Applying Constructive Alignment to Teaching, Learning and Assessment
Learning Outcomes

1. Explain constructive alignment.
2. Identify course learning outcomes for one of your courses.
3. Design teaching/learning activities to best achieve one of the course learning outcomes.
4. Design tasks to assess how well the course learning outcome has been achieved.
5. Reflect on the impact of this workshop on your role as a lecturer for implementing constructive alignment in teaching and assessment.
Student-centred Learning

The focus of teaching and learning is not what we teach but what we would like our students to learn and how we can help them achieve that.

The first step therefore is to define the course learning outcomes for our students.

Teaching and assessment are then designed and implemented to align to these outcomes.
Curriculum, Teaching and Assessment in Traditional Teaching

Curriculum:
A list of topics to be covered

Teaching:
Lecture, tutorial, practicum as defaults

Assessment:
Exam, assignment as defaults
CURRICULUM
This is in fact a design for teaching:

1. Define the *intended learning outcomes* that refer not only to content to be learned, but what is to be done with that content and to what standards.

2. Create a learning environment that is likely to engage the student in *learning activities* that will bring about the intended outcomes.

3. Use *assessment tasks* that directly address the outcome and that enable you to judge if and how well students’ performances meet the criteria.

4. Transform these judgments into summative grades.
Curriculum, Teaching and Assessment in Outcomes-based teaching and learning

Curriculum Intended learning outcomes
A list of topics to be covered BUT what are the students supposed to be able to do after learning those topics that they couldn’t do before? What are the intended learning outcomes of teaching?

Teaching
What learning activities should the students engage in order for them to best achieve those outcomes?

Assessment
What assessment tasks (tests, assignments) would really tell us how well they have achieved the intended learning outcomes?
Teacher's and Student's Perspective on Assessment: Outcomes-based teaching and learning

Teacher: Intended Outcomes  ➔ Teaching activities ➔ Assessment

Student: Assessment  ➔ Learning activities ➔ Outcomes
Implementing Outcomes-based Teaching and Learning using Constructive Alignment

Teaching: Engaging the student in the verb in the ILO apply

ILO: What the student has to learn (apply Psychology...)

Assessment: How well the student has met the ILO apply
**UNALIGNED COURSE**

- **Teacher's intention**
  - explain
  - relate
  - prove
  - apply

- **Student's activity**

- **Exam's assessment**
  - memorize
  - describe

"Dealing with the test"
**ALIGNED COURSE**

Teacher’s intention

- explain
- relate
- prove
- apply

→

Student’s activity

Exam’s assessment

e.g.
- explain
- relate
- prove
- apply
Alignment with teaching and assessment is created by the verbs in the CLOs

- For example: “*Explain* the historical evolution of nursing science”

- Teaching is specifically aimed at *activating* the verb
  For example: the students do the explaining to each other, providing feedback from rubrics defining aspects of a good explanation (at end of this presentation). They don’t just listen to the teacher doing the explaining.

- Students should be unable to complete the assessment tasks unless they enact the same verb that is in the CLO.
  For example: students could individually explain to the class how they see the historical evolution of nursing. The teacher, perhaps using peer assessment too, assess each explanation with the same rubrics.
<table>
<thead>
<tr>
<th>Common ILOs</th>
<th>Possible Assessment Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe</td>
<td>essay question, exam, oral presentation (peer assessment)</td>
</tr>
<tr>
<td>Explain</td>
<td>assignment, essay question exam, oral, letter-to-a-friend</td>
</tr>
<tr>
<td>Integrate</td>
<td>project, assignment</td>
</tr>
<tr>
<td>Analyse</td>
<td>case study, assignment</td>
</tr>
<tr>
<td>Apply</td>
<td>project, case study, experiment</td>
</tr>
<tr>
<td>Solve problem</td>
<td>case study, project, experiment</td>
</tr>
<tr>
<td>Design, create</td>
<td>project, experiment</td>
</tr>
<tr>
<td>Reflect</td>
<td>reflective diary, portfolio, self-assessment</td>
</tr>
<tr>
<td>Communicate</td>
<td>a range of oral, writing or listening tasks, e.g. presentation, debate, role play, reporting, assignment, precis, paraphrasing, answering questions etc.</td>
</tr>
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</table>
Implementing Constructive Alignment in Teaching and Assessment

Teaching:
Engaging the student in the verb in the ILO

ILO:
What the student has to learn

Assessment:
How well the student has achieved the ILO
Constructive Alignment in Teaching and Assessment
Designing Constructively Aligned Teaching and Assessment

There are four steps in designing such teaching and assessment:

1. state the *learning outcomes* in the form of *standards* students are to attain using appropriate learning verbs.

2. create a *learning environment* likely to bring about the intended outcomes.

3. use *assessment tasks* to enable you to judge if and how well students’ performances meet the outcomes.

4. develop *grading criteria (rubrics)* for judging the quality of student performance.
Procedures in Designing CLOs

1. Select the topics to be taught.

2. Decide the levels of understanding/performance the students are expected to achieve for the different topics.

3. Consider if all the CLOs are of equal importance.

4. Ensure a clear understanding and agreement of the CLOs within the teaching team and other relevant parties e.g. External Reviewer.

