### **BLG 374E**

### **Technical Communication for Computer Engineers**

# Week 5 Progress Reports and Reports

Your team's proposal is due next week!

### 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 Writing progress reports

### Lecture Contents:

- Why progress reports.
- Typical structure.
- Reporting expectations.

### Why progress reports? (I)

- Two-way communication.
  - "This is what we are doing."
  - "This is what you SHOULD be doing."
- Keep stakeholders informed.
  - "Where was this \$10,000 per month going again?"
- Maintain expectations, image.
  - "You were building us a Windows replacement, right?"
- Maintain trust.
  - "I don't know what you're doing and I don't trust you."

### Why progress reports? (II)

- Mitigate miscommunication.
  - "Why is our application not on the web? I said I wanted an app."
- Mitigate uncertainty.
  - "If we release the marketing material Tuesday, will the system be in time?"
- Requirements do change.
  - "Actually, can we have a web application too?"
- Situations do change.
  - "With one key developer gone, how much time will it take?"

## Typical contents of a progress report

- Introduction.
  - Context.
  - Brief summary.
- Project description reminder.
- Progress.
- New developments.
- Preliminary results.

## Typical organisation of a progress report (I)

- Introduction.
  - Which project.
  - Brief summary.
  - Maybe:
    - Outline of content of report.
    - Intended audience of report.
    - Purpose of <u>report</u>.

## Typical organisation of a progress report (I)

- Project description.
  - Readers might be new to project.
  - Maybe:
    - Start & end dates.
    - Involved parties (e.g. suppliers).
    - Purpose of project.
    - Scope of project.

## Typical organisation of a progress report (II)

- Progress.
  - What has been done.
  - What is to come.
  - Divide by:
    - Time periods (previous, current, future).
    - Tasks.

## Progress description sample structures

#### By task & time (twolevel)

#### <u>Database instantiation.</u>

#### Completed:

- Customer database.

#### In progress:

- Assets database.

#### Data import.

#### In progress:

- Customer records import.

#### Planned:

- Assets record import.

#### By time period

#### Completed.

- Customer database instantiation.

#### <u>In progress.</u>

- Assets database instantiation.
- Customer records import.

• • •

#### Planned.

- Assets record import.

. .

(other structures are possible – e.g. by task 1-level, by time-then-task)

## Typical organisation of a progress report (III)

- New developments.
  - Problems encountered.

"The proposed cloud services vendor has entered liquidation".

- Estimate effect.
  - "This should not delay the project, but may result in higher hosting costs".
- No issues?

"There have been no difficulties to report".

- Changes in requirements.
  - "Because of the advance marketing requirement the interface will now be delivered for testing by March 14".

## Typical organisation of a progress report (IV)

- Preliminary results.
  - E.g. Software testing results.
  - E.g. Output of investigative projects.
- Assessment of progress.
  - Not: a list of every complaint.
- What else the customer wants to know?

#### Other considerations

- Phone call instead of report?
  - No permanent record!

    (of progress or of reporting)
- Letter instead of report?
  - Ok, but follow structure.

### Other considerations

- Set up expectations with client.
  - Frequency of reports:
    - Yearly updates on research project.
    - Hourly updates on data leak.
  - Depth of reports:
    - One-paragraph email?
    - 50 page technical summary?
  - Reporting requirements:
    - Specific information requested (e.g. financial outgoings).
    - Full report template.

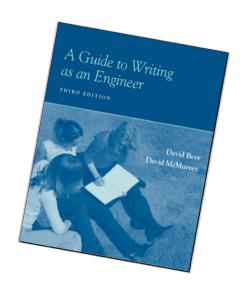
## Progress Report Example

AUTOMATICALLY GENERATED FROM TURKISH USING MS WORD TRANSLATOR

### RESEARCH PROJECT PROGRESS REPORT (Scientific Report)

```
PROGRAM CODE:
PROJECT NO:
PROJECT <u>DURATION</u>: .... months
REPORT NO:
REPORTING PERIOD: .../... / .... - .../... / .....
PROJECT COORDINATOR:
```

### Reading



Beer & McMurrey Chapter 5 - Section "Progress reports" (p.113).

Also, try the internet:





# BLG374E Technical Communications for Engineers Reports

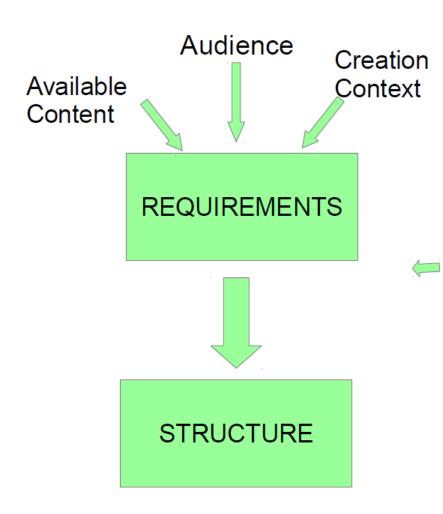
#### <u>Lecture Contents:</u>

Report requirements vs. structure Parts of reports
Common problems with reports

## Why standard structure & format?

- Rapid/random access.
- Reduce cognitive load.
- Ensure minimum standard.

