LC-1121 Communicating Sustainable Solutions

Autumn 2023



Session 4

- Logos, ethos, pathos from last week
- Intro to Problem-Solution pattern
- Facts, opinions and justifications
- Synthesizing FISH information in teams in class
- Team discussion about reflection cards



Logos, ethos, pathos







Logos = logic & evidence

- Convince the audience by appealing to their sense of reason:
- Logical arguments supported by reliable facts and figures

Example: "According to the Gun Violence Archive, in 2020 handguns accounted for approximately 20 000 deaths in the US alone. Therefore, restricting the sale of these weapons could have a significant positive impact on society"

Ethos = credibility
Persuade the audience by convincing them you are an authority
on the subject

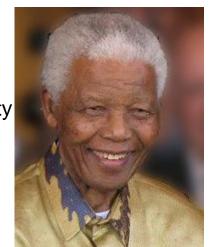
Character and reputation

Trustworthiness

Expertise on the subject

Example:

"As a member of the UN's special commission on climate change and as a scientist working in the field of climatology for over 30 years, I can tell you that urgent action is needed to save the planet"



Pathos = emotion

Convince the audience by eliciting a strong emotional response:

Inspiration or motivation

Sympathy, Humour, Sorrow, Shock, Guilt, Pride...

Narrative tools: anecdotes / personal examples, stories, jokes

Language tools:
Metaphors (e.g. "life is a journey")
Inspiring vocabulary (e.g. action verbs!)

Example:

"This is Amoo, he lives on a beautiful atol in the pacific ocean. However, if the climate continues to warm, his island paradise may soon sink beneath the waves."



The most effective presentations combine logos, ethos and pathos



Think of some initial ideas about how to combine the three modes of persuasion into your team's presentation



Problem-solution pattern



Which one do you prefer? Why?

Introduction 1

The purpose of this report is to introduce our group's solution to the problem we identified. We will discuss our solution from three perspectives: technical, design and financial feasibility. Also, we have included a discussion of how the solution meets the criteria given in the project outline. It is important to replace single-use plastic bottles with more environmentally alternatives.

Introduction 2

Billions of plastic water bottles are consumed around the world every year. However, although many countries run recycling programs, 80% of bottles still end up in landfills, polluting the environment. In addition to the problem of disposing of the bottles themselves, the whole process of producing plastic bottles requires a tremendous amount of natural resources.

The aim of this project was to find a more sustainable solution to plastic water bottles. This report presents two possibilities: A water bottle made from 100% recycled paper and a water bottle made from glass. Both solutions have high recycling rates and require a relatively small amount of energy for production. Thus, they are more sustainable than plastic water bottles.



What is the problem with text 1?

- Not enough context!
- Fails to specify the problem and the solution (The purpose of this report is to introduce our group's solution to the problem we identified)
- Lacks the "why" (It is important to replace single-use plastic bottles with more environmentally alternatives -> WHY?)
- Moves from specific to general information



What makes text 2 better?

Introduction 2



Problem

Billions of plastic water bottles are consumed around the world every year. However, although many countries have recycling programs, 80% of the bottles still end up in landfills, polluting the environment. In addition to the problem of disposing of the bottles themselves, the whole process of producing the plastic bottles requires a tremendous amount of natural resources.

Solution

The aim of this project was to find a more sustainable solution to plastic water bottles. This report presents two possibilities: A water bottle made from 100% recycled paper and a water bottle made from glass. Both solutions have high recycling rates and require a relatively small amount of energy for production. Thus, they are more sustainable than plastic water bottles.

Evaluation



Problem-solution pattern

- A common pattern in persuasive writing / speeches
- Used to convince the reader / listener to support a certain course of action
- Great for non-expert audiences



GENERAL

PROBLEM: What is wrong with the current situation?

SOLUTION: What is the solution to the current problem?

EVALUATION: What makes this a good solution?

