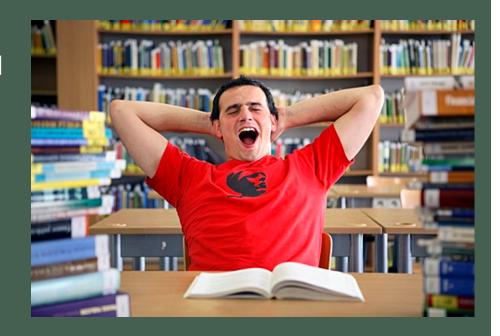


The problem:

Students are bored and readings are boring

- We want students to learn how to comprehend and critique complex arguments that tend to be in readings
- Students are disengaged generally, so how can we get them engaged with possibly the least engaging aspect of university study?!



Exacerbating the problem:

Students rarely have to read long

and complex texts

 Students can Google simple answers to most questions

 Increasingly, information is delivered in standalone sentences

Even brief news articles are summarized

The rare appearance of armoured vehicles outside Harare came a day after the head of the armed forces vowed to 'step in' to stop a political purge | CREDIT: REUTERS



Who takes a river cruise?

A unique perspective on Europe's finest river cruises Read more

By Peta Thornycroft and Chris Graham

15 NOVEMBER 2017 • 3:51AM

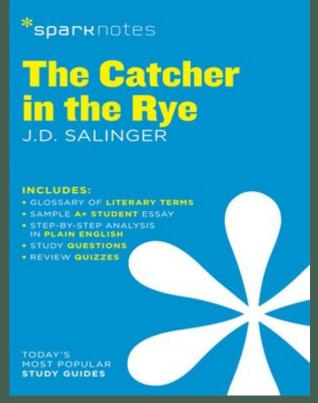
- Soldiers seen on streets of Harare
- Explosions rock Zimbabwe capital in early hours of morning
- Military 'takes over state broadcaster'
- Army says Mugabe is 'safe and security is guaranteed'
- Moves come amid rift between Mugabe and military

Zimbabwe's army has denied it has carried out a coup after troops took over the state broadcaster and soldiers patrolled the streets of the capital.

Exacerbating the problem:

Students rarely suffer consequences for not doing their readings

- Students can read summarised work instead
 - Online (blogs, Wikipedia, spark notes, etc.)
 - Lecture notes
- Many readings are not directly linked to assessment
- All of the important parts of readings are covered in lectures and lecture notes



Exacerbating the problem:

Distractions

Internet/games to students:

Look at me

Part-/full-time job to students:

You HAVE to come in today

Family to students:

• We need you to...



- 🙁 。 Studying while doing other things '
- Studying after other things
- Not studying because of doing other things
- Not being able to focus on one thing for more than 10 minutes





Context

- Difficult content: Philosophy of science/science and human values
- 2nd year in-person course

Learning outcomes

Comprehend and critique complex arguments

Independently!

 Means they have to be able to extract complex arguments from the readings!

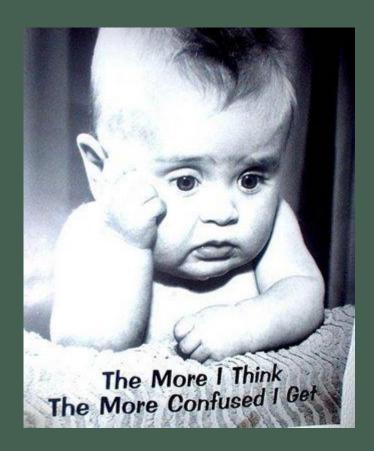
Course design

- Scaffolded learning
- Early and regular assessment
- Include low-stakes assessment
- Learn by doing
- Flipped approach
- Group and individual work
- Blended (in-person/online)
- Assessment fully linked to learning outcomes



Teaching

- Expectations are made crystal clear
- Expectations are justified in terms of learning outcomes
- Create multiple active learning moments
- Failure and feeling like you don't know things are normal parts of learning
- Encourage self-reflection on learning



Assessment

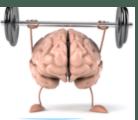
- Explaining how each relate to learning outcomes
- Pointing out the importance of doing the reading effectively

Component Description	Percentage of overall mark	Details
In-class participation	9	23 lectures Earn up to ½ a mark per lecture
In-class surprise quizzes	21	3 marks each Best 7 of 11 quizzes
Analysis Paper	30	Independently summarise and critique the argument in a complex paper
Exam	40	Write 2 essays from 6(/9) possible prompts

Scaffolding

- How to stay awake while reading
- How to extract information from a complex text and make notes
- Being encouraging and supportive

Success is close at hand



- Organize a regular time to do the reading and stick to it as best you can
- * Tell me if you are struggling
- * Understand that your brain is like a muscle

How to read critically

- * Make up your own mind before you read
- Momentarily take the opposite side to every point of view
- * Make this face

How to take notes

- * Think pair share
- * What is the author arguing for?
- * What are the main reasons the author uses to argue for that?
- * Are any terms defined and frequently used within the reading? What are they and what does the author say they mean?
- * Does the author use any key examples? What are they and what does the author use them to argue for?

Scaffolding etc.

- Work in teams during class to extract arguments from short complex passages
- Low stakes First quiz is revealed to be a practice quiz (after the fact)
- Prompt feedback
 - Discuss answers directly afterwards
 - Put up grades within 48 hours

(Practice) Quiz 1

- Describe Newton's method for discovering gravity (according to the text book). (1 mark)
 - Observations deduced from phenomena (using geometry style: deduce theorems from axioms)
 - Observations are then generalized (universalized) by induction/deduction from an assumption/axiom about God
- Why does Newton not like the 'come up with a hypotheses and then test it' method of science? (1 mark).

Quiz benefits

- Timing (any time, including multiple in one class, but usually at very start)
 - Students come on time (9am lecture)
 - Student don't leave early
 - Student pay attention while in class
 - Students read and take notes before class (students can use their notes during quiz)
- Best 7 of 11
 - Don't have to worry about sick notes etc.
 - Allows students to learn from mistakes in a low-stakes way
 - Students and I get regular feedback on their learning



Building skills and seeing their value

- Every reading and set of notes students do, helps develop their skills and enables them to get a better grade in all of the assessment
- I explain along the way how these skills can be used in the real world
- Sometimes swap exam for portfolio

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Student experience

- 50% of the responses to "What aspects of the paper helped you to learn?" mentioned the quizzes, including:
 - "The way that the paper was set out with most of our marks based on regular readings and participation and in-class quizzes helped me to keep up with the workload and attend class often."
 - "The structure of the paper allowed me to learn most effectively. E.g. readings before class, followed by (potential) quiz, learning about the reading in class -having to read and make notes in case there was a quiz and then having the content explained and examined in class helped me learn the content quite easily."

PHIL208-17A(HAM) Response rate: 75% (18/24)

94%

"Strongly agree" responses to "Overall, this paper provided me with a good learning experience"

Next steps

- Fully integrate (free/cheap) student response systems to spread the assessment throughout each class and further develop engagement
- Add more funny pictures to my slides

