

Vignette on the use of AI in NSSE for QCB12A and ACB32A

Course	QCB12A and ACB32A Pedagogies in Biology Education
Modality	Online asynchronous (1 hour), online Synchronous (2 hours)
Intended Learning Outcomes	1. Introduction to the design and intent of the Singapore science syllabus. 2. Compare and contrast the primary science, and lower secondary science syllabus. 3. Compare and contrast the GCE “O” levels and “A” levels syllabus for similarities and differences in learning outcomes.
Role of Faculty	<u>Before lesson:</u> 1. Locate the four syllabi. 2. Upload the syllabus into NoteBook LLM to generate flash cards and quiz questions. 3. Check for accuracy of the questions and answers provided. 4. Upload materials on NTULearn and set up discussion forum. <u>During lesson:</u> 1. Brief lecture on the goals of science education in Singapore and the mechanisms of syllabus review cycles to ensure currency of syllabus. 2. Gives instructions to students to access the flash cards and quiz. 3. Facilitate discussion on key insights related to the primary science, lower secondary science, O level biology and A level biology. 4. Comment on the questions and answers in the discussion forum.
Role of Students Learning as Designing Learning as Participating	<u>Before lesson (1 hour):</u> 1. Examine the four syllabus and note the format of syllabus, goals, and intended learning outcomes. 2. Record any questions in the discussion forum. <u>During lesson (2 hours):</u> 1. In pairs, students work on the flash cards and quiz on one device (social interaction is motivating and peer learning is powerful). 2. Records questions in the discussion forum. 3. Answers questions on the discussion forum if they know the answers. 4. Contributes and answer questions during whole class discussion and consolidation.
Role of AI	Use of Notebook LLM to generate quiz. Learning with AI Learn to teach science
Artefacts (if any)	Questions and answers in the discussion forum.