| Engin 103 February 3, 2011 back to e-syllabus	Topics: Brainstorming Example: Phases 3-4-5 Teamwork: A Case Study More on Teamwork and Presentations Logbook questions

Brainstorming: helps generate and filter ideas for a new project.

A Brainstorming Example: Leadership skills
Phase 1

　　　　Team leader: please copy this entire file into a Word file, then use Save As/ Web page (*.htm,*.html) to save it as 'brainstorming.html' (you should include the extension '.html'!) into a flash drive or a temporary folder in the hard drive. After having your team discuss the Phase 1 question below, record the answer into the appropriate row. Save and close the file, **then upload it onto the 'files' folder in the server** via ftp://www.students.umb.edu using the login information provided for your team.

Create the **files** folder in the server window if it is not there. After uploading, the **files** folder should contain the 'braingstorming.html' file.
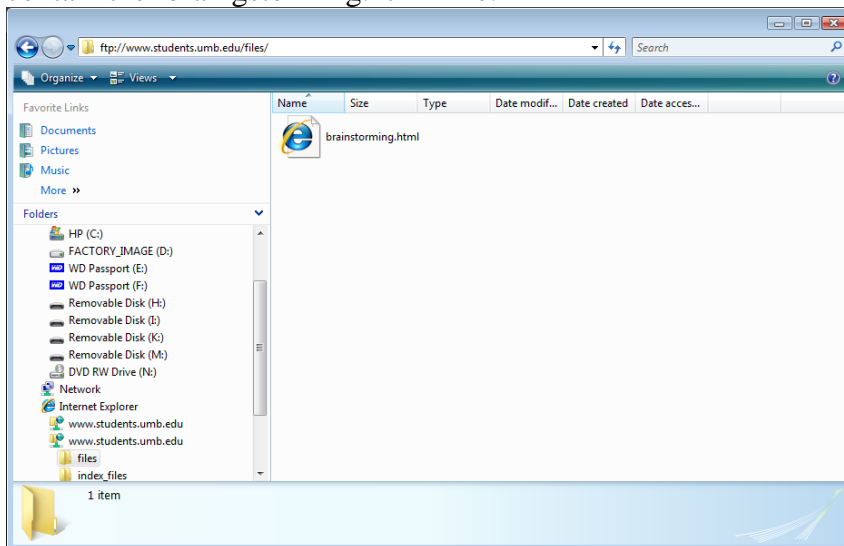
What is one skill that you can develop to be a good team leader?

Team #		One skill for a good team leader	
Section 1	Section 2	**Section 1**	**Section 2**
1	*1*	Understanding the assignment	
2	*2*	Organization	
3	*3*	Communication	
4	*4*	Ability to put teammates at ease	
5	*5*	Organization	
6	*6*	Communication	
7	*7*	Competence	
8	*8*	Communication	
9	*9*	Public Speaking	
10	*10*	Engaging all team members in	

		communication	

Phase One Results 02-01-11: One skill for a good team leader	
Section 1	**Section 2**
Understanding the assignment	
Organization	
Communication	
Ability to put teammates at ease	
Organization	
Communication	
Competence	
Communication	
Public Speaking	
Engaging all team members in communication	

Team leaders: please update your brainstorming.html file with the team's entry for Phase 2 before the next class

Phase 2

Team leader: please update the file you uploaded in the previous Phase. After having your team discuss the Phase 2 question below, record the answer into the appropriate row in this table. Save and close the file, then upload it onto the 'files' folder in the server via ftp://www.students.umb.edu using the login information provided for your team. If the *ftp* window is still open, you just need to drag and drop your 'brainstorming.html' file into that window.

What is one new skill that has not been entered in the previous Phase?

Team #		One skill for a good team leader, that has not been pointed out by any team in Phase 1	
Section 1	Section 2	**Section 1**	**Section 2**
1	*1*	Time management	
2	*2*	Public speaking	
3	*3*		
4	*4*		
5	*5*		
6	*6*		
7	*7*		
8	*8*		
9	*9*		
10	*10*		

Results from Phase One (02-01-11) and Phase Two (02-03-11)	
Section 1	**Section 2**
Understanding the assignment	
Communication	
Ability to put teammates at ease	

Organization	
Competence	
Public Speaking	
Engaging all team members in communication	
Be a good example, motivator	
Modesty/humility	
Interpersonal Skills	
Professionalism	
Good Listening Skills	
Confidence	
Understanding strengths of team members	
Time Management	

Phase 3

Team leader: please update the file you uploaded in the previous Phase. After working with your team to eliminate repeated skills and to group related skills, record the different groups into different rows in the table below. Save and close the file, then upload it onto the 'files' folder in the server via ftp://www.students.umb.edu using the login information provided for your team. If the *ftp* window is still open, you just need to drag and drop your 'brainstorming.html' file into that window.

