

Pre session polls

What level of study are you?

- Access
- Level 1
- Level 2
- Level 3
- Postgraduate

What would you consider is your main area of study?

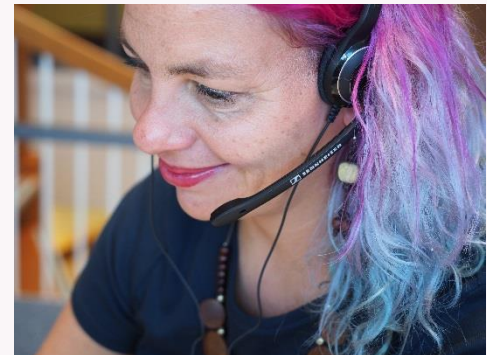
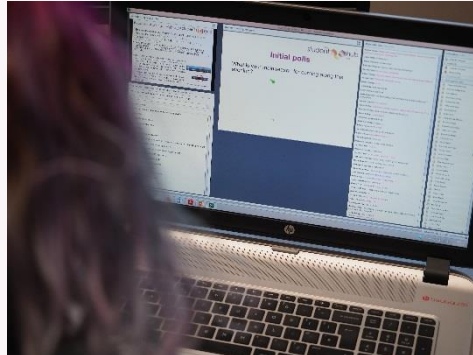
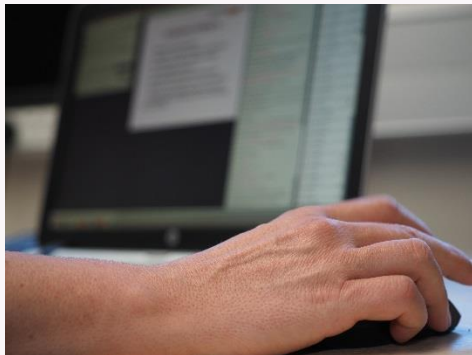
- Arts
- Languages (English & other)
- Social sciences
- Business and law
- Science
- Engineering or technology
- Maths
- Health sciences
- Education
- Sports
- OTHER

Have you been to any student hub live online events before?

- No (I'm brand new!)
- No (but have listened to one or more recordings)
- No (didn't have time)
- No (wasn't aware of before now)
- Yes any 2020
- Yes any 2021

What are student hub live online sessions?

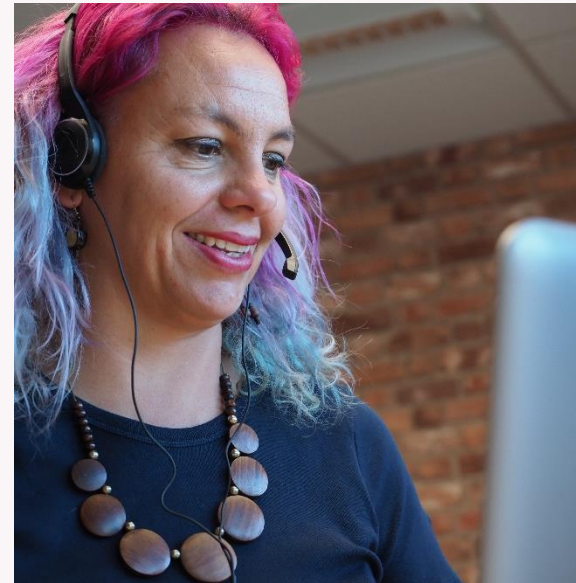
- All student hub live sessions are non modular and focus on skills relevant to study at university level
- Polls are anonymous to other participants but the chat box will have your logged in name associated with your comments during the live session.
- All online sessions are recorded and available to view on catch up on a public facing website.
- Slides are available to download during the session (*not accessible on mobile devices*) and from <http://studenthublive.open.ac.uk/>.



student hub live is the OU's live online interactive platform to support academic community



Karen Foley is a lecturer at the OU, head of student hub live and chairs Y032. She also tutors in social sciences, psychology and science.



