

資訊科技教育教學法系列：  
在中學策略性運用電子評估設計教學活動  
以提升學與教效能  
(第一節)



ASSESSMENT

香港中文大學學習科學與科技中心

Centre for Learning Sciences and Technologies (CLST)  
The Chinese University of Hong Kong



## 中學 R2AA 班

### 第一節

日期：2018/04/17 (星期二)

時間：18:30 - 21:30

地點：香港中文大學崇基校園信和樓614室

### 第二節

日期：2018/04/24 (星期二)

時間：18:30 - 21:30

地點：香港中文大學崇基校園信和樓614室



# 課程目標

本課程旨在介紹教師如何於電子評估運用資訊科技工具及創新教學法，以提升小學/中學的學與教效能。透過本課程讓學員：

- a) 了解電子評估的基本概念；
- b) 了解電子評估及相關資訊科技工具的特點、優勢和限制；
- c) 透過個案研究，了解如何在課前、課堂中和課後運用各種教學法實踐電子評估，以加強學生的學習效能；
- d) 適當運用資訊科技工具及學習管理系統（LMS）設計課程，並在課前、課堂中及課後進行電子評估，以提升學與教效能

# 課程目標

- e) 運用免費的資訊科技工具和LMS（例如Kahoot、Quizizz、Plickers等）創造簡單的電子評估活動；
- f) 運用和分析電子評估數據，並提供回饋，以改進學與教效能；及
- g) 了解和比較市場上各種電子評估平台的功能，並充分應用這些平台於不同科目的教學活動

# 課程詳情

## 第一節

1. 概述評估及電子評估
2. 討論不同 小型電子評估 工具（如Kahoot、Quizizz、Plickers, Socrative, Nearpod, Playposit, Schoology等）及其應用於電子評估的角色
3. 討論應用社交電子學習平台 LMS（如Edmodo, Facebook）以促進電子評估
4. 討論 HKEAA評核質素保證平台(Assessment Quality-assurance Platform, AQP) 及其他電子評估平台
5. 課業討論

# 課程詳情

## 第二節

1. 課業討論及回饋
2. 討論應用學習管理系統 LMS 為不同學科的電子評估工具  
介紹整合 **電子評估平台**（如Google Classroom、  
Microsoft Office 365等）
3. 討論**香港教育城的STAR平台**、**網上試題學習平台 (OQB)**  
及其他電子評估平台
4. 討論於學校實施電子評估的**教學考慮因素及行政安排**
5. 討論、問與答及課程總結

# 1. Overview of Assessment and E-Assessment



# 1. Overview of Assessment and E-Assessment

1. Definitions of e-Assessment
2. Different types of Assessment
3. Different online e-Assessment tools
4. Benefits and Barriers to using e-Assessment



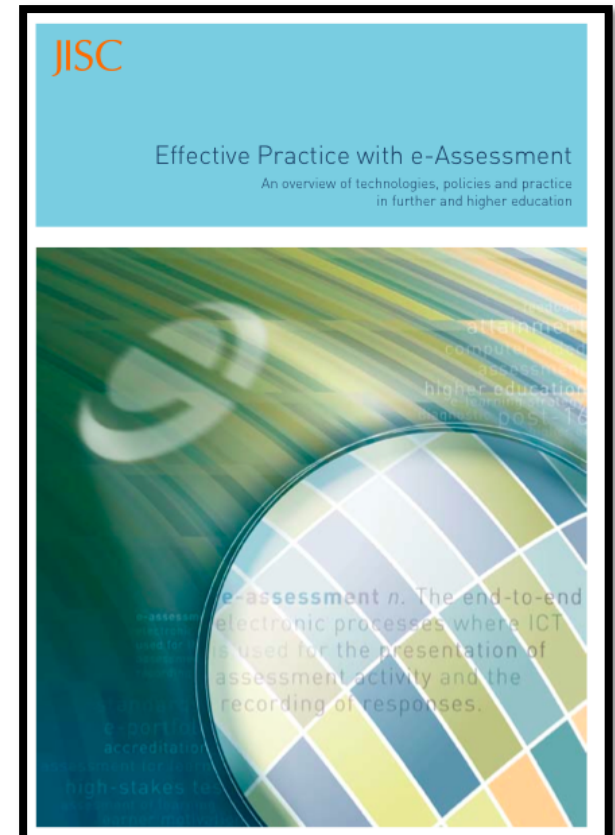
# 1. Overview of Assessment and E-Assessment

