

# Student Hub Live is the OU's live online interactive platform to support our academic community



Margaret Greenhall is a study skills specialist. She uses critical thinking to research her books. She tutors on science level 1 courses. She is going to be studying geology next year. Her hobbies are rowing and Lego.



Nicky Mee is a lecturer in business and language. She is a keen quizzer and animal lover with a 'mini-zoo' at home. In her spare time Nicky enjoys swimming, cycling and studying and is just starting her Law degree at the OU.

# Today's workshop

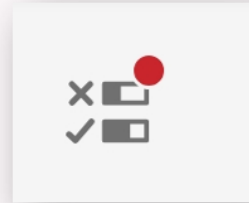
- This is a structured workshop to help you develop your critical thinking and assumes this is not new to you but that you are building skills
- We use illustrations and examples to get you thinking, as well as providing specific suggestions and ideas to consider the topic further
- There is a lot of interaction so please be ready to answer polls (questions) or add to chat pod during the session
- We can not give module or subject specific advice

# Online workshop basics

- Polls are anonymous to other participants but the chat box will have your name this will change to user number in the recording.
- All online sessions are recorded and available to view on catch up on a public facing website.
- Slides are available to download during the session(*may not be accessible on some mobile devices*) and from <http://studenthublive.open.ac.uk/>.
- It's a starting point for you to investigate more
- It's university wide not module specific

# Mobile users

If you are on a mobile device remember you need to tap into the polling option



To come back to these slides after completing a poll click on the share pod slides icon



Chat pod icon



## Please be aware

- These sessions are large scale
- They are very busy
- There is lots of interaction
- They are not the same as other tutorials
- You can maximise slides on your own screen by clicking the icon (this will hide the chat)



# Inclusivity

- We welcome all students at our workshops. Please do be aware that they can be very busy and some students may struggle with the non scripted nature.
- Slides are available to download within the live session and from the event page on the studenthublive website 24 hours ahead of every session to follow along or prepare for what will come up.

# Please

- Do NOT share any personal information in the chat pod during the session
- On the recording names will be anonymised to user number
- However if you type anyone's full name or any other personal information in the chat pod it can be seen by everybody and it would also show up on the recording so we would not be able to make the recording available

# Initial poll

What is your main reason for coming along to this session? Please choose the option that fits for you today:

- Study skills for current module(s)
- Study skills for future module (s)
- Connecting with other students
- Gain new ideas
- Responding to recommendation from tutor
- Curious about what studenthublive is



# Critical thinking and writing (Advanced)



## This was our advert...

This workshop is aimed at students studying at 2nd, 3rd or postgraduate level. Communicating critical thinking depends on developing convincing arguments for your audience. We learn how to dissect and map an argument identifying all of the key elements. By understanding how arguments are constructed you'll be able to improve your own writing skills and build better and more logical patterns of thinking. We'll look at visually mapping an argument to see how the critical thought process has been constructed. We'll then consider how you can use this to improve your own writing.

# Follow up recommendation

- Critical thinking for students
- Roy van den Brick-Budgen
- ISBN: 9781857036343
- <https://www.youtube.com/watch?v=HeBfHQ88pzc>

# First thoughts poll

- How do you persuade someone?
- Please use the poll pod to write your answer not the chat.

# Persuasion

- Writing is often the art of persuading others
- To get them to agree with you need to have evidence that supports your point
- This construction is called an argument



# Critical thinking process



# Poll what type of writing is this?

- Finds the significance
- Gives facts
- Weighs up the importance
- Gives reason for including the evidence
- Summarises
- Lists details
- Shows relevance of evidence
- States evidence
- Makes a reasoned judgment

# Descriptive writing

- Gives facts
- Summarises
- State how to do something
- Gives a timeline
- Lists details
- States evidence



# Example descriptive writing

- A survey was done of a local road. At 8.30 am there were 38 cars and this was 50% of the total volume of traffic. At 9.30 am there were 64 cars and this was 72% of the traffic. By 10 am the number of cars fell to 37 and but the percentage was now 80%.

# Critical writing

- Finds the significance
- Shows relevance of evidence
- Weighs up importance
- Gives reason for including the evidence
- Prioritises the information
- Argues a case using the evidence
- Makes a reasoned judgment
- Considers alternatives
- Draws conclusions

# Example critical writing

- The evidence that a calming system that varies with the day should be implemented can be seen in the data collected for Brickleton main street (Bricky et al 2023). At 8.30 am there are only 64 vehicles using the road. By 9.30 am this rises to 98 vehicles. There are two theories for the extra traffic – people dropping off at school returning home or business vehicles going to their first destination of the day. By analysing the data it is possible to see that the majority of the extra traffic (50%) was cars thus supporting the theory of returning school runs.

