

Chat transcript from Critical thinking in STEM(M)

- 14:58:40 From maggie boswell Bristol University (SW UK) to Everyone:
Hello everyone. Enjoying some sunshine at last in Bristol. Great to be here ☺
- 14:58:54 From Natasha Rust to Everyone:
Reacted to "Hello everyone. Enjo..." with ♥
- 14:59:08 From Deirdre Daly to Everyone:
Very sunny in South London too.
- 14:59:15 From Natasha Rust to Everyone:
cloudy in Leeds
- 15:02:04 From maggie boswell Bristol University (SW UK) to Everyone:
Zoom makes a great change, though I like that Teams meetings go directly to the calendar.
- 15:02:24 From Natasha Rust to Everyone:
I like keeping the chat on Teams
- 15:12:32 From Anna Murawska to Everyone:
ha! Good question! Perhaps commenting on the importance/implications of cell-cycle progression?
- 15:12:41 From Rob Playfair to Everyone:
comparison of different definitions for the term (the what question) - if there are any?
Maybe finding relevant meaning in the diagrams?
- 15:12:42 From Deirdre Daly to Everyone:
Evaluate different research approaches to APC/C regulation
- 15:12:50 From Kathryn Dalby to Everyone:
what: remember/understand
- 15:12:56 From Natasha Rust to Everyone:
are there other aspects involved in cell-cycle progression?
- 15:13:16 From maggie boswell Bristol University (SW UK) to Everyone:
..The most likely cause for X is The least significant factor that contributes to this is...?
- 15:13:19 From Kathryn Dalby to Everyone:
explain how X does Y: apply/analyse?
- 15:13:46 From Natasha Rust to Everyone:
how was the evidence created for determining that APC/C regulates cell-cycle progression?
- 15:14:04 From Anna Murawska to Everyone:
Reacted to "how was the evidence..." with 👍
- 15:14:13 From Rob Playfair to Everyone:
yes nice idea - thinking about the epistemology
- 15:14:17 From Anna Murawska to Everyone:
Reacted to "..The most likely ca..." with 👍
- 15:14:21 From Anna Murawska to Everyone:
Reacted to "are there other aspe..." with 👍
- 15:14:27 From Anna Murawska to Everyone:
Reacted to "Evaluate different r..." with 👍
- 15:14:31 From Anna Murawska to Everyone:
Reacted to "comparison of differ..." with 👍
- 15:17:20 From Natasha Rust to Everyone:
sounds like the lecturers are too
- 15:17:27 From Anna Murawska to Everyone:
Reacted to "sounds like the lect..." with 😊
- 15:17:59 From pd213 to Everyone:
Reacted to "sounds like the lect..." with ☺
- 15:20:54 From Georgia Clarke to Everyone:

This is quite interesting as I have a colleague who is looking at what academics say they are assessing under the umbrella of 'critical thinking' versus what they are actually marking students positively or negatively on based on the feedback given. There's often quite a discrepancy!

15:21:18 From Natasha Rust to Everyone:

Reacted to "This is quite intere..." with 👍

15:21:25 From maggie boswell Bristol University (SW UK) to Everyone:

Reacted to "This is quite intere..." with 👍

15:22:51 From pd213 to Everyone:

Reacted to "This is quite intere..." with 👍

15:22:52 From Deirdre Daly to Everyone:

Bahahah! Yes, thanks. 😊 I really feel your disappointment though.

15:24:18 From Natasha Rust to Everyone:

yes access to student exemplars are key

15:25:05 From Jenifer Spencer to Everyone:

Maybe the element of critical thinking in UG STEM is being critical of your won level of understanding- asking do I really understand this? How can I write this in a way that shows I understand it?

15:25:20 From C Edwards (Ms) to Everyone:

Totally agree about the assessment genre- my bugbear too 😊

15:25:32 From Anna Murawska to Everyone:

Reacted to "Maybe the element of..." with 👍

15:25:44 From Deirdre Daly to Everyone:

Reacted to "Totally agree about ..." with 👍

15:26:09 From pd213 to Everyone:

I could not agree more. :-)

15:26:15 From Deirdre Daly to Everyone:

Reacted to "Maybe the element of..." with 👍

15:26:18 From Anna Murawska to Everyone:

Reacted to "This is quite intere..." with 👍

15:26:27 From Deirdre Daly to Everyone:

Reacted to "I could not agree mo..." with 👍

15:26:50 From Tess E to Everyone:

In my opinion, if we rely on student exemplars, they need to be very good (over 70%). Science teachers at universities will tell you that the standard of published papers ARE the exemplars with the level of writing that they want their students to reach by the 3rd/4th year (depending on subject and course structure).

