### That GE แห่งเอาห์ เรื่อง การบ่มเพาะความเป็นมนุษย์ที่สมบูรณ์ด้วยการศึกษาทั่วไป ประจำปี 2564 เรื่อง การบ่มเพาะความเป็นมนุษย์ที่สมบูรณ์ด้วยการศึกษาทั่วไปท่ามกลางความพลิกผันของสถานการณ์โลก

### Assessment Skill Workshop 3 ให้มีประสิทธิภาพในวิชาศึกษาทั่วไป

ผู้ช่วยศาสตราจารย์ ดร.จิตต์ภิญญา ชุมสาย ณ อยุธยา

ผู้อำนวยการสำนักนวัตกรรมการเรียนรู้ มหาวิทยาลัยศรีนครินทรวิโรณ



ประธานคณะทรรมการการวัดการความรู้ด้วยวิชาการ สำนักนวัตกรรมการเรียนรู้ มหาวิทยาลัยศรีนครินทรวิโรณ





### Formative Assessment

for Outcomes-based Learning in General Education



- 1 ผู้ช่วยศาสตราจารย์ ดร.จิตต์ภิญญา ชุมสาย ณ อยุธยา
- อาจารย์ ดร.สุนทรี สกุลพราหมณ์
- อาจารย์ ดร.เมทินี ทนงกิจ

สำนักนวัตกรรมการเรียนรู้ มหาวิทยาลัยศรีครินทรวิโรฒ

### วิทยากร



ผู้ช่วยศาสตราจารย์ ดร.จิตต์ภิญญา ชุมสาย ณ อยุธยา,SFHEA ผู้อำนวยการสำนักนวัตกรรมการเรียนรู้ มหาวิทยาลัยศรีนครินทรวิโรฒ



อาจารย์ ดร.สุนทรี สกุลพราหมณ์ ผู้ช่วยผู้อำนวยการฝ่ายแผนและประกันคุณภาพ สำนักนวัตกรรมการเรียนรู้



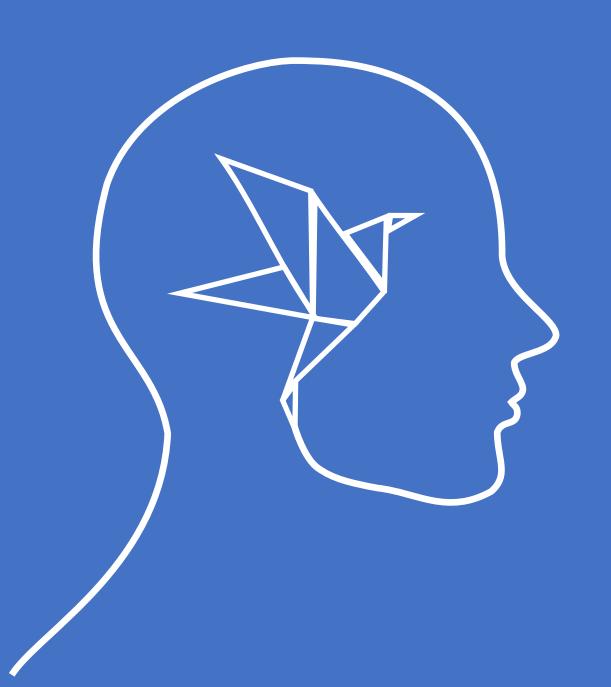
อาจารย์ ดร.เมทินี ทนงกิจ,SFHEA ประธานคณะกรรมการการจัดการความรู้ด้านวิชาการ สำนักนวัตกรรมการเรียนรู้

## Formative Assessment in GE



- 2 Formative Assessment
- 3 Reflection and Feedback
- 4 Digital Formative assessment tools





## Outcomes-based Assessment

### Overview of Outcomes-based Assessment

- Outcome-based assessment is a type of assessment which need to determine what degrees learners have accomplished the learning outcomes.
- The assessment development is depend on learners' learning outcomes which are clearly stated and measurable.
- Outcomes statements tell what a learner is expected to know and be able to do, and the measure instrument (test, survey, observation, performance measure, and group evaluation) are well prepared to obtain a measure of the degree to which the learners is able to meet the outcome expectation.

### 3 Levels Model of Outcome Statement



Goal level (GL)

- General learning outcome level (GLO)
- Specific learning outcome level (SLO)

### Goal level (GL)

- Directly relate to main topics and goals which you maps out for the course.
- Link to department or college goals.
- •3-5 goals are sufficient for a course.
- •Learner's success at the level is typically what you would report to administrators.

### General learning outcome level (GLO)

- Provide the additional clarification to broken down the GL into more specific statement that clarify goal.
- 2-4 GLOs are sufficient for a GL
- Useful for communicating with learners about course expectation.
- Typically appear in your course syllabus.
- Good for reporting overall learner success in your course at the department or program level.
- Not specific enough to be made measurable item.

## Specific learning outcome level (SLO)

- Provide specify that measurable items can be directly make from them.
- Typically appear in your teaching and assessing plan for telling the expect knowledge, skills, and attributes which the learner will show.
- Use to communicate with the learner along the learning process in order to make improvement that reach the expected SLO and GLO.
- Rubrics scoring as direction to help the learner improve their performances to the expected SLO.