Sorting: eliminating repeated skills and grouping related skills together

Team #		Classify previous 20 entries into groups of related skills, put each group into a box below. You don't need to use all ten boxes.									
Section 1	Section 2										
1	1	*Understanding the assignment *Competence *Confidence	Communication *public speaking *good listening skills	Ability to put teammates at ease *engaging all team members in communication * be a good example, motivator *Interpersonal skills *Understanding strength of team members	Organization	Modesty/humility *Professionalism				
2	2	Communication	Ability to put teammates at ease	Understanding the strengths of teammates	Public Speaking	Be a good example/ motivator	Engaging all teammates in communication			
3	3	Understanding the assignment, Competence	Communication, Public Speaking, Engaging all team members in communication, Interpersonal	Ability to put teammates at ease, Organization, Be a good example,	Professionalism, Good Listening Skills, Confidence, Understanding strengths of team					

			Skills	motivator, Modesty/Humility	members			
4	4	-Understanding the assignment	-Communication -Engaging all team members in communication -Public Speaking -Good Listening Skills -Confidence -Modesty/humility -Interpersonal Skills	-Ability to put teammates at ease -Understanding strengths of team members -Be a good example, motivator	-Professionalism -Organization -Competence			
5	5	Engaging all team members in communication Good Listening Skills Ability to put teammates at ease Be a good example, motivator	Communication Public Speaking Interpersonal Skills	Organization Competence Understanding the project Understanding strengths of team members	Confidence Modesty/humility Professionalism			
6	6	**Communication:** Engaging all team members in communication Public Speaking Good Listening Skills	**Interpersonal Skills:** Ability to put teammates at ease Provide Feedback Understanding strengths of team members	**Character:** Competence Be a good example, motivator Modesty/humility Professionalism Confidence	**Organization:** Understanding the assignment			
7	7	Organization Understanding the assignment - Understanding stren	Communication - Ability to put team mates at ease - Public Speaking - Engaging	Professionalism - Competence - Be a good example; Motivator - Confidence - Interper				

			all team members in Communication - Good listening Skills	sonal Skills - Modesty/humility						
8	8	Competence -understanding the assignment -organization	Communication -public speaking -engaging all team members -good listening skills -understanding strengths	Professionalism -teammates at ease -good example/motivator -modesty/humility -confidence -interpersonal skills						
9	9	Understanding the assignment, Competence	Communication, public speaking, confidence	Ability to put teammates at ease, Organization Engaging all team members in communication	Modesty humility, Interpersonal skills	Professionalism, Be a good example, motivator, Good listening skills	Understanding strengths of team membe			
10	10									

Phase 3 (Grouping: entries that are closely related should go to a same group)

Phase 4

Team leader: please update the file you uploaded in the previous Phase. After working with your team to define 5 distinctive categories and place previous-phase groups into these categories, record the 5 categories into different rows in the table below. Save and close the file, then upload it onto the 'files' folder in the server via ftp://www.students.umb.edu using the login information provided for your team. If the *ftp* window is still open, you just need to drag and drop your 'brainstorming.html' file into that window.

Further sorting: defining five distinctive categories and place previous-phase groups into these categories

Team #		Define 5 distinctive categories of skills for a good team leader, put each category in a box below. Put previous 20 entries and/or groups into the appropriate category.				
Section 1	Section 2					
1	1	Team member skills	Assignment knowledge	Communication skills	Public image	Organization skills

2	2	**Communication**-maintaining information flow within group/ keeping teammates on track.	**Organization**-All information in prepared, easy to access, and in order.	**Interpersonal Groups**- Motivation/ Engaging/ Open minded to team.	**Professionalism**-confidence in public speaking	**Competence**- understanding the assignment
3	3	Competence	Communication	Leadership	Professionalism	Commitment
4	4	Professionalism -Competence -Modesty/humility	Communication -Engaging all team members in communication -Public Speaking	Interpersonal Skills -Ability to put teammates at ease -Good Listening Skills -Confidence	Teamwork -Be a good example, motivator -Understanding strengths of team members	Organization -Understanding the assignment
5	5	Character Be a good example, motivator Good Listening Skills	Interpersonal Skills Communication Public Speaking Interpersonal Skills	Organization Organization Understanding the project Competence	Professionalism Confidence Professionalism Modesty/humility	Team management Engaging all team members in communicat Understanding strengths of team members Ability to put teammates at ease
6	6	Communication	Interpersonal Skills	Character	Organization	Punctuality
7	7	Organization - Understanding strengths of team members	Communication - Ability to put teammates at ease - Public Speaking - Engaging all team members in Communication	Professionalism - Be a good example; Motivator - Confidence - Modesty/humility	Interpersonal Skills - Good listening Skills	Competence - Understanding the assignment
8	8	Competence -understanding the assignment -organization	Communication -public speaking -engaging all team members -good listening skills -understanding strengths	Professionalism -teammates at ease -good example/motivator -modesty/humility -confidence -interpersonal skills	Management -Delegation -Multi-tasking -Prioritization	
9	9	Organization • Understanding the assignment • competence	Communication • public speaking • confidence	Leadership • ability to put teammates at ease • organization • engaging all team members	Skills • modesty humility • interpersonal • listener	Professionalism • be a good example • motivator • understanding the strengths of members

