

Soo Yuen Jien

2022 October



Center for Development of Teaching & Learning

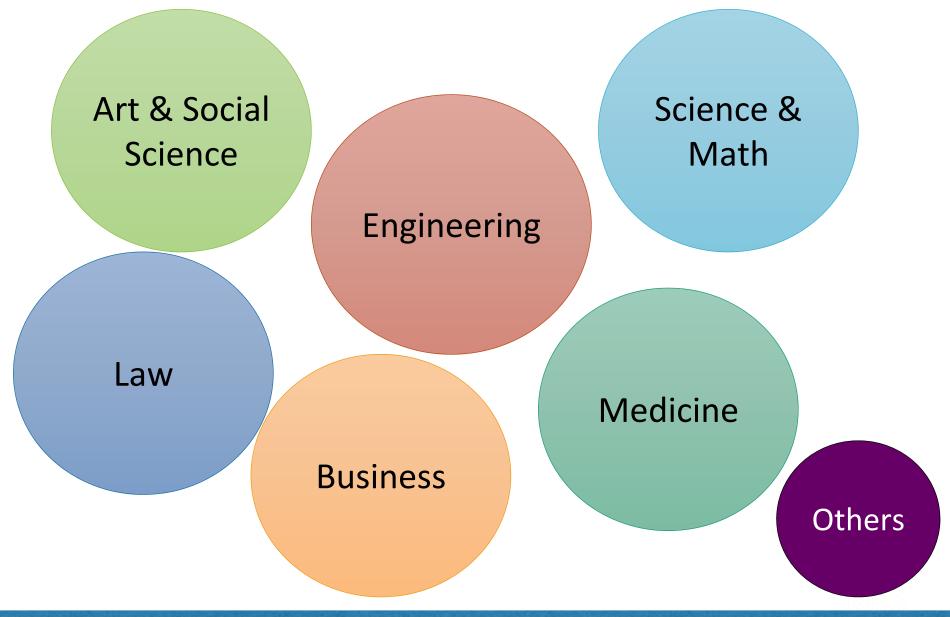
Soc School of Computing

Faculty member development & training

Support University Initiatives in T&L 20+ years in CS teaching

NUS OEA 2018 Tech Enhanced Education

### Discipline Domain (Warm Up)



### Workshop Agenda

- 1. Key ideas in Assessment and Feedback (40 mins)
  - Main room
- 2. Assessment Case Studies (30 mins)
  - Breakout rooms
- 3. Sharing of observations and approaches (20 mins)
  - Main room

### Workshop Assumption & Approach

- For colleagues relatively new to teaching
- For colleagues with some exposures to pedagogy
  - Defined Intended Learning Outcome (ILOs) for your course(s)
- Light on theory, lean on sharing and focus on "on the ground" practices

# Key Ideas in Assessment and Feedback

(40 minutes)

### Continuous Assessment vs Final Exam



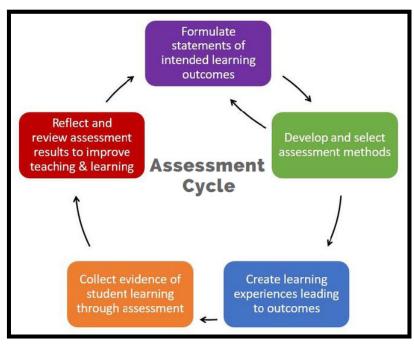
### How do you assess learning outcomes?

 Draw a simple flow diagram to explain how you go about assessing students' performance or learning outcomes?