### วิชา พลวัตสังคมไทยกับวิถีชีวิตที่มีความพอเพียง

GL : เข้าใจสภาพการเปลี่ยนแปลงทางสังคมไทยตั้งแต่อดีตถึงปัจจุบัน

GLO: สามารถอธิบายลักษณะสังคมไทยในแต่ละยุค

SLO : 1. บอกลักษณะการเปลี่ยนแปลงของสังคมไทยแต่ละยุค

- 2. อธิบายเปรียบเทียบข้อดี ข้อเสียของสังคมไทยในแต่ละยุค
- 3. วิเคราะห์ปัญหาและผลกระทบของการเปลี่ยนแปลงที่มีต่อการดำเนินชีวิต ของคนไทยในแต่ละช่วงการปลี่ยนแปลง

GL : เชื่อมโยงแนวคิดวิถีชีวิตที่มีความพอเพียงมาใช้ในสังคมปัจจุบันอย่างเหมาะสม

GLO : ประยุกต์แนวคิดวิถีชีวิตที่มีความพอเพียงมาใช้ในสังคมปัจจุบันได้อย่างมีวิจารณญาน

SLO: 1. อธิบายแนวคิดปรัชญาเศรษฐกิจพอเพียง

- 2. นำเสนอตัวอย่างบุคคลที่ประสบความสำเร็จจากการมีวิถีชีวิตแบบพอเพียง
- 3. แสดงออกถึงการนำวิถีชีวิตพอเพียงตามหลัก 3 ห่วง 2 เงื่อนไข มาพัฒนาการดำเนินชีวิตตนเองให้ดีขึ้น

# Example: 3 levels of GE outcome statement

## Purposes of Assessment



Certification

Quality assurance

Learning

Lifelong learning

Assessment of learning

Assessment of learning

Assessment for Learning

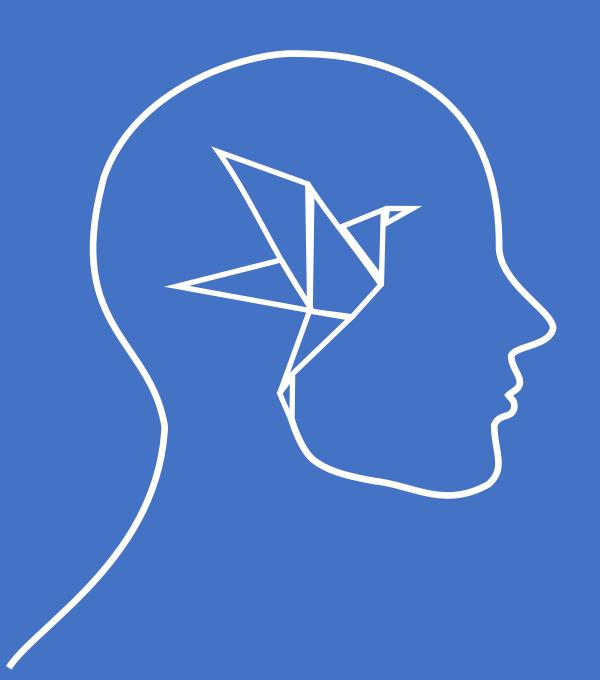
Assessment as learning

### Assessment for Learning

- Emphasize the formative and diagnostic function of engaging learners in assessment.
- Helping learners learn through completing their assignments and gaining feedback.
- Provide information about learner achievement to both teachers and learners.
- Enable learners to self- regulate their learning and the teacher to respond to the needs of the learners

### Assessment as Learning

- See Learners involvement in assessment as moment of learning in themselves.
- To develop learners' ability to self-assess and self-regulate their learning as essential to being an effective independent learner beyond formal education.
- It is an important subset of assessment for learning.



## Formative Assessment

### Assessment for/as Learning: Formative Assessment



Learning-oriented assessment as design tasks which lead to learning.

When learners are involved in evaluating their own works and when feedback is forward-looking so that learners can act upon it.





### How to Promote & Employ Formative Assessment

• Learning and assessment should be integrated, assessment should not come at the end of learning but should be part of the learning process.

#### The assessments should

- provide feedforward for future learning and rich in formal feedback.
- encourage metacognition, promote thinking about the learning process not just the learning outcomes.
- expect to be made visible to learners as far as possible.
- be used to evaluate teaching as well as learners' learning.

### How to Promote & Employ Formative Assessment

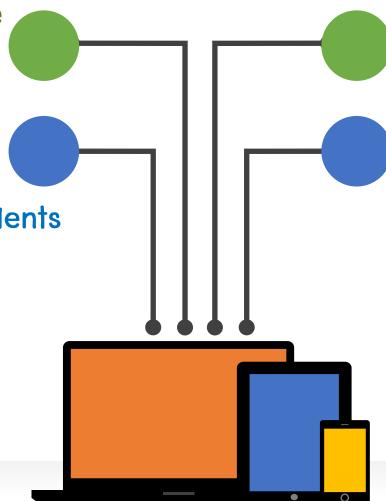
#### The tasks should

- be challenging, demanding higher order learning, integration of learning from both the university and other contexts such as work-based setting.
- involve the active engagement of learners developing the capacity to find things out for themselves and learn independently.
- -be authentic, worthwhile, relevant and offering learner some level of control over their work.
- fit for purpose and align with important learning outcomes.
- Learners are involved in self- assessment and reflection on their learning and in judging their performance.