## Definition of e-Assessment

JISC (2007) define e-Assessment as:

*‘the end-to-end electronic assessment processes where **ICT** is used for the presentation of assessment activity, and the recording of responses’ (p6).*

Available at: [http://www.jisc.ac.uk/publications/programmerelated/2007/pub\\_eassesspracticeguide.aspx](http://www.jisc.ac.uk/publications/programmerelated/2007/pub_eassesspracticeguide.aspx)



# 1. Overview of Assessment and E-Assessment

## Different Definitions of e-Assessment

### Discussion:

What are the **similarities** between different definitions of e-Assessment?

1. Read the different e-Assessment definitions provided in table 1.
2. What are the **similarities** between the different definitions of e-Assessment?
3. Refer back to your original e-Assessment statement and amend accordingly.

# 1. Overview of Assessment and E-Assessment

## Different Definitions of e-Assessment

Definition	Source
The use of <b>information technology</b> for any <b>assessment-related activity</b> .	Wikipedia: <a href="http://en.wikipedia.org/wiki/E-assessment">http://en.wikipedia.org/wiki/E-assessment</a>
E-assessment as a single term describes <b>a range of learning and assessment activities</b> that have distinct meanings in their own contexts e.g. electronic marking, online assessment, computer-aided assessment and direct on-screen testing are all referred to as e-assessment.'	e-Assessment Association: <a href="http://eaadev.ecomscotland.net/e-assessment-toolkit">http://eaadev.ecomscotland.net/e-assessment-toolkit</a>
e-Assessment is often seen as providing a <b>partial solution</b> to providing <b>assessment for increasing numbers of students and declining staff to student ratios</b> (Sim et al., 2004).	cited in Effective use of VLEs: <a href="http://www.jiscinfonet.ac.uk/InfoKits/effective-use-of-VLEs/index_html">http://www.jiscinfonet.ac.uk/InfoKits/effective-use-of-VLEs/index_html</a>

*Table 1: e-Assessment Definitions*

# 1. Overview of Assessment and E-Assessment

## The Two Parts to e-Assessment

e-Assessment consists of two components that are interrelated; one can not exist without the other.

These two components are:

1. The 'e' component;
2. The 'assessment' component.

The 'assessment' component will be explained briefly since this is key component of e-Assessment.

# 1. Overview of Assessment and E-Assessment

## What is Assessment?

The following extract from Dylan William's paper, *What assessment can and can not do*, provides a clear summary of what assessment is.

- Assessment is a *central process* in education.
- *If students learned what they were taught, we would never need to assess; we could instead just keep records of what we had taught.*
- *But as every teacher knows, many students do not learn what they are taught. Indeed, when we look at their work, we sometimes wonder if they were even present in the classroom.*

# 1. Overview of Assessment and E-Assessment

## What is Assessment?

The following extract from Dylan William's paper, *What assessment can and can not do*, provides a clear summary of what assessment is.

*In fact, it is impossible to predict with any certainty what students will learn as the result of a particular sequence of classroom activities.*

*And because we cannot teach well without finding out where our students are starting from, we have to assess.*

# 1. Overview of Assessment and E-Assessment

## What is Assessment?

The following extract from Dylan William's paper, *What assessment can and can not do*, provides a clear summary of what assessment is.