Isabella Henman is a tutor in science and health sciences at Access to level 2.

She normally talks at the online workshops but is supporting today

Workshop

- This is going to be a structured workshop to help you getting thinking more critically and being aware of what is important
- We'll give scenarios and illustrations to help recognise what is important
- There is a lot of interaction so please be ready to answer polls (questions) or add to chat pod during the session
- You'll get the chance to discuss with others in a small group / or alternative discussion activity (dependent on numbers)

Session purpose

- **Is for:**
- Covering general advice about critical thinking as a concept
- Give some guidance about how to look at different sides and provide evidence
- Provide a space to share ideas and connect with other students
- **Is not for:**
- Telling you what you HAVE to do
- Providing any module specific advice

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



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

Critical thinking and writing

This was our advert...

This workshop builds on the introductory workshop and is aimed mainly at Level 2 and 3 students. We will take a deeper look at critically analysing source material and identifying the most important elements for any argument or answer. The focus is on being critical in context, evaluating different approaches and being able to put them in perspective.

Initial polls

What is your main reason for coming along to this session?

(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



First thoughts

- Think about your favourite song. Use the short answer poll provided to say why it is your favourite song (you don't need to say what the song is, it's about why it is **your favourite** song)



Ideas

- You like the melody
- You liked the lyric
- You like someone in the production of it (singer / other musician)
- It reminds you of something happy or not

Why did we ask this?

- Critical thinking is about recognizing what is important, sometimes making a judgment call
- You have made a judgment call about what is your favourite song (although it may change in time!)
- There are many factors that will go into that
- New information may change what your favourite song is

Activity 1

- Imagine you are being asked to evaluate two theories that have been researched using different methods
 - One presents facts and commentary to say that students receive the highest grades if they go to live events (tutorials or similar)
 - The other similarly present facts and commentary to say that students receive the highest grades if the work by themselves and read the module content
- How could you critically evaluate the two theories? Give some suggestions in the poll pod available

Ideas

To think about this argument critically, you would ask the following questions;

- What else contributes to success?
- What are the characteristics of students who attend tutorials? For example, do they have more time to study and is this the factor that gives them the edge?
- What is it about tutorials that may make a difference? Could this be achieved another way?



Evaluation

- The task of evaluation is to consider the relative importance of different elements – some may have particular resonance depending on the context – critical evaluation will consider the context
- What are you being asked to be a critical about? What are your parameters?



As you read module material

Analyse

Examine how key components within your module materials fit together and relate to each other.

Compare

Explore the similarities and differences between the ideas you are reading about. Do some ideas conflict with or complement each other?

Synthesis

Bring together different sources of information to serve an argument or idea you are constructing. Make logical connections between the different sources that help you shape and support your ideas. Are there any inferences you can draw from the material and apply to an assignment question?

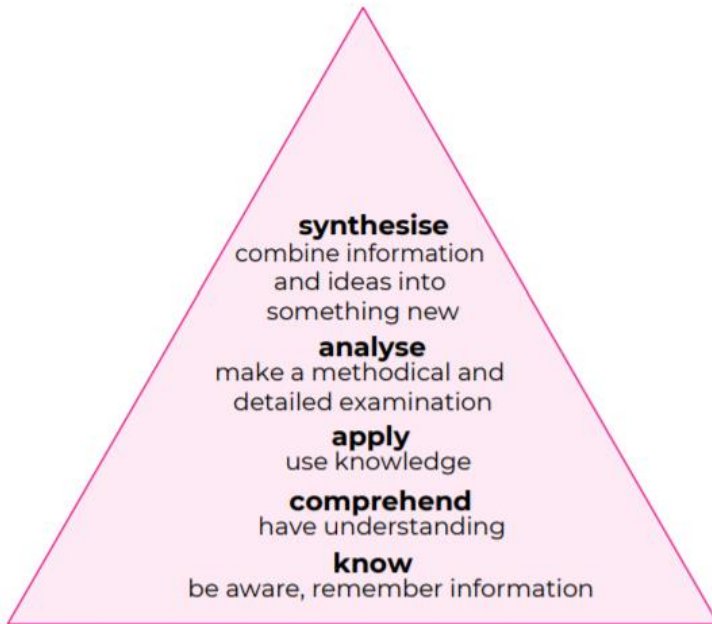


Figure 1 Levels of intellectual skill: the thinking triangle Source: adapted from Bloom, 1956

Methods of evaluation

- Using the same questions to consider different aspects allows you to think about things at a deeper level.
- What is not included may be just as important as what is evident!