### Fundamental Questions for Security & Validity in Online Assessment

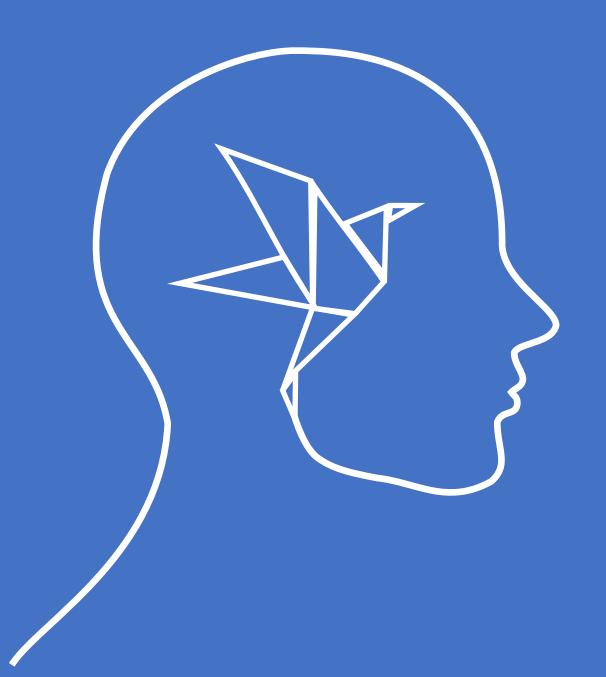
Does the assessment measure learners' success in meeting the learning outcomes?

Does the course prepare students for the assessment and equip them with the skills needs to undertake it?



Does the assessment act as a learning tool in itself?

Does the assessment provide useful and timely feedback and sustaining learners' engagement?



## Reflection & Feedback

## Reflection & Feedback

Some instructors worry about Reflection & Feedback that will increase their learners' workload.

The necessary conditions needed to encourage students to continue completing formative tasks (Reflection & Feedback) once they enter higher education:



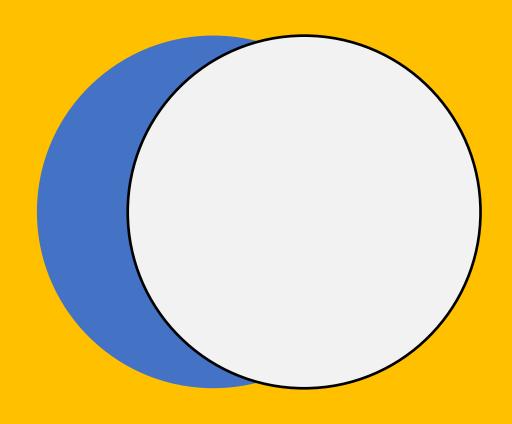
Explicitly help learners' complete summative assessment tasks. And lead to learners receiving useful feedback.

Required the learners to

submit it in some way (Bring to class, Post online, Hand it in) An action is taken if taken if they fail to do.

To provide a safe context for learners to expose problems with their study and obtain help.

3



### Reflection

The process of critically assessing of the effort to interpret and give meaning to an experience.

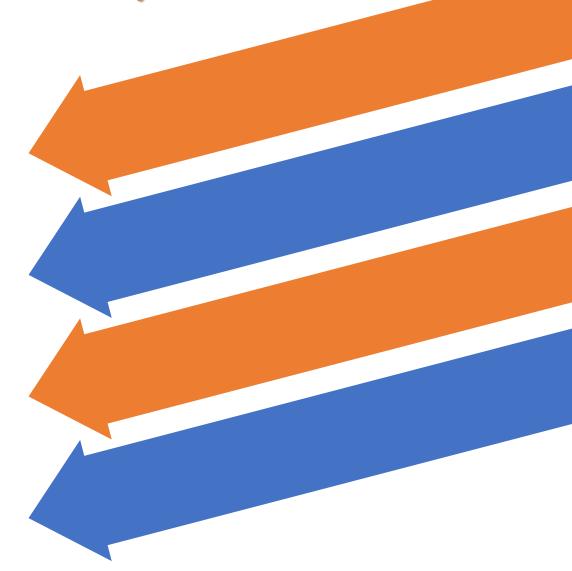
"Stop and Think" about What we do or have done?

## Reflection Model

### GIBBS' Reflective Cycle

Gibbs developed his reflective cycle from an educational perspective.

It is a popular model to assist with reflective practice. It can be applied to reflection on any type of experience



## Questions for Reflection (Gibb's model)



What were you thinking and feeling?

### 4. Critical Analysis

What sense can you make of the situation?



### V

What was good and bad about the experience?

3. Initial Evaluation

### 5. Conclusion

What else could you have done?



What would you do if a similar situation arose again?



What Happened?

## Questions for Reflection (AAR's model)



# Reflection for Transformative Learning

- Reflection on Content focus on attention on physical clues such as healthy, active, and productivity.
- Reflection on Process focus on assess the adequacy of the efforts to find relevant and dependable clues in order to improve the performance in solving similar problems in the future.
- Reflection on Premise focus on the merit, norm, common sense, ideologies, paradigms and philosophies relevant the question such as why do? or should do?

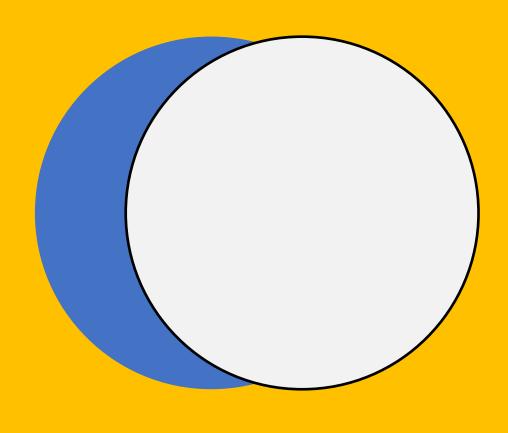




Learner has aware and freedom.

