Getting started writing in DAT146

Writing challenges in DAT146 I

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Reveal your communication's organisation

Four techniques for forecasting organisation:

- 1. Transitions
- 2. Headings use the opportunity!
- 3. Visual arrangement
 - paragraphing!
 - figures and tables etc (methods, results)
- 4. Forecasting statements

Information Structure I

The central 'paragraph unit':

- One idea = one paragraph
- One idea = topic sentence
- Topic sentence = unity
- Topic sentence = coherence
- Topic sentence = development

Paragraphs can develop topic sentences in many ways:

 Exemplify, specify, concretise, modify, define, describe, answer, object to

Common Patterns:

- · cause and effect
- problem solution
- chronologystep-by-ste
 - step-by-step procedures
 - Instructions
 - classification
- comparison and/or contrast
- advantages and disadvantages

Create smooth flow between sentences

Keep a steady focus from sentence to sentence

Cohesion:

Transitional words and phrases – linking terms, echoing words and phrases, pronoun usage

Coherence:

Keeping topic in focus and developing it

The coherent paragraph

The topic sentence

- A statement of the main idea (central theme) of the paragraph
- · Purpose:
 - Gives the paragraph direction
 - Tells the reader what is coming
 - Is focused enough to be covered in one paragraph
- Topic sentence = topic + controlling idea

The Essentials of English, p. 273

Paragraphing - topic sentence

• An example from Swales and Feak (2004:26):

Lasers have found widespread application in medicine. For example, they play an important role in the treatment of eye disease and the prevention of blindness. The eye is ideally suited for laser surgery because most of the eye tissue is transparent. Because of this transparency, the frequency and focus of the laser beam can be adjusted according to the absorption of the tissue so that the beam "cuts" inside the eye with minimal damage to the surrounding tissue-......

Create smooth flow and a steady focus

Coherence: keeping topics in focus

Radon is a naturally occurring radioactive gas that is present throughout the environment. Basements of houses and other underground structures are examples of places where it can accumulate, sometimes to dangerous concentrations. The normal, or "background" level of radon in our region is 0.40 +/- 0.13 pCi/L (picocuries per litre of air).

Create smooth flow... - keep a steady focus

Coherence: keeping topics in focus

Radon is a naturally occurring radioactive gas that is present throughout the environment. It can accumulate, sometimes to dangerous concentrations, in enclosed places, such as the basements of houses and other underground structures. The normal, or "background" level of radon in our region is 0.40 +/- 0.13 pCi/L (picocuries per litre of air).

Paragraphing - linking terms

Example / Explanation	Addition	Result / Reason	Attitude	Contrast / Comparison
For example,	Moreover,	So,	Naturally,	However,
For instance,	Furthermore,	Consequently,	Certainly,	Nevertheless,
That is,	In addition,	Thus, As a result,	Fortunately,	On the contrary,
In other words,	Additionally,	For this reason,	Undoubtedly,	In contrast,
	And,	Owing to this, therefore Therefore, Accordingly,	Strangely enough, Of course, Predictably,	One the one hand, On the other hand, In comparison,
Time / sequence	Summary	Order	Back reference	Still,
At first, Next, Then, Later, In the end,	Finally, In conclusion, In short, To sum up,	First(ly), Second (ly), Third(ly), Last(ly), Finally,	This, That, These, Those, Such,	Yet, But,

Paragraph Development

- Comparison
 - "The investigation of the new fuels can be even further developed. By looking at other projects, it is clear that..."
- Contrast
 - "Even though fossil fuels are efficient and still widely used, alternative fuels....There are even...."
- Detail
 - "In recent years, the shipping industry has undergone several changes....These changes include...."
- Process
 - "The first step in analysis is to... After that, it is necessary to..."

Coherent paragraph?

If no fault is detected, then we can conclude that the system is in a safe configuration, since every processor is executing line 3c of the code. Therefore, we may use Corollary 4. Otherwise, there exists a processor that assigns dtc to its state, causing every processor to assign dtc and to execute a PIF within the first O(d) asynchronous cycles that follow the detection. When the last processor changes state to act, the processors are ready to change state to safe. Using the fact that line 3a is executed, and by use of Property 2, it must hold that all the trees are fixed BFS trees. Furthermore, the tree descriptions used by the failure detectors of the processors are all identical (this is part of the PIF allsafe query). Thus, a safe configuration is reached and no processor detects a fault thereafter.