15:26:58 From Rob Playfair to Everyone:

still quite abstract

15:27:12 From Catrin EGAN to Everyone:

They might think they should say negative things

15:27:31 From Rosita Hill to Everyone:

if you're using evidence to support something, why criticize it...and many not used to doing so

15:27:32 From Natasha Rust to Everyone:

no real framework for discussing or questioning - links back to the previous 3 minute paper we had

15:27:33 From Anna Murawska to Everyone:

can turn into an "annotated bibliography" rather than lit review - different genre

15:27:42 From Lori-ann Milln to Everyone:

This is limiting the scope for critical thinking


15:27:54 From Tess E to Everyone:

Reacted to "They might think the..." with 👍

15:27:55 From maggie boswell Bristol University (SW UK) to Everyone:

Very interesting point about using student texts for sample analysis. I would say as well as because I see expert writing as "something to aim for", and like students to analyse expert writing to see how argument construction is attained. How to reach H.O.T, by joining the conversation as soon as they can.


15:28:01 From Natasha Rust to Everyone:

Reacted to "This is limiting the..." with 

15:28:15 From Rosita Hill to Everyone:

suggests that that is what crit anal always means

15:28:27 From maggie boswell Bristol University (SW UK) to Everyone:

Reacted to "can turn into an "an..." with 

15:28:55 From Tess E to Everyone:


No explanation of what lecturers/markers understand by the phrase "critical analysis", and students often don't take much/any notice of marking criteria

15:29:00 From maggie boswell Bristol University (SW UK) to Everyone:


Replying to "can turn into an "an..."

Important point. Annotated bibliography an essential process in the advent of AI

15:29:01 From Tess E to Everyone:

Reacted to "suggests that that i..." with 

15:29:23 From Shasha to Everyone:

Reacted to "This is quite intere..." with 


15:30:49 From Tess E to Everyone:

Yes - showing the students the marking criteria for hints as to what is wanted is very helpful for us in EAP sessions


15:30:59 From Rowan Murray to Everyone:

I think that texts from various grade bands are helpful- not just high mark examples. It provides opportunity to compare and contrast information that has been included or excluded for example


15:31:10 From Laura Duncan to Everyone:

Reacted to "I think that texts f..." with 


15:31:19 From Tess E to Everyone:

Reacted to "I think that texts f..." with 

15:31:21 From Catrin EGAN to Everyone:

Reacted to "I think that texts..." with 

15:31:47 From maggie boswell Bristol University (SW UK) to Everyone:

Reacted to "I think that texts f..." with 

15:31:54 From Tess E to Everyone:


Yes, comparison is very useful but hard to do - can't always get exemplars of the same task

15:33:26 From Tess E to Everyone:

Replying to "I think that texts f..."

True, but I find with STEM students that in the first instance it is easier to show where criticality is present, rather than starting from where it's absent.

15:34:00 From Anna Murawska to Everyone:

Reacted to "I think that texts f..." with 

15:34:40 From Tess E to Everyone:

Replying to "I think that texts f..."

I often do the opposite with non-STEM students

15:35:03 From maggie boswell Bristol University (SW UK) to Everyone:

Sounds great!

15:35:28 From Laura Duncan to Everyone:

Reacted to "Sounds great!" with 👍

15:42:48 From Jane Sjoberg to Everyone:

@Tess I have had the discussion many times about published papers being given to students as 'models' and yes...STEMM staff very often say what you mention that they want students to achieve publication standard by their final year. However... there is a discussion to be had here about scaffolding towards that and whether a published paper is a food exemplar, for example for a UG 1st year lab report.

15:52:47 From maggie boswell Bristol University (SW UK) to Everyone:

Very interesting. Thank you for the conversation room 5!! 👍

15:53:01 From Deirdre Daly to Everyone:

Replying to "Very interesting. Th..."

