
Providing Timely and Structured Feedback via LMS Enhancements: A Case Study in a Technological Course

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Agenda

What teaching and learning problems can be effectively addressed by E-learning tools?

Is building in E-learning to a course technically difficult for the "average" teacher?

- Moodle usage in HKU
- Four scenarios
- Future Work

Moodle in HKU

A learning management system (LMS) is a software application for the **administration, documentation, tracking, reporting and delivery** of course resources.

Moodle has been used as a Centralized LMS in HKU, maintained by ITS.

It is the first e-learning tools that teachers may try.

The screenshot displays the Moodle LMS interface for the course 'CCST9003 Everyday Computing and the Internet [Section 1A, 2015]'. The top navigation bar includes the 'hkumoodle' logo and a user profile for 'Chi Un Lei'. The course title is prominently displayed in the center. Below the title, a breadcrumb trail shows 'Home > CCST9003_1A_2015'. A 'Turn editing on' button is located in the top right corner. On the left, a vertical sidebar contains 'Navigation' and 'Administration' tabs. The main content area is titled 'General Information' and lists various course resources with checkboxes for selection: 'News announcement', 'News forum', 'Course Information [Updated: 2015/08/30]', 'TA Team', 'Avoiding Plagiarism', 'Questionnaire for Improving Learning Management Systems (Optional)', 'Tutorial Schedule', 'Project Group Arrangement', '3M Talk Schedule', and 'CCST9003 Tutorial Scheduling Form'. On the right side, there are three widgets: 'SECTION LINKS' with a list of numbers 1 through 6, 'SEARCH FORUMS' with a search input field and a 'Go' button, and 'LATEST NEWS' with a list of recent updates including dates and names like 'Keok Yu Kwang'.

Moodle usage in HKU

Most teachers use Moodle as file repository only.

Most teacher-student interactions are done offline, within classes.

Feedback process is slow and without technology-assisted.

Most teachers are learning how to align learning outcomes with assessment.

Comments of assignments are from teacher only.

Scenarios from Practitioners

1. How to efficiently assess learning outcome in time through online pre-defined rubrics, during presentations or practical assessment activities?
2. How to match up comments to specific marking criteria in the rubric-based grading, in order to help students understand evaluation structure?
3. How to integrate peer feedback into grading process to assist students to develop their own high-level metacognition skills?
4. How to immediately consolidate students' learning progress during class with the help of in-class quizzes?

Question: How to **immediately consolidate students' learning progress?**

Just-In-Time knowledge check;

Misconception clearance;

In-class engagement

Mentimeter?

Short quiz

Simple quizzes closed within 1 hour after lecture

Open-end questions for clarifications and answers and lessons

Question 1
Not yet answered
Marked out of 1.00
Flag question

Which of the following best describe(s) the computing model that we predominantly use today?

Select one or more:

- ☐ a. Computing steps are carried out one at a time.
- ☐ b. Computing results are deterministic, i.e., same input will give the same output.
- ☐ c. The algorithm will change according to the input given.
- ☐ d. There can be many different algorithms for a single computing problem.
- ☐ e. None of the above.

Question 2
Not yet answered
Marked out of 1.00
Flag question

Which of the following is(are) good reason(s) for using running time (defined as actual wall-clock time spent) as a performance measure?

Select one or more:

- ☐ a. Using running time makes comparison of algorithms easy.
- ☐ b. It is good to solve a problem in a shorter time.
- ☐ c. An algorithm's running time can be accurately measured with great ease.
- ☐ d. We can compare algorithms using running times before deciding to implement the best one.
- ☐ e. None of the above.

Question 3
Not yet answered
Not graded
Flag question

Open-Ended Question [OPTIONAL]:

Please kindly name anything (concepts, examples, etc.) that you do not quite understand about today's topics or that you can relate to today's topics. You can also use this space to give justifications/explanations to your quiz answers.

- Remember to confirm your submission by clicking the "Submit all and finish" button.



Question: How to **efficiently assess** learning outcome in time during **presentations?**

Question: How to **match up comments to specific marking criteria** in the rubric-based grading?