Learning process and learning support.

(Channels, Activities, Time limit, Judgment, Useful)

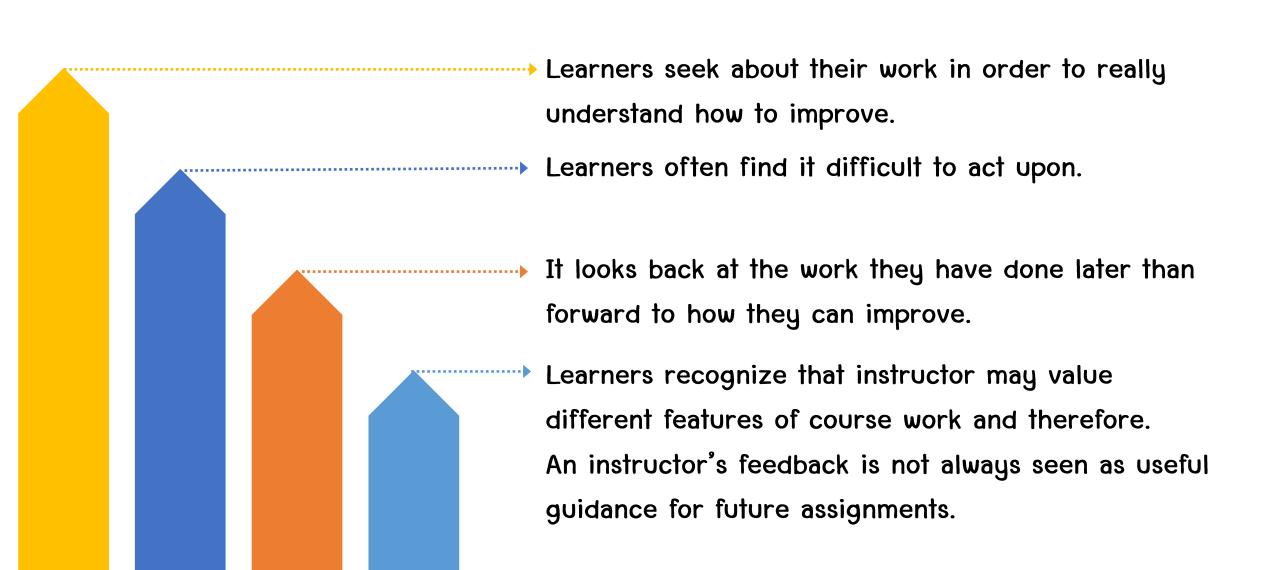


### Feedback

The most Important aspect of the assessment process in raising achievement

(Understand what the standard and what to do, Having the strategies to reduce the gap, Confidence, Satisfaction, Engagement)

### When is Feedback Delivered?



### Where are Feedback Sources?



## How to Give Useful Feedback?

	Category	Indicators
Evaluative feedback	A.1 Positive feedback	To approve students' work or engagement
	A.2 Negative feedback	To disapprove of student's work or behavior
Descriptive/ constructive feedback	B.1 Achievement feedback	To identify and label aspects of successful attainment
		To identify mistakes/ failures in work performance
		To specify how something that is being learned can be corrected
	B.2 Improved feedback	To shift the emphasis more to the student's own role in learning, where teacher is as 'facilitator' rather than 'provider' or 'judge' of feedback.
		To give student greater responsibility to make choices for themselves, instead of telling student what to do to improve.

### DON'T Tips!!!

- Telling only the points earned or where is right/wrong or good/bad.
- Providing overview comments before the end of class.
- Giving a fixed answer or samples of work with full marks.

### DO Tips!!!

- Ask whether they are open to some feedback.
- Be direct to person with informal communication.
- Describe specific behavior.
- Describe the impact of the behavior.
- Discuss and leading questions to encourage to suggest change.
- Be sincere.