Engin 103 Class Notes –Spring '11   6-12

10	10	COMMUNICATION Communication; Public Speaking; Engaging all team members in communication; Interpersonal Skills; Good Listening Skills; Understanding the assignment	DECISIVENESS Problem solving; Decision making; Value judgments	PERSONABILITY Ability to put teammates at ease; Be a good example, motivator; Modesty/humility; Professionalism;	ORGANIZATION Organization; Clearly delegating tasks	PERSONAL STRENGTHS Understanding the assignment Competence; Confidence; Understanding strengths of team members;

Example

Phase 4 (Making 5 Big Categories: Naming Each Group)

Naming each group led to 4 big categories and some reorganization. This also prompted us to introduce a brand new category totally unrelated to the previous ones: Experience. As one progresses through the phases of a brainstorming process, additional thinking is required but the quality of discovered information is also increased.

Phase 5

Team leader: please update the file you uploaded in the previous Phase. After having your team discuss the question below, record the answer into the appropriate row in this table. Save and close the file, then upload it onto the 'files' folder in the server via ftp://www.students.umb.edu using the login information provided for your team. If the *ftp* window is still open, you just need to drag and drop your 'brainstorming.html' file into that window.

What of the previous-phase categories is the most important?

Team #		Which of the five categories you defined is the most important?
Section 1	Section 2	
1	*1*	Team member skills
2	*2*	
3	*3*	Communication
4	*4*	Teamwork
5	*5*	Organization
6	*6*	Organization
7	*7*	Communication
8	*8*	Communication
9	*9*	Leadership
10	*10*	Communication Communication; Public Speaking; Engaging all team members in communication; Interpersonal Skills;

		Good Listening Skills; Understanding the assignment	
Section 1			
Section 2			

Engin 103
Engin 103

Teamwork -Case Study #1

Engin 103 **team 12** consists of 4 members: A, B, C, D. During Project 0 A acted as the team's leader, he sent out an email regarding the project, only B replied so he thought C and D are not interested in participating, he scheduled meetings with B and they both completed part I of Project 0. During Part I presentations, A and B performed the PowerPoint presentation, while C and D did not participate since they felt they did not contribute to the project being presented.

C and D wanted to change the team, they said they felt left out, were not given a chance to participate in the project. The instructor encouraged the members to try to work together and give it a second chance. In Project 1 member C tried to be more responsive to the team leader, B, and participated as much as possible in the team meetings. At one point D was told to build a part, which will be connected to the team device, for Project 1 presentation. D asked if the team could finish their part then give it to him, he will build his part and connect to the whole system. He asked to have it by 1pm on a Wednesday before the presentation. The team did not think they could have it by that time, also they thought D did not need their part to complete his part, they never communicated their decision back to D. D traveled to the meeting place and waited for an hour on Wednesday afternoon to get the team system, nobody showed up. B, A, C completed the project on their own the night before the presentation, and gave D a poor grade for his participation.

The team improved slightly when C became the leader. However when Project 2 was completed, A, B, C wanted to change the team, they were afraid D would "revenge" by giving them a poor performance grade when he will be the leader for Project 3. D maintained he will promote participation after a meeting with the instructor. Five minutes before the presentation, A and B were still skeptical on D's promises, and since he did not show up yet, they were afraid their grades will be affected because D will not deliver as 'he did not in the previous projects', they thought. However D showed up on time and delivered the presentation using inputs from all members of the team.

Team leaders: Take a look at the Elements of Teamwork Checklist below, discuss with your team to select which **one** element would have helped **Team 12** the most, type in the corresponding box below, save the file as "teamwork1.html", then upload it to the team's "files" folder in the server via ftp://www.student.umb.edu

Team #		Case Study #1 Teamwork element	
Section 1	Section 2	Section 1	Section 2

1	*1*		
2	*2*		
3	*3*		
4	*4*		
5	*5*		
6	*6*		
7	*7*		
8	*8*		
9	*9*		
10	*10*		

Two-way communication is very important

Teamwork -Case Study #2

Engin 103 team 13 consists of 3 members: A, B, and C. The team met and worked on Project 0, everyone did a little bit on their part. When the presentation is due, the member who has the PowerPoint presentation is missing.

