Good Practices on e-Assessments

Prepared by Centre for Learning and Teaching
Vocational Training Council

Introduction

This document aims at providing good practice samples on delivering e-assessment with Moodle and other online applications. With the samples developed by the Senior Digital Future Officers (SDFOs) of YC and 9 disciplines, some key points were identified and summarised as appended to support teachers in designing effective e-assessment for digital learning and teaching.

The good practices in designing e-assessment is based on the following aspects:

1. Instruction
2. Assessment Method
3. Security and Cheating
4. Grading
5. Feedback
6. Data Analysis

Acknowledge the following disciplines and Youth College contributing to this document.

BA	CECS	DE	ENG
Business	Childcare, Elderly and Community Services	Design	Engineering

HLS	HT	IT	LD
Health and Life Sciences	Hospitality	Information Technology	Language

SD	YC
Student Development	Youth College

01

Instruction

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Instruction

✓ Provide clear instructions to guide students completing the e-assessment, e.g. Moodle Quiz. The purpose of the quiz, no. of questions, question types, regulations, time allowed, no. of attempt allowed and score, etc. should be clearly stated in the beginning of the assessment. (see sample 1, 2 and 3)

Online Test (10 Multiple Choice questions) - 11am on 30 April Friday

Date : 30 April (Friday)

Time : 11 am – 12 noon (**You will have only 30 minutes for answering the MC questions**)

10 multiple choices (30 minutes)

Time allowed : 30 minutes

Student must answer the questions in order, cannot return to previous pages or skip questions

Instructions

Example

Calculate the variable cost.

The variable cost = [⬍] - [⬍]

= $ [ ]

Pull-down menu:
Choose the correct answer from the list

Blank box:
Enter the correct answer in the box

Sample 1 and 2: Moodle Quiz Instructions

Instruction

Topic 2 - Personal Protective Equipment For Chemistry Laboratory

What are the Personal Protective Equipment (PPE)?

How can we protect ourselves in chemistry laboratory by PPE?

What are the reasons behind of equipping such PPE?

You can find the answers in the content of this topic.

BASIC CHEM LABORATORY SAFETY II

Personal Protective Equipment For Chemistry Laboratory Session

HLS

Sample 3: Purpose of the Quiz

✓ Provide clear instructions to guide students completing the assignment in Moodle, e.g. purpose of the assignment, submission requirement and format, etc. (see sample 4)

ENG

EA-Project (50%) to be submitted by 1:30 pm, 6 May (Thursday)

