



Clinical reasoning
assessment in a virtual
environment: utilising
Moodle Lesson to
provide equity between
on-campus and
distance education
nursing and midwifery
students.

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What is a Moodle Lesson?

- A Moodle Lesson is an activity that enables an educator to deliver content in interesting and flexible ways. The Lesson can be used to create a linear set of content pages or instructional activities that offer a variety of paths or options for the learner, e.g.
 - Scenarios or simulations/decision making exercises.
 - For differentiated revision, with different sets of revision questions depending upon answers given.
 - Self-directed learning of a new topic.

(Moodle Docs, 2011)

Background

Who: Second year nursing and midwifery students.

What: Moodle Lesson

Where: Online, University of South Australia

When: 2012

Why: Previously, the assessment had been a face-to-face Objective Structured Clinical Assessment (OSCA) conducted in Practice Based Laboratories. This posed several problems:

- ◉ External (off-campus) student physical presence was required
- ◉ Multiple consumables
- ◉ Human resources (clinical staff, patient actors and academics)

Aims...

The main aims for using the Moodle Lesson were:

- To provide equitable and simultaneous assessment opportunities for all students enrolled in the Bachelor of Nursing program (both on-campus and off-campus)
- To replicate real world practice in a virtual environment
- To facilitate Inquiry Based Learning approaches
- To establish capacity and representation of real world practice, through the assessment of safe delivery of patient care, clinical comprehension and written communication.
- Enhancement of professional discourse of nursing students, augmented through the engagement with multi-disciplinary clinical case study scenarios

Clinical Reasoning

Reason for using Moodle lesson:

- Format is linear and branching can be used to guide students down different pathways (correct/incorrect)
- Able to use multiple clinical scenarios
- The ability to use clinical charts in the form of clinical handover, patient history, patient medication charts, observation charts
- Multiple choice questions: guided students who had to apply a clinical reasoning process
- The patient's condition would be determined by the choice made and required the student to continually evaluate the clinical information

Things to think about before you start...

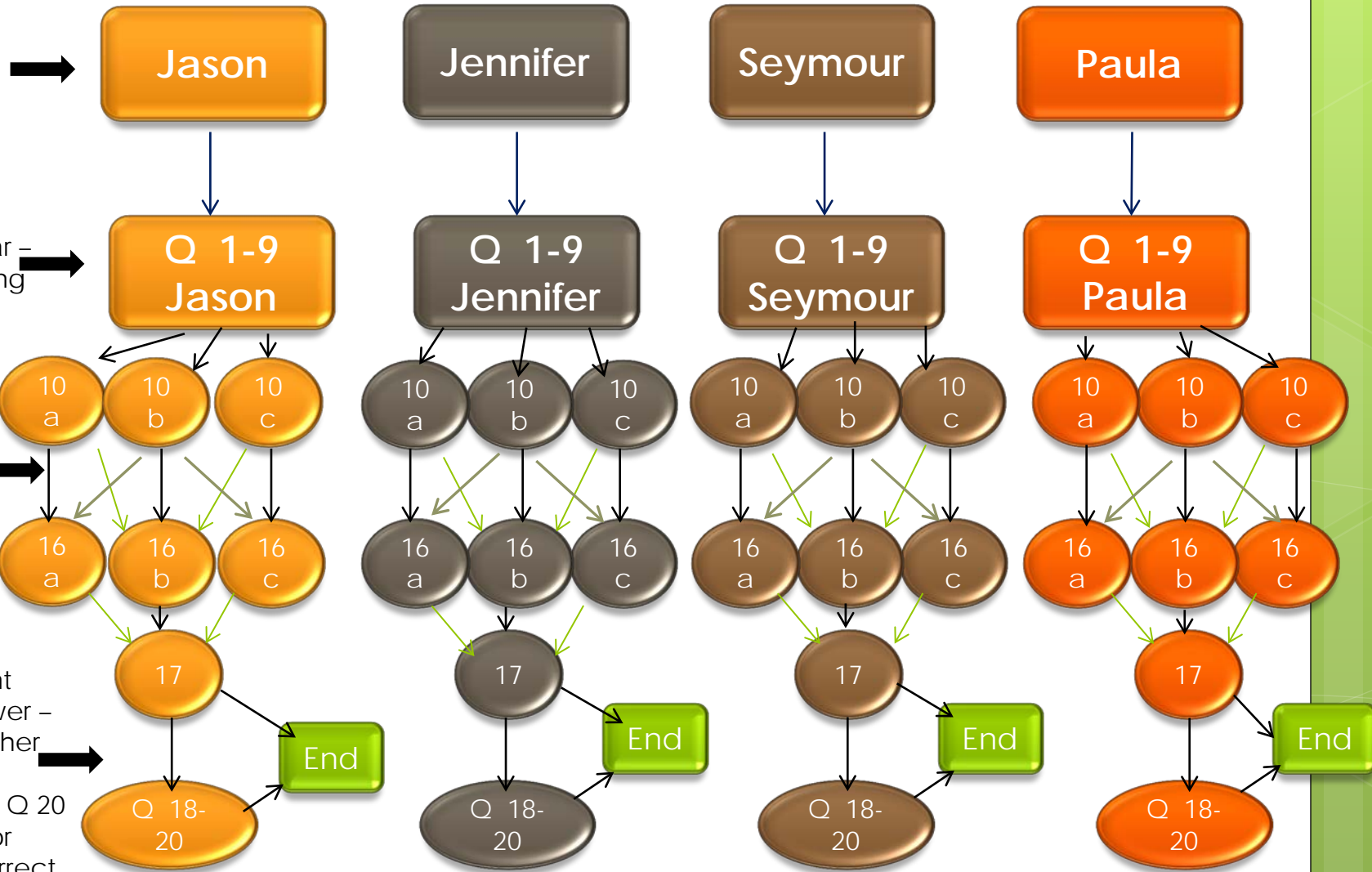
- Do I have the time? (Moodle lesson takes quite a bit of time to prepare and create but can be self-marking or provide instant feedback)
- Why you want to use the lesson and not another activity? Will it suit your purpose?
- Consider the end result when mapping the individual Lessons.
- Whether you want to use the Lesson for summative or formative assessment (track student progress/provide added resources or test student knowledge)?
- Whether you want to use images, video, charts or other media to enhance your lesson?