Sentence structure: 'Given and new'

Intuitive sentence pattern to present information step by step starting with old or known = 'given' information

- Previous mention in the text
- Inferred from the text or subject area (shared)
- Generally known information

'Given and new'

For 'given' information you can condense information through:

back-reference; (articles) synonyms; (using key phrases) summaries; (short condensed phrases) ellinsis:

With 'new' information you have to be more careful, explicit, and precise.

Common patterns of given and new

given and new Given in sentence one, given in sentence two.

1) **Figure 1** shows a flowchart of the general processes in the three value chains. **It** also indicates the geographical location of each process.

New in sentence 1 becomes Given in sentence 2.

1) Otherwise, there exists <u>a processor that assigns</u> <u>dtc to its state</u>, causing every processor to assign dtc and to execute a PIF within the first O(d) asynchronous cycles that follow the detection. 2) **When the last processor changes state to act**, the processors are ready to change state to safe.

What characterises a summary?

Structure:

what order of information? order of announcement not order of discovery

Balance

primarily conclusions (50%) evidence and method not as detailed theory/practice/method

Objectivity

a summary reflects the ideas of the text only

How to summarise?

- 1. Thesis statement and main argument (aboutism)
- 2. Summary for whom / what purpose?
- 3. Careful reading
 relevant facts and points
 a mind map or other visualisation
 a paragraph structure (organisation and balance)
- 4. Arranging information for audiences structure of three points (frame + three)
- 5. Assessment (self and peer)

How to turn from summarising to a commentary (review)

- On critiques and positioning (Swales 191-192)
 - Who is the audience?
 - What is the purpose of the article?
 - What research questions(s) is/are addressed?
 - What conclusions are drawn? (y/n to the RQs?)
 - What evidence is offered to support conclusions?
 - · Missing evidence? Invalid evidence?
 - Are the conclusions valid/plausible? (why/why not?)
 - Are there important assumptions underlying the article? How do they affect the conclusions?
 - Is there an original contribution to the field?

On reviews (getting started)

- Difficult situation as some of the papers have been chosen (and sometimes involves the supervisor) > encourage critical reading!
- · Zobel on reasons to doubt papers
 - Merely presentation of new work <> considered explanation
 - Issues unexplored due to deadlines
 - Aspects superseded or irrelevant; false or limited technical assumptions
 - Snapshot of a project in time limited knowledge at the time

Organising a review - architecture

 Any sequence of articles in a reading list can be arranged differently in the review and this structure affects the impact of the review

Rhetorical patterns

Recurring rhetorical patterns

- Generic to specific (Swales)
- Cause and effect
- Situation problem solution evaluation (Swales)
- Problem method solution
- Chronology
 - step-by-step procedures
 - instructions
- Classification and or definition (Swales)
- Geographical
- Comparison and/or contrast
- Advantages and disadvantages
- Dialectic / thematic

Situation-Problem-Solution-Evaluation

· Situation:

Background information on subject, statement that will draw your reader into the text.

· Problem:

Clear description of the problem. Be as specific as

Solution:

Choose one possible solution, either your own or someone else's. Why have you chosen it?

· Evaluation:

How far does this solution work? How certain are you that this is the answer? Does your language reflect

More language: Conditionals

"This article would have been more influential if the author had related the findings to previous work in the field.'

- Unreal conditionals cannot be met and are in the past: Would/might have + verb +past participle + comparison + if + noun phrase + verb present participle
- They can be in the present and still be 'unreal' but
- hypothetically possible:
 "The paper would be better if you corrected the language mistakes."
- · Other ways of suggesting improvement:
 - Going from 'could' to 'should' is a more negative comment on something missing

On citation and plagiarism...

- · Chalmers academic integrity document
 - Academic integrity and honesty
- · Functions of citation
 - Acknowledging a source
 - · copyright, intellectual effort, ethics
 - Respecting previous work (knowing the area)

 - Authority arguments (using the area)Credibility (knowing the area and belonging to it)
 - Finding a space to work!

Citing references

Central claim:

The tense choice in such citations is not only affected by grammatical rules but also by the function of particular passages and the connection between parts in a text (Hawes & Thomas 1997)

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Verbs: Verb tense differences

Past or present perfect: often a matter of intention and perspective

This is an experiment that my supervisor and I have designed/designed This is an experiment that we designed a few years ago.

Most likely?

We found that the concentration inhibited the peroxidation / We have found that the concentration has inhibited the peroxidation

Make the distinction:

The professor lectured for 40 years at Chalmers.
The professor has lectured for 40 years at Chalmers.