Yes, thank you! :)

15:53:14 From Georgia Clarke to Everyone:

Reacted to "Very interesting. Th..." with 👍

15:53:23 From maggie boswell Bristol University (SW UK) to Everyone:

Reacted to "Very interesting. Th..." with 👍

15:53:24 From maggie boswell Bristol University (SW UK) to Everyone:

Removed a 👍 reaction from "Very interesting. Th..."

15:54:08 From Jenifer Spencer to Everyone:

Very valuable task. Useful

15:54:17 From maggie boswell Bristol University (SW UK) to Everyone:

Good ideas @Natasha

15:55:55 From Tess E to Everyone:

Completely agree, Jane

15:57:31 From maggie boswell Bristol University (SW UK) to Everyone:

In Room 5, we were discussing the importance of "precision", and creating activities where students could enhance some of the extracts, for example.

15:57:38 From Natasha Rust to Everyone:

Reacted to "In Room 5, we were d..." with 👍

15:58:23 From maggie boswell Bristol University (SW UK) to Everyone:

Replying to "In Room 5, we were d..."

That was Georgia's point, I believe

15:59:29 From Georgia Clarke to Everyone:

Replying to "In Room 5, we were d..."

I think formality and features such as pronouns were also mentioned

16:00:52 From Jenifer Spencer to Everyone:

Replying to "In Room 5, we were d..."

Congrats to the people who started with the praised examples. We made the same mistake as our students and started at the beginning instead of looking at the best examples first and then using them as a standard for the others!

16:01:12 From Anna Murawska to Everyone:

Reacted to "Congrats to the peop..." with 👍

16:01:44 From Natasha Rust to Everyone:

Reacted to "Congrats to the peop..." with 👍

16:02:05 From Lori-ann Milln to Everyone:



16:02:27 From pd213 to Everyone:

Reacted to "Congrats to the peop..." with 👍
16:02:28 From maggie boswell Bristol University (SW UK) to Everyone:
Reacted to "Congrats to the peop..." with 👍
16:03:36 From Rosita Hill to Everyone:
We suggested getting the students to evaluate the examples and come up with ideas of how to improve them - so that they form their own framework of how to produce better work.
16:03:44 From Natasha Rust to Everyone:
Reacted to "We suggested getting..." with 👍
16:03:47 From Jenifer Spencer to Everyone:
Reacted to "We suggested getting..." with 👍
16:05:08 From maggie boswell Bristol University (SW UK) to Everyone:
Reacted to "We suggested getting..." with 👍
16:05:44 From maggie boswell Bristol University (SW UK) to Everyone:
🌷 Great BALEAP session Jane! Thank you - loved the interactivity. Really great analysis with Deidre and Georigia too. All much appreciated. Have a great rest of your sunshiny day Jane and everyone ☺
16:05:51 From Catrin EGAN to Everyone:
Sorry I arrived late - a useful session and nice to see some familiar faces from Warwick
16:05:57 From Kathryn Dalby to Everyone:
Thank you!
16:05:58 From Rob Playfair to Everyone:
Thank you, very interesting session!
16:05:58 From Catrin EGAN to Everyone:
Thank you !!
16:06:16 From Deirdre Daly to Everyone:
Jane, thanks so much. Your materials were very insightful and generous. I DO think what you have presented is research, not just 'personal experience'. Your practice and your self-reflection were invaluable. Practice-based research is legitimate, critical, and enriching - as your presentation showed us. Thank you!
16:06:31 From maggie boswell Bristol University (SW UK) to Everyone:
Reacted to "Jane, thanks so much..." with 👍
16:06:40 From Natasha Rust to Everyone:
Reacted to "Jane, thanks so much..." with 👍
16:06:46 From Rob Playfair to Everyone:
Great that Aaron is joining!
16:06:52 From Tess E to Everyone:
Very useful and interesting session - thank you!
16:07:14 From Rosita Hill to Everyone:
Inspiring thanks!
16:07:36 From Natasha Rust to Everyone:
I think you're right we look at texts to explore examples of criticality
16:07:37 From PF to Jane Sjoberg(Direct Message):
Thank you very much for a very informative and enjoyable session.