



Constructive Alignment

By Dina Yassin



Who am I?

- A **Special Educational Needs Coordinator (SENCo)** for almost 10 years.
- A **Master's degree holder in Special & Inclusive Education** from University College London (UCL)
- Aspiring for a **PHD degree in Practices of Inclusion & Psychological Assessments.**
- I enjoy working with **students with disabilities** in all contexts.



What are the Criteria of a Good Teacher?

- ▶ A **good** teacher **establishes clear objectives** for each lesson and works to meet those specific objectives during each class.
- ▶ A **good** teacher **designs learning activities** for students. They Focus on activities which activate students such as **peer instruction**, and **peer review** that contribute substantially to student learning.
- ▶ A **good** teacher **designs assessment tasks** that capture student time and attention, and generate appropriate student learning activity.



What is Constructive Alignment!



Constructive Alignment

- ▶ **Constructive Alignment** is based on the twin principles of **Constructivism** in Learning, and **Alignment** both of **teaching** and of **assessment tasks** to the **intended learning outcomes**.
- ▶ In a **constructively aligned** system, all components- **intended learning outcomes, teaching/learning activities, assessment tasks**- support each other, so the learner is enveloped within a supportive learning system.



The Intended Learning Outcomes of the Curriculum

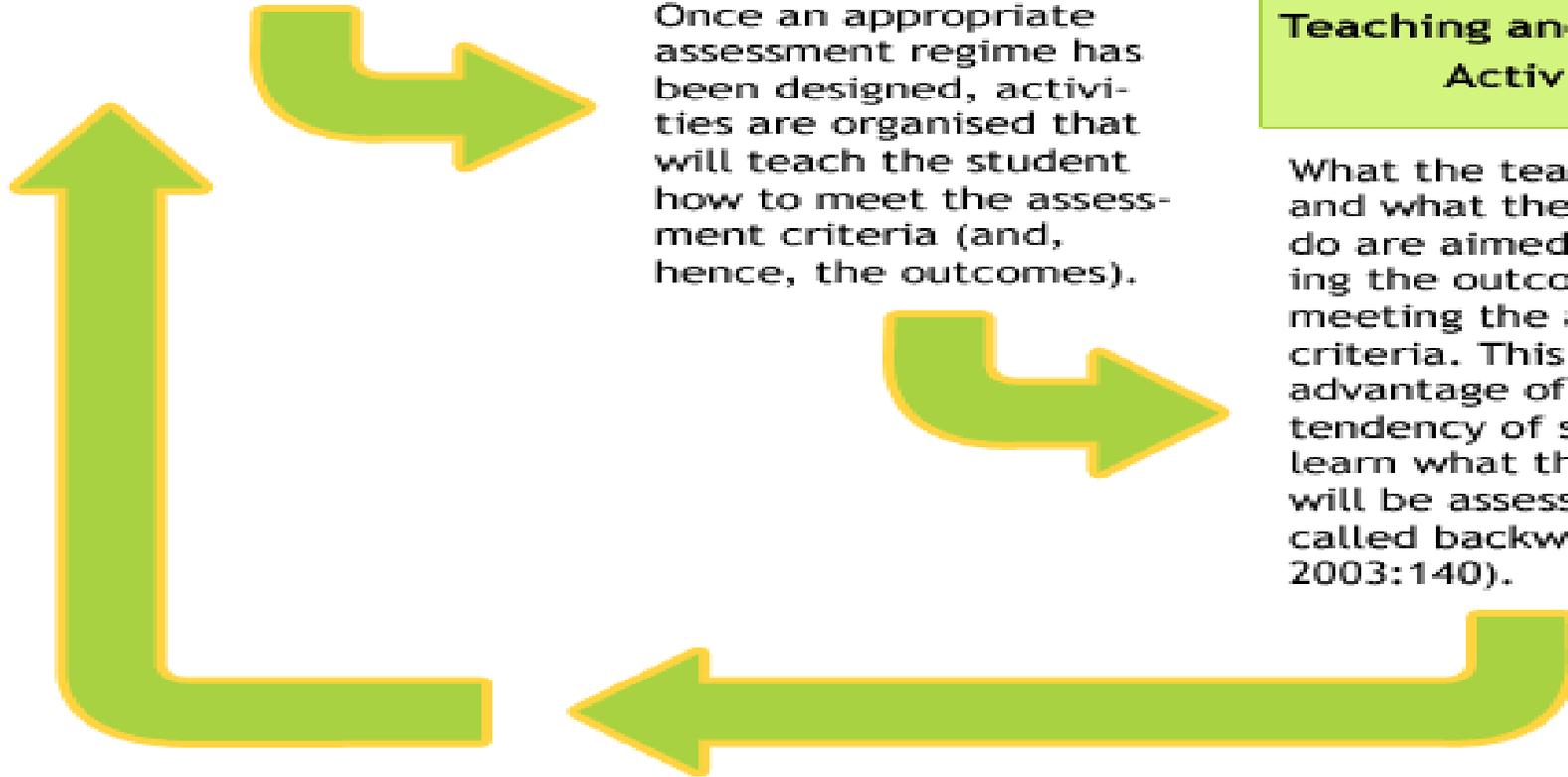
The outcomes are formulated first. From these the assessment criteria are developed.