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Citing references

Swales and Feak, p. 254

 "Several studies have shown that at least two-thirds of all citing statements follow one of these three major natterns"

1.Past 2. Present perfect
Researcher as agent, single or specific studies 2. Present perfect Research area of inquiry

3. Present
Current knowledge,
no reference to
research activity

Jones (1997) Several researchers investigated have studied...[1-4]

Illiteracy appears to have...[1-4]

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Present tense (I)

· Used:

 with a named researcher and a <u>discourse verb</u> (verbs related to stating or saying something, e.g. <u>suggest</u>, <u>conclude</u> and <u>maintain</u>) to indicate a generalized statement or inference from previous research

"Powell [28] **suggests** that regular, sub-maximal exercise programs may improve cognitive function..." (Hawes & Thomas 1997:404 [my bold])

Present tense (II)

· Also used:

 To signal that the writer agrees with a particular type of previous research by taking the role of claiming something at the same time as backing that claim with previous research:

"An operant conditioning programme **results** in the reduction of complaints, improvement of mood, lower medication dependence and increased physical activity, through the restructuring of behavioural consequences [6-10]." (Hawes & Thomas 1997:405 [my bold])

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Present tense (III)

- The role of taking a broader perspective also happens when using so-called meta-term subjects such as research and data)
 - "Analog research indicates that hyperintensive disease can be induced in laboratory animals when dominance-submission hierarchies are disrupted and the animals are forced into competitive, social interaction [1-3]" (Hawes & Thomas 1997:405 [my bold])

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Past tense

Particularly used to refer to particular studies in the form
of results of those studies or methods or procedures
employed. Sentences or passages in the past tense
often used to serve as background or support to an
argument that is carried out (so not necessarily
negative). Example:

"The mean apgar was found to be significantly lower in the high anxiety group (Table 1). Drages and Brendes [11] showed that there was a higher than average incidence of neurological abnormality at one year of age, associated with lowered five-minute apgar scores. Although the exact mechanism underlying this association is at present unknown, it would seem reasonable to suggest that..." (Hawes & Thomas 1997:

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Present perfect (I)

The function of the present perfect tends to be part of the authors argumentation and these verbs often set the scene for some sort of logical conclusion or implication (cf. Swales & Feak "area of inquiry"). Because the evidence or issue is <u>rooted in the past</u> (typically previous research) at the same time as it is of <u>relevance</u> for the authors current argument and study, it makes sense to use the present perfect (the present situation is the result of previous research).

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Present perfect (II)

Setting the scene by means of the present perfect

"Buck [7] has proposed that individuals who give expression to felt emotions display attenuated levels of concomitant physiological arousal relative to those who fail to freely express their affective experience. Thus, expressiveness tends to moderate physiological responsivity, and in some instances, may be inversely related to the magnitude and duration of physiological response to stress"

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From previous research to conclusions

Recently, tissue engineered vessels have been proposed as a promising solution to the limitations associated with current therapies [17]. This approach uses vascular cells and supporting scaffolds to build functional blood vessels [18] and [19]. Vascular tissue engineering strategies have been successfully employed to create functional small-diameter tubular grafts by combining cells with a natural and/or synthetic scaffold material [20], [21], [22] and [23]. Addition of vascular cells, such as endothelial cells, onto scaffolds has been demonstrated to maintain patency of implanted grafts [23] and [24]. Moreover, cell containing vascular scaffolds facilitate graft maturation and promote remodeling when implanted in vivo [23]. While it is evident that cells play a major role in achieving patent vessels, vascular scaffolds which serve as cell carriers and provide structural support contribute to the ultimate success of engineered grafts.

Yes, I hope to have one on CS for the workshop in October!

Citing references

- · So does this have any relevance to your writing?
- Are these patterns activated in the papers you've chosen in the seminar?
- Does there seem to be an implicit evaluation of sources through citation patterns the way suggested by Swales?

