



**Co-funded by  
the European Union**



Disclaimer: Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

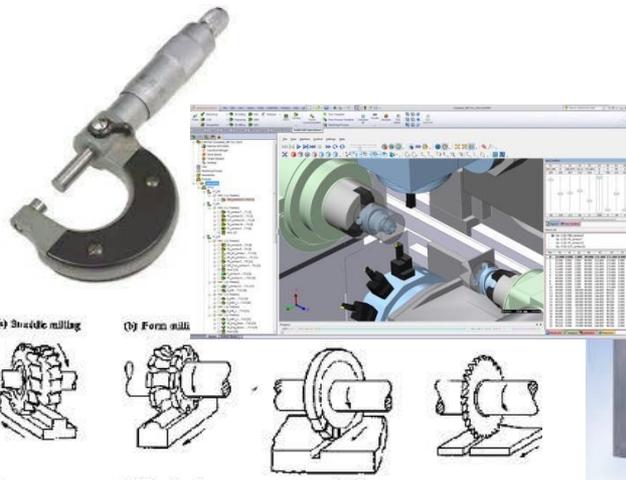
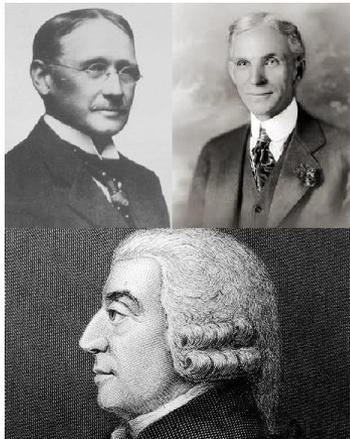
**Erasmus +: BLISS**

**Blended Learning Implementation for reSilient, acceSsible and efficient higher education**

Project 2021-1-SE01-KA220-HED-000023166

**MG2100:** *Vetenskaplig forskningsmetodik inom industriell production.*  
*Scientific Methodology for Production Engineering*

**Topic:** Debate



# This lecture ILO



- Plan and execute all the activities related with a debate: research, organization, refutation, evaluation and presentation
- Explain why debate is key activity for scientists

# What is a debate?



- Far from being a shouting match between two sides, a debate has strict rules of conduct, utilizing sophisticated techniques.
  - It is based on a Question or **Theme**
  - **Cooperative** exchange of argument
- You may be put in a position where you must argue the opposite of what you believe in. This is an important part of the art of debating.
- Scientist must be able to communicate and discuss effectively their results

# Topic, Theme or Thesis



- It is better to spank children.

**weak example**

- Studies have shown that spanking children is an effective means of behavioral modification and that if used properly, leads to a better disciplined and more socially productive adult.

**stronger example**

# Debate mechanics



- **Affirmative speech** speakers make points in support of the Theme
- **Negative speech** speakers rebut the point and make their own points against the Theme
- The Debate is judged by **evaluators**
- There can be **several cycle** of points and counter points.

# Debate mechanics



Affirmative or Negative depends on how the theme is formulated:

- It is wrong to spank a child:
  - Affirmative must be against spanking
  - Negative in favor
- It should be allowed to spank a child
  - Affirmative in favor
  - Negative must be against spanking

# Making a point in academic debates



In order for an argument to count as a **complete**, it must contain the following:

- An Assertion or claim
- Reasoning or warrant
- Evidence in form of data or researched quotation

# Example of a point



Women, in particular, benefit from a single-sex education; research shows that they participate more in class, develop much higher self-esteem, score higher in aptitude tests, are more likely to choose 'male' disciplines such as science in college, and are more successful in their careers. In the USA Who's Who, graduates of women's colleges outnumber all other women; there are only approximately 50 women's colleges left in the States today.<sup>[1]</sup> Elizabeth Tidball, who conducted the Who's Who research, also later concluded that women's colleges produced 'more than their fair share who went on to medical school or received doctorates in the natural or life sciences', typically male fields.<sup>[2]</sup>

1. Calefati, Jessica, 'The Changing Face of Women's Colleges', US News, 11 March 2009.
2. Kaimer, W. 'The Trouble with Single-sex Schools'. The Atlantic, April 1998.