You are required to submit your Revit File of model with all views and sheets and pdf (drawing)
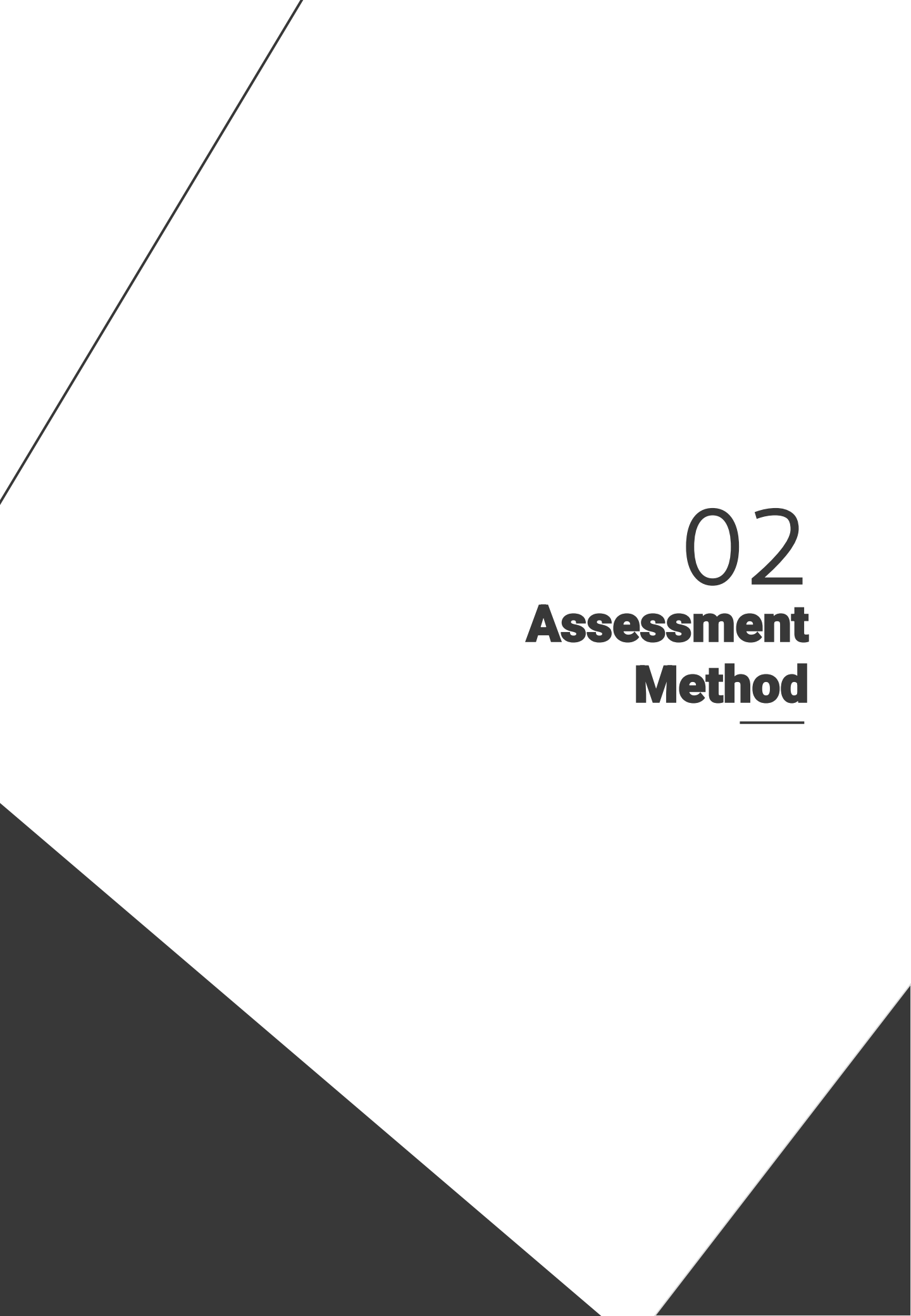
1. Revit File of model with all views

2. pdf (A4 size plans and drawings as per the file "hints for preparation of your EA")

Mark will be deducted for late submission as per the following rules.

10% mark will be deducted for every day thereafter and you will receive zero mark if you submit your EA-project one week later (after the deadline).

CON4159-BIM Learning Materials for EA.pdf 30 April 2021, 1:05 PM
CON41529-EA-Drawing_project-202021 new.pdf 30 April 2021, 1:05 PM
Hints for preparation of your EA project.pdf 30 April 2021, 1:05 PM