Implementation

- Create a formative Lesson(s) with only one branch so **students and staff** can familiarise themselves with the online activity.
- Consider the types of questions you want to ask? Moodle has several formats available:
 - Multiple choice
 - True/False
 - Short Answer
 - Numerical
 - Matching
 - Essay
- Think about the structure and draw up a diagram of the branching structure (whiteboard, mind-map or paper) before you start with the online system.

Structure of the Lesson

Students
choose a
patient



Student feedback on the Lesson...

Positive:

- The Lesson was a test of knowledge and within the time limit what we as RN's would do to handle an acute patient
- I would have liked to do more of these for practice without them being assessed.
- The Lesson was a fantastic way to find out how much of our learning had 'sunk in'. A very clever way of testing our knowledge.
- I liked the Lesson assessment and would like to see a lot of these perhaps during the weekly tutorial covering each topic. It would be good to go through scenarios in this format as a group and feedback rationale for correct/incorrect decisions.

Negative:

- We received no feedback as to how we did, where we went wrong and what we need to work on.
- I found it hard to follow.
- I couldn't find the answers in Google!

What we would do differently next time...

- Have multiple formative Lessons so students and staff could familiarise themselves with the format and the thought process.
- Provide students with further feedback on the assessment.
- Have less patient scenarios.
- Include more media (images, video etc.) to enhance the student experience.

You start preparing Jennifer for theatre. You review the case notes. What is the next nursing action?

CONSENT TO OPERATIVE NON-OPERATIVE AND ANAESTHETIC PROCEDURES	U/R 2012 2013 SURNAME: <u>LEACH</u> <small>Affix patient sticky label</small> OTHER NAME: <u>JENNIFER</u> DOB: <u>16/4/1986</u> GENDER <u>F</u>
1. OPERATIVE AND/OR NON-OPERATIVE PROCEDURE	
I (name) <u>JENNIFER</u> <u>LEACH</u> <small>(Full name) (Surname)</small> have had explained to me by Dr. <u>JENNIE</u> <u>STUBBS</u> <small>(First name) (Surname)</small> the nature, consequences and risks of the following procedure(s) <u>Open Reduction and</u> <u>Internal fixation of L distal ulna + Radius</u> being performed on _____ <small>(If not set state patient's name and relationship)</small> He/she* has also explained that other procedures may be necessary or advisable to be performed during the course of the above procedure(s). The nature, consequences and risks of alternative procedures including no treatment at all, have also been explained to me. I have understood and am satisfied with the explanations that I have been given. I request and give my consent to the performance of the above procedure(s) and I also consent to such other procedure(s) which may be necessary or advisable to be performed at the same time. with the exception of the following (if applicable) _____ _____ I also consent to: • The administration of general, local, regional and other anaesthetic for any of these purposes. • The transfusion of blood or blood products when immediately indicated. • The taking of a blood sample for appropriate testing of communicable diseases including HIV and hepatitis, should contamination of any staff member or doctor or myself occur during my hospital stay. Patient's Signature <u>Jennifer Leach</u> Date <u>17, 8, 2012</u> Medical/Dental Practitioner's Signature <u>A. McMahon</u> Date <u>17, 8, 2012</u>	
2. ANAESTHETIC PROCEDURE	
I have had the nature, consequences and risks of an anaesthetic procedure explained to me by Dr. <u>ALEXANDER</u> <u>McMAHON</u> <small>(First name) (Surname)</small> I have understood and am satisfied with the explanations that have been given. I request and give my consent to the performance of the above procedure(s) and I also consent to such other procedure(s) which may be necessary or advisable to be performed at the same time. with the exception of the following (if Applicable) _____ _____ Patient's Signature <u>Jennifer Leach</u> Date <u>17, 8, 2012</u> Medical/Dental Practitioner's Signature <u>A. McMahon</u> Date <u>17, 8, 2012</u>	

CONSENT

- ☐ notify the treating consultant
- ☐ notify the anaesthetist
- ☐ ask the patient if they know what procedure they are having

You review the Intravenous orders. **How many mls per hour do you administer the fluids?**

- ☐ 150mls per hour
- ☐ 167 mls per hour
- ☐ 125mls an hour