

A large orange square with a white border, centered on a white background. Inside the square, the text "Online teaching in STEM" is written in white, bold, sans-serif font.

**Online
teaching in
STEM**

Goals

- Provide same learning opportunities to students as face-to-face
 - Should be evident in assessment results
- Be flexible
 - Stress
 - Difficult to study at home
 - Lost regularity

All my teaching choices were centred around these ideas

Origins and Evolution of Life

- Traditional tutorial
 - Introduction to topic
 - Student exercise
 - Share and wrap-up discussion
- Online formats

Video

Audio

Text

Strategy: Break it down

- Each tutorial can be broken into its smaller components
- Introduction to topic → Video
 - Panopto + other means when necessary
- Activity → Online mode
 - Student exercise generally centres around answering a question
 - Moved to submission of online response
 - Google Forms
 - Moodle quiz/questionnaire
 - Moodle assignment submission
- Discussion → Video response
 - Go through anonymised responses on Panopto
 - See where student understanding is - adapt

Initial reflections on strategy

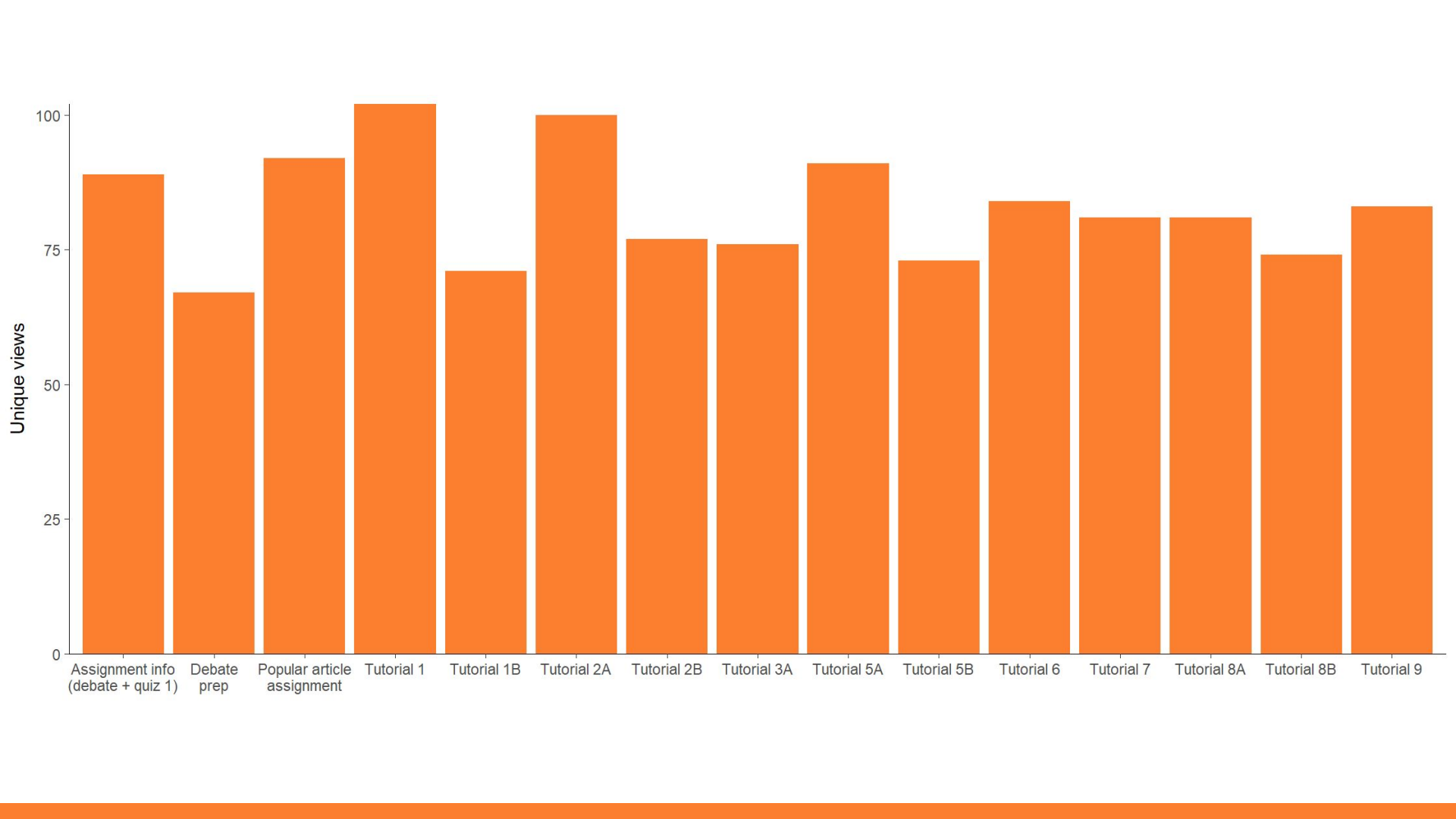
- Breaking down is necessary
 - Students less likely to sit through long content
- Loss of discussion
 - **Cons**
 - Students can't bounce ideas around to improve
 - **Pros**
 - Students can (and do) re-watch content
 - See more responses than a typical tutorial
 - Students with unsure answers more likely to respond