# Words that show critical thinking

- However, Consider
- Perhaps, Probably
- Similarly, Fails to
- Moreover, Despite
- Convincing, Persuasive
- Strongly contested, Vigorously challenged
- Disputes, Contends
  
- <https://www.phrasebank.manchester.ac.uk/being-critical/>

# Using PEEL to write

- PEEL
  - Point – make it (conclusion)
  - Evidence – support it with facts (premises)
  - Explain – why the evidence is supportive and relevant (premise support)
  - Link – link the paragraph to the next section and/or question

But how do you evaluate your chain of evidence?

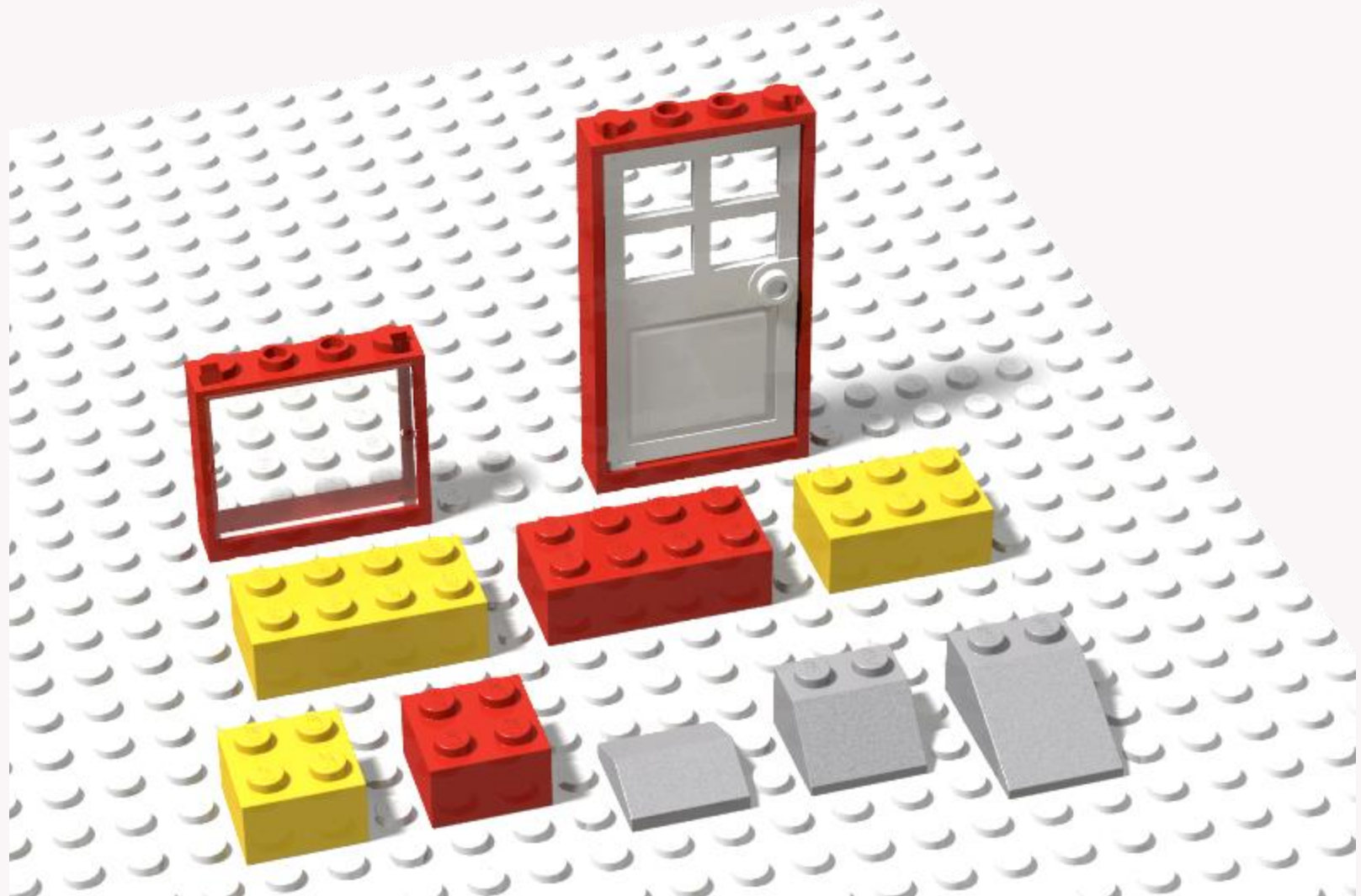
# Example critical writing

- The evidence that a calming system that varies with the day should be implemented can be seen in the data collected for Brickleton main street (Bricky et al 2023). At 8.30 am there are only 64 vehicles using the road. By 9.30 am this rises to 98 vehicles. There are two theories for the extra traffic – people dropping off at school returning home or business vehicles going to their first destination of the day. By analysing the data it is possible to see that the majority of the extra traffic (50%) was cars thus supporting the theory of returning school runs.

