

Assessment One Tasks and Criteria

4.1 Lesson Planning Assessment

Note: the candidate must engage in lesson planning and review for all teaching sessions during the academic year. **For the assessment**, each candidate provides **four** completed lesson plans and reviews for a module(s) that they teach (two in semester 1 and a further two in semester 2). **You are required to record outputs from your four lesson plans on the Moodle/VLE CRN 51389.**

| TEACHING SESSION PLAN | |
|--|--|
| Module: Limnology and Oceanography | Level / Stage (6,7,8) L7 & L8 Year: Second year |
| Title of session/ topic: Freshwater Wetlands | |
| Mark the type of session: | |
| Lecture <input checked="" type="checkbox"/> | Tutorial <input type="checkbox"/> Lab <input type="checkbox"/> Studio <input type="checkbox"/> Workshop <input type="checkbox"/> |
| Module Outcome (What module outcome(s) is the class/session aligned to): | |
| The module outcomes are to: | |
| <ul style="list-style-type: none">• Identify and describe the major processes that define the earth's hydrosphere• Evaluate the important physical and chemical environmental variables which sustain aquatic life• Describe the importance of productive processes and the inter-relationships between plants and animals• Select and apply analyses and methods appropriate to the scientific study of aquatic environments• Identify the risks and hazards associated with field sampling in aquatic environments | |
| Class/Session Outcomes : Upon completion of this session, you should be able to: (Share with students e.g. Write on board /slide/ project image at beginning of lecture for students) | |
| The learning outcomes for the flipped classroom were: | |
| <ul style="list-style-type: none">• To introduce freshwater wetland ecosystems• To investigate the key characteristics of freshwater wetland ecosystems | |
| Lecture notes and flipped classroom discussions available on GMIT VLE (Moodle) | |

Select & Prioritise Your Content:

For the session, decide what material is used in class and what material the students should study independently and/or online. To do this, think about the material and its relative importance and prioritise and list in the appropriate quadrant.

| | Support Learning | Independent Learning |
|--|--|---|
| Priority (Need to know) | 1 <ul style="list-style-type: none"> • Definition of a wetland • Know the three types of wetlands – lacustrine, riverine, palustrine • Detail the four key characteristics of wetlands – geomorphology, hydrology, hydric soils and hydrophytes | 2 <ul style="list-style-type: none"> • Detailed lecture notes provided through the GMIT VLE (Moodle) |
| Supplementary Learning (Nice to know) | 3 <ul style="list-style-type: none"> • Components of hydrology – hydroperiods and physical aspects • Types of hydroperiods • Saturation vs flooding • Types of wetland soils – organic and mineral • Types of hydrophytes – emergent, submerged, floating | 4. <ul style="list-style-type: none"> • Watch the wetland videos provided on the GMIT VLE (Moodle) • Summary of content discussed in the flipped classroom available on the GMIT VLE (Moodle) |

Material in quadrants **1 and 3 typically become the focus during classes**. Quadrants **2 and 4 represent material students could study themselves and use the VLE/Moodle and online learning objects to support this learning**.

Think about how you might incorporate *Technology Enhanced Learning Tools and Blended Online Learning Objects*, that will develop students learning and engagement with the module.



| Teacher Activity (what you will do during the class): | Student Activity (what students will do during workshop/lecture): |
|---|--|
| <p>Introduce the learning outcomes for the class (2 mins)</p> <p>Answer questions from students based around their reading of the topic (10 mins)</p> <p>Explain processes that they found difficult to deal with (10 mins)</p> <p>Ensure all students have a clear understanding of the topic (5 mins)</p> <p>Use examples of wetlands to explain my point (5 mins)</p> <p>Summarise main points discussed in class (5 mins)</p> <p>Gather student feedback on the flipped classroom (10 mins)</p> | <div data-bbox="703 315 1257 595" data-label="Diagram"> </div> <p>Summarise key information, theories, and processes learnt during their own reading using verbal volleyball in Mentimeter (represented in class by a wordle) (20 mins)</p> <p>Propose questions where gaps appeared in their learning and understanding of the topic using Q&A in Mentimeter (20 mins)</p> <p>Peer discussion to ensure they have gained adequate knowledge (10 mins)</p> |
| <p>Online Student Engagement Tools:</p> <p>All lecture notes, and associated videos were available on GMIT VLE (Moodle) for 4 days before the flipped classroom took place. Updated flipped classroom discussion notes were also added e.g. Wordle.</p> <p>Note! This flipped classroom employed Education for Sustainable Teaching by having no photocopied paper notes and using the GMIT VLE Moodle and Menitmeter instead.</p> | |

Teacher Reflection:

What worked?

The flipped classroom itself worked really well. Employed the use of Menitmeter to run verbal volleyball (GMIT PASS game) and Q&A. As the different teams examined the key processes and terms of the wetland lecture they posted them to menitmeter where they were presented to the class for discussion using a wordle. This visual aid was really great in stimulating questions around definitions and application of processes. Also employed Q&A in menitmeter to cover any aspects of the lecture not dealt with in verbal volleyball. This was anonymous so students felt comfortable putting their question out there. We had a great response and some questions were even based on previous lectures. Overall felt the students engaged well in the flipped classroom and enjoyed the experience.

Feedback gathered at the end of class showed students found it “creative”, “informative”, “fun and easier to take notes”, “was good to ask questions about stuff we didn’t understand”, “helpful”, and “good, interaction with students is better – learn more”.

What did not work?

Engaging students with the idea of the flipped classroom. Using progress bars on Moodle, 43% of students actually clicked on the lecture notes before the flipped classroom. 60% of students actually attended the flipped classroom however, only 33% of these had clicked on the lecture notes. As in semester 1, I found it difficult to gauge the level of knowledge in students who did not read the lecture notes but attended the flipped classroom session. As this was the first time the class had been involved in a flipped classroom I feel they weren’t sure of the expectations on their side. More specifically that they were required to read the online material and formulate their own thinking and use the flipped classroom to fill in any gaps they didn’t understand.

At the end of the flipped classroom, I did feel more confident that they had gained some valuable learning from the session as the student comments above highlight. However, I am still unclear on how to motivate them to read the material in their own time before the flipped classroom.

To what extent did you address different domains of learning?

The three domains of learning were addressed within the lecture:

- Cognitive domain (knowledge) – revising previous information and gaining new knowledge of the topic using verbal volleyball
- Affective domain (attitude) - formulating their own thoughts and feelings about the topic. Using knowledge gained to form strong scientific points of view
- Psychomotor domain (skills) – practice applying knowledge through discussions in the flipped classroom in particular through the use of the Q&A in Menitmeter

What would I do differently next time?

- Clearly indicate the benefits of the flipped classroom to their (students) own learning and long term academic development to get early buy-in and increase the number of students contributing to the flipped classroom
- Increase the number of flipped classrooms – as students become more familiar with the process they gain more confidence in themselves that they have acquired enough knowledge to participate in a flipped classroom scenario
- Set pre-flipped classroom material as an assignment on Moodle with an associated assessment activity action (Ginty, 2018). This is a recommendation made in the feedback on lesson plans from S1 which I think will help increase the level of engagement with my flipped classroom approaches in the future.