Whole of Degree Design – Embedding Scaffolded Authentic Assessment

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Myths & Movements: Reimagining Higher Education Assessment
## Wollongong at a Glance

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campuses</td>
<td>9</td>
</tr>
<tr>
<td>Total student enrolment</td>
<td>30,038</td>
</tr>
<tr>
<td>International students enrolled in Australia and abroad</td>
<td>11,631</td>
</tr>
<tr>
<td>Students in Australia</td>
<td>25,500</td>
</tr>
<tr>
<td>Nationalities at UOW</td>
<td>134</td>
</tr>
<tr>
<td>Employees</td>
<td>2,353</td>
</tr>
<tr>
<td>Research strengths</td>
<td>11</td>
</tr>
<tr>
<td>Academic and research collaborations globally</td>
<td>213</td>
</tr>
<tr>
<td>$431m in research &amp; commercialisation income</td>
<td></td>
</tr>
<tr>
<td>Degrees on offer</td>
<td>476</td>
</tr>
<tr>
<td>UOW Alumni</td>
<td>112,302</td>
</tr>
<tr>
<td>Average daily temperature</td>
<td>22°C (71.6°F)</td>
</tr>
<tr>
<td>Average summer temperature</td>
<td>27°C (80.6°F)</td>
</tr>
<tr>
<td>Population of Illawarra area</td>
<td>292,500</td>
</tr>
<tr>
<td>Distance to Sydney Opera House</td>
<td>85km (53 miles)</td>
</tr>
</tbody>
</table>
What are we trying to achieve when we teach?

I taught Stripe how to whistle.

I don't hear him whistling.

I said I taught him. I didn't say he learned it.
Hunters & Gatherers: Strategies for Curriculum Mapping and Data Collection for Assurance of Learning

assuringlearning.com
How do we assure learning?

- Write Degree LOS
- Map Degree LOS
- Collect Evidence
- Use Evidence
- Benchmark
How do we assure learning?

1. COLLABORATION
   - Benchmark
   - Use Evidence

2. Write Degree LOS
   - Map Degree LOS
   - Collect Evidence

3. HOLISTIC

4. SUSTAINABLE
   - COLLABORATION
   - INTEGRATED

Hunters & Gatherers
How do we assure learning?

- Design Curriculum
- Engage Students
- Facilitate Learning
- Assess Learning
- Review Practice
- Benchmark
- Write Degree LOS
- Collect Evidence
- Use Evidence
- Map Degree LOS
- Facilitate Learning
- Assess Learning
Curriculum design for assuring learning in business education – leading the way

2013 OLT National Teaching Fellow

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University of Wollongong
New South Wales
Designing learning

- Learning Outcomes
- Learning Activities
- Evaluation
- Assessment
Whole of Degree Approach
Whole of Degree Approach

Critical Thinking

Ethical Awareness

UNIVERSITY OF WOLLONGONG
Whole of Degree Process – How?

- Writing **Degree** Learning Outcomes
- Understanding Criteria and Standards needed to achieve the DLOs *(whole of degree rubrics)*
- Designing Authentic **Scaffolded** Assessment of DLOS
- Teaching DLOs with Effective Feedback/*Feedforward* Mechanisms
- Leading the Process – Facilitating Change
Designing learning

- Learning Outcomes
- Learning Activities
- Evaluation
- Assessment

• How will you/ students know if they can do it?
Considerations

• National (International)
  – Government Regulations
  – Discipline Thresholds
  – Professional Bodies
Council for Higher Education Accreditation
FOR A FAIR SELECTION EVERYBODY HAS TO TAKE THE SAME EXAM: PLEASE CLIMB THAT TREE
Considerations

• National (International)
  – Government Regulations
  – Discipline Thresholds
  – Professional Bodies

• Institutional/Faculty
  – University requirements (point of distinction)

• Degree
  – Context
  – Level
What are you assessing?

External – Govt, Prof Bodies

Internal – University GA

Degree Level – DLO
Valid Data for Quality Assurance

- Although quality assurance has been recognised as a critical component of educational enhancement principles there is little consistency as to how to achieve it.

- Of more concern, is the validity of the data being used to assure quality.
Streamlined Approach

Degree LO

Unit LO

Assessment
Streamlined Approach

Degree LO

UNSW LO

Assessment
Streamlined Approach

Degree LO + Unit LO → Assessment (Context/Level)
Step 1 – Design Authentic Assessment

- Select a Degree LO
  - How would students demonstrate the competence in industry/profession/real life?
  - Where would it take place?
  - How would you judge if it was good?

