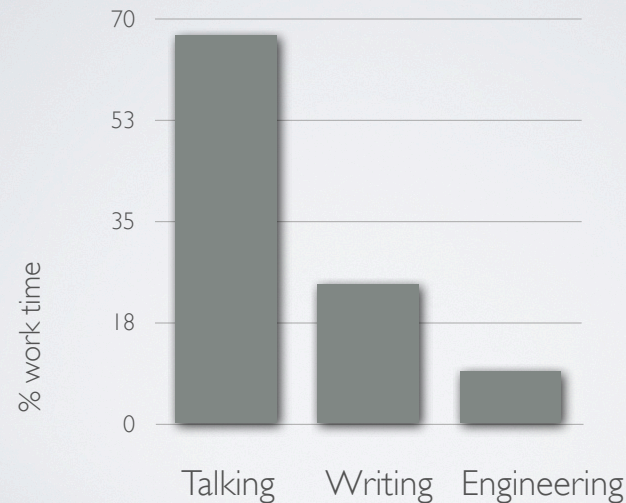
Credible, meticulous, honest, creative, informed....

Every communication has a component of relationship and a component of content. One end of the spectrum are communications like "I love you," where the relationship component is high; on the other end are, for example, technical papers where the content component is high. Even a technical paper, though, affects the author's relationships, by demonstrating such personal qualities as credibility, honesty, and meticulousness.



We tend to think of communication as a back-and-forth, like pingpong. It may be more realistic to think of it as a long-term, evolving process, like a garden.

Engineers were asked how they really spend their time.



MIT Alumni office

Professional scientists and engineers spend most of their time talking and writing. (The talk/write balance is probably more equal now, with email.) Then from time to time, they get to do science or engineering. You will leave here with the ability to do excellent science and engineering. We want you to leave with an ability to communicate that is a match for the quality of your work.

Communication Assignments
6.141 Spring 2013

Writing

- Challenge Design Exercise
- Challenge Design Document:
 - outline and final
 - individual component
 - team component
 - revision option
- Reflective Report

We want you to experience writing professional-level documents. You will have two minor and one major writing assignments for the term: First, your CDE, which is an individually written short document designing the Challenge robot with the knowledge you have now. Second, you will write the Challenge Design Document, spelling out the design of your Challenge robot. It will be submitted first as an outline, then as a final document. It will be partially team-written and partially individually written. A revision option will be offered.

Finally, you will write a Reflective Report discussing your experience of the course as a whole.

Communication Assignments
6.141 Spring 2013

Presentations

- 5 Lab briefings
- Debate

We also intend that at the end of the term you will be able to present with increased confidence and professionalism. You will do two kinds of oral presentations: briefings for labs 2, 3, 4, 5 and 6; and a formal debate later in the term.

Communication Assignments
6.141 Spring 2013

Collaboration

- Self-assessment
- Team guidelines
- Mid-term check-in
- Final self-assessment

Finally, we will work with the elements of effective collaboration, so that you learn how to be more effective when working with a team of people. This part of the course requires a self-assessment at the start and the end of the course, and several brief assignments during the term.

Grading Criteria

Subject grades are formed from a weighted average as follows:

- Lab Quality, Wiki, Briefings: 35%
- Team Challenge Design & Proposal: 10%
- Challenge implementation and performance: 30%
- Debate Performance: 10%
- Participation in Lecture and Lab: 5%
- Initial ideas and Reflective Report: 10%

Each of the components above incorporates both technical performance and communications effectiveness.



Note that the communication component is woven into each part of your grades. Communication is not a separable component of your professional life; thus, it is integral in this class.

HOW WILL YOU IMPROVE?

- Participate in class
- Participate with each other
- Experiment (risk, be uncomfortable, make mistakes)
- Ask questions
- Observe
- Ponder

You will learn a lot in this class if you engage with it: you'll learn from your staff, but also from each other. Take on the communication portion of class with an open, inquiring mind. We intend to leave you with learning that can last a lifetime.