The Assessment Regime

Once an appropriate assessment regime has been designed, activities are organised that will teach the student how to meet the assessment criteria (and, hence, the outcomes).

Teaching and Learning Activities

What the teacher does and what the students do are aimed at achieving the outcomes by meeting the assessment criteria. This takes advantage of the known tendency of students to learn what they think will be assessed - and is called backwash (Biggs 2003:140).





Intended Learning Outcomes (ILOs)

The **ILOs** are statements written from the **students'** **perspectives** indicating the level of understanding and performance they are expected to achieve as a result of engaging in the **teaching** and **learning** experience.



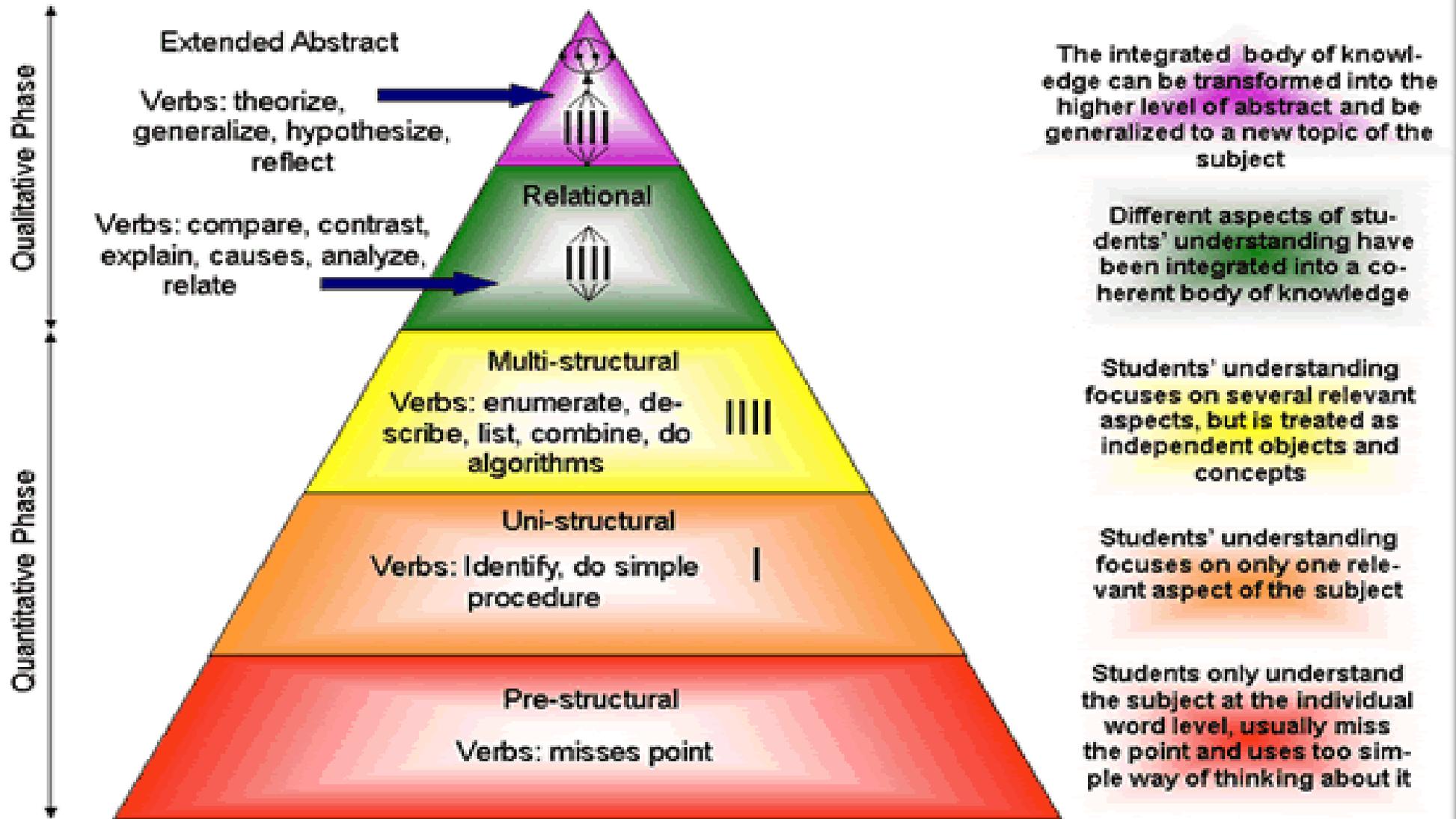


Intended Learning Outcomes (ILOs)

Solo Taxonomy

SOLO, which stands for the **S**tructure of the **O**bserved **L**earning **O**utcome, is a means of classifying learning outcomes in terms of their complexity, enabling us to assess students' work in terms of its **quality** not of how many bits of this and of that they have got right.

SOLO Taxonomy



5 Levels in the SOLO Taxonomy

Information at each level



Intended Learning Outcomes (ILOs)

Solo Taxonomy

- **Pre-structural:** the task is not attacked appropriately; the student hasn't really understood the point or needs help to start.
- **Uni-Structural:** the student's response only focuses on one relevant aspect.
- **Multi-structural:** the student's response focuses on several relevant aspects, but they are treated independently and additively.
- **Relational:** the different aspects have become integrated into a coherent whole. This level is what is normally meant by an adequate understanding of some topic.
- **Extended abstract:** the previous integrated whole may be conceptualized at a higher level of abstraction and generalized to a new topic area.