- Translate this into an **authentic** assessment tasks
## Step 2 – Rubric Development

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>STANDARD</th>
<th>BELOW EXPECTATIONS</th>
<th>MEETS EXPECTATIONS</th>
<th>EXCEEDS EXPECTATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GRADE</strong></td>
<td>Z</td>
<td>→</td>
<td>P → C</td>
<td>D → HD</td>
</tr>
<tr>
<td><strong>Demonstration of inter-relationships between differing business related disciplines</strong></td>
<td>Limited demonstration of integration between disciplines. e.g. identification or description only.</td>
<td>Sound demonstration of integration between disciplines. e.g. examination, explanation, interpretation, application or analysis of interrelationships.</td>
<td>Comprehensive demonstration of integration between disciplines. e.g. detailed examination, insightful analysis or interpretation, synthesis, extrapolation, evaluation and/or recommendations.</td>
<td></td>
</tr>
<tr>
<td><strong>Application of critical understandings of theoretical concepts underpinning perspectives in industry based scenarios.</strong></td>
<td>No / little application of critical understandings demonstrated. e.g. Only one perspective drawn on to demonstrate concepts.</td>
<td>Application of critical understandings demonstrated. e.g. 2-3 perspectives drawn on to demonstrate concepts.</td>
<td>Convincing application of critical understandings demonstrated. e.g. Relevant and innovative application drawn from multiple / global perspectives.</td>
<td></td>
</tr>
</tbody>
</table>
### Whole of Degree Rubric

**Degree LO1** Demonstrate essential knowledge necessary for a career in business related professions

<table>
<thead>
<tr>
<th></th>
<th>Year 1: Foundation</th>
<th>Year 2: Intermediate</th>
<th>Year 3: Competent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appreciation of essential concepts necessary for a career in business and related professions.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical analysis and evaluation of essential concepts.</td>
<td>e.g. Reference to concepts through definition or description only.</td>
<td>e.g. analysis demonstrated through explanation, discussion, investigation, application, interpretation of concepts.</td>
<td>e.g. involvement of reflection, judgment, problem-solving, synthesis, assessment, prediction.</td>
</tr>
<tr>
<td><strong>C</strong></td>
<td>Demonstrates some consideration of the economic, social and cultural aspects of international business context.</td>
<td>Demonstrates sound consideration of international economic, social and cultural differences between cultures and how these differences impact ways that business operates.</td>
<td>Demonstrates high level understanding of international economic, social and cultural environmental issues in an international business situation. e.g. accurate explanation of relevant actions and prediction of responses.</td>
</tr>
<tr>
<td>Consideration of the economic, social and cultural environments within which international businesses operate.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
http://www.uow.edu.au/cedir/deploy/animations/01683_OLT_Fellowship_Animations/animations003/final/
<table>
<thead>
<tr>
<th></th>
<th>Year 1: Foundation</th>
<th>Year 2: Intermediate</th>
<th>Year 3: Competent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>B</strong> &lt;br&gt;B. Critical analysis and evaluation of essential concepts.</td>
<td>Demonstrates some critical analysis/evaluation of essential concepts. E.g. Reference to concepts through definition or description only.</td>
<td>Demonstrates sound critical analysis / evaluation of essential concepts. E.g. analysis demonstrated through explanation, discussion, investigation, application, interpretation of concepts.</td>
<td>Demonstrates thoughtful critical analysis and evaluation of essential concepts. E.g. involvement of reflection, judgment, problem-solving, synthesis, assessment, prediction.</td>
</tr>
<tr>
<td><strong>C</strong> &lt;br&gt;C. Consideration of the economic, social and cultural environments within which international businesses operate.</td>
<td>Demonstrates some consideration of the economic, social and cultural aspects of international business context.</td>
<td>Demonstrates sound consideration of international economic, social and cultural differences between cultures and how these differences impact ways that business operates.</td>
<td>Demonstrates high level understanding of international economic, social and cultural environmental issues in an international business situation. E.g. accurate explanation of relevant actions and prediction of responses.</td>
</tr>
<tr>
<td>ULO</td>
<td>Below F</td>
<td>Meets P</td>
<td>Exceeds D</td>
</tr>
<tr>
<td>-------</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DLO1</td>
<td>Describes essential concepts of business</td>
<td>Explains essential concepts of business, demonstrating application of concepts.</td>
<td>Interprets essential concepts of business hypothesising, and assessing aspects of the concepts.</td>
</tr>
<tr>
<td></td>
<td>Demonstrates some consideration of the economic, social and cultural aspects of international business context.</td>
<td>Demonstrates sound consideration of international economic, social and cultural differences between cultures and how these differences impact ways that business operates</td>
<td>Demonstrates high level understanding of international economic, social and cultural environmental issues in an international business situation. e.g. accurate explanation of relevant actions and prediction of responses.</td>
</tr>
</tbody>
</table>
DLO 1
8 – Synthesize complex conflict and related theories and standards for professional practice in CMR.
9 – Evaluate complex conflict and related theories and standards for professional practice in CMR.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Grad Cert Fail</th>
<th>Grad Cert Pass MCMR Fail</th>
<th>Grad Cert Exceeds MCMR Pass</th>
<th>MCMR Exceeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(a) Understands the theories and standards for the purpose of applying them in practice</td>
<td>Does not identify key concepts of theories/standards and/or does not explain their relevance to practice.</td>
<td>Explain the key concepts of complex theories/standards in the field and their relevance to practice.</td>
<td>Comprehensively explains complex theories/standards in the field and their relevance to practice.</td>
<td>Comprehensively explains and critically analyses complex theories/standards in the field and their relevance to practice.</td>
</tr>
<tr>
<td>1(b) Demonstrate interrelationships between complex conflict and related theories and standards</td>
<td>Does not draw any links between theories and/or standards.</td>
<td>Explain the relationships between key concepts of complex conflict and related theories and standards</td>
<td>Comprehensively explains the relationships between complex conflict and related theories and standards.</td>
<td>Comprehensively explains and critically analyses the relationships between complex conflict and related theories and standards.</td>
</tr>
<tr>
<td>1(c) Draw conclusions</td>
<td>Conclusions not logically linked to theories and standards.</td>
<td>Draws logical conclusions from theories and/or standards.</td>
<td>Draws and explains logical conclusions from theories and/or standards.</td>
<td>Draws and critically justifies conclusions from theories and/or standards.</td>
</tr>
<tr>
<td>1(d) Apply theory/standards to practice</td>
<td>Incomplete application of theories/standards to practice.</td>
<td>Applies theory/standards to practice, utilising the main elements of the theory/standards</td>
<td>Effectively applies theory/standards to practice utilising relevant elements of the theory/standards.</td>
<td>Produces a comprehensive application of theory/standards to practice utilising relevant elements of the theory or shows innovation in application.</td>
</tr>
</tbody>
</table>
Step 3 – Scaffold Assessment throughout Curriculum

