BLG 374E

Technical Communication for Computer Engineers

Week 4 Collaborative Writing

Your team's proposal is due in two weeks!

Lecture Notes

I'll be using lecture notes prepared by earlier instructors, including Esbie van Heerden, Damien Jade Duff, and probably others (though I may revise them).



BLG374E Technical Communications for Engineers Collaborative Writing

Lecture Contents:

- Why group writing
- Dangers in group writing.
- Common divisions of labour.
- RACI for division of labour.
- Exercises:
 - Strength identification.
 - Sub-task identification.
 - Deliverables exercise.
- Phases in a writing project.
- Planning sessions.
- Collaborative editing software.
- General tips.

Why group writing?

- A common necessity:
 - Engineering projects.
 - Specifications.
 - Documentation.
 - Project reports.
 - . . .
 - Research projects.
 - Grant proposals.
 - Collaborating on theoretical positions.
 - Writing up results.
 - . . .
 - Business...
 - Education...

- . . .

Get used to it!

Why group writing?

- Get better results!
 - Different expertise.
 - Different presentation skills.
 - Different perspectives.
 - The value of criticism.
 - The value of revision.
- Working in teams:
 - Valuable skill.
- See how other people work.

Dangers in group-writing

Danger	Possible Solutions								
Underutilised skills.	Identify strengths early.	Divide labour.							
Lack of coordination.	Agree on process.	Assign coordinator(s).							
Process heavy.	Simplify process / divide labour.	Assign coordinator(s).							
Broken hearts.	Cultivate sensitivity, respect, positive criticism.	Verbalise problems (respectfully).							
Freeloading / credit assignment.	Explicit recognition for tasks.	Negotiate expectations.							
Groupthink.	Encourage dissent.	Encourage quieter members.							

Common divisions of labour.

- Research.
- Coordination.
- Draft text preparation.
- Text polishing.
- Layout/formatting.
- Graphics preparation.
- Proofreading.
- Re-drafting.
- Re-drafting.
- Re-drafting.

Example RACI analysis

Eng.		(here	Role we use name dir	rectly)
		Albert	Johannes	Enrico
	Research	AR	RI	RC
	Initial Draft	С	AR	I
	Algorithm implementation	I	С	AR
	Running Experiments	С	С	AR
Task	Experiment 1 Results	I	AR	CI
	Experiment 2 Results	AR	I	CI
	Experiment 3 Results	1	1	AR
R ← Responsible A ← Accountable	Proofing + Editing	CI	CI	AR
C ← Consulted I ← Informed	Proofing 2 + Submission	AR	I	I

Example RACI analysis

Step	Project Initiation	Project Executive	Project Manager	Business Analyst	Technical Architect	Application Developers
1	Task 1	С	A/R	С	1	1
2	Task 2	Α	1	R	С	1
3	Task 3	А	1	R	С	T
4	Task 4	Task 4 C A		1	R	I
						CIO/IDG

Example RACI analysis

Preparing the project proposal

Task						
No	Tasks	S1	S2	S3	S4	S5
1	Identifying possible topics	AR	RI	R	R	R
2	Identifying 3 finalist topics	R	AR	CI	C	C
3	Identifying the winner	C	R	AR	CI	C
4	Determining proposal format	C	C	R	AR	CI
5	Writing/submitting the proposal	CI	CI	CI	R	Α
6	Revisions	R	R	R	RI	AR

Sub-goal identification exercise

As a group, identify some tasks into which you can divide your current team assignment.

Preparing the project proposal

Task	
No	Tasks
1	Identifying possible topics
2	Identifying 3 finalist topics
3	Identifying the winner
4	Determining proposal format
5	Writing/submitting the proposal
6	Revisions

Strength identification exercise

As a group, identify the relative strengths of each of your members.

Match strengths with task requirements.

Task								
No	Tasks	S1	S2	S3	S4	S5		
1	Identifying possible topics	AR	RI	R	R	R		
2	Identifying 3 finalist topics	R	AR	CI	С	С		
3	Identifying the winner	С	R	AR	CI	C		
4	Determining proposal format	С	C	R	AR	CI		
5	Writing/submitting the proposal	CI	CI	CI	R	Α		
6	Revisions	R	R	R	RI	AR		
S1: Creati	ve and socially communicative, Res	searcher						
S2: Organ	izer, Decision Maker, Researcher							
S3: Decisi	S3: Decision Maker, Researcher							
S4: Resea	rcher, Decision Maker, Skilled Write							
S5: Skilled	Writer, Editor, Critic (CONTACT PE	RSON: Wil	l submit pro	posal to tu	rnitin on be	ehalf of the	whole gro	oup)

Identify Deliverables

Task No	Tasks	Deliverables
1	Identifying possible topics	At least 1 topic proposed per person, along with supporting material/procedure
2	Identifying 3 finalist topics	3 finalist topics, along with justification and supporting material/procedure
3	Identifying the winner	1 winner topic, along with justification and supporting material/procedure
4	Determining proposal format	1 proposal format, along with justification and supporting material/procedure
5	Writing/submitting the proposal	Finished and submitted proposal
6	Revisions	1 revised proposal draft per reviewer

How much time is needed to deliver these?