# Building your argument



# Deconstructing other arguments



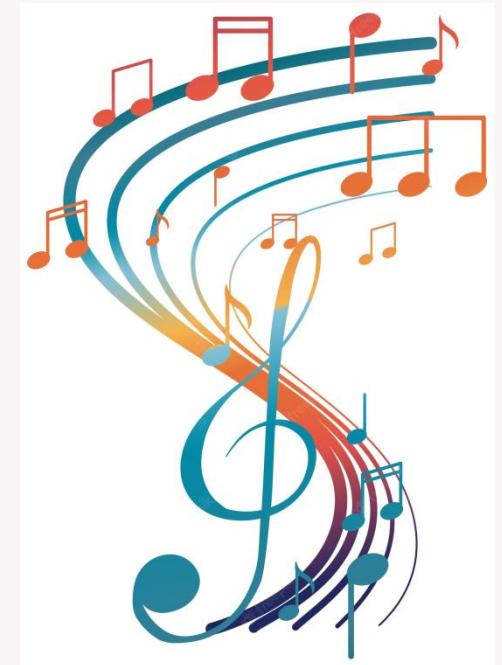


# Four types of sentence to construct your argument

- Point – the conclusion that your evidence supports – what are you persuading someone else to believe?
- Evidence – your main premise for your point
- Statement – facts can be used to back up your evidence – your supporting explanations
- Question – who, what, when, where, how?

# Example

- A. Come along to Margaret's singing workshop.
- B. Learn from her all the techniques she knows about how to sing.
- C. "I was thrown out of the choir when I was nine because my voice was so awful."
- D. Time has changed my voice and yours can change too.
- E. My favourite choral music is Alegri's miserere. I love the soaring notes and contrasting voices.



# Example

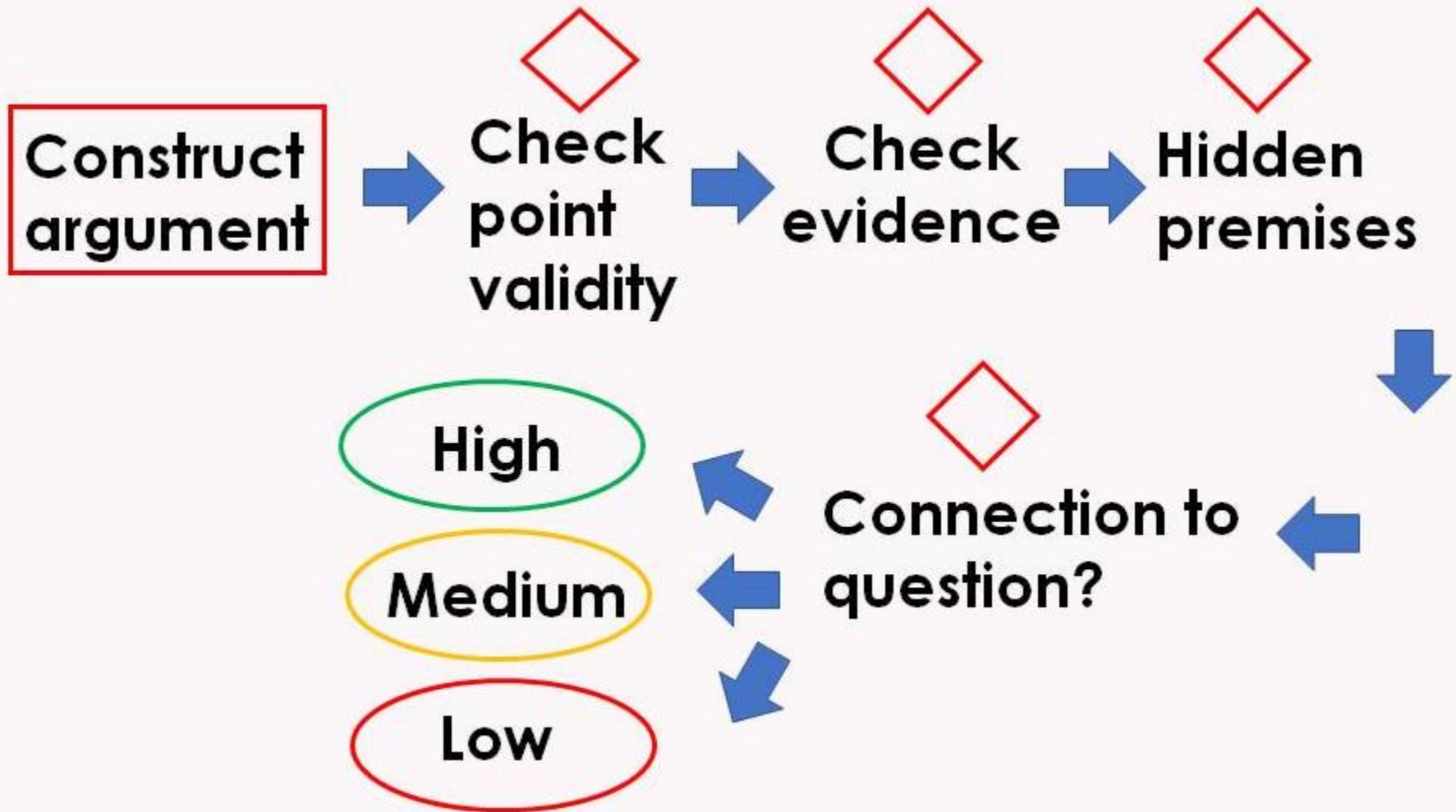
- A. Come along to Margaret's rowing workshop.
- B. Learn from her lots of the techniques she knows about how to row on a machine.
- C. "I restarted rowing in 2014"
- D. "I'm now triple European champion at 2 different weights."
- E. I design training for a group that includes 5 world championship medallists.
- F. You'll need access to a rowing machine either a home or in a gym.
- G. This is an eight week course delivered by zoom that will take you through the basics the stroke through to your first racing speed 2000m.