WWW: Where, what, why?

PROMPT

- Provenance
- Relevance
- Objectivity
- Method
- Presentation
- Timeliness

Structuring evaluation

- PESELS

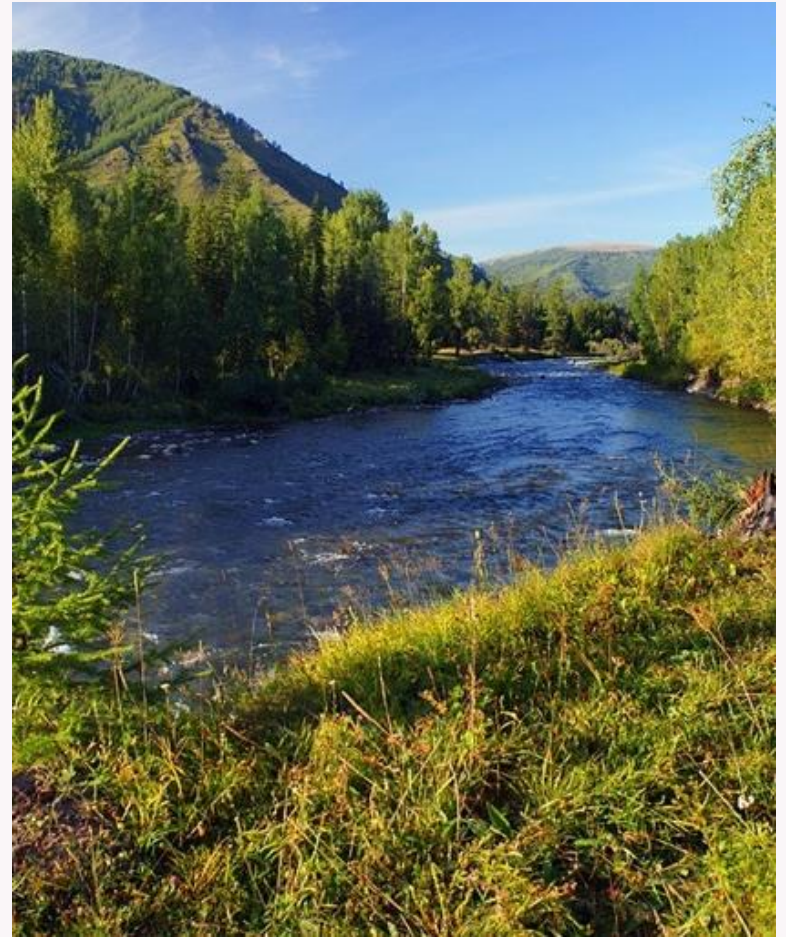
- Point - make the point for this paragraph
- Explain - what do you mean by this point
- Support - provide evidence from studies and research
- Evaluate - what is there about this point that is for/against
- Link - to the essay task
- Signpost - to the next paragraph

Knowing your context

- This is where reading your question is very important, you can critically analyse the same information in a different way depending on what you are being asked about

Scenario

- On the next slide is some promotional information about why you might want to take Isabella's river trip – look carefully at it and then listened to what you are being asked to critically analyse about it