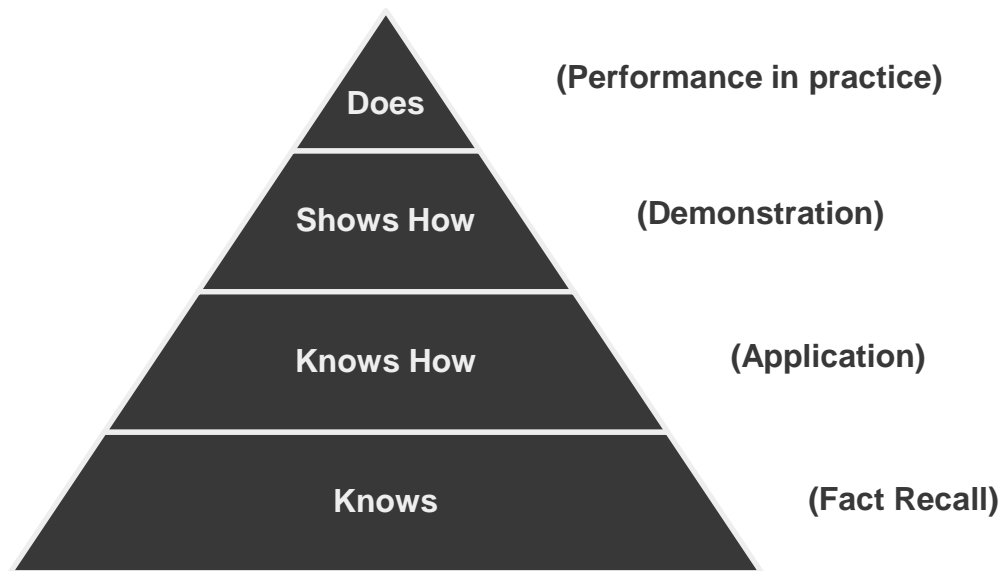Sample 4: Moodle Assignment Instructions

02
Assessment Method

Assessment Method

✓ Use various question types to simulate different levels of understanding, including some recall questions, some comprehension questions and some application and analysis questions. (see sample 5)

✓ Use appropriate question types to simulate different types of learning contents.

Does — **(Performance in practice)**

Shows How — **(Demonstration)**

Knows How — **(Application)**

Knows — **(Fact Recall)**

Sample 5: Assessment Pyramid

Based on Miller GE, The Assessment of Clinical Skills/Competence/Performance; Acad. Med. 1990; 65(9); 63-67

Assessment Method

✓ Use Moodle Assignment enables students to submit their coursework as a file upload or online text and allows teachers to assess, grade and provide feedback. (see sample 6)

ENG

| Surname ▲ / First name	ID number	Email address	Status	Grade	Edit	Last modified (submission)	File submissions
CHAN Yuk Chun	200177736	200177736@stu.vtc.edu.hk	Submitted for grading	Grade / 100.00	Edit ▾	Thursday, 6 May 2021, 1:10 PM	📄 chanyukchun 200177736.pdf 6 May 202 🎬 rvt CHANYUKCHUN (3) {3D}.avi 6 May 202 rvt CHANYUKCHUN (3).rvt200177736. 6 May 202
CHAN Tsz Ho	200256764	200256764@stu.vtc.edu.hk	Submitted for grading	Grade / 100.00	Edit ▾	Thursday, 6 May 2021, 1:25 PM	200256764_Project1_EA Elevation(A00 A012).rvt 6 May 202 🎬 200256764_Project1_EA {3D}.avi 6 May 202 🎬 200256764_Project1_EA Walkthrough 6 May 202 📄 200256764_Project1_EA_PDF.pdf 6 May 202 200256764_Project1_EA.rvt 6 May 202
CHAN Cheuk Hang	200294511	200294511@stu.vtc.edu.hk	Submitted for grading	Grade / 100.00	Edit ▾	Thursday, 6 May 2021, 1:07 PM	4159 chan cheuk hang .rvt 6 May 202 📄 4159 chan cheuk hang.pdf 6 May 202 🎬 200294511 {3D}.avi 6 May 202
CHEUNG Yuk Fei	200131906	200131906@stu.vtc.edu.hk	Submitted for grading	Grade / 100.00	Edit ▾	Thursday, 6 May 2021, 1:07 PM	🎬 CheungYukFei_Project {3D}.avi 6 May 202 🎬 CheungYukFei_Project Walkthrough 3. 6 May 202 CheungYukFei_Project.rvt 6 May 202

Sample 6: Moodle Assignment Submission

Assessment Method

✓ Use H5P to develop bite-sized interactive videos and other HTML5 content to enrich the quiz functions in Moodle. (see sample 7 and 8)