Intended Learning Outcomes (ILOs)

Solo Taxonomy

- ▶ **Solo** help students think about the strengths and the weakness of their own thinking, to “**Learn to Learn**”.
- ▶ **Solo** help schools develop a wide understanding of:
 1. The learning process.
 2. Learning intentions & learning outcomes.
 3. Self assessment of the learning process.
 4. Interventions (thinking interventions & e-learning interventions).

SOLD
TAXONOMY
MINECRAFT

FUNCTIONING KNOWLEDGE





Intended Learning Outcomes (ILOs)

- ▶ The ***ILOs*** for ***The Nature of Teaching and Learning*** course, with the learning activities or verbs italicized;
 1. *Explain* why a particular course topic is important to teaching;
 2. *Apply* a course topic to your own teaching;
 3. *Reflect* on your teaching in terms of a working theory you have gained from the course.
 4. *Evaluate* a situation that has gone wrong and *apply* a solution.

Teaching & Learning Activities (TLAs)





Teaching & Learning Activities (TLAs)

- ▶ **TLAs** include independent learning with self addressed questions (what is the most important idea in today's session?), and small group learning and collaborative learning with learning partners, a reflective diary, etc...
- ▶ **TLAs** are usually obtained through negotiations between the teacher and his/her students. The following dialogue illustrates how this could happen (S are students, T is teacher)

S *How do we show we can reflect?*

T *keep a reflective diary or journal and/or talk it over with your colleagues.*

S *Wouldn't it be better if we had a discussion groups so we can share experience.*

T *certainly. I have already booked the room next door. You can meet there*



Teaching & Learning Activities (TLAs)

The **TLAs** for *The Nature of Teaching and Learning* course, with the learning activities or verbs italicized;

1. *Explain* why a particular course topic is important to teaching.