1. Why take Isabella's river journey

Isabella's River Journey will be fantastic if you are a white water rafter or an ornithologist. You have cozy wooden chalets to sleep in before you begin & these are equipped with wood burning stoves for cold nights. We give a full safety briefing & have different groups depending on your main purpose. White water rafting groups will take a route with many exciting turns & twists along with rocky parts and thrills & spills. Ornithology groups will have spotter guides & be encouraged to use high powered binoculars to locate neighbouring birds both in & above the water. Prices are reasonable and include transportation from your chosen station. Chocolate is also in plentiful supply

Critically analyse poll

- What information is there to help you decide what is useful about the trip if you are an adventure seeker and want to know whether to get your friends together to do an activity such as this?
- Please use the poll pod provided

Ideas

- You had a specific scenario to use the information-adventure seekers would probably be interested in the white water rafting rather than the ornithology or the eating of chocolate or indeed whether there was nice beds
- You needed to evaluate the information in the context of your instructions
- If you had been asked to evaluate based on the relevance to your local RSPB group it would have been different

Note...

- It wasn't about describing information but evaluating in context, so if all you did was restate the information you weren't making it clear **why** it was important
- Critical thinking is showing that you have appreciated what is important, why it is important and have applied it effectively

Lots of people have theories

Peter Vickers of Durham University writes about four times when scientific theories appeared to be correct, but were far from reality.

THE CONVERSATION

A version of this article was originally published by [The Conversation](#) (CC BY-ND 4.0)

There are surprisingly **few proven facts** in science. Instead, scientists often talk about how much evidence there is for their theories. The more evidence, the stronger the theory and the more accepted it becomes.

Scientists are usually very careful to accumulate lots of evidence and test their theories thoroughly. But the history of science has some key, if rare, examples of evidence misleading enough to bring a whole scientific community to believe something later considered to be radically false.

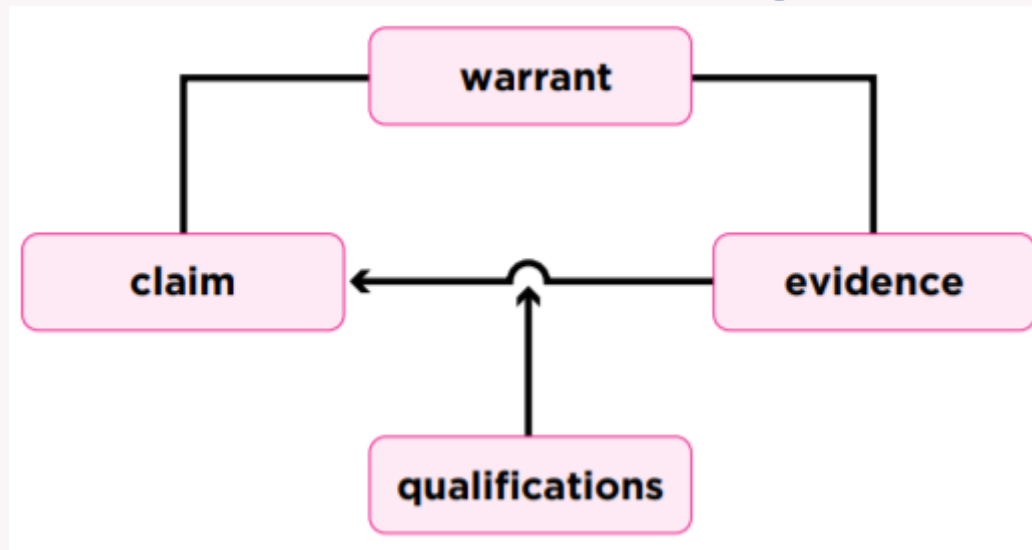
A common way scientists gather evidence is to make a prediction about something and see if they're correct. The problem occurs when the prediction is right but the theory they use to make it is wrong.

But it isn't always that simple

- Popper argued that "inductive" logic is flawed
- Just because the sun has risen every day until now does not necessarily entail that it will rise again tomorrow. One instance of the sun's failure to rise will falsify the theory that "the sun always rises"



Elements of an argument



When you evaluate academic material such as a journal article, you're aiming to form a judgement on the validity of the argument presented.