# Poll - evaluation

- How do you evaluate arguments?

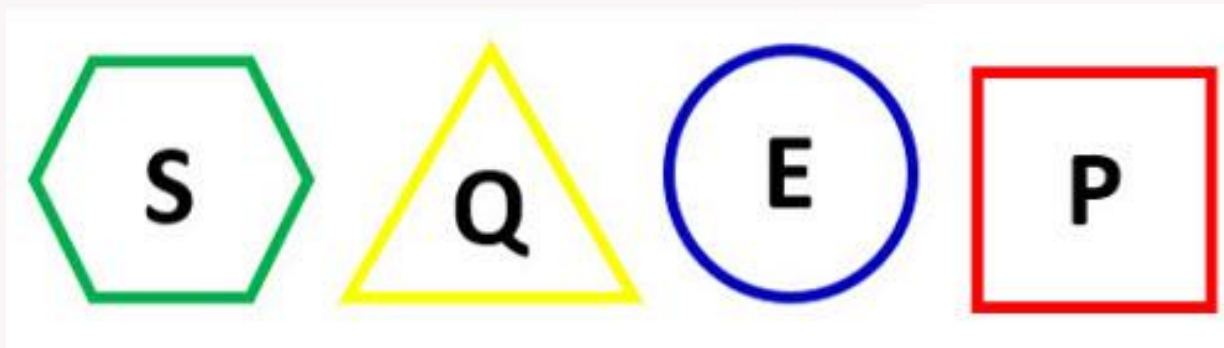
# Evaluation



**What could you do if your point shows a low score when you evaluate it?**

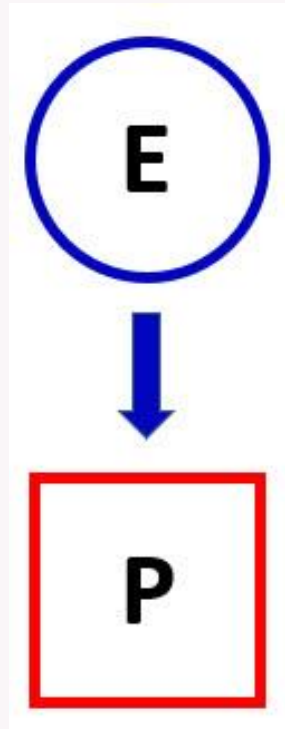
# Mapping an argument

- To help understand both the arguments you're reading and the ones you create it is very helpful to map the components
- S = statement
- Q = question
- E = evidence
- P = point



# Simplest argument

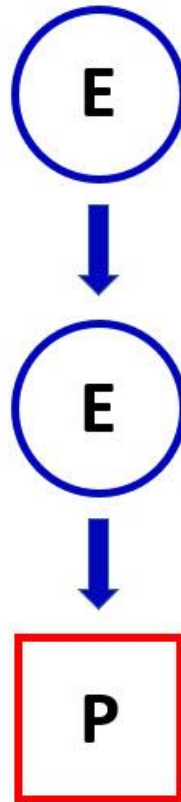
- There is a sign saying don't walk on the grass.
- You are not allowed to walk on that grass.