Data Commentary

In your papers you will very probably use some type of illustration to help communicate your points. You have to use the illustration strategically. Apart from actual formatting, there are four important elements that most readers will need or want:

- 1. Reference in the text to the illustration
- 2. A summarising phrase to indicate what the illustration represents
- Any necessary 'highlights' (the specific details that deserve mentioning)
- Possible conclusions, implications, or explanations

On the abstract in the guidelines

- Motivation: Why should the reader care about the studied problems and the results?
- Problem description: What are the problems that the paper is addressing and what is the scope of the survey?
- Approach: What are the proposed solution approaches that the survey studies?
- Results: What are the technical results that the survey studies?
- Conclusions: What are the implications of these results?
- Extensions and future work: What are the extensions that the authors of the survey propose to the study results? A good hint is to pack each of these parts into a couple of sentences

Moves in abstracts following Swales & Feak

- Move 1: Background/Introduction/Situation

 Many scholars claim that democracy improves the welfare of the poor.
- Move 2: Present research/purpose The objective of this study was to...
- Move 3: Methods/materials/subjects/procedures
 We interviewed...; Classification studies using XYZ have been used...
- Move 4: Results/findings

 Numerical results are presented as...; The results show...
- Move 5: Discussion/conclusion/implications/ recommendations

The general characteristics....demonstrate the capability of the proposed procedure...; We conclude that...

Swales, J.M & Feak, C.B. 2009. Abstracts and the Writing of Abstracts. Ann Arbor: 57 The Univ. of Michigan Press

Turning to your oral presentations

- · What is communication?
- · The rhetorical foundation
 - · The oral presentation
 - · Visual design

Sender Receiver "Interpretation" "Interpretation" Information Disturbances Knowledge? Understanding?



Audience

"Speak to someone"

Define the audience you are addressing

-how you build your presentation is defined by the audience, not the other way around

What does your audience expect from your presentation?

Decorum

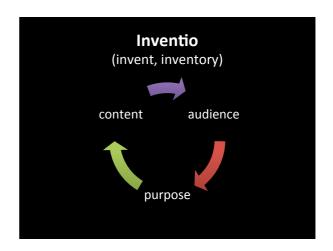
"The style of the presentation"

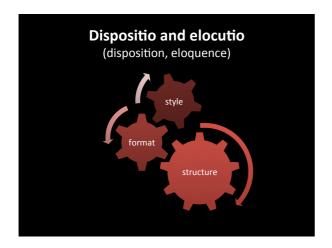
Adapt your presentation to the situation

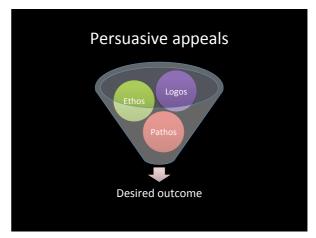
-the presentation needs to be contextualized; different situations require different presentations

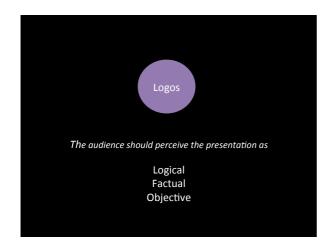
Cicero's five canons of oratory

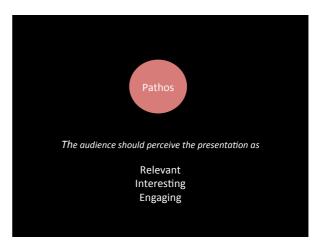
- Inventio
- Dispositio
- Elocutio
- Memoria
 - Actio















The building blocks of a presentation

Opening

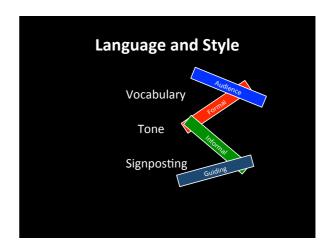
Background

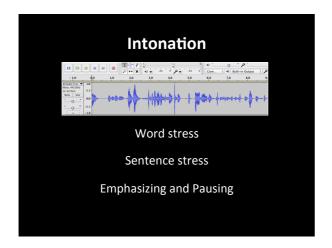
Introduction

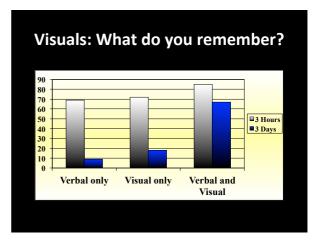
Main body

Conclusion

How you structure your presentation is a completely different matter of course! **Avoid written structures**



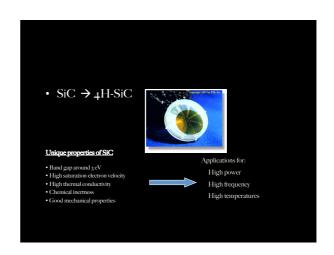


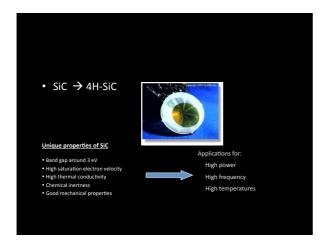


Three important design concepts Make it BIG Keep it simple and clear Be consistent