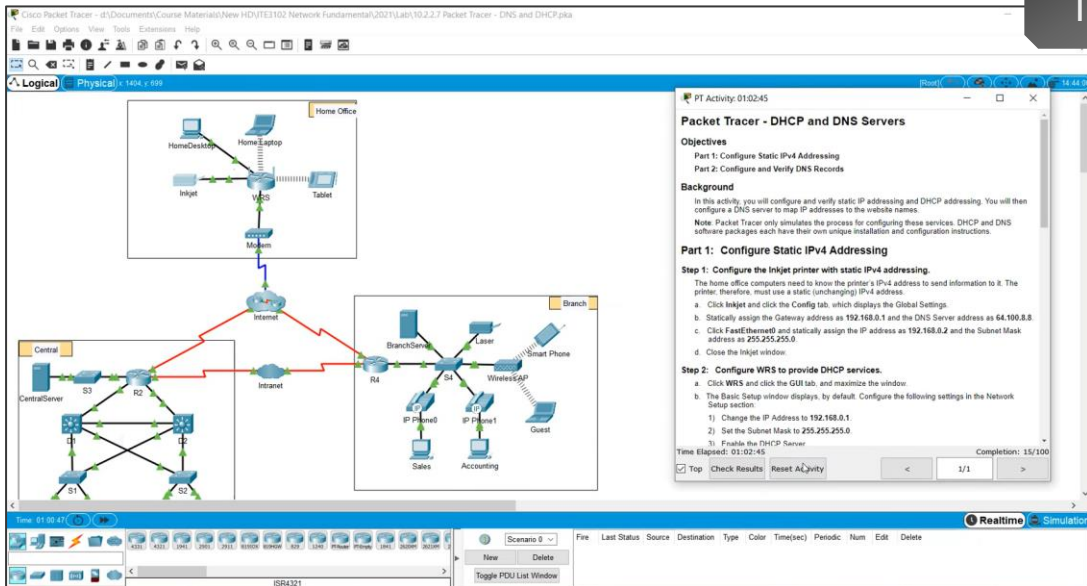Sample 7: H5P Interactive Video with In-video Questions
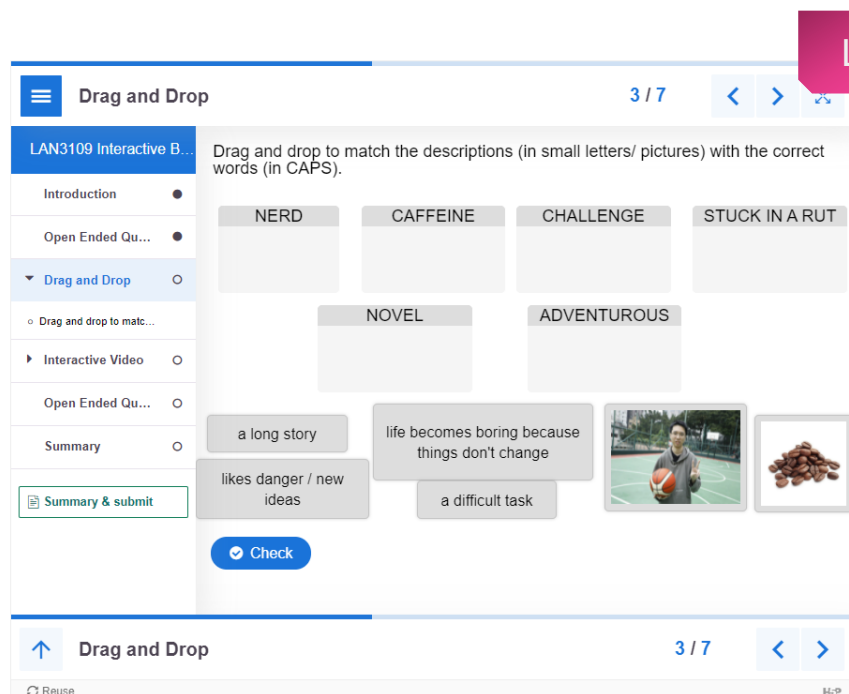
Sample 8: H5P Interactive Book with Drag and Drop Questions
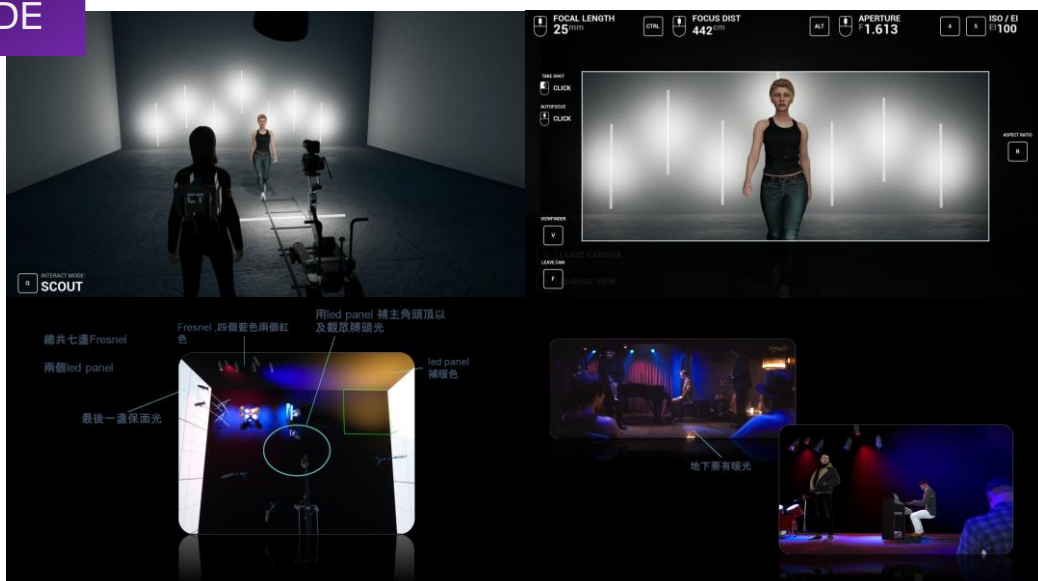
Assessment Method

