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# Crynoldebau / abstracts

Using Mentimeter to explain (physics) modelling concepts

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Mentimeter is a versatile online teaching tool which can be used to ask students a variety of question types during classes to, amongst other aspects, probe prior knowledge, check understanding and increase engagement.

Here in this presentation the use of a series of Mentimeter questions as an actual vehicle to explain complex atmospheric modelling concepts (Y3 specialist module) will be demonstrated. The computational modelling of exoplanetary atmospheres is an exciting and fast-evolving area of research development. As desirable as it is to include contemporary research into specialist modules to increase student satisfaction and employability potential, teaching innovation is desirable if not essential as the concepts underpinning this seminal work is abstract in nature.

By prompting students to respond to a sequence of tailored questions the concepts of i) Random number generation, ii) types of data (discrete, continuous, binary), iii) application of a-priori conditions and iv) idea of forward versus retrieval models are explained as the responses collectively create a unique class dataset in real-time which can be discussed and used to facilitate understanding.

These questions are low-stakes fun questions with no real right or wrong answers so hence lowering the barrier for engagement – e.g. prompting students to give a number between 1 and 10, name an animal, name a capital city.

In this presentation some (hard!) lessons learned from this teaching experiment will be given and ideas offered for how other subjects could potentially use Mentimeter to go beyond it’s intended use.