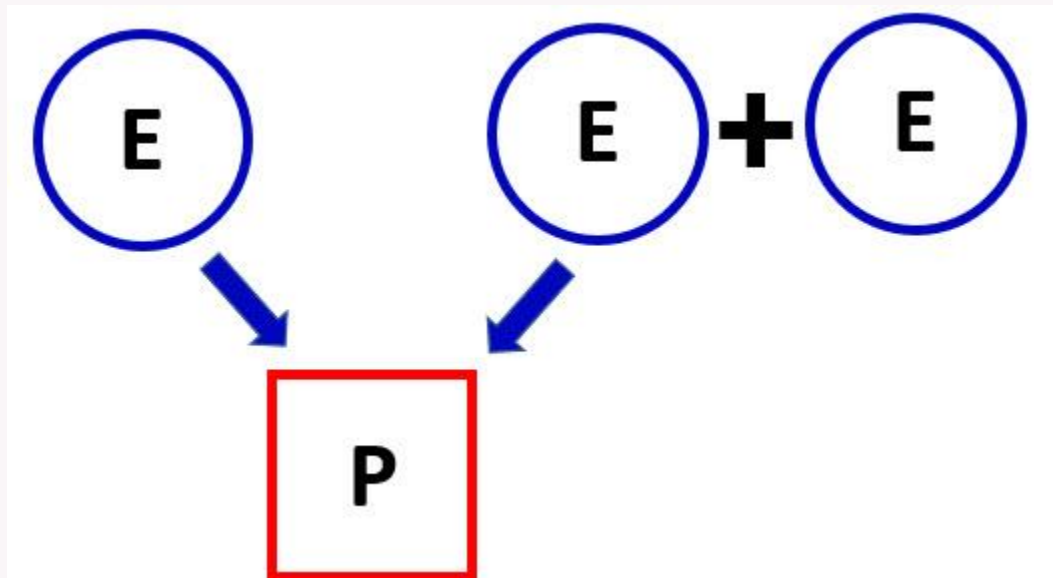
# Next stage

- There is a sign saying don't walk on the grass.
- It also says you can get fined £10.
- It's not a good idea to walk on that grass.



# More convoluted

- I don't need to pay today.
- The parking sign says you have to pay.
- A separate note on the parking meter says Monday to Friday only.
- Today is Saturday.



# Back to the singing

**Point** Come along to Margaret's singing workshop.

**Evidence** Learn from her all the techniques she knows about how to sing.

## Statements with no link to point

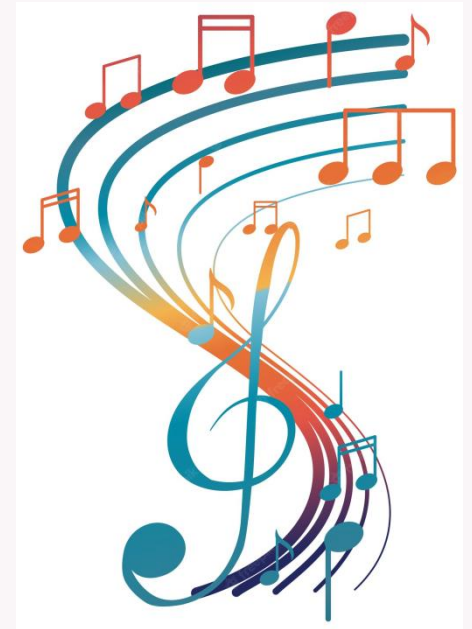
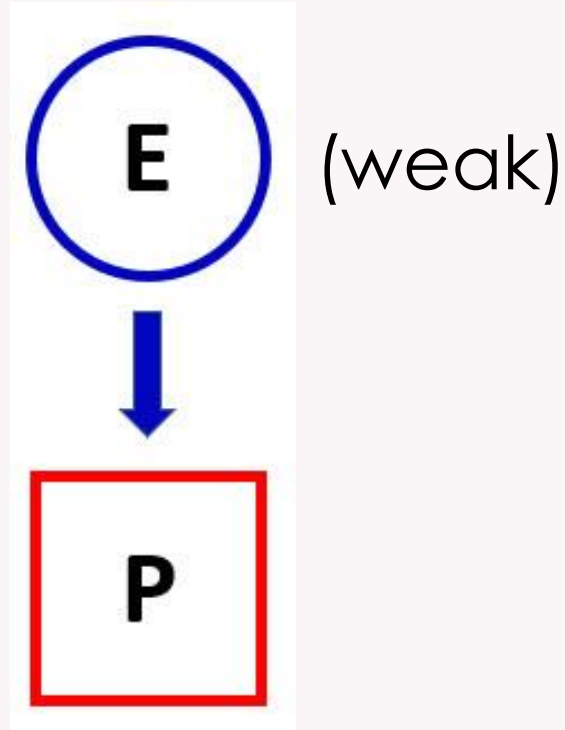
"I was thrown out of the choir when I was nine because my voice was so awful."

Time has changed my voice and yours can change too.

My favourite choral music is Alegri's miserere. I love the soaring notes and contrasting voices.



# Map of logic in singing



# Example

Come along to Margaret's rowing workshop.

Learn from her lots of the techniques she knows about how to row on a machine.

“I restarted rowing in 2014”

“I'm now triple European champion at 2 different weights.”