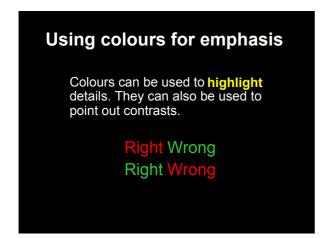


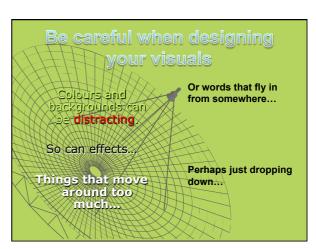
SERIF
SANS





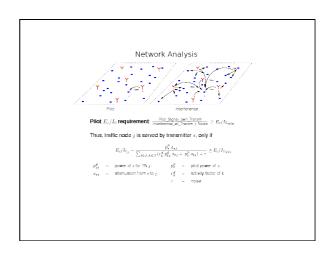
Upper or lower case letters? READING ON A SCREEN CAN BE QUITE DIFFICULT. HOWEVER, BY MIXING UPPER AND LOWER CASE LETTERS, THE TEXT IS MUCH EASIER TO READ. DON'T YOU AGREE? Reading on a screen can be quite difficult. However, by mixing upper and lower case letters, the text is much easier to read. Don't you agree?





Help the audience

- Guide
- Comment
- Instruct

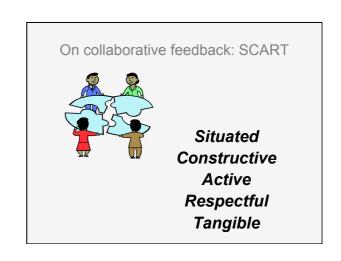


The position of the reaction control thrusters on the Enterprise NCC-2001 REACTION CONTROL THRUSTERS Source: http://www.cygnus-x1.net/links/lcars/excelsior-blueprints.php

So, to sum up

- What is communication Knowledge vs. Information
- KAIROS, AUDIENCE, DECORUM
- The organization of a presentation
- How to give a presentation Speaking, animating, visualizing

Know your subject -speak, do not recite Know your audience -adapt your presentation Emphasize logical structure -organization is key to success Have an enthusiastic approach -you must want to tell the audience something



Assessment and feedback

Writers must know:

Where am I going? What good performance is (standards)

How am I doing? How current performance relates to good performance

What should I do next?

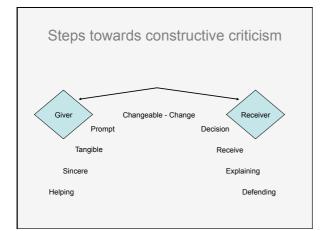
How to act to close the gap between current and good

Sadler (1989) & Nicol (2006)

A basic model for improving our own performance

- Student perspective:
 You need to know, clearly & confidently, what counts as a good performance (we call this "internalising standards")
- You need to be able to judge your own level of performance accurately and objectively (do you regularly get outside input, btw??)
- You need to know exactly how (or if??) your performance falls short of a good performance You need to be able to identify what you need to do, or add, or change etc. to get your performance up to the "good" level
- Finally, you need to actually be able to do this.

Largely re-phrased from Gibbs



Levels and foci of comments

Content and language:

- Vague / general positive comments
- Personal comments
- Sentence level edits
- Word level edits
- Text playback and functions
- Readers' needs and expectations
- Writers' strategies
- · Ask many questions, offer suggestions, describe reactions regarding content and language interplay!

Working texts from ideas to presentation

'Speed writing' --- Elaborate --- Revise

- Timed - Without stopping

- Generate ideas

A start

- Add
- Cut
- Replace Clarify

- Focus

- Phrasing

- Mechanics

- Proof reading

- Form/structure

- Replace 'inspiration' Elaborate Correct
 - Move
- [Dysthe, Olga, Hertzberg Frøydis and Løkensgard Hoel, Torlaug. (2002) Skriva för att lära. Studentlitteratur, Lund]

Feedback must be relevant (duh!)

Speed writing

Ideas, content. thoughts Direction

Generate more ideas and opportunities Generate enthusiasm

Draft

Commenting form and focus Outline Structure Coherence and argument

Comprehension (explicative level)

Final version

Coherence and logic Phrasing and style Mechanics Correctectness

Understanding the task / purpose and the intended reader

What is the text about? What is the text meant to achieve?