## The Assessment Cycle

Assessment Cycle

### Our focus for Today



 What aspects of assessment do you find challenging? setting the **criteria** for assessing the work

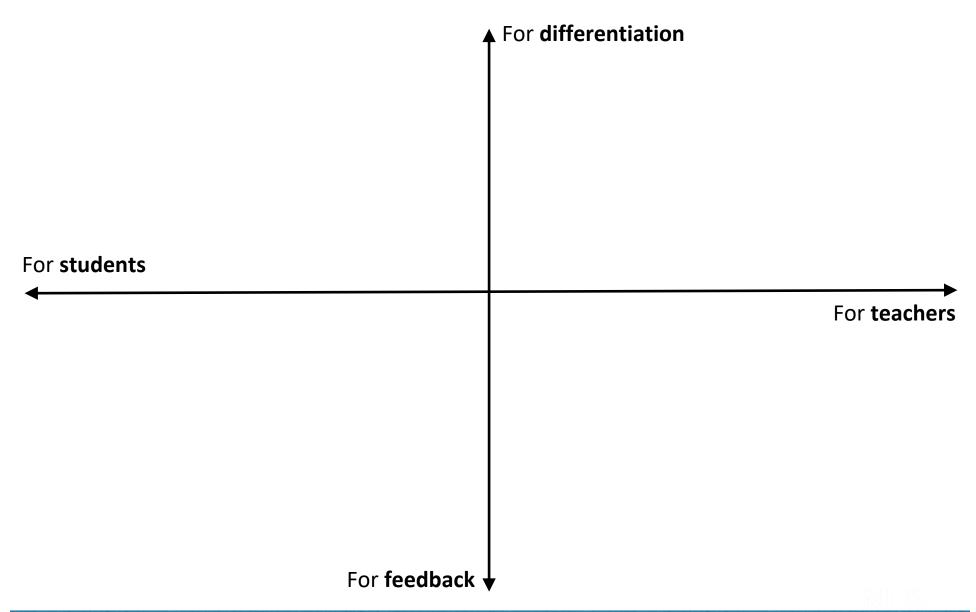


selecting the **evidence** that would be relevant to submit to judgement against those criteria



making a **judgement** about the extent to which these criteria have been met

### The landscape of Assessment

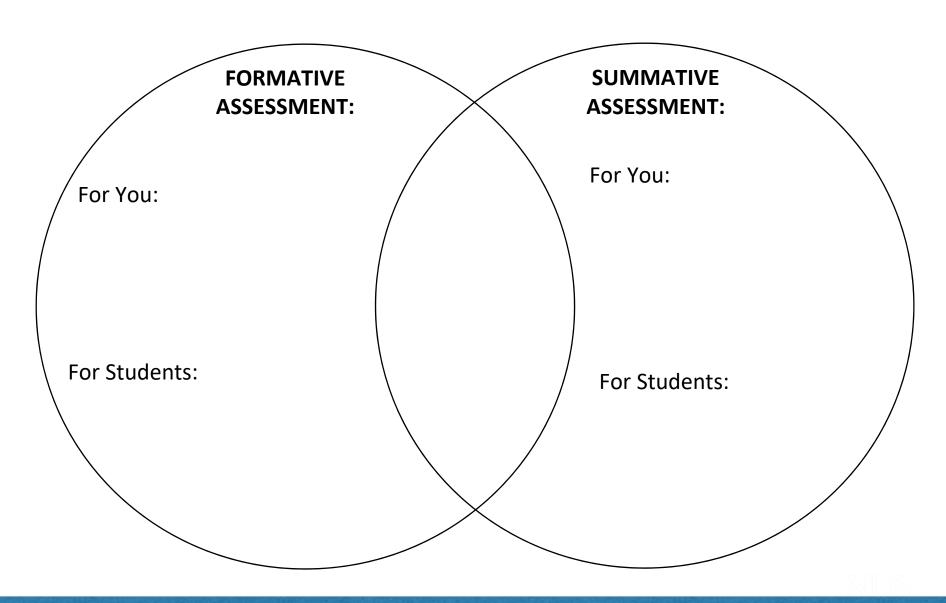


### Where does your Assessment stand?

Place *tick* ✓ somewhere along the continuum that best represents your assessment design:

<u>-</u>	 	 	
Formative			Summative
Using open-ended assessment tasks			Using close-ended assessment tasks
Feedback is discussed			Feedback is delivered
Involving your students			All teacher controlled

# What purpose (formative or summative) does assessment serve for you and your students?



### Is there clarity of purpose in your assessment?

#### FORMATIVE ASSESSMENT:

#### For Staff

- To monitor student learning.
- To ascertain progress.
- To check understanding.
- · To teach responsively.