Just in time;
Grade integrity

Instant marking via pre-defined rubrics

Feedback

Grade	Understanding, Analysis, Synthesis, and Application of Knowledge: Knowledge is clear; Understanding is good	Poor	Fair	Satisfactory	Very Good	Outstanding	Max.	Better to refer to Chapter 6
	Argumentation: Perspectives important; Logic is clear; Build a compelling case	Poor	Fair	Satisfactory	Very Good	Outstanding	Max.	Discussions about e-learning can be more in depth
	Structure / Organization: Introduction clear; Conclusion summarizes main arguments; Transitions are good	Poor	Fair	Satisfactory	Very Good	Outstanding	Max.	Good introduction by user stories
	Delivery: Adhere to time limit; Engaging audience at all times (eye contact, voice, gestures)	Poor	Fair	Satisfactory	Very Good	Outstanding	Max.	Finish within 3 minutes. Good eye contact
	Mechanics: Spoken language accurate; Pronunciation clear	Poor	Fair	Satisfactory	Very Good	Outstanding	Max.	Presentation can be more fluent
66.14 / 100.00								
Graded on	Tuesday, 31 May 2016, 11:38 AM							
Graded by	 Lei Chi Un							

Feedback comments

Good try. However, contents and discussions are not concrete enough.

On-site instant marking
through mouse clicking

Clear score breakdown
with mapped skills

Marking aligned with CCC
rubrics

Comments aligned with
rubrics

Question: How to integrate **peer feedback** into grading process?

Meta-cognition/Evaluation;

Peer learning;

Feedback co-creation

1. Collect peer responses through survey
2. “Peer responses > Responses from peers”
3. Disseminate responses from peers through assignments

Evaluation Rubric:**Criterion (for the video)**

Understanding, Analysis, Synthesis, and
Application of Knowledge
Argumentation

Structure/Organization

Delivery

Mechanics

Evaluation: To what extent that the group achieve the following?

Consistent perceptive and critical engagement with issues and themes based on comprehensive understanding of relevant concepts

Examines the issue from all important perspective

Provides an outline which clearly introduces the structure and a conclusion that clearly summarizes the main ideas; transitions from one idea to the next logically

Video adheres strictly to the time limit and engages the audience at all times

Spoken language is always accurate, fluent, and precise

Question 1

Not yet answered

Marked out of 1.00

🚩 Flag question

Student that you reviewed (UID): (NOT your own UID)

Question 2

Not yet answered

Marked out of 1.00

🚩 Flag question

Please give a single score for the reviewee (scale: 0 to 10):

Scores and
Comments

Question 3


Not yet answered

Marked out of 1.00

🚩 Flag question

Your comments:

Feedback

Grade	82.00 / 100.00	Semi-automatic processing	Comments from multiple peers
Graded on	Tuesday, 31 May 2016, 11:51 AM		
Graded by	 Lei Chi Un		
Feedback comments	The presentation is quite clear and well-organized. The illustration of theme and supporting idea is very concise which makes concepts easy to be understood. It may be better if the presenter can talk more about how this technology affects peoples life, its future application and potential drawbacks.		

CCST9003 Group 2 ☆

File Edit View Insert Format Tools Table Add-ons Help Last edit was made on November 26, 2015 by AMAN JOHAR

100% Normal text Times New... 12

Comments from peer:

The project is able to discuss different aspects about HoloLens with details. The descriptions on technical details make it easy to understand the basic principle of the technology in a high-level manner. Discussions on social and health impacts covered a wide range of issues but it would be better to explicitly tell the readers which one is positive or negative. Despite the technology itself does not seem to have direct impact on environment, the report is able to identify the possible related impacts by looking into some practical applications. The final part on future development seems to be shorter than previous section. Although those ideas themselves are easy to understand, it would be better to elaborate further and give more details on the examples.

Nov 21, 2015

Add: "Comments from peer: The project is able to discuss different aspects about HoloLens with details. Th..."

Nov 21, 2015

Well the future features is like a empty bucket, there will always be space for more features and more details. Since its impossible to think of all possible

Show more

Integrate
Google
Service with
Moodle

Future Work

What T&L problems can be effectively addressed by E-learning tools?

Is building in E-learning to a course technically difficult for an "average" teacher?

How should be the e-learning training in HKU?

How should be the e-learning cultivation in HKU?