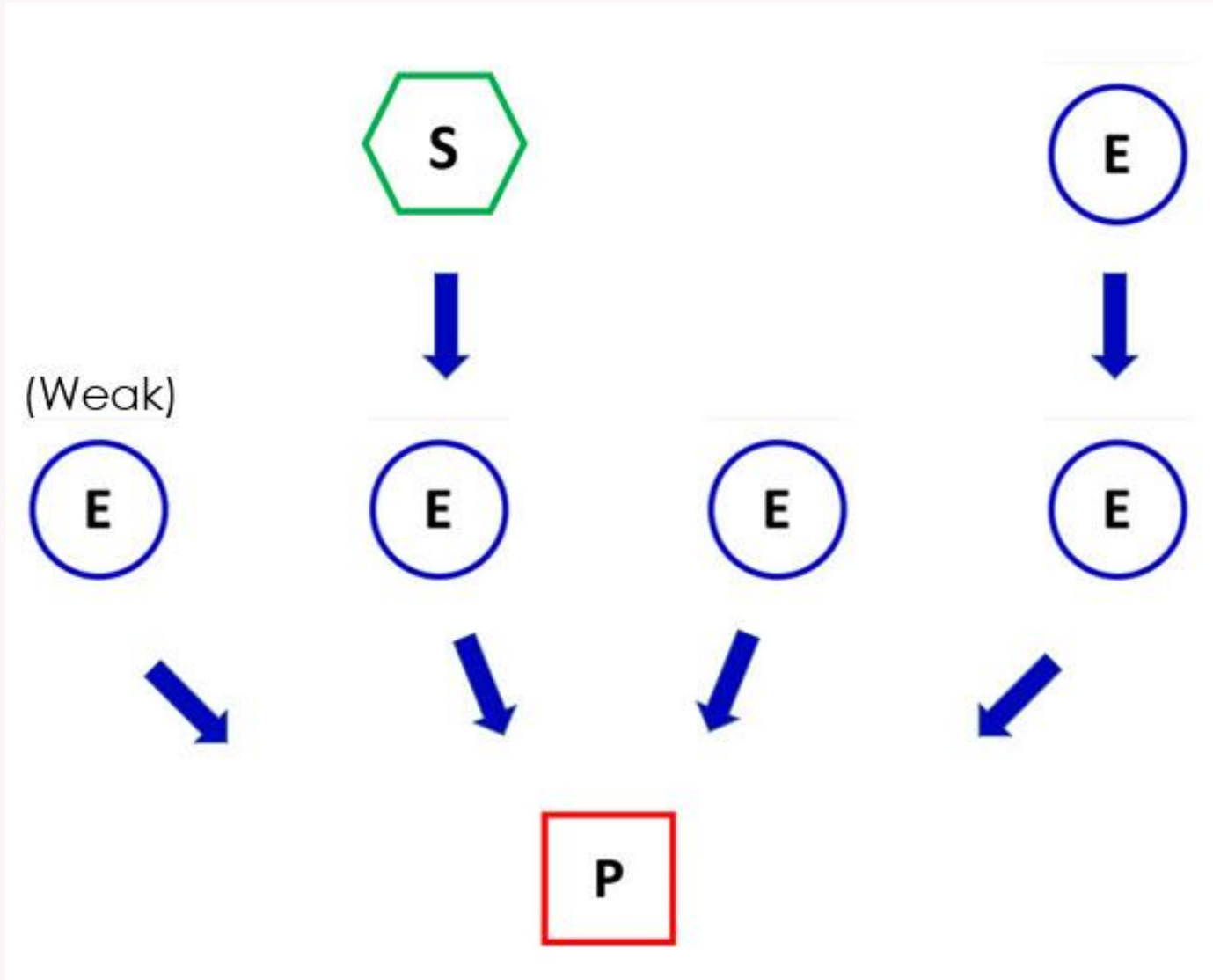
I design training for a group that includes 5 world championship medallists.

You'll need access to a rowing machine either a home or in a gym.

This is an eight week course delivered by zoom that will take you through the basics the stroke through to your first racing speed 2000m.



# Map of logic in rowing



# Poll

- How could you use this in your work?

## Necessary evidence

- If this evidence is missing the point can't be proved

## Sufficient evidence

- If the evidence is sufficient then the point must be correct



# Example

- You have to be fairly fit to row a marathon.
- Is this sufficient or necessary?

# Example

- To win medal in that race you have to enter.
- Is this sufficient or necessary?



# Example

- To get a gold medal you have to win the race.
- Is this sufficient or necessary?



# Example

- To get a gold medal you have to win the race.
- Can you think of a hidden premise, ie missing evidence?



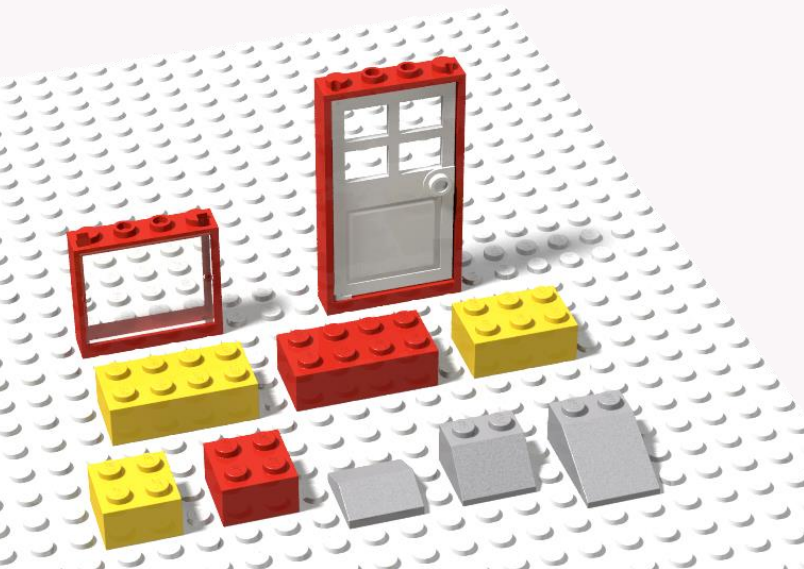
# Example 1

- To build a brick house you need bricks.
- Is this sufficient or necessary?