#### For Students

- To evaluate their own learning.
- To build knowledge.
- To identify strengths and weaknesses.
- To continually improve learning.
- · To target learning.

#### BOTH:

- Are ways to assess student learning.
- Are opportunities to give and receive feedback.
- Are ways to evaluate the effectiveness of teaching.

### SUMMATIVE ASSESSMENT:

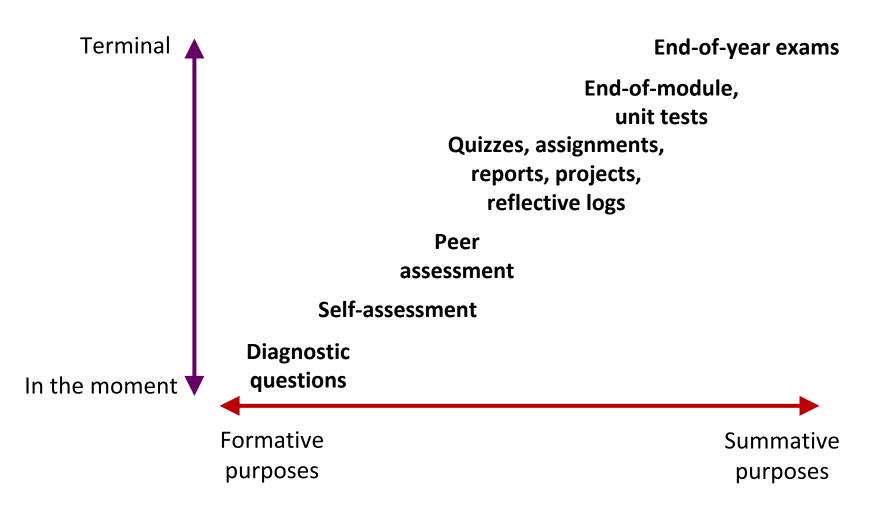
#### For Staff

- To measure whether a student has met learning outcomes, and to what extent at the end of a unit of study.
- To make further improvements in future iterations.

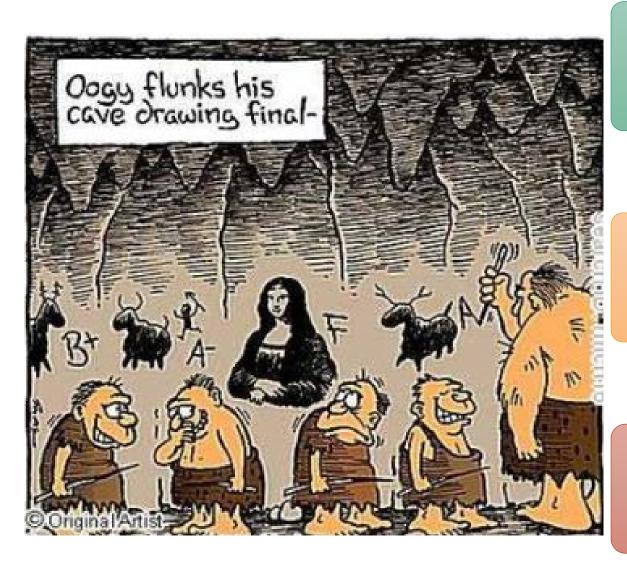
#### For Students

- To understand their overall performance in a unit of study.
- To understand whether they have met the learning outcomes, and to what extent, at the end of a unit of study.

