Alternative Assessment Methods/Tools:
Developing Students' Critical Thinking Skills - Self- & Peer-assessment

Dr Kokin Lam (CM)
David Santandreu Calonge (EDO)
THIS WAS A PRODUCTIVE FOUR-HOUR LEADERSHIP MEETING.

I'D LIKE ONE OF YOU TO TYPE UP YOUR NOTES AND SEND AN E-MAIL TO THE ENTIRE COMPANY.

OKAY, NO PROBLEM. DOES ANYONE REMEMBER WHAT WE DECIDED?

WE AGREED TO INCREASE... SOMETHING.

NO, DECREASE SOMETHING.

NEVER MIND. LET'S TRY IT AGAIN ON THURSDAY AT 8 A.M.

WHEN IS THE NEXT LEADERSHIP MEETING?

I SHOULD HAVE WRITTEN THAT DOWN.

NO ONE TOOK NOTES?

I DIDN'T HAVE A PEN.
By the end of this session you will be able to:

- **Analyze** the diverse goals of assessment
- **Generate** ideas for **Assessment Tasks** which meet these goals within the OBTL framework at City University
- **Reflect** on the advantages and disadvantages of self and peer assessment
What is Assessment?

- Pairs/small groups to consider what assessment is - a definition?
- What does it involve for the student?
- What does it involve for the assessor?
- Why do we assess?
Assessment involves "... 
✓ making our expectations explicit and public;
✓ setting appropriate criteria and high expectations for learning quality;
✓ systematically gathering, analyzing, and interpreting evidence to determine how well performance matches those expectations and standards; and
Paradox and Infinity Problem Set 1: Zeno’s Paradoxes

How this problem set will be graded:

- Assessment will be based on the reasons you give in support of your answers, rather than the answers themselves. (Keep in mind that even if it is unclear whether your answer is correct, it can be clear whether or not the reasons you have given in support of your answer are good ones. It is only the latter that will be taken into account.)

- No answer may consist of more than 150 words. Longer answers will not be given credit.

- These two constraints are often in competition: it may sometimes seem to you that you can’t argue for your answer properly in 150 words or less. Learning to deal with this problem is a skill you will acquire with practice. The ability to distill what is essential about a point in a few words requires clear thinking, and it is clear thinking I am after.

Are these expectations very clear and explicit?
What is assessment?

Generally, assessment is the **systematic basis for making inferences about the learning and development of students**.

More specifically:

- **Provides data/information** you need on your students’ learning
- **Engages** you and others in analyzing and using this data/information to confirm and improve teaching and learning
- **Produces evidence** that students are learning the outcomes you intended
- **Guides you** in making educational and institutional improvements
- **Evaluates** whether changes made improve/impact student learning, and documents the learning and your efforts
Why do we Assess?

- To provide ‘objective’ evidence of student attainment
- To maintain institutional/national/international standards
- To demonstrate professional competence for accreditation
- To provide benchmarks of educational level
1. What do we want our students to achieve (aims/goals & outcomes)?

2. How do we help our students achieve them (teaching & learning activities)?

3. How do we know our students have achieved them (assessment tasks)?
How Do We Add Value To Assessment

- Thinking and cognition
- **Metacognition**: Thinking about thinking
- Imagination and creativity: Student and teacher!
- What is a fair test?
Traditional Assessment:

- ‘Objective’ Testing
- Advantages and disadvantages?
- Essay Testing
- Advantages and disadvantages?
### Advantages and Disadvantages of Different Traditional Test Items

<table>
<thead>
<tr>
<th>Type</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short answer</td>
<td>Can test many facts in short time. Fairly easy to score.</td>
<td>Difficult to measure complex learning. Often ambiguous.</td>
</tr>
<tr>
<td>Essay</td>
<td>Can test complex learning, assess thinking process/creativity.</td>
<td>Difficult to score objectively. Uses a lot of testing time. Subjective.</td>
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<tr>
<td>True/False</td>
<td>Test most facts in shortest time. Easy to score. Objective.</td>
<td>Difficult to measure complex learning. Difficult to write reliable items. Subject to guessing.</td>
</tr>
<tr>
<td>Matching</td>
<td>Excellent for testing associations and recognition of facts. Objective.</td>
<td>Difficult to write effective items. Subject to process of elimination.</td>
</tr>
<tr>
<td>Multiple choice</td>
<td>Can assess learning at all levels of complexity. Can be highly reliable, objective. Tests large knowledge base in short time. Easy to score.</td>
<td>Difficult to write. Somewhat subject to guessing.</td>
</tr>
</tbody>
</table>
Alternatives to Traditional Assessments:

- Authentic Classroom Assessment
- Portfolios and Exhibitions
- Posters, Presentations and Performances
- Informal Assessments
- Peer assessment

KEEP A JOURNAL OF EVERYTHING YOU DO. THAT WAY YOU'LL KNOW WHERE YOU NEED HELP.

Now I am writing in my journal, I am still writing in my journal. Now I am writing about writing in my journal.