*Even if all our students started out at the same point (a highly unlikely situation!), each of them will have reached different understandings of the material being studied within a very short period of time.*

*That is why assessment is the bridge between teaching and learning—it is only through assessment that we can find out whether what has happened in the classroom has produced the learning we intended.'*

# 1. Overview of Assessment and E-Assessment

## What is Assessment?

JISC (2007) provide a summarized description of what is assessment where they see it as having **two main purposes** within further and higher education:

1. To **assist** learning
2. To determine the **effectiveness** of the education system

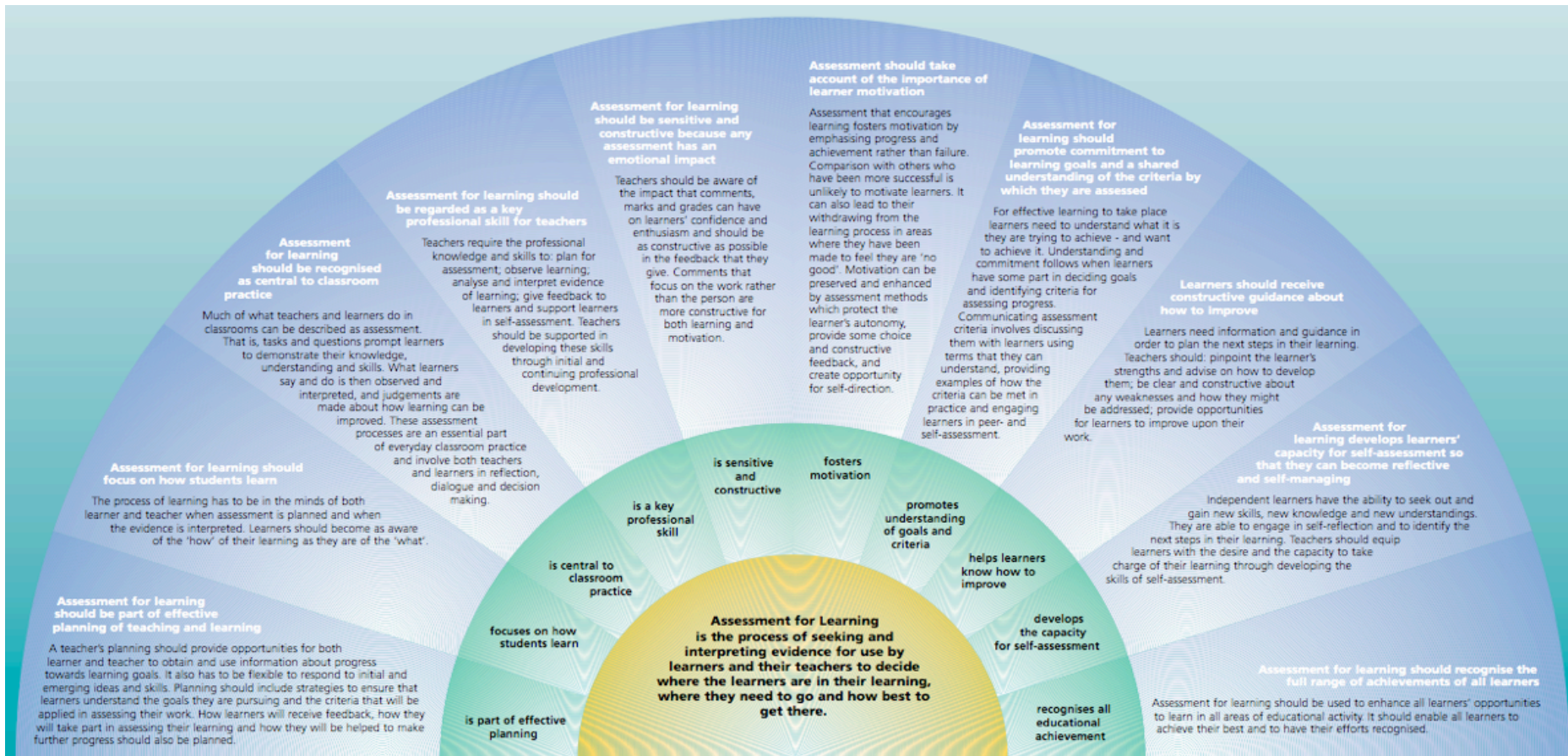
# 1. Overview of Assessment and E-Assessment