### Is your assessment fit for purpose?



# What is your understanding of quality work?



setting the **criteria** for assessing the work

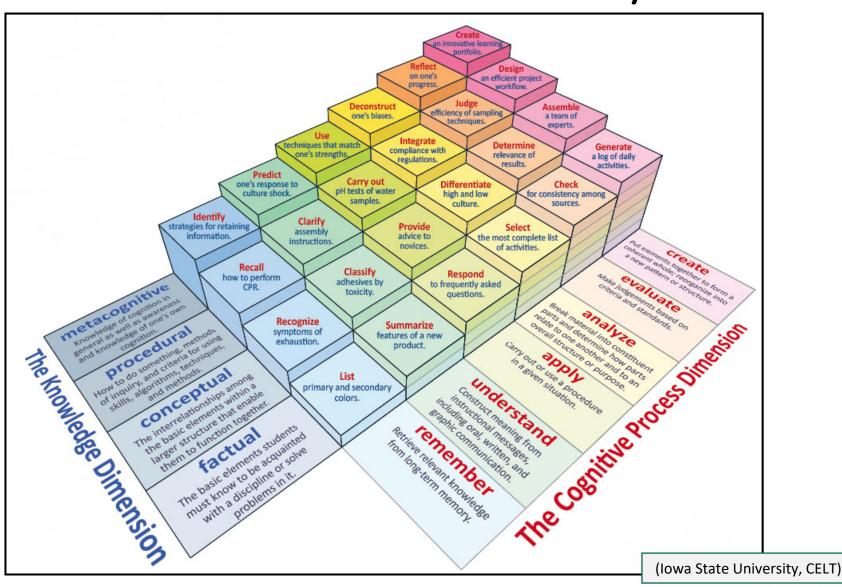


selecting the **evidence** that would be relevant to submit to judgement against those criteria



making a **judgement** about the extent to which these criteria have been met

# One possible model: Revised Bloom Taxonomy



### Summary: Qualities of a Good Assessment

- 1. Elicit higher-order cognitive skills
- 2. Are fair, and free of bias
- 3. Can be **generalized** and be **transferable**, at least across topics within a domain
- 4. Ensure the **quality of content** is consistent with the best current understanding of the field
- 5. Recognize the comprehensiveness, or scope, of content coverage
- 6. Are high-fidelity assessment of critical abilities
- 7. Are **contextualized** and **meaningful** to students' educational experiences
- 8. Are practical, efficient and cost-effective

Linn et al, 1991; Darling-Hammond et al., 2013).

### Giving feedback to students

- What are the strengths of this work?
- Which part of the work was especially good?

What has been done well in relation to the learning criteria?

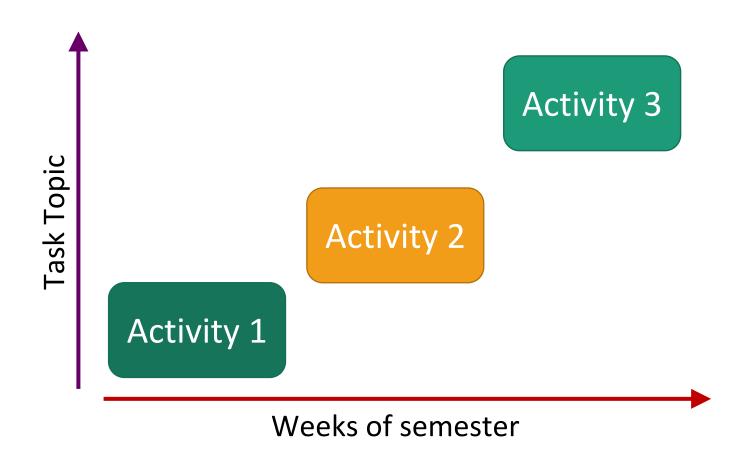
What still needs to be done in order to achieve the learning criteria?

- What are the most important issues which limit the overall quality of the work?
- Why is it problematic?