TLAs: Plenary sessions with pre-readings and notes used for learning information. Discussion on application to teaching with partners and in small groups (Peer Instruction)

2. *Apply* a course topic to your own teaching.

TLAs: Application of the different teaching practices/models, recorded in reflective diary.

3. *Reflect* on your teaching in terms of a working theory you have gained from the course

TLAs: keep reflective diary on critical incidents; discuss with group/learning partner (Peer Instruction)

4. *Evaluate* a situation that have gone wrong and apply a solution.

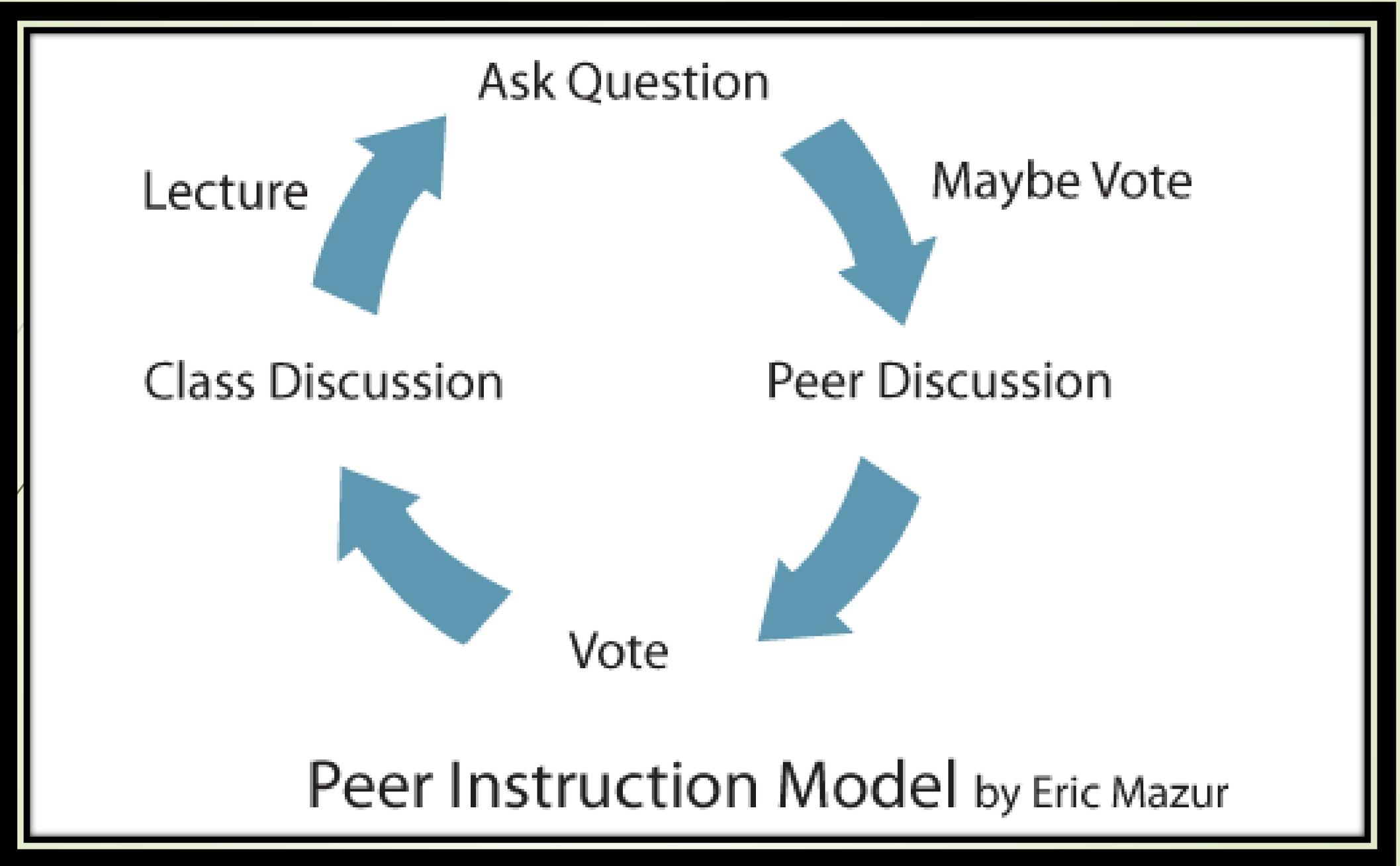
TLAs: use workplace resources, group/learning partner comparing perspectives on evaluating and applying.