- Now look at this collection of assessment tasks and ask
  - How can you build throughout the course (increase complexity)? This is **scaffolded** assessment

<table>
<thead>
<tr>
<th>DLO</th>
<th>Assessment 1</th>
<th>Assessment 2</th>
<th>Assessment 3</th>
<th>Assessment 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Written</td>
<td>Memo to manager</td>
<td>Letter to client</td>
<td>Executive Summary</td>
<td>Full report</td>
</tr>
<tr>
<td>2 Ethics</td>
<td>Case study (one issue)</td>
<td>Case study (multiple issues)</td>
<td>Current News Analysis</td>
<td>Real Wicked Problem</td>
</tr>
</tbody>
</table>
Step 4 – Map to embed into the curriculum

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Task</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>DLO 1 – Assess 1</td>
<td>Memo to manager</td>
<td>HR101</td>
</tr>
<tr>
<td>DLO 1 – Assess 2</td>
<td>Letter to client</td>
<td>Mgt 201</td>
</tr>
<tr>
<td>etc</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Whole of Degree Marking**

<table>
<thead>
<tr>
<th>Hi achiever in 1st yr subject</th>
<th>Hi achiever in 2nd yr subject</th>
<th>Poor achiever in 3rd yr subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 1st year student achieved at 2nd year level. This version allows markers to grade using a 100% scale but still reveal to the student that their work is really at a 2nd year level. Obviously their mark on this criteria would be constrained to 100% for this actual task.</td>
<td>• 2nd year student achieved at 3rd year level. This version allows markers to grade using a 100% scale but still reveal to the student that their work is really at a 3rd year level. Obviously their mark on this criteria would be constrained to 100% for this actual task.</td>
<td>• 3rd year student achieved at 1st year level. This version allows markers to grade using a 100% scale but still reveal to the student that their work is really at a 1st year level. Obviously their mark on this criteria would be constrained to 0% for this actual task.</td>
</tr>
</tbody>
</table>
Sadler (2012) discusses commonly used options in assuring achievement including:

- overall results,
- external examiner systems,
- threshold standards
- and standardised testing,

but stresses problems with each of these methods unless a

- moderation and calibration process is included.
Calibration

Calibrating and grading to the standard

Pre-F2F
- Assess
- Enter
- Compare
- Consensus
- Agree

F2F

Post-F2F
- Apply
  - to assignment if student
  - to marking if faculty

Freeman, Hancock et al
Valid Data for Quality Assurance

- Yorke (2008) has also raised concern about adopting overall percentages as the indicator of quality.
- What does a percentage or grade point average or degree classification actually tell us;
  - which capabilities were actually assessed
  - at what level;
  - how grading was decided.
Yorke (2008) proposed that evidence can (some might say 'should') be created by students.

Creating ePortfolios is said to enable students to enhance their learning by giving them a better understanding of their skills and attributes, as well as where and how they need to improve to meet academic and career goals (Yancey, 1999).
Degree LO Evidence
Assessment . . .

“Students can escape bad teaching: they can’t avoid bad assessment”

“Assessment methods and requirements probably have a greater influence on how and what students learn than any other single factor”