Team leaders: Take a look at the Elements of Teamwork Checklist below, discuss with your team to select which **one** element would have helped **Team 13** the most, type in the corresponding box below, save the file, then upload it to the team's "files" folder in the server via ftp://www.student.umb.edu

Team #		Case Study #2 Teamwork element	
Section 1	Section 2	Section 1	Section 2
1	*1*		
2	*2*		
3	*3*		
4	*4*		
5	*5*		
6	*6*		
7	*7*		
8	*8*		
9	*9*		
10	*10*		

A procedure is needed in case of emergencies

Elements of Teamwork Checklist

By Joanne Fortuin, Northern Albert Institute of Technology, Alberta, Canada

COMMUNICATION

Excellent: Free, open expression of ideas and feelings at the right times with no fear of embarrassment or reprisal.
Poor: Stifled, close to the vest, guarded. Lets the other person start the communication.

PARTICIPATION

Excellent: Full Contribution, reaches out to lend a hand, readily available.
Poor: Lack of initiative to help the other person? not around when needed, begrudging contribution.

GIVE AND TAKE

Excellent: Open to compromise, flexible? Recognition that it is sometimes better to give in than be "right".
Poor: Stubbornly dug in on own viewpoint, uncompromising, always right, never wrong.

LEADERSHIP

Excellent: Promotes team actions and decisions, recognizes he/she needs the team, and lets each member know where they stand. Team members support his/her suggestions.
Poor: No leadership initiated. Reacts rather than acts. Poor or reluctant support of ideas.

ORGANIZATION

Excellent: Knows their responsibilities. Provides structure to accomplish team goals.
Poor: Unclear of responsibilities or doesn't care about responsibilities.

PREPARATION

Excellent: Did their homework. Research was thorough, especially as it affects other team members.
Poor: Team progress was held up because of participant's lack of preparation. Consistently dropped the ball.

PROCEDURE

Excellent: Lives by the ground rules and procedures. Functions smoothly, works with the team.
Poor: Absence of order, operates on their own rules, progresses from crisis to crisis.

CAPABILITY

Excellent: Members have confidence in participant and can rely on performance.
Poor: Mediocre "Class C" player not interested in becoming "Class A".

COMMITMENT

Excellent: Participant rallies to the goals. Goals clearly defined in his/her mind.
Poor: Lack of awareness of, or resistance to, team goals.

PROGRESS

Excellent: An attitude of action and momentum, makes suggestions of steps forward.
Poor: Dead in the water ? "Everything is a drag" attitude.

back

More on Teamwork and Presentations

Please post a question in Google Groups if you are unsure about the right answer for each of the Logbook questions shown below.

back

LOGBOOK: example of a logbook page

-Use a quadrille notebook; number all pages; date all entries
-Write your notes for all activities, thoughts, problems and solutions, and learning conclusions related to Engin 103. You should write down progress, outcomes, and conclusions on projects and teamwork; conclusions from class work (including LabVIEW) and homework.
-In addition you should answer in the logbook all questions listed in these notes in blue, as shown below:

3)
(a)Which of the five categories of leadership skills summarized in Phase #4 of the brainstorming process is the most basic and important (in such a way that when the other four are absent, it will well help a team leader in Engin 103)? Explain your position in your own words.

(b) Explain what leadership skills would have helped team 12 and team 13 in the Case Study #1 and #2 above, support your claim with reasons and by referring to specific circumstances in the Case Studies.

4) (a)
Teamwork: for each question below select which option is right for a good teamwork, A or B?

Q#	A	B
1	Additive	Complementary
2	Reserved	Open
3	Independent	Interdependent
4	Inquisitive	Defensive
5	Complacent	Discontent
6	Persevering	Impatient
7	Unable	Unequal
8	Different	Uniform
9	Procedural	On the go

(b)

Presentations: for each question below select which option is best for a good presentation, A or B?

Q#	A	B

	Expert audience	Inexpert audience	
1	Expert audience	Inexpert audience	
2	Know details, wait for questions	Present all details	
3	Read from slides	Talk using flash cards	
4	Explain connections between things	Point to an equation for the connections	
5	Show a graph	Explain tendencies in the graph	
6	Plan on using 100% allotted time	Plans for 100%, 90%, 80% or 70% of allotted time	
7	Large fonts, uniform background	Small fonts, rich background	
8	Only presentation matters	Presentation and presenters are equally important	
9	Speaking too loud bothers	Speaking too soft bothers	
10	Clear oral presentation	Clear oral presentation with slides	

back