SPECIFIC

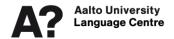


Recommendation report

Part 1

Introduction

- Provides the current context specifying the need (situation-problemsolution-evaluation)
- Written as a group
- Length 200-250 words
- Try to write the tentative draft of this in week 5



Recommendation report Part 2

Body

- Discusses the recommended solution in terms of technology / design or financial viability.
- Makes it clear what the recommended solution is and why it helps to solve the case
- Each group member writes an individual part of about 400 words
- To ensure that all the parts fit together, answer the questions on the planning your individual part handout in week 4
- Bring your 400-word individual part to class in week 7



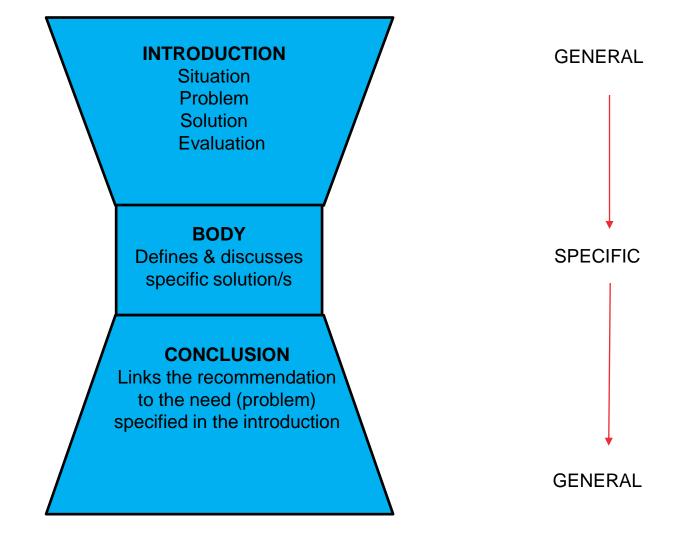
Recommendation report

Part 3

Conclusion

- (Re)states the recommendation
- Explicitly links the solution back to the original problem or need
- Summarizes the main argument(s) to justify the recommendation
- Written as a group
- Length 50-100 words
- Work on this in class in week 7







Facts, Opinions and Justifications

- Strong vs. weak justifications
- Giving support for your justifications
- Fact vs. opinion



Facts vs. opinions

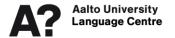
What distinguishes a fact from an opinion?

A fact

- •is something that is true about a topic
- can be tested or proven by objective data

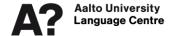
An opinion

 expresses an attitude towards something - judgment, view, claim or conclusion



In groups of three

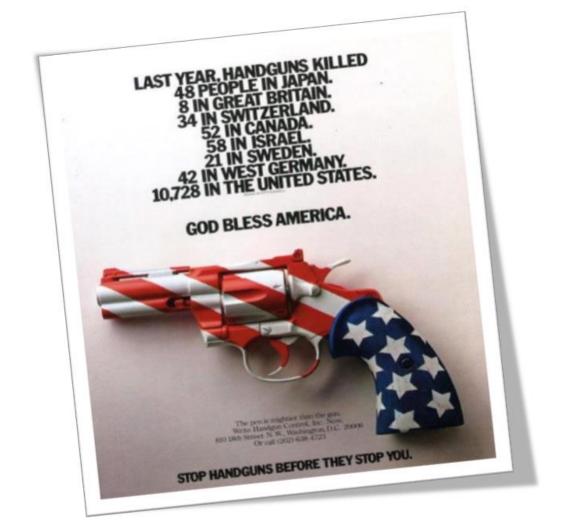
- Think of some facts and opinions about sustainability/climate change/ biodiversity
- Present them to the class



Facts or opinions?

- Let's have a look at the following poster for a while.
- What does it appear to do? Is it effective? (sarcasm or irony?)
- •Is the message clear, and who is it from?
- •Is this fact or is this opinion?
- •Where might this be used?







Facts or opinions? Discuss in small groups!

- The overall quality of life has decreased in the last 10 years.
- Governments must invest more in the environment to combat the loss of biodiversity
- . Aalto university is the greenest university in Finland.
- Professor Morag MacRae (2020) argues that, due to the worsening environmental impact of carbon emissions, the use of fossil fuels should be banned by 2030.
- The research team has discovered a new method for this complicated chemical analysis.
- Prolonged use of this product might cause stomach problems for some people.