# Rebuttal



- Do your research to be well-prepared for contra arguments.
- Take notes of the points to rebut.
- Concentrate on the important points and use logic to show why the other side is wrong.
- Attack each argument that the opposition presents in turn.
- Without the **obligation to rebut** the other side points debate becomes **dueling speeches**...like politics!

# Example of a Rebuttal



Other studies have found that women in fact are not any better off in single-sex institutions. A 1998 survey from the American Association of University Women, a long-time advocate of single-sex education, admitted that girls from such schools did not show any academic improvement.[1] That they are more inclined towards maths and sciences is of questionable importance to society as a whole. As the report noted, "boys and girls both thrive when the elements of good education are there, elements like smaller classes, focused academic curriculum and gender-fair instruction".[2] These can all be present in co-educational schools. Tidball in her research made the mistake of not controlling for other characteristics, namely socio-economic privileges of those at elite women's colleges.[3]

- [1] Morse, Susan ed., *Separated by Sex a critical look at single-sex education for girls*, American Association of University Women Educational Foundation, March 1998.
- [2] Lewin, Tamar, 'All-Girl Schools Questioned As a Way to Attain Equality', *The New York Times*, 12 March 1998.
- [3] Kaimer, W. 'The Trouble with Single-sex Schools'. *The Atlantic*, April 1998.

# Debate dynamics



- Time for presenting and rebutting a point is not unlimited
- Any argument that you do not address in a rebuttal will be left in the memory of others as your opponents stated it. (in academic debates it is prohibited to leave a point without answer!)
- Likewise, any rebuttal from your opponents that you do not address will also be left in the minds of your audience / judges

# Importance of research

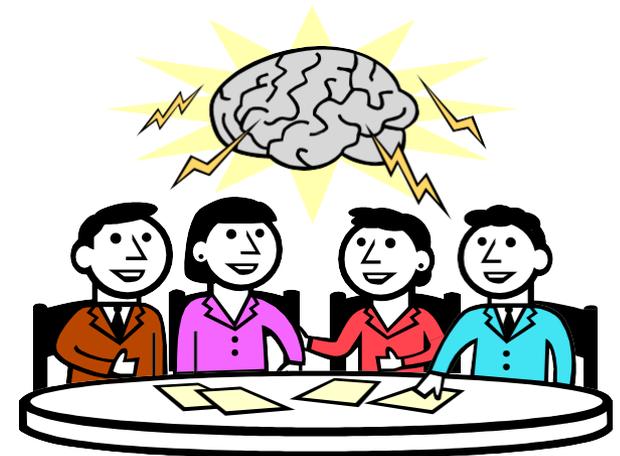


- Arguments will be based on evidence, facts and statistics. No claim without support:
  - Gather at least three pieces of evidence to support your claim.
  - Have information on each “sub topic” prepared ahead of time.
- You can use multiple sources

# Brainstorming



- Brainstorm ALL possible arguments for & against the topic
- Come up with as many arguments as possible to support your claim
- Think about possible rebuttal arguments
- Use a concept map



# Introduction and Conclusion



- The first speaker in a debate must make sure that the theme being debated is clearly stated and defined.
- The closing speaker(s) should sum up all relevant arguments and rebuttals without introducing any new information.

Remember debate is a  
cooperative activity!

# Summary



Academic debate is distinguished from other form of verbal sparring by:

- An organized structure
- A requirement for organized refutation
- Requirement for complete and well supported argument (claim, warrant and evidence!)



