Teamwork and Group Dynamics

A few tips on effective teamwork, meetings, and presentations

Derived by Anthony Hornof with permission from the original author, Michal Young, 1988

What is a Great Team?

- Diverse Skills
  - People skills, communication and writing skills, design skills, implementation skills and knowledge
- Coherence
  - Ability to build and maintain a shared vision
  - Shared expectations
- Mutual Respect and Responsibility
  - You don’t have to like each other, but you need to trust and respect each other — and to earn your teammates trust and respect

Team Roles

- Manager: responsible for schedule
- System architect
- Quality control
- Technical documentation
- User documentation
- User interface
- Configuration control (build-master)
  Not 1-1 with people. Backup for each role.

Diverse Skills

- At least one person with experience in team projects, preferably with some management experience.
- At least one person with strong skills in programming and program design, preferably including networking.
- At least one person with strong communication skills and good written English.

What do software developers do?

- One way to measure: how do they spend their time?
- IBM study (McCue, 1978):
  - 50% team interactions
  - 30% working alone
  - 20% not directly productive

Technical excellence is not enough

"Egoless" design

(Weinberg, *Psychology of Computer Programming*)

- Investing ego in group
- "Letting go" of ego investment in code, design, ideas
  - No winning or losing design debates
  - Once contributed, ideas belong to the group
- Criticisms are aimed at ideas, not people
- The best designers criticize their own designs!
Ego investment is normal
– be aware of it, be in control of it

Consider the egos of others
– What are you attacking? Why?
– What is motivation of the other person?
  • Do they need an ego stroke?
  • Are they feeling ignored?

Pride in accomplishment is ok, unless it interferes with accomplishment

Consensus decision making

Consensus is not counting votes
– Democracy is 51% agreement
– Unanimity is 100% agreement
– Consensus is neither
  • It is “buying in” by group as a whole, including those who disagree

Everyone has their say
Everyone accepts the decision, even if they don’t prefer it

Consensus takes time and work, but is worthwhile

Notes on effective meetings

Have a goal, and a plan
– known to all

Plan to goal:
– Participants
– Schedule
– Intended outcome

End with concrete, specific action items

Prepare
– Cost of wasted time = Time x people x hourly cost
– Cost of individual prep time is much less

Presentation materials

Handouts
– Slide handouts are good. People can focus on the content and not writing it down, can more easily take supplemental notes, and refer back to previous slides, if they are numbered.
– Other handouts may distract.

Don’t spoon feed your slides
– Trust that the audience will be able to manage their own attentional resources, and decide whether they can read ahead and still listen.
– Don’t make us keep your place for you.
Answering questions effectively

- Be sure you understand the question. This is most often done poorly!
  - Ask for clarification
  - Back up if necessary

- Manage the time
  - If short or clarification, answer or deal with it
  - If an extended discussion point or a diversion (or when it becomes a diversion), push it offline. A polite interruption may sometimes be necessary.

- Ask for confirmation
  - "Is that what you asked?"
  - "Does that make it clear?"
  - "Does that address your concern?"

Speaking up

- Always consider:
  - How will this contribute to the goal?
  - Is this the right time and forum?

- Don’t hold back
  - out of fear of looking stupid
    - (people will remember the smart things more than the dumb)
  - out of fear of attack
    - (yes, it happens, but you’ll survive)