Final step as Zoom could allow students to discuss further + keep pros

Reflections now

Main issues I was concerned about:

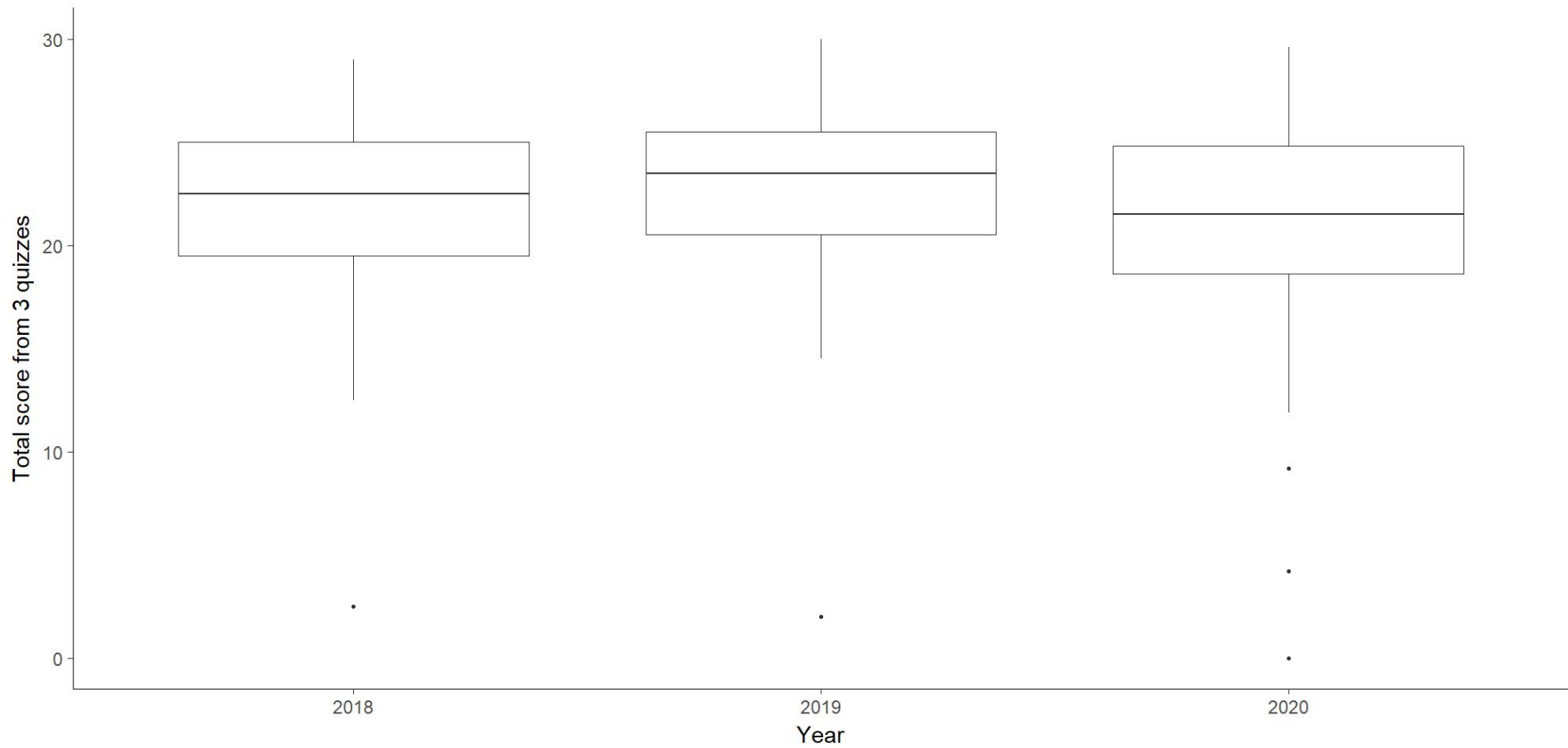
- Actually engaging students
- Did they learn?
- Have their assessments suffered?