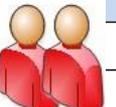
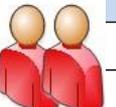
# Debate Exercise

## Example

# Children Should be allowed to work

Theme: \_\_\_\_\_

## MG2100 Debate Flow and Scoring<sup>1</sup> report

 <b>"Affirmative Speech" team</b>	 <b>"Negative Speech" team</b>	 <b>"Evaluation" team</b>
 <b>Doing Research!</b>	 <b>Doing Research!</b>	 <b>Doing Research!</b>

<b>Affirmative Speech gives three points</b>		<b>2 min to think for the negative speech team</b>	<b>Negative Speech gives three points and attacks affirmative points</b>		<b>Affirmative defends their points and attack negative points</b>		<b>Negative defends their points and make final attack and wrap up</b>		<b>Affirmative defends from the negative final attack and makes its own final attack and wrap up</b>		
<b>Affirm. Point 1</b>	Children would live in worse poverty if they were not allowed to work <input type="checkbox"/>		<b>Attack a.point 1</b>	Children who work are to a great extent excluded from education and this inhibits their future chance to get out of poverty <input type="checkbox"/>	<b>Defens 1</b>	Often their chance to survive depends on their ability to work so it is necessary to learn income to have any future <input type="checkbox"/>	<b>Final speech: attack and wrap up</b>	To summarize, child labour is harmful to children and in places it occurs, often comes with significant physical and mental health risks. Children can only benefit from its abolition and appealing to their freedom of contract is absurd when in many cases they have no other choice. Additionally it perpetuates the poverty which forces these kids into labour in order to survive. <input type="checkbox"/>	<b>Final defense</b>	Child labour should not be abolished as it origins from different causes. In the case of poor areas, it is a necessary means for survival. In more prosperous, were safety standards and education policies are well established, its abolition would violate the freedom of the children to form contracts with employers and choose to work. In any case working from an early age can also provide beneficial life lessons <input type="checkbox"/>	
<b>Affirm. Point 2</b>	The prohibition of child labour violates their freedom of contract <input type="checkbox"/>		<b>Attack a.point 2</b>	Freedom of contract is not more important than their right to healthy childhood and proper education. <input type="checkbox"/>	<b>Defense 2</b>	Freedom of choice is a fundamental liberty and an unconditional human right <input type="checkbox"/>	<b>2 min to think for the negative</b>	<b>Final speech: attack and wrap up</b>	<b>Final defense</b>	<b>Final speech: attack and wrap up</b>	<b>Final defense</b>
<b>Affirm. Point 3</b>	Often children do not have the luxury to stay out of work as they have to assist the family <input type="checkbox"/>		<b>Attack a.point 3</b>	Children who work are underpaid compared to adults and this helps in perpetuating poverty conditions since it keeps wages of their parents low <input type="checkbox"/>	<b>Defense 3</b>	Take the example of farming families that children have to help, so educational programs are adjusted to harvesting cycles <input type="checkbox"/>					
		<b>Negat. Point 1</b>	Children who are working are deprived of educational opportunities that will offer them a better future <input type="checkbox"/>	<b>Attack n.point 1</b>	Their future is depending on their ability to survive which is often the reason for working <input type="checkbox"/>	<b>Defens 1</b>					
		<b>Negat. Point 2</b>	Children who are working are deprived of their childhood <input type="checkbox"/>	<b>Attack n.point 2</b>	There is no point in focusing on childhood when survival is at stake and the basic needs are not met <input type="checkbox"/>	<b>Defense 2</b>	Every child is entitled to a healthy and safe childhood without bearing the burden of labour <input type="checkbox"/>				
		<b>Negat. Point 3</b>	Work environments in areas where child labour is common are often hazardous, especially for the under aged <input type="checkbox"/>	<b>Attack n.point 3</b>	The solution to that is not the abolition of child labour, but making work environments safer <input type="checkbox"/>	<b>Defense 3</b>	Even a safe work environment is unsuitable for an under aged person <input type="checkbox"/>				

# Evaluation



- Transcribe all the points and rebuts in the framework
- If you consider them valid put a cross in the little square in the related cell
- Count the marked cell for each group for the result (maximum is 11/11)

It does not matter who wins the debate: successful debate must provide convincing solution!