## Case Study

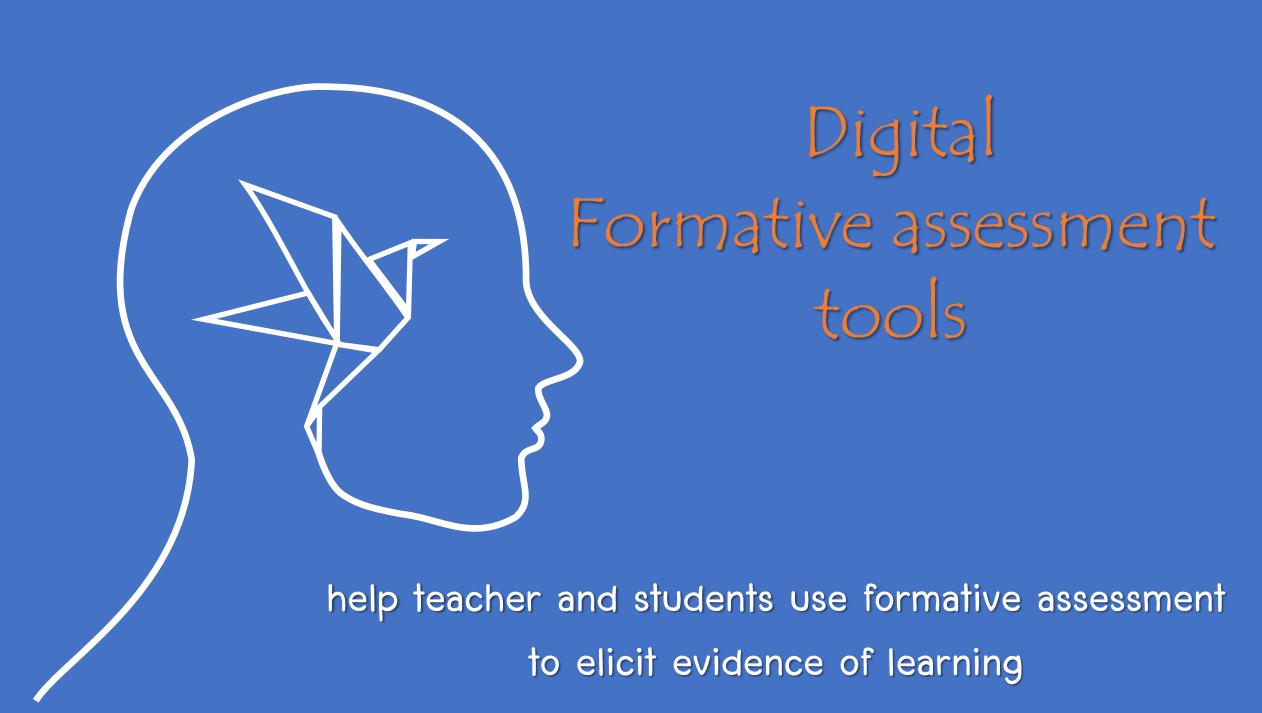


Give Critical Feedback

หลังจากอาจารย์ผู้สอนได้มอบหมายให้ผู้เรียนรวมกลุ่ม ตามความสมัครใจ กลุ่มละ 8-10 คน เพื่อทำโครงงาน 1 ชิ้น กำหนดระยะเวา 1 เดือน และส่งงานครั้งที่ 1 โดยให้ผู้เรียนศึกษาจากตัวอย่างโครงการของรุ่นพี่ และ เกณฑ์ประเมินผล (Scoring Rubrics) รวมทั้งมี การติดตามสอบถามในคาบเรียนทุกครั้งว่ากลุ่มใด ติดขัดส่วนใดหรือไม่

เมื่อผู้เรียนส่งโครงงานครั้งที่ 1 ผลการตรวจตามเกณฑ์ ประเมินผล พบว่า ส่วนใหญ่ผู้เรียนได้คะแนนไม่ถึงครึ่ง





### What aspects of student learning can we assess online?

- Interactivity, collaborative learning
- Collective construction of knowledge

## Bloom's Taxonomy Knowledge Comprehension Application Analysis/Synthesis/Evaluation

### Online Assessment Methods Multiple Choice, True/False, Matching, Fillin-the-blank, short answer, flash cards, games, quizzes Simulations, animations, tutorials Multiple choice, short answer, essay, tutorials, simulations, games, case studies Multiple choice, essay, project, portfolio, simulation, peresentation, paper, virtual labs, case studies



Summative Assessme



ที่มา: https://sites.psu.edu/onlineassessment/gather-evidence/

Formative assessment goes beyond checking for misconceptions and should focus on the relationship between the student's understandings and a productive response from educators.



Priming

Posing

Pausing

Probing

Bouncing

Tagging

Binning



Formative Assessment	Formative and Summative Assessment	Summative Assessment
	Case Study	Project Portfolio Presentation
Discussion (blog, board, chat) Quiz	Paper	
	Self-Assessment	
	Simulation/Animation	
	Reflective Journal	
	Virtual Lab/Game	

☐ Discussion Post (boards/blogs/chat)

Quiz (short answer, multiple choice)

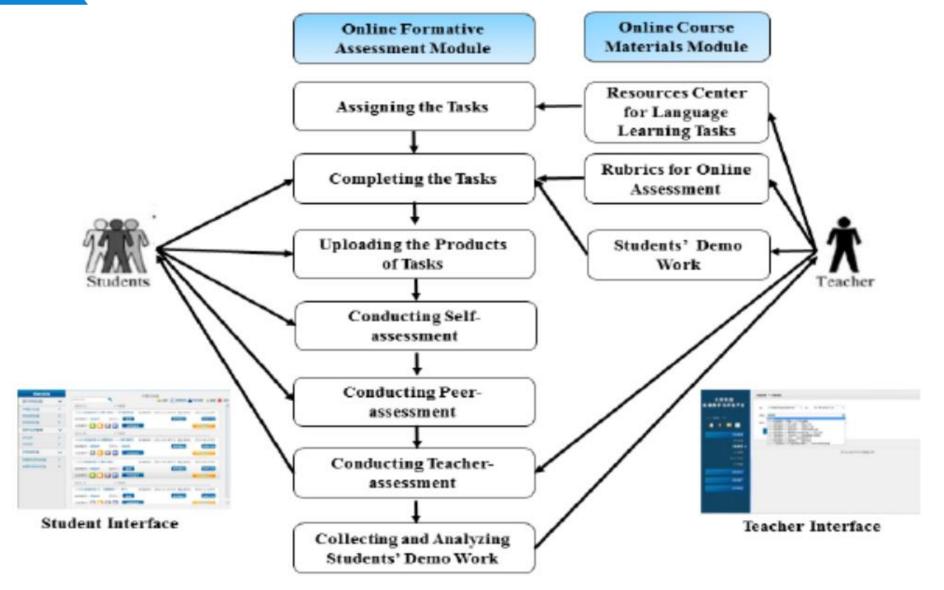
### **EXAMPLE**

Formative Assessment	Formative and Summative Assessment	Summative Assessment
Discussion (blog, board, chat) Quiz	Case Study	Project Portfolio Presentation
	Paper	
	Self-Assessment	
	Simulation/Animation	
	Reflective Journal	
	Virtual Lab/Game	