You can do this by looking at

- the coherence of the argument
- the supporting evidence

Critical thinking interrogates ideas

**quality of
evidence**

=

**quality
of data**

+

**quality of
interpretation**

Coherence

- Being able to identify when an argument is valid (i.e. that the claims made support the conclusions drawn adequately and justifiably) is vital.
- Check the line of reasoning – is it coherent and logical? Are there any flaws in its progression?
- Look at the conclusions drawn – are they supported adequately by the claims made throughout the argument? Are they valid and do they make sense?
- Have the authors justified their claims by supporting them with acceptable sources of evidence?
- Are any assumptions made and, if so, are they acceptable?
- Have all alternative claims been considered? Is there any bias in the claims and supporting arguments?
- Is there any indication that a claim made is merely the author's opinion rather than based on evidence?
- Does the claim make sense when compared to the evidence used?

Supporting evidence

You also need to evaluate the evidence you've been presented with to establish its worth, in its own right and when compared with other evidence

- Does the evidence support all the claims made – is it comprehensive?
- Is the evidence appropriate to the topic?
- Is the evidence recent and is that important for your purposes?
- How does this evidence compare with that provided by other people: does it conflict with other evidence? Is it complementary to other evidence? Does it coexist, adding something extra to the topic?
- Are there any methodological issues about the collection of the evidence that might affect its usefulness?

Discussion scenario

Think about a "fact" have you been told that you now know is not true?

- Why did you believe it in the first place
- How did you change your view?

Please use the relevant pod to give your thoughts and we will pick out themes that arise

Bringing it back to the module

- Just because it is published doesn't mean it is right, and it doesn't mean that everything important has been included (the author may have been selective about material)
- Evidence can contradict, theories can have limitations

Discussion activity

- Now that you have some ideas and suggestions about critical thinking what do you think will be the aspect that you are going to be developing for your critical writing?
- Please bring back a few points that you can share with the rest of the group
- We can then try and discuss some of the common points
- You do not have to speak on mic if you don't want to but please do interact with your group using the chat option

Useful points for breakouts

- We suggest you use the first couple of minutes to introduce yourselves and get used to the room. Choose a volunteer to keep the discussion on track and feed back to the main room
- If you want to speak you will need to activate your microphone *once in the room and you see the option available*

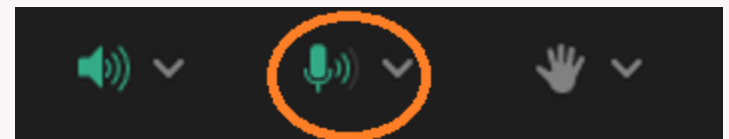


- Breakout groups work best if people engage and contribute and discuss
- There will be ~10 minutes for the breakouts overall – we'll send regular reminders to let you know how long you have got left

*Remember to check the number of the room you are in (shows at top of chat pod as “chat x **BREAKOUT** y”) in case of connection issues and for bringing back information.*

Breakout activity

- Now that you have some ideas and suggestions about critical thinking what do you think will be the aspect that you are going to be developing for your critical writing?
- Please bring back a few points that you can share with the rest of the group.
- You do not have to speak on mic if you don't want to but please do interact with your group using the chat option



This session is currently in breakouts (small groups).

If you are part of this group and have had connection issues please let us know your room number in the chat box

If you are only just arriving in this room then unfortunately you have missed the main session. Please log back out and watch the recording which will be available later today

So....

- What can people share from their sessions?

Take home message

- Critical writing does require a good understanding of the topic (which takes time!)
- The key is evaluation rather than basic description, e.g. saying how and why rather than just what

Final polls

What do you feel is the main thing you will take away from this session?



29th Mar noon Your first assessment (broadcast event)

13th Apr 7pm Introduction to critical thinking & writing

20th Apr 7pm Developing a Good academic argument

27th Apr noon Dealing with other people's ideas

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/> and subscribe for events as they are announced. Send us feedback at studenthub@open.ac.uk