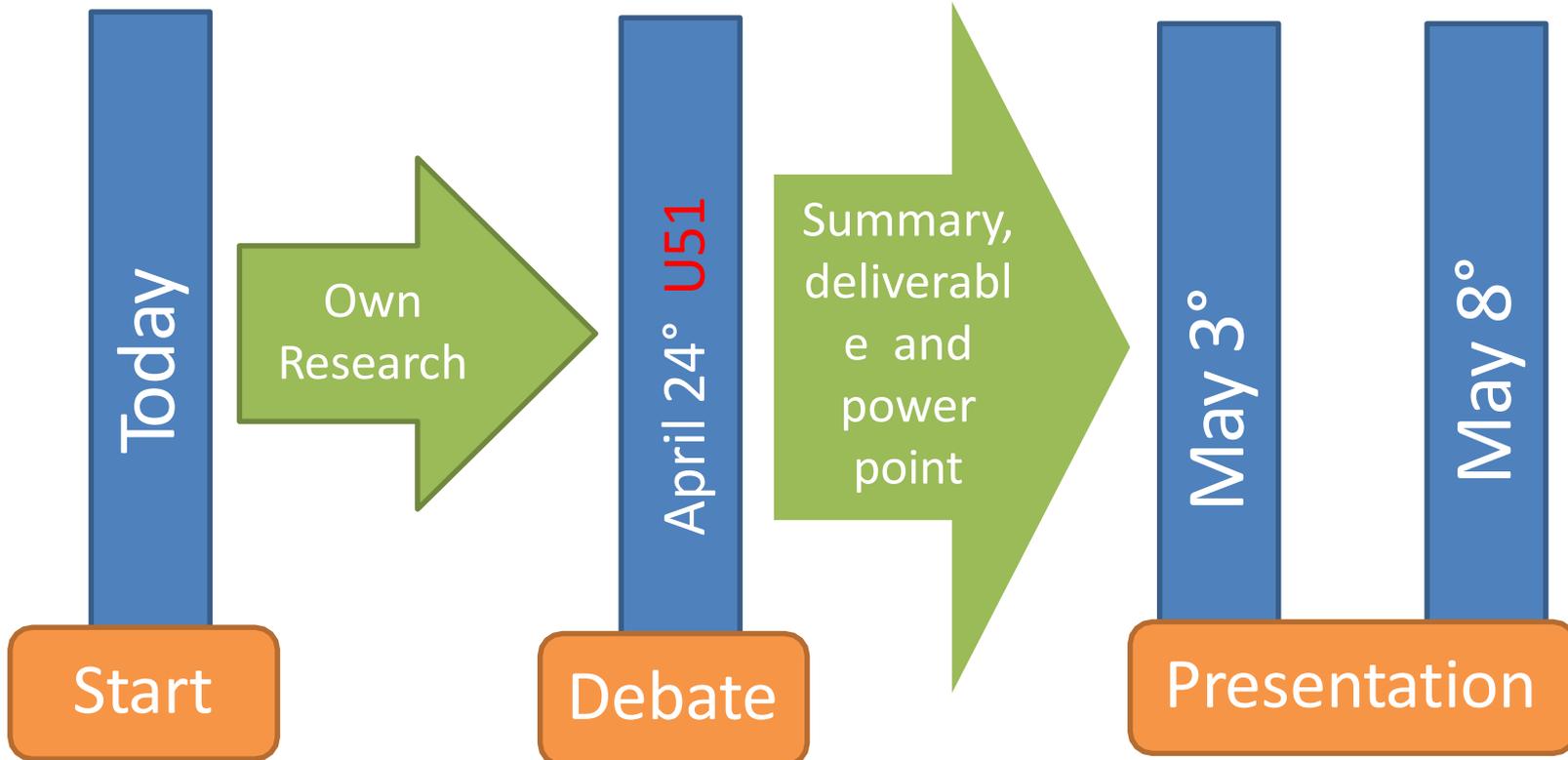
# Debate exercise - Assignment



- Teachers formed groups of **six people**, made of 3 sub-groups of 2 people each.
- Each group will be given **three topics for debate** and each subgroup will have a different role for each topic: affirmative speech, negative speech and evaluation
- The sub-groups will do their **research** during this coming week.
- The groups will **debate** all the three topics with the different roles assigned. **FLEXIBLE: on Zoom or IRL**
- Evaluation group will make a record of the session.
- In the following week each sub-group will make a **power point to present** the theme that they have evaluated
- Finally all the power points will be **presented** during the next meeting indicated in the course schedule.
  