- ☐ Case Study
- Paper
- Self-Assessment
- ☐ Simulation/Animation/Virtual Lab/Game
- Reflective Journal

### **EXAMPLE**

### The Structure of Online Formative Assessment System



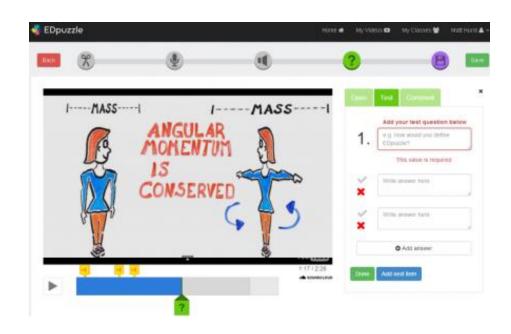


- Test
- Survey
- Observation
- Performance measure
- Group evaluation



Turn videos into a quick assessment. Choose a video on YouTube, Khan Academy, Crash Course, or upload your own. Trim the video, insert a quiz anywhere and track your students progress.

(Freemium, basic account is free, additional features available with paid accounts.)





- Easy-to-use! Create video lessons in seconds.
- Beautiful, simple student reports.
- Share lessons with your colleagues.





Online whiteboard program that can be used on any device. Students can quickly create video summaries in which they can present the most important things they learned and what questions they may still have.

(Free and paid versions)

#### **Broadcast your virtual** teaching and hybrid class

Use whiteboard software to help your hybrid learning students clearly see and follow visualized elements, from handwriting to annotated diagrams. This is all possible during an online lecture and live broadcasting and can be used on top of any video conference solution.

Start lecturing in a hybrid model











#### Collaborative whiteboarding for teaching

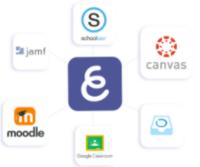
To support two-way communication, focus on collaboration between you and students. Open space for discussion and dialogue by creating a dynamic shared place for working on collaborative tasks including problem sets, brainstorming, and diagramming. Provide memorable learning experiences in education during remote learning.

Start collaborating with your students

#### Online whiteboard for teaching with LMS

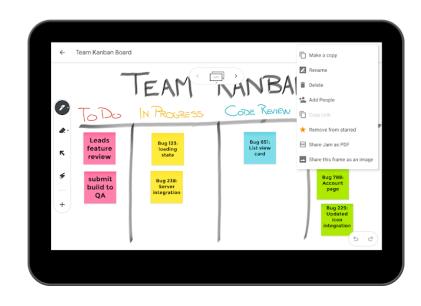
Use existing materials when making videos or conducting live presentations. Link your content to and from existing Learning Management Systems, Easily switch between remote teaching tools to enhance workflow and communication in a hybrid class.

Integrate Explain Everything with your LMS





Cloud-based, whiteboard application that can be used for collaboration across multiple devices. Students can use this application to collaborate, create presentations, and bring together resources from other Google apps and the web.







Video discussion platform, that allows students to respond to questions, topics, and reflect using video. Students can also respond to each other, leave comments, and more.

(Free!)

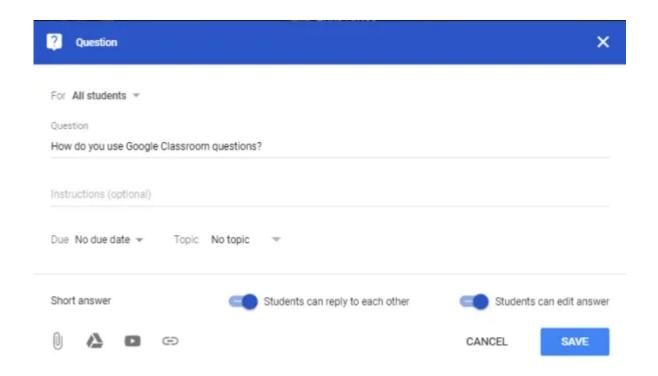






Create a question and share that with students. You can make this collaborative, or just have the answers viewable for you the teacher. This is not a robust threaded discussion tool like I wish it was, but it can be handy for formative assessments and to check for understanding.







Online assessment tool that is very robust. Formative allows teachers to choose pre-made assessments and edit to fit their needs, create their own from scratch, or even upload a PDF or doc to create. They also offer some fantastic data that you can track and intervene when needed.

Formatives Classes Tracker

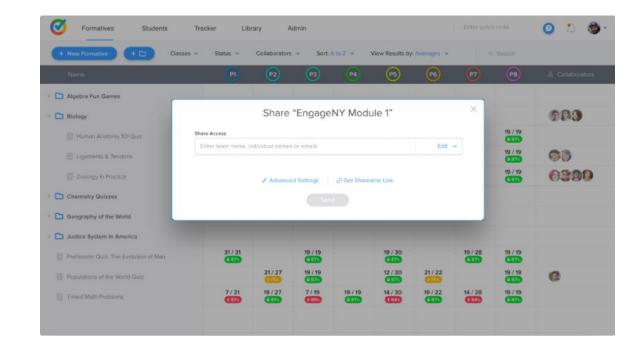
Tags X 

Select Class

Tags X 

Tags X

(FREE and integrates with Google Classroom)





Game-based learning and trivia platform that allows you to create very engaging quizzes for classroom. Play live kahoots, in groups, issue challenges, or assign as homework. (FREE)





Live audience polling tool that integrates into your presentation. You can ask questions during your lessons, see live data, and reports.