# Example 2

- To build the brick house pictured you need lots of the bricks shown and instructions.
- Is this sufficient or necessary?

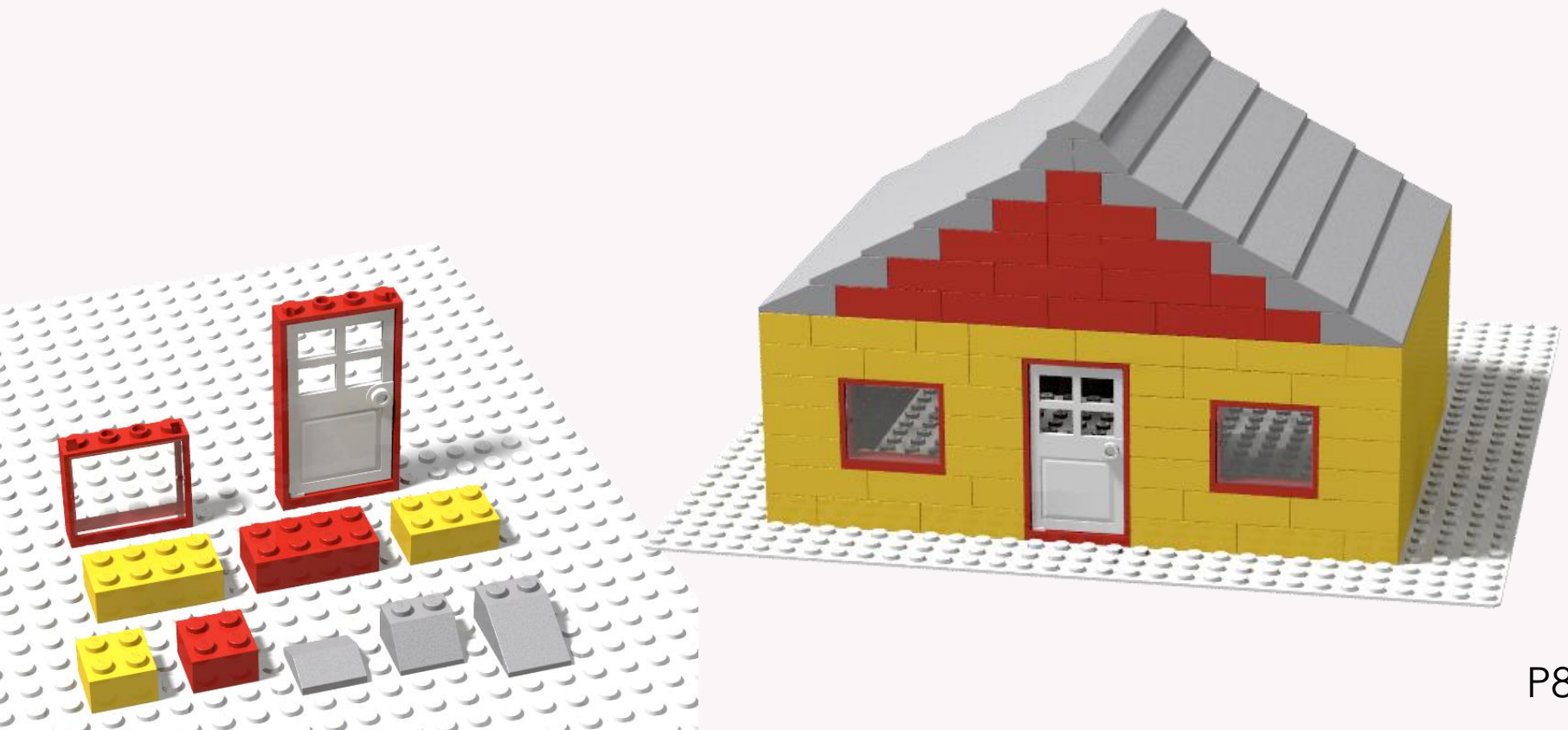


# Hidden premises?

- To build an argument you have to assume your audience already knows some facts.
- However, you do need to check that you haven't jumped a step and made too big an assumption.
- A hidden premise is an assumption about the understanding.
- Is it too big a leap for your audience?

# What are the hidden premises?

- To build the brick house pictured you need lots of the bricks shown and instructions.





# What are the hidden premises?

Come along to Margaret's rowing workshop.

Learn from her lots of the techniques she knows about how to row on a machine.

"I restarted rowing in 2014"

"I'm now triple European champion at 2 different weights."

I design training for a group that includes 5 world championship medallists.

You'll need access to a rowing machine either a home or in a gym.