- Documents submission deadline: **May 2**



# Timeline



If you can't join one of the meetings make sure your colleague in the sub-group of two can cover. If you are both absent change the arrangement of sub-groups in your own group so that there is at least one person present for each sub-group in all the activities.

---



# What to do before debate?

- Decide as a whole group if you want to use ChatGPT or not.

## Traditional groups

- **Tool:** your old friend Google
- **Research**
  - Each sub-groups should conduct research on the assigned topics to build strong arguments and rebuttals.
- **Develop arguments**
  - Based on your research, each sub-groups should develop a list of arguments that support their side of the debate. These arguments should be backed up by **evidence**.

- **Tool:** ChatGPT
- **Research**
  - Each sub-group should ask chatGPT for arguments related to the assigned topics.
- **Develop arguments**
  - Select the best arguments and develop a list that support your debate strategy. These arguments should be backed up by **evidence**.

## ChatGPT groups



# What is ChatGPT?



- ChatGPT is a Artificial Intelligence (AI) **chatbot**
  - Based on GPT-3, i.e., “Generative Pre-trained Transformer”
    - A type of language model that can generate human-like text given a prompt.
    - Tasks such as writing articles, answering questions, or completing sentences.
    - The model is trained on a large dataset of human language to understand how words and phrases are used in context.
  - Developed by OpenAI and launched in November 2022.
  - Available at: <https://openai.com/blog/chatgpt>
-



# ChatGPT for the debate activity



- How will you use ChatGPT for the debate exercise?
    - **Research**
      - > *Gather information*
      - > *List the possible arguments for the debate*
    - **Practice**
      - > *Engage in conversation with the chat*
      - > *Improve argumentative skills and anticipate potential counterarguments*
  - What is ChatGPT **not good** for?
    - Find references
      - > *ChatGPT suggests not existing reference. You need to find good reference in real books or papers.*
    - Choose the best argument
      - > *ChatGPT choses popular arguments*
      - > *Sometime can be biased or even give wrong information.*
      - > *You need to assess the truthfulness and relevance of the arguments and choose the one you think are more relevant and this needs to be motivated.*
-



# Why?



- Why is ChatGPT included in this activity this year?
- Research publication
  - IF and HOW ChatGPT is enhancing or hindering the learning process
  - Test this with the debate exercise
- Your input
  - Survey based on your experience in using ChatGPT



# In practice...affirmative team

- First round of **argument**:
    - Ask ChatGPT 10 possible arguments in favour.
    - Choose 3 that
      - > *Fit better the theme: provide short explanation why.*
      - > *Fit better your debate strategy*
      - > *For EACH chosen arguments you must find the **source/reference** (need to come from reliable sources, i.e., book, paper or other)*
  - **Counterargument** to the rebuttal
    - > *Discuss with ChatGPT the possible rebuttal to your arguments from the negative team*
    - > *Ask and select counterarguments to the rebuttal in a similar way as above (with **references**)*
  - **Final argument**
    - > *Discuss with ChatGPT the possible rebuttal to your arguments from the negative team*
    - > *Ask and select your final argument in a similar way as above (with **references**)*
-