Teaching & Learning Activities (TLAs)

Peer Instruction

- ▶ **Peer instruction** is an interactive teaching technique introduced by Harvard Physics Professor Eric Mazur in the late nineties.
- ▶ In Mazur's technique, multiple-choice conceptual questions are posed at key parts of the lecture. If the majority of the students' responses are incorrect they are asked to **turn to their neighbor** to convince them of their answer.
- ▶ This technique works best if students prepare before class and then test their application of knowledge in class where they have opportunities for rich feedback (self, peer and teacher).
- ▶ This technique is a form of the **flipped classroom** which presents an opportunity for educators to understand the basis of the flipped classroom model



Lecture

Ask Question

Maybe Vote

Class Discussion

Peer Discussion

Vote

Peer Instruction Model by Eric Mazur



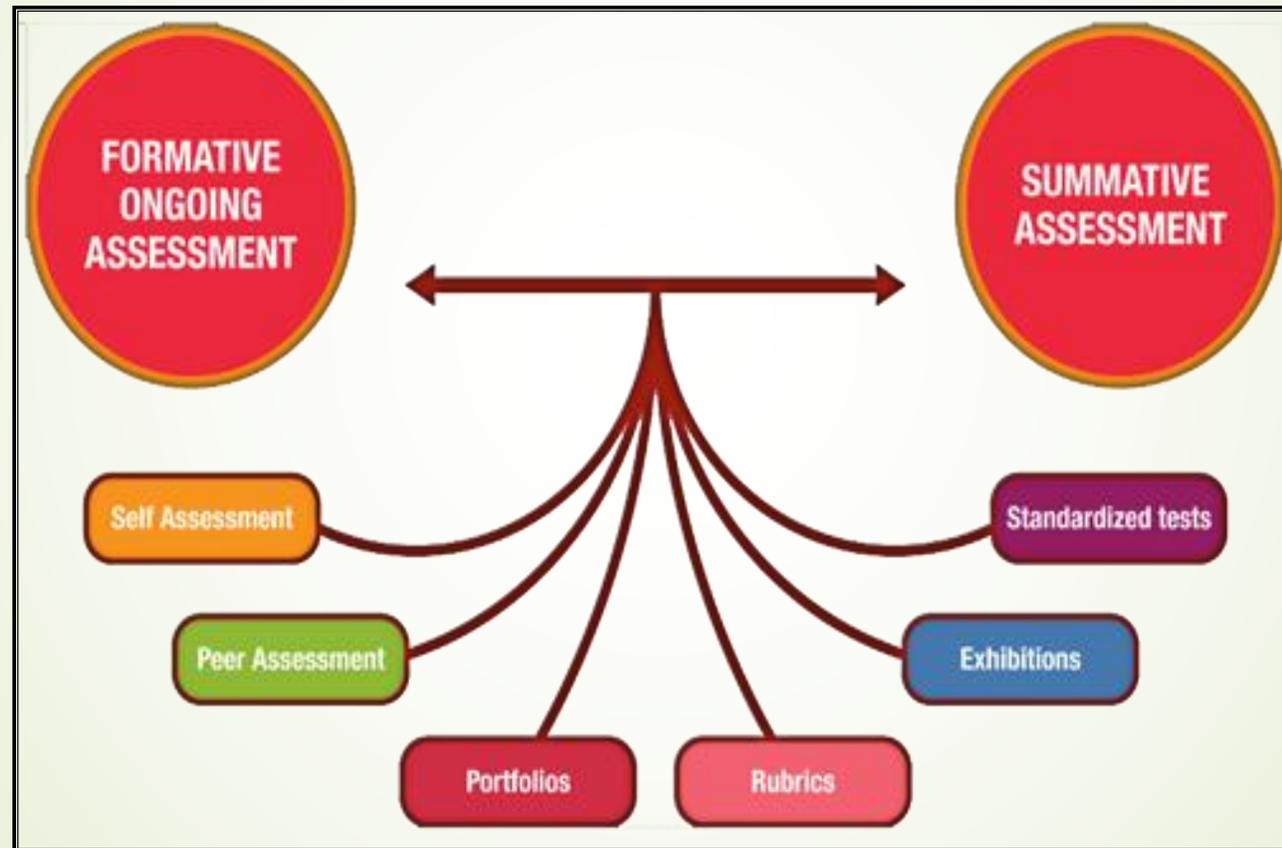
Teaching & Learning Activities (TLAs)

Peer Instruction

► How do we do it?