This is an eight week course delivered by zoom that will take you through the basics the stroke through to your first racing speed 2000m.



# Flawed arguments (fallacies)

- What ways can you think of to misrepresent your point?

# Straw man

- Setting up the argument to deal with a flimsy point that is easily destroyed.
- Deliberately selecting the weakest points in a argument and only addressing those.



# Straw man



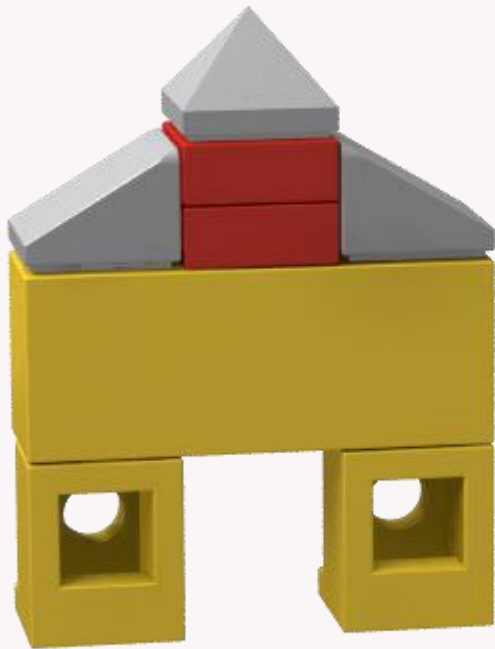
# Attacking the arguer (Ad Hominem)

- Instead of your point addressing the issue you attack the way it's represented or the person representing it.



# Limiting the options

- Presenting limited points that don't allow your reader the full range of options.



# Two wrongs to make a right

- Giving reasons that are inconsistent or untrue and using them to build your point.



# Slippery slope

- Starting from one piece of evidence then piling on evidence with too big gaps between them for the argument to be logical and therefore your point to be valid.





# What is wrong with this reasoning?

There is so much rubbish being thrown from cars.  
Last week 15 bags of rubbish were collected from our verges.

It has been proved that rubbish can lead to higher crime rates.

Areas with higher crime rate have are more dangerous for people to live in.

People who throw rubbish from their cars should lose their driving licence immediately to protect our children.

# What is wrong with this reasoning?

There are two well known ways to keep fit.

Walking 5000 steps a day and swimming.

Both are relatively cheap and accessible options for most people.

To protect our population from long term heart problems we must make one of these our priority in the active life programme.

# What is wrong with this reasoning?

There is planning permission for 50 houses on some waste land in the middle of our village.

My neighbours say it will increase the car traffic too much.

They are fine ones to talk I saw them drive 400 m to pick their kids up yesterday.

We should support the planning application.

# Poll

- What can you do to fix your argument?

# What if it doesn't add up?

- Strengthen your evidence
- Support the point in further paragraphs
- Weaken your point
- Don't use the point

# Critical thinking checklist of questions

- What are the most important questions for you to use in your critical thinking?

# Checklist of questions

- ✓ What is the point?
- ✓ Have you used a tool to check the validity (PROMPT or CRAAP)?
- ✓ Why is the point relevant to the purpose?
- ✓ What's important about this particular point?
- ✓ How does it fit with the rest of the content?
- ✓ Would the overall argument work without this point?

# Checklist of questions

- ✓ Does the evidence support this point?
- ✓ Is the evidence necessary?
- ✓ Is the evidence sufficient?
- ✓ Are there any hidden premises?
- ✓ Are there any errors in the logic (fallacies)?
- ✓ Could the reasoning be improved?



# Your thoughts

- There will be 2 specific questions in chat pods for you to explore some of the elements we have discussed further.
- *WHEN I READ I WILL USE CRITICAL THINKING BY....*
- *WHEN I WRITE I WILL USE CRITICAL THINKING TO...*
- You are welcome to add your thoughts and we will then pick up some of the themes and talk through them.
- Chat does have names on but the recording will be anonymised so you will appear as 'user number'

# Critical thinking process



# Take home message

- Critical thinking and writing is about the detail
- It's a questioning process
- It's an advanced skill
- You can learn a lot from analysing other people's work

# Upcoming sessions

27th June 7pm End of year party

5th July 7pm Using other people's ideas

11th July 11am Learning from feedback

13th July 11am Creative note taking

18th July 11 am Effective academic communication

**20th June 11am Playfulness and perspectives in learning**

**22nd June 11am Summer time brain food**

**27th June 11am FASS showcase**

**29th June 11am Module creation in business and law**

**19<sup>th</sup> 11am July Moving onto the next level**

Details and booking information from

<http://studenthublive.open.ac.uk/>

Past student hub live online study skills sessions [here](#)

Visit us at <http://studenthublive.open.ac.uk/> email : [studenthub@open.ac.uk](mailto:studenthub@open.ac.uk)

# Feedback please

Please use the following link to provide feedback to help the studenthublive team to continue to improve what we do

<https://forms.office.com/e/dWuDgyYMPN>