# In practice...negative team

- First round of **rebuttal to the argument**:
    - Ask ChatGPT 10 possible **affirmative arguments** and the best **rebuttal** to them.
      - > *Prepare the rebuttal for the argument that you think can be used by the affirmative team.*
      - > *You need to have good **source/reference** (need to come from reliable sources, i.e., book, paper or other)*
  - First round of **argument**:
    - Ask ChatGPT 10 possible arguments against the topic.
    - Choose 3 that
      - > *Fit better the theme: provide short explanation why.*
      - > *Fit better your debate strategy*
      - > *For EACH chosen arguments you must find the **source/reference** (need to come from reliable sources, i.e., book, paper or other)*
  - **Counterargument** to the rebuttal
    - > *Discuss with ChatGPT the possible rebuttal to your arguments from the affirmative team*
    - > *Ask and select counterarguments to the rebuttal in a similar way as above (with **references**)*
  - **Final argument**
    - > *Discuss with ChatGPT the possible rebuttal to your arguments from the affirmative team*
    - > *Ask and select you final argument in a similar way as above (with **references**)*
-



# Tutorial

- Theme: “Public colleges should offer free tuition”
- Go to <https://openai.com/blog/chatgpt>

## Your question:

**E** hey, i am doing a debate activity. i need your help to find 10 arguments in favour of "Public colleges should offer free tuition" 



Sure, I can help you with that! Here are ten arguments in favor of public colleges offering free tuition:

1. Education is a basic human right: Access to education is a fundamental right, and making higher education free would ensure that everyone has an equal opportunity to pursue their dreams and achieve their potential.
2. Reducing student debt: Offering free tuition at public colleges would help to alleviate the burden of student debt that many graduates face after completing their degrees, which can impact their ability to achieve financial stability.
3. Stimulating the economy: An educated population is key to a strong economy, and making college more affordable would increase the number of students who pursue higher education and enter the workforce, leading to increased economic growth.
4. Expanding opportunities: Free tuition would allow more students, particularly those from disadvantaged backgrounds, to pursue higher education and achieve upward mobility, which can create opportunities for themselves and their families.
5. Reducing inequality: Access to higher education is often limited to those who can afford it, perpetuating inequality. Free tuition would reduce this gap and create more opportunities for students from low-income families.

6. Attracting diverse student body: By making college more affordable, it would attract a diverse range of students who bring different perspectives and ideas to the classroom, which can enhance the learning experience for everyone.
7. Encouraging innovation: When education is more affordable, students can take more risks and pursue unconventional careers, leading to more innovation and creativity in society.
8. Better-educated citizens: By providing free tuition, it would help to create a better-educated population, which can lead to more informed and engaged citizens who can contribute to society in a variety of ways.
9. Investment in future: Investing in education through free tuition is an investment in the future of the country. The benefits of a more educated population will be felt for generations to come.
10. Greater social mobility: Free tuition would create more opportunities for social mobility, allowing students to break out of their socioeconomic status and achieve success on their own terms.

I hope these arguments help you in your debate activity!

chatGPT generated answer



# Tutorial reference

- Find references for the selected argument

5. Reducing inequality: Access to higher education is often limited to those who can afford it, perpetuating inequality. Free tuition would reduce this gap and create more opportunities for students from low-income families.

- Go to Google Scholar

[https://scholar.google.se/scholar?hl=en&as\\_sdt=0%2C5&inst=3006122349567257957&q=fee+tuition+public+college+reduce+inequality&btnG=](https://scholar.google.se/scholar?hl=en&as_sdt=0%2C5&inst=3006122349567257957&q=fee+tuition+public+college+reduce+inequality&btnG=)

---



# Deliverable

- ChatGPT group:
    - Template “Debate flow and scoring”
    - List of motivation for all arguments choices (from the ones suggested by the chatbot)
    - List of references
  - No ChatGPT
    - Template “Debate flow and scoring”
    - Description of the process of identification of the argument (used google, forum, pre-existing knowledge)
    - List of references
-



# Presentation schedule

## Debate exercise – Presentation schedule

**May 3<sup>th</sup>**

Group A  
Group B  
Group C  
Group D  
Group E

**May 8<sup>th</sup>**

Group F  
Group G  
Group H  
Group I

For each group, the evaluation teams in turn will present on the assigned dates. The presentation will be held in classroom.

The presentation must take max 20 min for all the 3 topics.

---



# Material in Canvas

- File with the groups
    - *“MG2100 groups and topics for the debate assignment”*
  - Presentation schedule
  - Template
-