- What one or two steps would make the most difference to the student's next piece of work?
- How to go about making changes which would help the student to progress in future work?

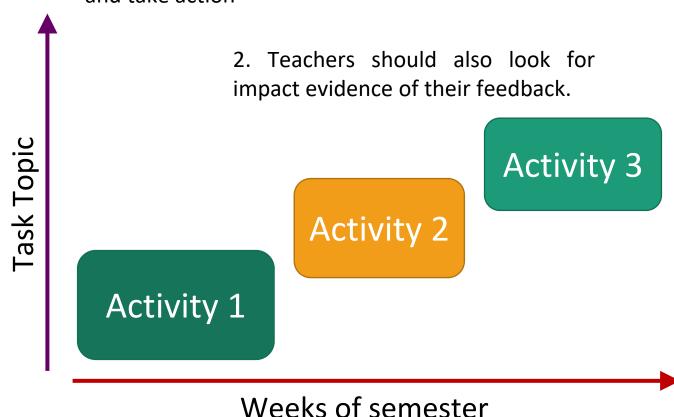
How to achieve that improvement?

### How to create feedback opportunities?

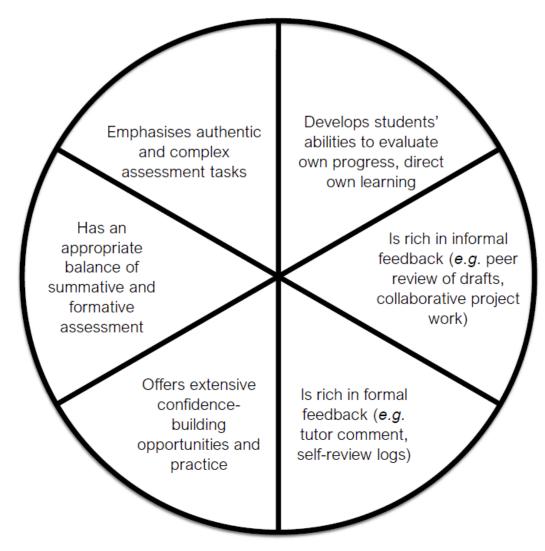


### How to create feedback opportunities?

1. Student need opportunity to reflect on the feedback, apply it, and take action

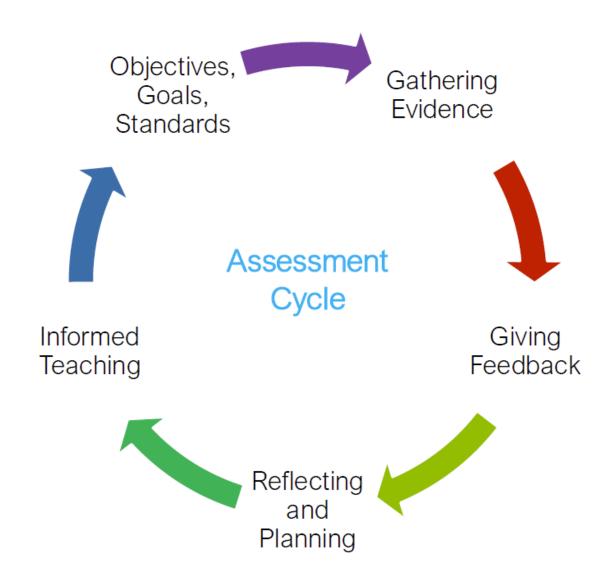


### **Holistic Assessment Considerations**



Sambell, K., L. McDowell and C. Montgomery (2013) Assessment for Learning in Higher Education, Abingdon: Routledge.

### Assessment: Role in Teaching & Learning



### Summary: Assessment

 "all those activities undertaken by teachers—and by their students in assessing themselves—that provide information to be used as feedback to modify teaching and learning activities."