5. Communicate the CLOs to students.
Designing Teaching/Learning Activities to Align to Intended Learning Outcomes
## Four common teaching situations and associated teaching and learning activities

<table>
<thead>
<tr>
<th>Situation</th>
<th>Teaching activities</th>
<th>Learning activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>LECTURE</td>
<td>Talk, explain, clarify</td>
<td>Listen, take notes, accept, query, discuss with peers, one-minute paper</td>
</tr>
<tr>
<td>TUTORIAL</td>
<td>Set/answer questions provide feedback</td>
<td>Pre-read, prepare questions, learn from peers, critique, analyse</td>
</tr>
<tr>
<td>PROJECT</td>
<td>Set brief, provide ongoing feedback</td>
<td>Apply, create, self-monitor, communicate, teamwork</td>
</tr>
<tr>
<td>PBL</td>
<td>Set problems provide feedback</td>
<td>Set learning goals, design, apply, access desired content and integrate, solve problems</td>
</tr>
<tr>
<td>Typical ILO</td>
<td>Possible TLAs</td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Describe</td>
<td>Set reading, lecture, report on field trip, write essay</td>
<td></td>
</tr>
<tr>
<td>Explain</td>
<td>Tutorial, activities, write essay</td>
<td></td>
</tr>
<tr>
<td>Integrate</td>
<td>Project, assignment</td>
<td></td>
</tr>
<tr>
<td>Apply</td>
<td>Project, case study</td>
<td></td>
</tr>
<tr>
<td>Solve problem</td>
<td>PBL, case study</td>
<td></td>
</tr>
<tr>
<td>Design, create</td>
<td>Project, poster</td>
<td></td>
</tr>
<tr>
<td>Hypothesise</td>
<td>Experiment, project</td>
<td></td>
</tr>
<tr>
<td>Reflect</td>
<td>Reflective diary</td>
<td></td>
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</table>

The point is not how you are going to teach but how and what you want your students to learn.

**NOTE!** Many of these TLAs can be assessments tasks as well. Then you have excellent alignment.
Assessment Tasks (ATs)
Assessment Tasks (ATs)

- Provide students the opportunity to demonstrate whether or not they have achieved the ILOs and what level their performance is in those ILOs.

- Should be appropriately designed or selected to address the ILOs that we want to assess.

- Different assessment methods (tasks) address different ILOs. There should therefore be different types of task as appropriate.

- Provide the evidence allowing teachers to make a judgment about the level of a student’s performance against the ILOs and to award a final grade.

- Provide constructive feedback to students on their learning.
Selecting Assessment Tasks

A range of different assessment tasks may be required to address the range of ILOs of a subject.

Questions to be asked in selecting assessment tasks:

1. Are the assessment tasks aligned to their appropriate ILOs? Are the students required to engage in the verbs identified in the ILOs?
2. Do the assessment tasks reflect the relative importance of the subject ILOs?
3. Are the assessment tasks practicable with respect to available time and resources?
4. Is the assessment workload realistic for teachers and students?
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<tr>
<td>Describe</td>
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<td>Explain</td>
<td>Assignment, essay question exam, oral presentation</td>
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<td>A range of oral, writing or listening tasks addressing the ILOs, e.g. presentation, debate, role play, reporting, assignment, précis, paraphrasing, answering questions</td>
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## Assessments Tasks for Large Classes

<table>
<thead>
<tr>
<th>Some ATs</th>
<th>Useful for</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exam</strong></td>
<td>Ensuring work is student’s own, mostly multistructural ILOs</td>
</tr>
<tr>
<td><strong>Multiple choice</strong></td>
<td>Recognition, strategy, coverage</td>
</tr>
<tr>
<td><strong>Ordered outcome items</strong></td>
<td>Hierarchies of understanding</td>
</tr>
<tr>
<td><strong>Poster</strong></td>
<td>Integration, application, creativity</td>
</tr>
<tr>
<td><strong>Concept maps, Venn diagrams</strong></td>
<td>Coverage, relationships</td>
</tr>
<tr>
<td><strong>Three minute essay</strong></td>
<td>Different levels of understanding, sense of relevance</td>
</tr>
<tr>
<td><strong>Short answer</strong></td>
<td>Recall units of information, coverage</td>
</tr>
<tr>
<td><strong>Letter-to-a-friend</strong></td>
<td>Integration, application, reflection</td>
</tr>
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Example of a Concept Map:
Implementing Outcomes-based Teaching and Learning using Constructive Alignment

**Teaching:** Engaging the student in the verb in the ILO

**ILO:** What the student has to learn

**Assessment:** How well the student has achieved the ILO
Example of a Venn Diagram

Provision of professional service

Customers

Staff

Professional Service

Management

1

2

3

Explain the interaction that would occur in sites 1, 2 and 3 in relation to providing professional service.
Learning Outcomes/Assessments

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References