### Report requirements vs. structure



### Report types

- Recommendation.
- Progress.
- Incident.
- Inspection.
- Field.
- Laboratory/research.
- Specifications.
- Proposals.
- Results.

### Possible report sections

- Letter of transmittal (cover-letter).
- Executive summary.
- Title page.
- Abstract.
- Table of contents.
- List of figures.
- Document control/revision history.
- Abbreviations/glossary.
- Introduction.
- Body.
- Conclusion/recommendations.
- Bibliography.
- Appendices.



**REQUIREMENTS** 

## Experimental reports: Typical additional contents

- Background:
  - Research question.
  - Theoretical considerations.
- Literature review.
- Method/procedure/equipment.
- Results/data.
- Implications/analysis.
- Conclusions.

Beer & McMurrey "Laboratory and Field Reports" (in chapter 5).



# BLG374E Technical Communications for Engineers Reports

#### <u>Lecture Contents:</u>



Report requirements vs. structure Parts of reports
Common problems with reports

## Engineering report-writing: Titles

- To understand topic:
  - <u>Informative</u>.
- For indexing:
  - Appropriate words.
  - Multiple lines: Okay.
  - Multiple paragraphs: Not okay.

## Engineering report-writing: Introduction

- Who should be reading this?
  - Context of report creation (audience, intent).
- Why am I reading this?
  - Brief background.
  - Statement of topic & motivation for it.
- What should I expect?
  - Summary of content.

## Engineering report-writing: **Background**

- Any information necessary to understand the purpose of the report or its contents.
- E.g.:
  - Technical background.
  - History of topic.
  - Literature reviews (scientific).

## Experimental report-writing: Approach/methods & results

- Interleaved:
  - Experiment 1: XXX.
    - Motivation.
    - Methods.
    - Results.
  - Experiment 2: YYY.
    - Motivation.
    - Methods.
    - Results.

- Or separated:
  - Experiments Intro.
  - Methods:
    - Experiment 1: XXX.
    - Experiment 2: YYY.
  - Results:
    - Experiment 1: XXX.
    - Experiment 2: YYY.

## Experimental report-writing: Approach/methods & results

- Approach/methods:
  - How info was acquired.
- Results/details:
  - Careful presentation of information.
- Don't be afraid to repeat information.

### Repeating information

• Methods section:

The two algorithms are run on the primary dataset and compared in terms of relative prediction error, calculated as...

• Results section:

The results of comparing the two algorithms on the primary dataset with respect to prediction error can be seen in Figure 3...

• Is this OK?

## Engineering Report-writing: Conclusions

- Summarise information.
- Reiterate interpretations.
- Reiterate conclusions.
- Reiterate important takeaways.
- No new info.

## Engineering Report-writing: Appendices

- Extra info that would break flow inside report.
- Unnecessary for main understanding.
- E.g.
  - Mathematical derivations.
  - Reference information
    - Raw data.
    - Survey questions.
    - Technical set-up info.
    - Etc.



# BLG374E Technical Communications for Engineers Reports

#### **Lecture Contents:**

Report requirements vs. structure Parts of reports Common problems with reports

### Common problems with reports

- Unnecessary information.
  - What is the <u>purpose</u>?
- Wall-of-text.
- Sloppiness:
  - Spelling, white-space, basic sentence structure.

## Final Report Example

AUTOMATICALLY GENERATED FROM TURKISH USING MS WORD TRANSLATOR

### RESEARCH PROJECT FINAL REPORT (Scientific Report)

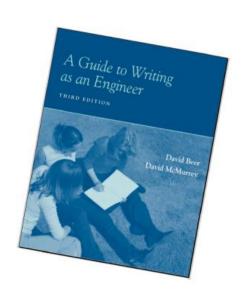
**PROGRAM CODE:** 

**PROJECT NO:** 

**PROJECT DURATION: .... months** 

PROJECT COORDINATOR:

### Reading



Beer & McMurrey Chapter 5.

"Writing Common Engineering Documents"

Getting Started With Report Writing

http://mycourse.solent.ac.uk/mod/book/tool/print/index.php?id=232731&chapterid=36552 Short Reports

http://www.engineering.utoronto.ca/Directory/students/ecp/handbook/documents/short.htm