(Freemium, free accounts are limited to 25 responses per poll.)

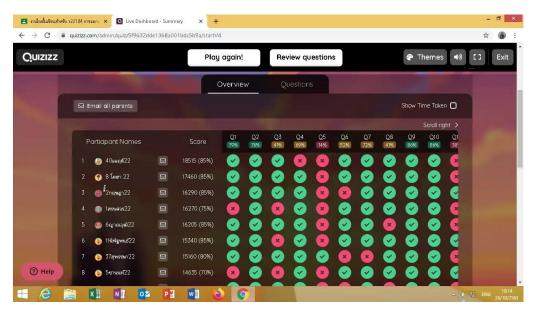




Conduct student-paced formative assessments in a fun and engaging way for students of all ages. Quizizz works on just about any device and offers a library of public quizzes that teachers can use in their classrooms. They also provide detailed class and student reports.

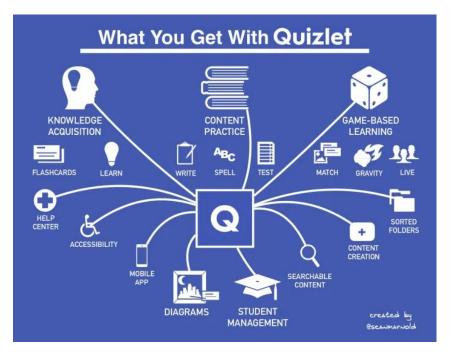
(FREE)

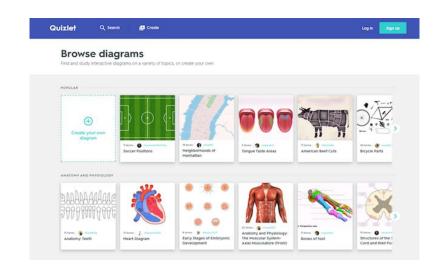


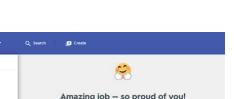




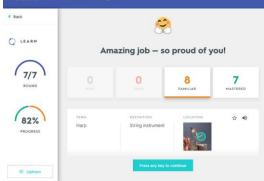
Study tool that uses flashcards, games, and other "study sets." to help students. Quizlet Live is a collaborative quiz game where students are placed into teams to work together to answer the questions and learn together.







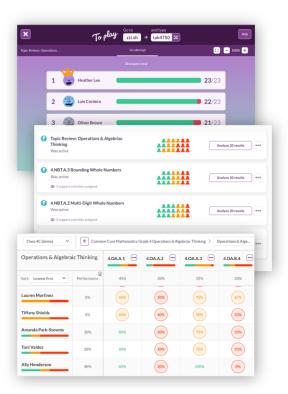
(FREE)



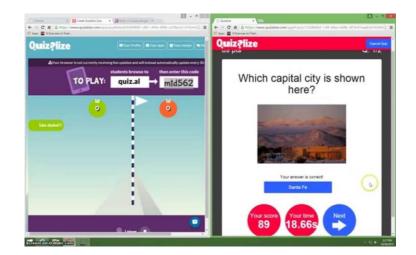
# Quiz?lize

Engage your class with fun, standards-tagged quizzes. Get instant data on student mastery. Automatically assign differentiated follow-up activities.





(Free basic teacher accounts)





#### Quizizz

- -Free
- -Works on any Internet Enabled device
- -Students only need the url and game code to get to quiz
- -Live results show up on the teacher dashboard
  - -Dashboard can be turned off
- -Questions can use text and pictures
- -Engaging and funny memes after each question is given to students
- -Can duplicate and edit other teachers' games and make the content appropriate for your classes
- -Quizzes can be done in class or set up as homework



#### Quizalize -Free

- Works on any Internet Enabled device
- -Students only need the url and game code to get to quiz
- -Live results show up on the teacher dashboard
- -Students broken up into two teams randomly
- -Teacher dashboard shows who needs help with what content
- -Quiz results can be printed out and used for dcoumentation
- -Questions can use text and pictures
- -Can duplicate and edit other teachers' games and make the content appropriate for your classes
- -Quizzes can be done in class or set up as homework



#### Kahoot

#### -Free

- Works on any Internet Enabled device
- -Students only need the url and game code to get to quiz
- -Live results show up on the teacher dashboard
- -Answer choices are shapes not words
- --Can duplicate and edit other teachers' games and make the content appropriate for your classes
- -Quizzes can only be done in class. No homework option.

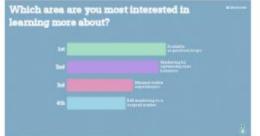


Interactive presentation tool that allows you to poll your students, check for understanding, or ask students to vote. There are several different types of questions you can create, image-based, multiple-choice, scales, open-ended, questions from the audience and more.

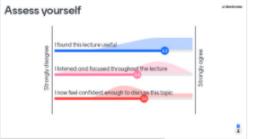
(Freemium, some features are free.)



What are the takeaways from the keynote?