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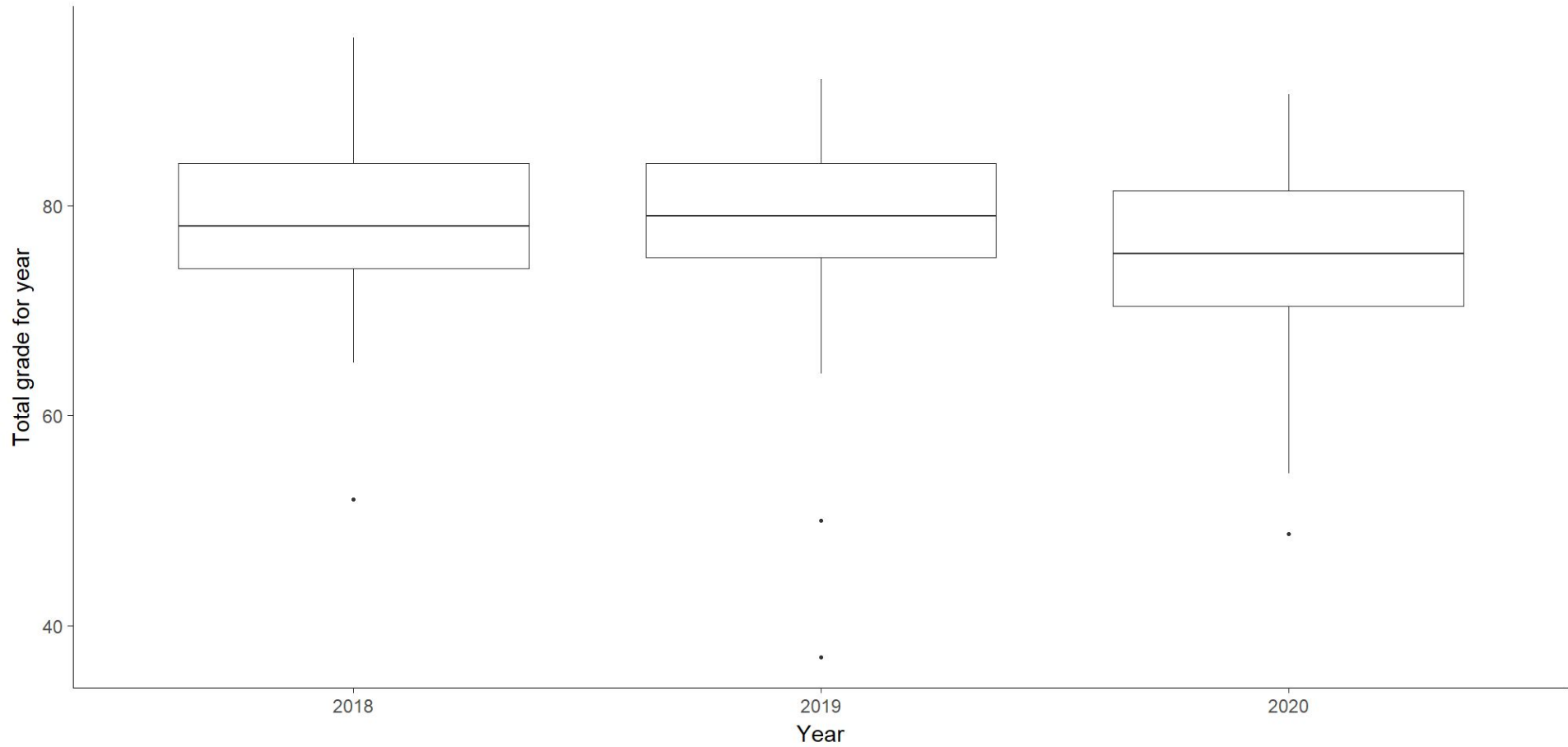
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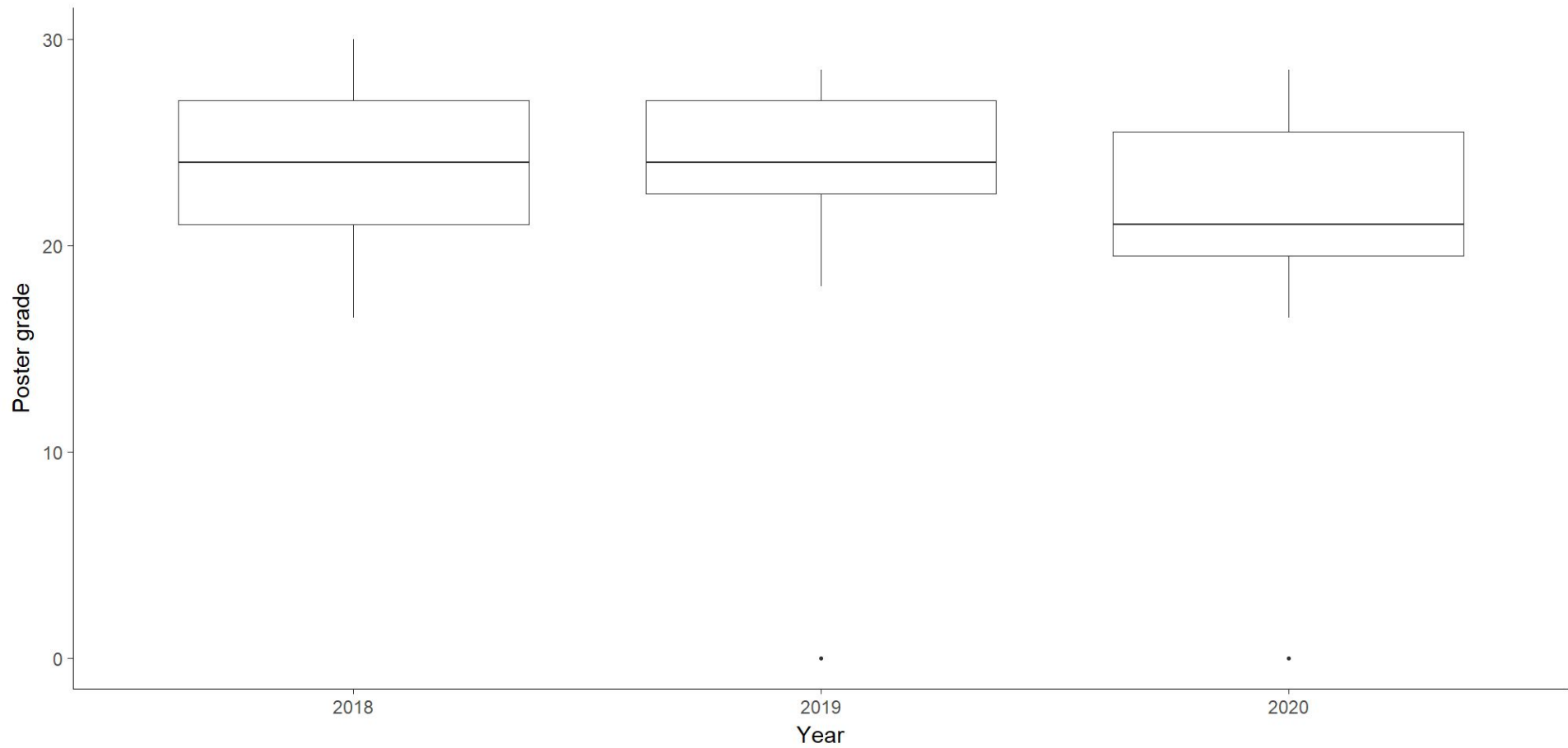


Reflections now

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Final changes for future

- Experiment with Zoom for discussion section
- Focus more tutorial components on assignments - particularly poster