OHHH, I THINK I FELT A LITTLE PERSONAL GROWTH THERE.

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## Formative and Summative Assessment

<table>
<thead>
<tr>
<th></th>
<th>Formative</th>
<th>Summative</th>
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</thead>
<tbody>
<tr>
<td><strong>Time</strong></td>
<td>During a learning activity/unit</td>
<td>At the conclusion of a learning activity/unit</td>
</tr>
<tr>
<td><strong>Goal</strong></td>
<td>To improve learning</td>
<td>To make a decision</td>
</tr>
<tr>
<td><strong>Feedback</strong></td>
<td>Return to material/learning issues</td>
<td>Final judgement</td>
</tr>
<tr>
<td><strong>Frame of reference</strong></td>
<td>Always criterion (evaluating all students according to the same criteria)</td>
<td>Sometimes normative (comparing each student against the others)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sometimes criterion (evaluating each student according to the same criteria)</td>
</tr>
<tr>
<td></td>
<td>Criterion</td>
<td>Norm</td>
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<td>----------------</td>
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</tr>
<tr>
<td><strong>Time</strong></td>
<td>During a learning activity/unit at the conclusion of a learning activity/unit</td>
<td>At the conclusion of a learning activity/unit</td>
</tr>
<tr>
<td><strong>Goal</strong></td>
<td>To find out if a student has reached a certain criteria on a skill, ability and behaviour To find out the characteristic of the individual</td>
<td>To compare the students in relation to their peers To find out a student’s ability in relation to others</td>
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Self assessment?

- Research shows that students at all levels see assessment as something that is done to them on their classwork by someone else.

- “The assessment of student learning emphasizes self-assessment as a natural part of the learning process” (Indiana university).

- Students describe their general approaches to learning, or their learning styles, by comparing themselves with several different profiles and choosing those that, in their opinion, most closely resemble them.

Student Portfolios

**WHAT IS IT?**

Portfolios are collections of student work representing a selection of performance.

**WHY TRY IT?**

Portfolios capitalize on students' natural tendency to save work and become an effective way to get them to take a second look and think about how they could improve future work.
Research indicates that self-evaluation plays a key role in fostering an upward cycle of learning.
A Four-Stage Model for Teaching Student Self-Evaluation

- **STAGE 1** - **Involve** students in *defining the criteria* that will be used to judge their performance.

- **STAGE 2** - **Teach** students how to *apply the criteria* to their own work. If students have been involved in a negotiation in Stage 1, the criteria that result will be an integrated set of personal and university *goals*. Since the goals are not entirely their own, **students need to see examples of what they mean in practice**.
STAGE 3- Give students feedback on their self-evaluations.

STAGE 4- Help students develop productive goals and action plans. Without teacher help, students may be uncertain whether they have attained their goals.
Peer assessment?

- One of the ways in which students internalize the characteristics of quality work is by evaluating the work of their peers.

- For peer evaluation to work effectively, the learning environment in the classroom must be supportive.

- Students can also benefit from using rubrics or checklists to guide their assessments. Students do not learn to monitor or assess their learning on their own; they need to be taught strategies for self-monitoring and self-assessment.

This kind of practice helps students to be aware of their learning. It also informs the teacher about students' thoughts on their progress, and gives the teacher feedback about course content and instruction.
Peer-assessment can be an invaluable means of involving students closely in their own and each other's learning.

1. Student presentations
2. Reports
3. Essay plans
4. Calculations
5. Interviews
6. Annotated bibliographies
7. Practical work
8. Poster displays
9. Portfolios
10. Exhibitions and artifacts
Timing Assessment

- Avoiding the Assessment Balloon!
- Frequent Assessment
- Timely Assessment
- Cumulative Assessment
Examples of Assessment for Deeper Learning

- Use a real-life case
- Set-up scenes
- Set up appearance in classroom ‘court’
- Follow the real-life processes
- Decide on what outcomes you are assessing and prepare a rubric
Conclusions

- Assessment requires attention to outcomes but also and equally to the experiences that lead to those outcomes.

- Be aware of and respond to student differences.

- Specify clear learning outcomes.

- Use formative assessment to monitor progress.

- Ensure students are aware of criteria for success on summative assessment.

- Provide varied forms of assessment
IS YOUR PLAN CONSISTENT WITH OUR CORPORATE STRATEGY?

HOW WOULD I KNOW?

DON'T YOU KNOW OUR STRATEGY?

NO. DO YOU?

OF COURSE I DO. IT'S SOMETHING ABOUT LEVERAGING OUR PLATFORMS.

DOES YOUR PLAN LEVERAGE OUR PLATFORMS?

NO, BUT I CAN REWRITE MY PLAN SO IT SEEMS AS IF IT DOES.

GOOD. GO BACK AND DO THAT.

THERE'S NO POINT IN HAVING A STRATEGY IF YOU AREN'T GOING TO PRETEND TO FOLLOW IT.
Thank you!