## What is Assessment?

- Assessment is therefore deemed necessary to assess learners' current skills or knowledge and understanding of concepts to ensure that future learning material is developed that meets the needs of all learners.
- Assessment is also necessary to evaluate an educational programme to ensure that the content and structure is appropriate and effective.
- It is therefore important that the purpose of any assessment and the methods used are rigorous and reliable through adhering to the ten principles of assessment.

# 1. Overview of Assessment and E-Assessment

## Ten Principles of Assessment



Research-based principles of assessment for learning to guide classroom practice

# Assessment for Learning

# 1. Overview of Assessment and E-Assessment

## Ten Principles of Assessment

(LIVERPOOL JOHN MOORES UNIVERSITY (LJMU) provide a similar set of ten principles of assessment:

### **Principle 1**

Assessment **facilitates student learning** and informs and supports student progression

### **Principle 2**

Assessment is an **integral part of the course design process**, appropriately aligned with learning outcomes

### **Principle 3**

Assessment must be **inclusive and accessible**

### **Principle 4**

There are **clear and consistent** assessment criteria

### **Principle 5**

Assessment is **transparent**



# 1. Overview of Assessment and E-Assessment

## Ten Principles of Assessment

(LIVERPOOL JOHN MOORES UNIVERSITY (LJMU) provide a similar set of ten principles of assessment:

### **Principle 6**

Assessment is **valid**, **reliable** and free of bias

### **Principle 7**

Students have a **responsibility to actively** and **honestly engage** in the assessment process

### **Principle 8**

Students are provided with **feedback on assessment** which is timely, which promotes learning and **facilitates improvement**

### **Principle 9**

The management of assessment is **efficient and effective**, especially with regard to the amount and timings of assessment and staff and student workloads

### **Principle 10**

Assessment of students is underpinned by **appropriate staff development**

# 1. Overview of Assessment and E-Assessment

## Activity :

Watch this innovative video and take notes related to *what is assessment*, *why assess* and *how to assess*:

[http://www.youtube.com/watch?v=c\\_gibuFZXZw&feature=related](http://www.youtube.com/watch?v=c_gibuFZXZw&feature=related)



# 1. Overview of Assessment and E-Assessment

## Types of Assessment

### Diagnostic Assessment 診斷性評估

Diagnostic assessment is used to **diagnose the level of learning** that has been achieved by our students, and is generally used at the **beginning of course** units for staff to determine the level at which they should be aiming their teaching, or to suggest to staff (or students self assess themselves) the level of support that may be required.

Staff may use diagnostic assessment at the **end of a lecture**, or a series of lectures, to see if students have comprehended the information conveyed, and students appear to like this, as it is a way for them **to keep a track on their learning**. However, diagnostic assessment does not provide a tool to enhance student learning unless it has **an element of feedback within it, unless it becomes formative**.

# 1. Overview of Assessment and E-Assessment

## Types of Assessment

### Formative Assessment 形成性評估

Assessment that is **formative occurs** during a course, **and provides feedback** to students to help them **improve** their performance.

The feedback need not necessarily be derived from only the **tutor**, but can be from **students' peers** or **external agents** such as clinical tutors or placement supervisors.

It is important that the feedback should be given in relation to the **criteria** against which the work is being assessed.

Formative assessment can be through **tutor assessment**, **peer assessment** or **self-assessment**.

# 1. Overview of Assessment and E-Assessment

## Types of Assessment

### Summative Assessment 總結性評估

Assessment that is summative **may or may not include feedback**.

The main difference between this form of assessment and that which is purely formative is that **grades are awarded**.