What is the purpose and focus of the text?

What will a reader definitely want to know? What knowledge is reasonable to assume among readers? What are the likely expectations of the reader?

What is the likley reading pattern of the reader?

The PQ4R strategy is useful in peer reading

Repetition!

- Many of the following ten slides function (almost) as self-study material. I will show them but they are more important to you as resources to return to along with checking EngOnline and Chalmers Writing Guide and all the resources that CHOCS provide.
 - Links to these resources are provided via the course

Sentences and clauses

- Sentence: says something about a situation in the world
- Clause: group of words that contains a subject and a predicate
 - Independent clause can stand alone
 The ship sailed across the Atlantic.

† †

Because the ship sailed across the Atlantic.

The Essentials of English, pp. 19-23

Simple Sentence

- A simple sentence contains one *independent* clause.
 - Shipping is an essential industry.
 - Emissions from ships are very damaging to the environment.
- Can these sentences be improved?
 Aluminium is a metal. It is abundant. It has many uses. It comes from bauxite. Bauxite is an ore.
 Bauxite looks like clay.

The Essentials of English, p. 27

Compound Sentences: Coordination

Two independent clauses (IC) combined with a comma and a coordinating conjunction

"I C 1" + , + "FANBOYS" + "I C 2"

Example:

Shipping is an essential industry, but emissions from ships are very damaging to the environment.

The Essentials of English, pp. 27, 30-36, 196

Coordinating Conjunctions

F = for

A = and

N = nor

B = but

O = or

Y = yet

S = so

Compound Sentences: Conjunctive Adverbs

You can also connect two independent clauses with

Conjunctive Adverbs

consequently in fact nevertheless
furthermore indeed then
however moreover therefore

- 5 You can place a conjunctive adverb after a semicolon to clarify the relationship between two clauses.
- ' A comma always follows the conjunctive adverb
- Conjunctive adverbs may also begin a sentence.

The Essentials of English, p. 3

Conjunctive Adverbs

(examples of usage)

If no fault is detected, then we can conclude that the system is in a safe configuration, since every processor is executing line 3c of the code. Therefore, we may use Corollary 4. Otherwise, there exists a processor that assigns dtc to its state, causing every processor to assign dtc and to execute a PIF within the first O(d) asynchronous cycles that follow the detection. When the last processor changes state to act, the processors are ready to change state to safe. Using the fact that line 3a is executed, and by use of Property 2, it must hold that all the trees are fixed BFS trees. Furthermore, the tree descriptions used by the failure detectors of the processors are all identical (this is part of the PIF allsafe query). Thus, a safe configuration is reached and no processor detects a fault thereafter.

Common error: Run-together

- When you separate 2 independent clauses with just a comma, you create a **run-together** sentence
- Example:

To complete the proof, note that, during R^0_1 , the execution of line 3a must terminate in O(d) asynchronous cycles with an indication that all the processors are in a safe state, therefore, reaching line 3c. [edited by me]

The Essentials of English, p. 57-58

Fixing Run-together sentences

1. Add a coordinating conjunction

To complete the proof, note that, during R^0_1 , the execution of line 3a must terminate in O(d) asynchronous cycles with an indication that all the processors are in a safe state and, therefore, reaching line $\frac{3}{2}$

2. Make two separate sentences

To complete the proof, note that, during R^0_1 , the execution of line 3a must terminate in O(d) asynchronous cycles with an indication that all the processors are in a safe state. Therefore, it reaches line 3c.

3. Replace the comma with a semicolon

To complete the proof, note that, during $R^0_{\mbox{\tiny 1}},$ the execution of line 3a must terminate in O(d) asynchronous cycles with an indication that all the processors are in a safe state; therefore, reaching line 3c.

The Essentials of English, pp. 57-58

Common error: Fragment

- · A fragment is an incomplete sentence.
- · How do you identify a fragment?
 - Is there a verb?
 - Is there a subject?
 - Does the sentence have an independent clause?

If the answer to any of these questions is **NO**, then the sentence is a fragment.

The Essentials of English, pp. 54-56

Fixing fragments

Possible solutions:

- 1. Attach the fragment to a nearby sentence.
- 2. Turn it into a simple sentence. So, add the missing part of speech.

The Essentials of English, pp. 54-56

Article usage, nouns and verbs

- You will obviously also need to read up on article usage in English
- Subject-verb agreement is another frequent problem that is comparatively simple to address

As we don't really have rom for this I suggest you turn to EngOnline and later on CHOCS for these issues.