See what your audience wants to learn



Lecture engagement self-assessment



Post-event feedback survey



Interactive classroom tool for teachers to engage students with interactive lessons. Nearpod allows you to create and share lessons that sync across devices and encourage student participation, and evaluate student responses through comprehensive reporting.



(Freemium, some features are free, 40 students)



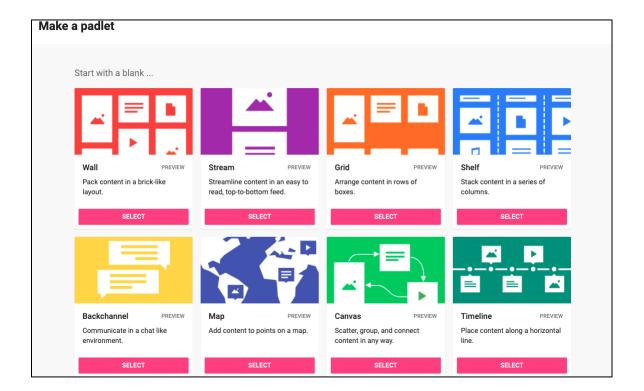




Online bulletin board that allows teachers and students to share and collaborate. It works on any device, and you can share just about any type of information—text, links, upload files, photos, videos, just about any kind of response.

(Free trial available)





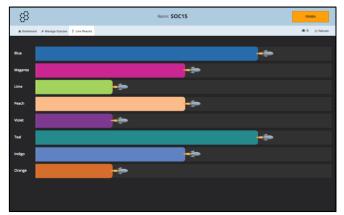




Web-based formative assessment tool that allows teachers to create quizzes, ask questions, collect exit tickets and feedback. You can also create a competitive quiz bowl game, called, "Space Race," where students compete to get the most answers correct.

(Freemium with up to 50 students per session.)







### **EXAMPLE**

### ตัวอย่าง



การประยุกต์ ใช้เครื่องมือออนไลน์

สำหรับการวัดประเมินผลแบบ Formative Assessment

รายวิชา SWU 141 ชีวิตในโลกดิจิทัล และ SWU 261 พลเมืองวิวัฒน์



### ทดลองใช้เครื่องมือออนไลน์

และวางแผนวัดประเมินผลแบบ Formative Assessment





> Helped teachers to differentiate instruction.

Positively impacted achievement and motivation.

> Improved high-performing students' performance.

### Digital formative assessment tool

aids the learning process as it improves students' participation, saves the learning time, guarantees equal participation opportunities, and creates a fun and exciting learning environment.





Great teachers are habitual students of their students. They assess continually to understand the human beings that they teach.

-Carol Ann Tomlinson, p. 10

The more time that elapses

petween a student response

the less metacognitive reflection takes place.

—Sonny Magaña and Robert J. Marzano, p. 82

wasting the students' time.

Recurring, nonthreatening feedback encourages students to persist. As some teachers say, "You don't know it yet."

**Takes on Thoughtful** Assessment

tests will improve little. -Harvey F. Silver and Matthew J. Perini, online

If we don't teach students how to plan, assess, and refine their

own work, performance on

the Common Core-aligned

Grading too soon can lead students to the damaging inference that if you have to try, you aren't smart in the subject.

-Jan Chappuis, p. 20

impression that we value the right answer more than critical thinking, we may drive them to take shortcuts and cheat.

When we give students the

-Cris Tovani, p. 50

Surfacing student misconceptions is at the very heart of the

Source: The collective wisdom of authors published in the March 2014 issue of Educational Leadership, "Using Assessments Thoughtfully" (Volume 71, Issue 6).

- ✓ วางแผนการจัดการเรียนรู้และ การประเมินผลที่ดี
- ✓ เลือกเครื่องมือการประเมินที่เหมาะสม ทดลองใช้งานให้คุ้นชิ้น ตรวจสอบ ความพร้อมก่อนใช้งาน



### Practice: Refection Practice

1

คำถามสำหรับการสะท้อนคิด เกี่ยวกับเนื้อหา (Reflection on Content) 2

คำถามสำหรับการสะท้อนคิด เกี่ยวกับกระบวนการ (Reflection on Process) 3

คำถามสำหรับการสะท้อนคิด เกี่ยวกับฐานความคิดความเชื่อ (Reflection on Premise)



## Only learners create learning, but teachers guide the process by responding to student performance.

© Wabisabi Learning



## References

- Carriveau, R. S. 2016. Connecting the Dots: Developing Student Learning Outcomes and Outcomes-Based Assessment. 2<sup>nd</sup> Ed. Verginia: Stylus Publishing.
- Fry, H., Ketteridge, S., & Marshall, S. 2012. **Handbook for Teaching and Learning in Higher Education**. 4<sup>th</sup> Ed. New York: Routledge.
- Faber, Luyten, & Visscher. 2017. The effects of a digital formative assessment tool on mathematics achievement and student motivation: Results of a randomized experiment. Computers & Education. Volume 106: 83-96. https://doi.org/10.1016/j.compedu.2016.12.001
- Merirow, J. 1991. Transformative Dimensions of Adult Learning. San Francisco: Jossey-Bass.
- Helena Pedrosa-de-Jesus & Cecília Guerra. 2018. Written Formative Feedback on Students' Critical Thinking: A Case Study. **Journal of Education**, 9(1): 3-22.
- Zheng, Chunping & Su, You & Jingjing,. (2014). **Developing an Online Formative Assessment System for a Chinese EFL Course**. Workshop Proceedings of the 22nd International Conference on Computers in Education, ICCE 2014.