1. Provide students with materials to study before class to prepare them for active learning in class.
2. After a brief lecture (10-15 minutes) ask students a challenging conceptual question.
3. Individuals think for 1-2 minutes.
4. Ask students to vote on their answer (show of hands, cards, electronic voting- e.g. UQ Poll).
5. If under 30% are correct then revisit the concept.
6. Ask individuals to think and re-vote.
7. If 30-70% are correct, engage in peer discussion (pairs or small groups).
8. Students re-vote. If over 70% are correct then explain the answer and move on. If they are still struggling, revisit the concept (e.g. mini lecture) and repeat the process.

Assessment Tasks (ATs)





Assessment Tasks (ATs)

- ▶ **ATs** should be;
- ✓ directly relating to the **ILOs**.
- ✓ explicit about what learners are required to do.
- ✓ time efficient and manageable.
- ✓ including clear and explicit assessment criteria.
- ✓ providing challenge for the full range of learners being assessed.
- ✓ fair to all students including those with **Special Educational Needs**.
- ✓ scored or marked based on transparent rubrics.
- ✓ appropriate to where learners are in their learning.



Assessment Tasks (ATs)

The **ATs** for *The Nature of Teaching and Learning* course, with the learning activities or verbs italicized;

1. *Explain* why a particular course topic is important to teaching.

ATs: set yourself a 2000 word essay on one of two nominated topics.

2. *Apply* a course topic to your own teaching.

ATs: written report explaining relevant diary entries concerning the application, problems encountered, student reactions.

3. *Reflect* on your teaching in terms of a working theory you have gained from the course

ATs: present selected parts of diary with comments: explain how your portfolio items meet ILOs and self-evaluate.

4. *Evaluate* a situation that have gone wrong and apply a solution.

ATs: write a case study of a critical incident in your own teaching and how you dealt with it.



How to Assess your Own Teaching!

Teaching Portfolio

Teaching portfolio (it could be an e-portfolio) is a collection of evidence about your teaching and your student's learning, and a self reflection of that evidence.

► It helps you to;

1. Keep a personal record of your teaching practice.
2. Reflect on your teaching philosophy and practice.
3. Identify your strength and areas for improvement as a teacher.
4. Plan your professional teaching development.

Kelly Tams' Teaching Portfolio



[Home](#)

[Resume](#)

[My Philosophy of Education](#)

[Planning for Teaching](#)

[Lesson and Unit Plans](#)

[Adapting for Special Needs Learners](#)

[Special Topics Project](#)

[Behaviour Management](#)

[Assessment](#)

[Technology in the Classroom](#)

[Extra-Curricular Involvement](#)



You are visiting my digital teaching portfolio. I have recently completed my fourth and final year at McGill University in the Kindergarten and Elementary Bachelor of Education program. I hope that you will learn all about the kind of teacher I would like to become. Welcome to Miss Tams's classroom!



How to Assess your Own Teaching!

Peer Review of Teaching (PRT)

The primary purpose of **Peer Review of Teaching** is to provide feedback for continuing professional development of individual teachers. A teacher invites a colleague, a critical friend, to observe his/her teaching and/or teaching materials to provide feedback for reflection and improvement.



How to Assess your Own Teaching!

► Some conditions for effective **Peer Review of Teaching (PRT)**:

1. The purpose and the intended outcomes of the **PRT** exercise should be clearly defined.
2. Participation must be voluntary.
3. The reviewee should be given the choice of his:
 - a. His/Her reviewer.
 - b. Which classes to be observed or what teaching materials to be reviewed.
4. All feedback should be returned to the reviewee and used for developmental purposes only.