Gantt Chart and Workload

Task No	Tasks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Days	S1	S2	S3	S4	S 5
1	Identifying possible topics																2	3	1	1	1	1
2	Identifying 3 finalist topics																2	1	3	0.5	0.5	0.5
3	Identifying the winner																2	0.5	1	3	0.5	0.5
4	Determining proposal format																3	0.5	0.5	1	3	0.5
5	Writing/submitting the proposal																5	0.5	0.5	0.5	1	2
6	Revisions																2	1	1	1	1	3
																	-	15	16	16.5	20	21.5
																	-	1	1.07	1.1	1.33	1.43
											W	ork	load	× D	ays							
	Average Workload per Day																					
											-		•		•							

Task No	Tasks	Deliverables
1	Identifying possible topics	At least 1 topic proposed per person, along with supporting material/procedure
2	Identifying 3 finalist topics	3 finalist topics, along with justification and supporting material/procedure
3	Identifying the winner	1 winner topic, along with justification and supporting material/procedure
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5	Writing/submitting the proposal	Finished and submitted proposal
6	Revisions	1 revised proposal draft per reviewer

Possible phases in a writing project

<u>Phase</u>	Group orientation
Brainstorming, sharing, informal discussions.	Together.
Audience analysis, problem analysis.	Separate/together.
Establish high-level principles (argument, approach).	Separate+together.
Planning.	Together.
Design.	Separate/together.
Rough text pieces.	Separate.
Rough drafts.	Separate/together.
Revisions.	Separate/together.
Content changes.	Separate/together.
Revisions	Separate/together.
Proofreading.	Separate/together.
Revisions.	Separate/together.

Planning sessions

- Outcome-related.
 - Agreeing on outcome.
 - Assigning deliverables.
 - Arranging next meeting.
 - Developing schedule.
- Content-related.
 - Brainstorming.
 - Sharing ideas.
 - Finding agreement.
- Relationship-related.
 - Learning about each other.
 - Finding common values.
 - Generating shared commitments.



Meeting Minutes

Meeting minutes:

- "Are key for accountability and productivity."
- "Are a written record of the conversation and decisions that are made over the course of a meeting."
- "Provide a historical record of the company's (team's) discussions, decisions, and long-term planning."
- "Serve as proof of why and how a company came to certain decisions."

Why Are Meeting Minutes Important?

"Meeting minutes serve as proof of why and how a company came to certain decisions. This can be helpful in answering any questions that arise in reference to decisions that have been made or the discussions that were held."

"They are

- a record of a group's decisions and actions
- a reminder of who was given assignments
- evidence of deadlines
- a benefit for people who are absent when decisions are made."

How To Write Meeting Minutes?

Rotate the role of "note taker" amongst meeting participants.

Write the following information:

- The date and time of the meeting.
- Names of the participants.
- Purpose of the meeting.
- Agenda items and topics discussed.
- Key decisions, action items, and responsible individuals for action items.
- Next meeting date and place.

Questions to the class

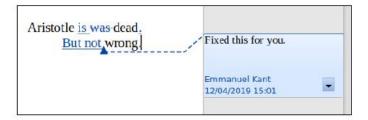
- When is your group scheduled to meet next?
- Who is currently assigned to what task?
- What is your current schedule?
- Who depends on whom for what?



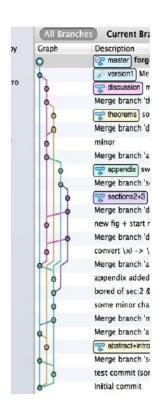
Collaborative editing software

- Online collaborative latex editors:
 - https://www.sharelatex.com/
 - https://www.overleaf.com/
- Tracking changes & document comments.
 - https://help.libreoffice.org/Common/Recording Changes
 - https://help.libreoffice.org/Common/Comment_1
- Online docs.
 - http://docs.google.com/
 - https://office.live.com/start/Word.aspx
- · Desktop file-sharing:
 - https://spideroak.com/
 - http://dropbox.com/
 - https://www.seafile.com/en/home/
- · Collaborative reference management:
 - https://www.zotero.org/support/groups
 - https://www.mendeley.com/guides/using-citation-editor/09-collaborating-colleagues
- Use a wiki/project management:
 - https://wikispaces.com
 - http://trello.com









Collaborative editing software

 Version control management software:

 $\label{lem:http://en.wikibooks.org/wiki/LaTeX/Collaborative_Writing_of_LaTeX_Documents} $$ $$ \text{http://stackoverflow.com/questions/6188780/git-latex-workflow} $$ e \cdot g \cdot SVN_{\text{r}} git. $$$

- All changes tracked.
- Usually for code.
- Can be used with Office documents:

https://git.wiki.kernel.org/index.php /GitTips#How to use git to track_Open Document .28OpenOffice.ZC_Koffice.29_ files.3F

- SVN centralised, git decentralised.

Final advice

- Importance of respectful attitude.
 - 3 smart people hating each other?
 - 3 smart people working together?

Start early!

- Revision process takes time.
- Individual schedules change.
- The hardest obstacle is starting.



Reading



See also: University of North Carolina College of Arts and Sciences Writing Center *Group Writing Handout*.

https://writingcenter.unc.edu/handouts/group-writing/

Or try the internet:



working in a team Q -