THE UNIVERSITY OF UTAH

Department of Mechanical Engineering
ME EN 3910 - Design Methodology

Team Proposal Writing (by Mara Berkland)

Guidelines for Group Writing

- Acknowledge or elect a leader.

- Acknowledge or examine group members' strengths.

- Strategize through primary collaboration.
  Make a thorough outline.
  Assign the writing based on knowledge areas.
  Give firm deadlines.
  Use dialogue and leadership to overcome and prevent conflict.

- Write interactively.
  Revise the document so that everyone has input.
  Meet regularly.
  Give feedback to members, evaluate.
  Revise numerous times.

- Address conflict.
  Use leadership.
  Use dialogue.
  Create and apply an evaluation system.

Hazards of Group Papers/Projects

Because of the difficulties inherent in scheduling meetings and reaching agreement on how to approach problems, if students can figure out a way to run a group assignment into an individual one, the will do it. Thus, if required to produce a polished document of more than a page or two, groups will adopt one of three approaches, each of which usually has negative effects on both learning and group cohesiveness. For example:

1. The majority of groups will decide to split up the writing task by assigning parts of the paper to the member who has the highest level of expertise in each part. This improves the quality of at least some of the pieces, but also increases the probability that:

- students will learn very little outside of their area of expertise;

- the finished product will be disjointed and the pieces will vary in quality;

- students will tend to see the issues from their narrow perspective and fail to see either the "big picture" or the merits of other points of view.

2. Others will delegate the actual writing to one member of the group. This improves the flow of the paper but also increases the probability that:

- only the designated writer has the opportunity to learn very much that is outside of his or her area of expertise;

- only the writer has realistic opportunity to develop a "big picture" perspective;

- interpersonal conflict will develop within the group because: a) the writer will resent being stuck with an inordinate share of the work and/or b) non-writers will be angry if their input gets ignored or the product isn't a good one.

3.   Group members will occasionally work shoulder to shoulder around a computer terminal and write the paper together. If successful (it usually isn't) most groups will discard this method in favor of one of the above methods because it results in a higher quality group product but also:

- interferes with learning because students spend much of their time talking about punctuation, wording, and sentence structure rather than the concepts themselves;

- is so inefficient and frustrating that the main thing students remember is how painful it is to work in a group.

- taken from a lecture by Larry Michaelsen, University of Oklahoma, April 1993

Group Work

Characteristics of collaborative writing

- hierarchical and dialogic modes of collaboration

- primary collaboration

- interactive writing

- peer collaboration

- integrated teams

Causes of group disintegration

- Small group processes:
  poor conflict management
  personality differences and unresolved emotional issues
  poor client management

- Writing processes:
  misconceptions about the writing process
  ignorance of the group writing process

- Other causes:
  imperfect knowledge of others' capabilities
  leadership which has not yet emerged
  poor definition of the task

        sporadic, unstructured meetings
        poor division of labor
        poor procedures for assessing process

Guidelines for successful collaboration

1. Leadership that will keep authors informed

2. Clear goals/content based on the intended us e of the final product

3. Conflict resolution, including organized and informal reviews

Ways to encourage collaborative activities

- opening lines of communication

- making sure that responsibility for products is shared equally

- creating small teams to address interesting and complex tasks

Taken from: Debs, M.D. (1991). Recent research in collaborative writing in industry. Technical Communication, Fourth Quarter, 476-484.

Recommended Reading

- The Craft of Scientific Writing by M. Alley and Debs, M.D. (1991). Recent research in collaborative writing in industry. Technical Communication, Fourth Quarter, 476-484. Bosley has an article in the same issue.

- Bosworth, Kris, and Sharon J. Hamilton, eds. Collaborative Learning: Underlying Processes and Effective Techniques. New directions for teaching and learning; no. 59. San Francisco, Calif.: Jossey-Bass, 1994.

- Bruffee, K."Collaborative Learning: Some Practical Models." College English 34 (1973): 634-643.

- Slavin, Robert. Cooperative Learning. New York: Longman, 1983.

- Learning to Cooperate, Cooperating to Learn. New York: Plenum, 1985.