How to Assess your Own Teaching!

► **PRT** should include the following **four stages**;

- 1. Pre-review meeting** between the reviewer and the reviewee to discuss purpose and intended outcomes of the review, type of the feedback that would be helpful to the teacher, and to make logistics arrangement.
- 2. The actual review** usually involves a real-time teaching session where the students should be informed why an extra person is present in the classroom.
- 3. Post-review meeting.** During the meeting , feedback is provided by the reviewer for further discussion, and maybe clarification.
- 4. Post-review reflection** by the teacher based on the feedback to identify areas for improvement and to develop an action plan for future changes.

Peer Review of Class Assignments & Assessments

Peer Review of Class Assignments and Assessments

4=Strongly Agree 3=Agree 2=Disagree 1=Strongly Disagree NA=Not Applicable

Areas	Best Practices	4	3	2	1	NA
Class Assignments						
	The assignments probe different student skill sets.					
	Assignments are clearly aligned with course objectives.					
	Assignments are spread appropriately across the semester.					
	The difficulty of assignments across the semester is appropriate for the course level.					
	The workload required by the assignments is appropriate to the credit load for the course.					
	The instructions for these assignments are clear.					
Assessments						
	The assessments probe different student skill sets.					
	Assessments are clearly aligned with course objectives.					
	The difficulty of assessments is appropriate for the course.					
	The instructions for these assessments are clear.					
	Criteria for each assessment are clearly delineated.					

Comments:

Peer Review of Syllabus

Peer Review of Syllabus

4=Strongly Agree 3=Agree 2=Disagree 1=Strongly Disagree NA=Not Applicable

Syllabus Areas	Best Practices	4	3	2	1	NA
Course Information The objectives are appropriate to the course. Class materials are appropriate to the course. The syllabus provides clear roadmaps for the course. Course Policies are clearly stated (e.g., criteria for grading, makeup exams). Required university statements are present (e.g., academic misconduct). Criteria for grading are clearly delineated.						
Instructor Information	The percentage of the grade for course assignments and exams is clearly stated.					

Comments:



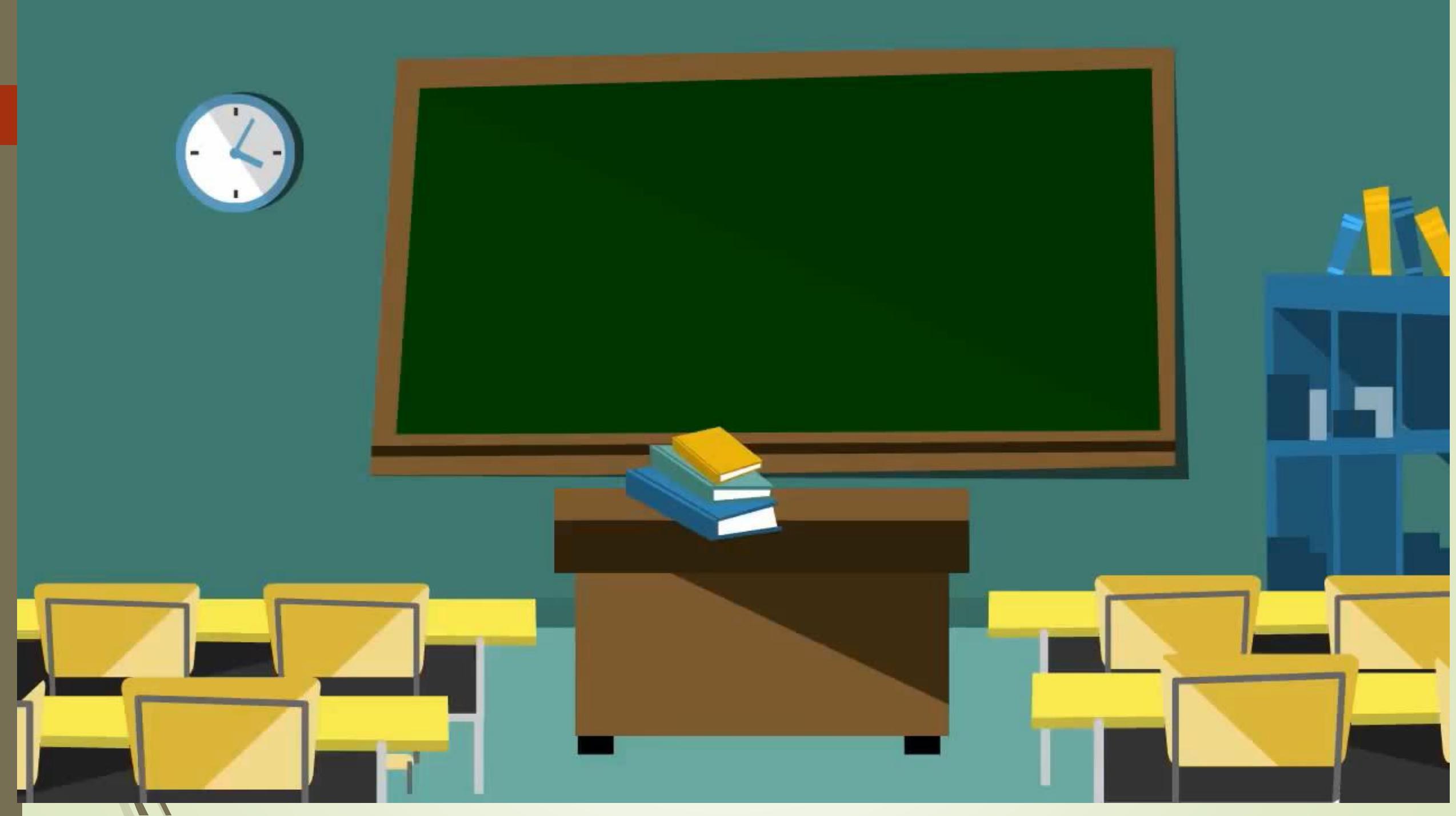
Evaluation of Constructive Alignment

- ▶ **What level is your department/faculty/school at?**
- ▶ **What actions would you take as either a program leader or head of department or faculty dean to enable a higher level of implementation of Constructive Alignment in your department/faculty/school?**

Constructive Alignment Development Framework at Department/Faculty/School level



	Level 1	Level 2	Level 3	Level 4
Implementing CA	-CA is worked on at a declarative level of understanding that CA is aligning ILOs with teaching and assessment.	CA is about defining the ILOs, but TLAs and ATs are only loosely aligned to the ILO	-ILOs, TLAs, and ATs, are constructively aligned using verbs in the ILO. -Evidence collected on the effectiveness of the implementation.	In addition to level 3, ways of ongoing improvement to the system are in place through reflective practice and action research.
Observable indicators	-Completion of necessary documentation but no consistent or clear alignment between courses ILOs, little or no mention of graduate outcomes. -No obvious staff support structures within the department/faculty/school	-Completion of necessary documentation, reasonable alignment between program & course outcomes, but little attempt to align program and graduate outcomes. - Isolated supportive structures, such as CA facilitators, but no clear or systematically defined roles. - Mechanism for systematic feedback and evaluation not implemented.	-Mapping of course, program, and graduate outcomes done with thorough and wide consultation. -Mechanism for systematic and reliable feedback and evaluation is properly implemented. - Teaching is seen as a departmental activity, with systematic support structures, and staff development. - Encouragement and support of action research in CA in teaching and learning. - CA facilitators, teaching and learning committee, all interact systematically. - CA effort awarded.	-CA is regarded as the norm for teaching in the department/faculty/school. - In addition to level 3, colleagues and departments generate new ideas, strategies, solutions, pedagogies, and technologies for enhancing teaching & learning. - Substantial evidence of success/effectiveness in implementing CA is collected, reflected and acted on. - Quality Enhancement is established as a culture. - Hard evidence of improved learning outcomes from departmental-based action research - Colleagues publish their research on teaching and learning related topics.





Practical Activity

- ▶ Take a course that you are teaching;
- A.** What are three of the things that you expect your students to be able to do at the end of the course?
- B.** How do you *teach* your students to do these things?
- C.** How do you *assess* your students on doing these three things?

Your reflection:

What do you think of the alignment between A, B, and C?



Thank you!