The grade will **indicate performance** against the standards set for the assessment task, and can either be part of in-course assessment, or assessment at the end of a course or module.

# 1. Overview of Assessment and E-Assessment

## The 'e' of Assessment

There are different methods of assessing online as summarized below:

<http://www.scribd.com/doc/461041/Assessment-20>

Web service	Example	Cycle	Use(s)
E-mail	Google Mail	Evidence storage	Storing (and searching for) evidence
Personal homepage	Netvibes	Evidence organisation	Combining evidence sources on single page
Blog	Wordpress	Evidence organisation	Logbook/diary; e-portfolio; authentication
RSS	Bloglines	Evidence discovery	Subscribing to evidence sources
Social bookmarking	Del.icio.us	Evidence capture	Capturing sources of evidence
Instant messaging	MSN	Evidence discovery	Discussion; group work; collaboration
VOIP	Skype	Evidence capture	Capturing audio evidence; evidence authentication; oral assessment
Wiki	Wikispaces	Evidence creation	Collaborative writing; projects; research findings; group work
Search engine	Live Search	Evidence discovery	Locating evidence
Data capture	Clipmarks	Evidence capture	Selecting and storing evidence
Video upload	YouTube	Evidence storage	Creating and storing video evidence
Online encyclopaedia	Wikipedia	Evidence discovery	Finding and publishing evidence
Social network	Facebook	Evidence discovery	Collaborating and publishing evidence

# 1. Overview of Assessment and E-Assessment

## Advantages & Disadvantages of e-Assessment

In a Futurelab report, *Literature review of e-Assessment*, a range of advantages and barriers were discussed as follows:

Advantages	Barriers
Assessing: Metacognition Group projects Creativity Communication skills	Dumbing down academic work Reliability Plagiarism Equity Technical Skills ICT infrastructure Examination process

Literature Review of E-assessment REPORT 10: FUTURELAB SERIES Jim Ridgway and Sean McCusker, School of Education, University of Durham Daniel Pead, School of Education, University of Nottingham

# 1. Overview of Assessment and E-Assessment

## Self Assessment Task

Through undertaking this module you should have knowledge and understanding of:

1. What is e-Assessment;
2. What, why and how to assess;
3. Different online tools for assessment purposes;
4. Advantages and disadvantages of e-Assessment.

Your task is now to choose one of the e-Assessment tools to reflect upon the above learning outcomes in relation to your personal development of e-Assessment.

# 1. Overview of Assessment and E-Assessment

## Reading

Elliot, B. (2008). Assessment web 2.0. Available at: <http://www.scribd.com/doc/461041/Assessment-20> accessed on 10th June 2012.

Black, P. J. & Wiliam, D. (1998b) Inside the black box: raising standards through classroom assessment (London, King's College London School of Education).

Brosnan, M. (1999). Computer anxiety in students: Should computer-based assessment be used at all? In Brown, S., Race, P. & Bull, J. (1999) (Eds), Computer-assisted assessment in higher education. London: Kogan-Page.

Duffy, Peter and Bruns, Axel (2006) The Use of Blogs, Wikis and RSS in Education: A Conversation of Possibilities. In *Proceedings Online Learning and Teaching Conference 2006*, pages pp. 31-38, Brisbane.

Dylan Wiliam, Clare Lee, Christine Harrison & Paul Black (2004): Teachers developing assessment for learning: impact on student achievement, *Assessment in Education: Principles, Policy & Practice*, 11:1, 49-65

JISC (2007) Effective use of VLes : e-Assessment. JISC

JISC (2007). *Effective practice of assessment*. Available at: [http://www.ljmu.ac.uk/lid/lid\\_docs/Effective\\_Practice\\_in\\_Assessment.pdf](http://www.ljmu.ac.uk/lid/lid_docs/Effective_Practice_in_Assessment.pdf). Accessed on 10th June 2012.

JISC (2007) Effective practice of e-Assessment. JISC JISC (2007). *Effective practice of assessment*.

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