In pairs, consider strong vs. weak justifications for opinions

Smoking should be banned in public places because

1)it is bad.

2)it gives people bad breath and makes their teeth yellow.

3)secondhand smoke is harmful to nonsmokers.

Which of these justifications is the strongest / weakest and WHY?



A strong justification has the following qualities

- It logically supports the opinion
- It is specific and states the idea clearly
- •It is convincing to a majority of people

(LeBeau, Harrington, Lubetsky 2000)

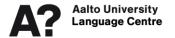


Justification consists of evidence

Four kinds of evidence:

- Example
- Common Sense
- Statistics
- Expert opinion (Research-based evidence)

(LeBeau, Harrington, Lubetsky 2000)



Smoking should be banned in public places

Example:

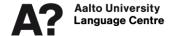
When I go to the restaurant or bar and there are people smoking near me, I feel that I am breathing their smoke. This makes me a smoker, even though I don't want to be!



Smoking should be banned in public places

Common sense:

It's obvious that secondhand smoke is unhealthy for nonsmokers.



Smoking should be banned in public places

Statistics:

Each year, secondhand smoke causes about 250,000 respiratory infections in infants and children, resulting in about 15,000 annual hospitalizations [3].



Smoking should be banned in public places.

Expert opinion:

According to the Environmental Protection Agency, secondhand smoke is particularly harmful to young children and adults with respiratory conditions [1].



Which type of support do you think is most convincing in your presentation/ report?

- Example
- Common Sense
- Statistics
- Expert Opinion



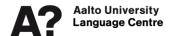
Synthesizing FISH information in teams in class FOCUS INVESTIGATE DISCUSS SHARE

- Explore the issue: what is already known and what do you need to know?
- Refine learning issues (Focus)

- Research the issue and investigate possible solutions
- Summarize what you learned (FiSH document)

- Incorporate what you have learned into your discussion
- Synthesize information / solutions using critical thinking
- Evaluate group process at the end of the discussion

- Present and support your solution
- -Evaluate the PBL group process at the end
- -Presentation
- -Written report



Based on Iterative PBL Group Process by Blumberg (2019, p. 345) & Steps to a problembased approach (Centre for Teaching, The University of Iowa)

Synthesizing Fish information 40 min

Incorporate what you have learned into your discussion: Synthesize information / solutions using critical thinking

- 1. How can you combine each member's findings into a holistic whole in your presentation and report?
- > Think about the different levels of information (background, specific, niche), style, the presence of a strong common thread linking the parts
- 2. Is the information you have found fact or opinions based on facts? What information do you need to support the opinions you will present?
- 3. What are the four stages of the problem-solution pattern that you will include in the introduction to your report?
- What is the background? What is the problem? What is/are the solution(s)? How effective do you think the solution(s) will be?



Evaluate your group's progress: the reflection cards (15 min)

As homework, you reflected on

- a) your own role, strengths & weaknesses, moments of success, setbacks and challenges
- b) the answers of at least one of your team members

Based on your reflections & the work in class today, briefly discuss with your

team

- a) how you are doing as a team
- b) how you can better support each other in this project

For further ideas, see Checklist for unlocking the potential of a team (Session 4)!



Cite your sources!

When using information and ideas produced by others in academic writing:

- Choose a referencing style (Harvard/ APA, MLA, IEEE, etc.)
 and follow the guidelines for formatting citations (see:
 https://owl.purdue.edu/owl/research_and_citation/resources.html)
- Include a citation in the text and an entry in the reference list/ footnotes
- To avoid plagiarism, clearly distinguish between your ideas and those of others



Homework:

- Complete the referencing video and quiz
- Investigate and contribute to FISH (2%)
- Start to write the introduction section of your recommendation report
- Fill in the 'planning your individual part' handout



Next week

No on-campus session.

 Complete the online module on text genres, paragraph structures and readability