 "Such assessment becomes formative assessment when the evidence is actually used to adapt the teaching to meet student needs"

### Summary: Educational Assessment

"Educational assessment refers to the set of methods and processes by which evidence about student learning is designed, collected, scored, analysed, and interpreted. These processes are meant to support decisions about teaching, learning, administration, policymaking, and accountability".

"The processes depend on expert judgement and statistical analysis of the quality of the assessment methods, their relationship to intended objective or outcomes, and the validity of consequences".

Brown, G.T.L. (2018). Assessment of student achievement. New York: Routledge.

# **Assessment Case Studies**

Observe, Reflect, Discuss and Share (30 minutes)

### **Quick Briefing**

- Let's ensure you have access to the materials
- Activity Sheet:

https://docs.google.com/presentation/d/1FDbOATzZ4n5 3WeWVkL91osl8vS9ipX-nUV5EzRtCLLs/edit?usp=sharing

• Shared folder:

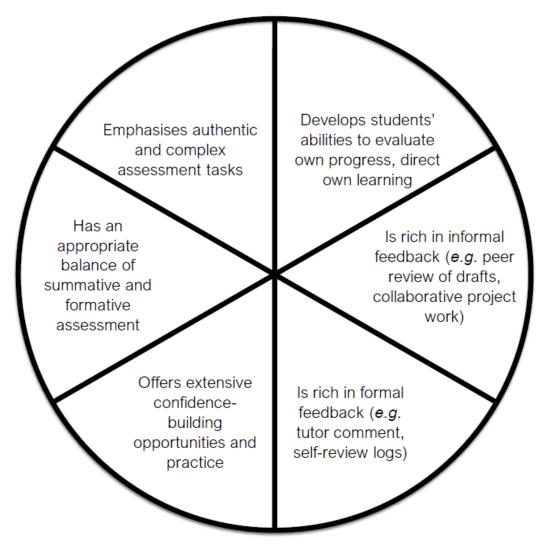
https://drive.google.com/drive/folders/1Xfqxv2Z7MyeZf OKj9PAPCRs3m5fFREo2?usp=sharing

 Time is now \_\_\_\_\_\_, we will meet back in the main room at \_\_\_\_\_

# Sharing of Observations and Approaches

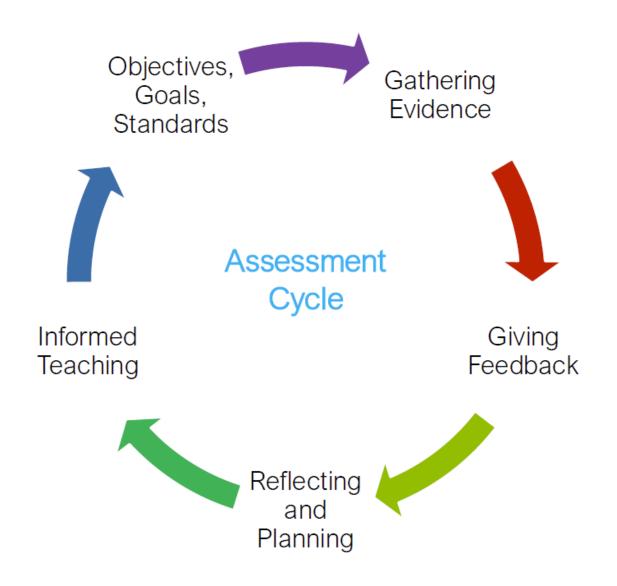
(20 minutes)

### **Holistic Model**



Sambell, K., L. McDowell and C. Montgomery (2013) Assessment for Learning in Higher Education, Abingdon: Routledge.

# Assessment: Evidence collection mechanism



### Acknowledgement

- Content and lesson design:
  - NUS CDTL:

Adrian Lee, Kiruthika Ragupathi, Mark Gan

- Case Studies:
  - NUS Colleagues:

Adrian Lee, Chris McMorran, Loy Hui Chieh, Dan Friess

# End

Thank you