✓ Use online applications to assist the online

practical assessment. (see sample 9 and 10)

Sample 9: Packet Tracer

Sample 10: Cine Tracer

Assessment Method

✓ Use Moodle SCORM Package to incorporate interactive elements, such as multimedia and quizzes in Moodle course. (see sample 11)

Sample 11: Moodle SCORM Package

Database SCORM testing

Database Exercise
- ☐ Data Type
- ☐ Create Table

Oracle資料類型練習
參考以下表格, 選擇適當資料類型拖放空格內

屬性欄名稱	資料類型	定義	約束設定
MEMBER_ID	-------------------	會員編號	主鍵
FAMILY_NAME	-------------------	姓氏	
FIRST_NAME	-------------------	名字	
HKID	-------------------	香港身份證號碼	NOT NULL
DOB	-------------------	出生日期	NOT NULL
SEX	-------------------	性別	
HK_PER_RES	-------------------	香港永久居民	DEFAULT "Y"
PHONE_NUM	-------------------	電話號碼	唯一值

字符　日期　大型二進制物件　大型字符物件　整數

YC

Assessment Method

✓ Using videos to demonstrate the scenario and answer corresponding MC questions in Moodle for students' easy understanding. (see sample 12 and 13)

Sample 12: Video Demonstration

好啦, 你前面有兩杯橙汁

你再話我聽, 依家兩杯橙汁係咪一樣多呀?(你再說給我聽, 現在兩杯橙汁是否一樣多?)

Watch this video and answer the following question(s).

Question 6

Answer saved

Marked out of 1.00

⚑ Flag question

⚙ Edit question

From the above video, which of the following explanations can explain the child's answer?

Select one:

○ a. The child has the ability to mentally represent an object that is not present

○ b. The child overrides some features of classification

○ c. The child focuses on one aspect of a situation, neglecting other important features

○ d. The child cannot distinguish between one's own perspective and someone else's perspective

Sample 13: MCQs in Moodle

03
Security and Cheating

Security and Cheating

✓ Use the "Add random question" feature to randomise the question order and the answer order in Moodle Quiz. (see sample 14)

Sample 14: Edit Quiz Setting

Questions: 20 | This quiz is open

Repaginate | Select multiple items

✎

Page 1

1 🎲 ⚙ **Random** (CHAPTER 20 Applications of price e
questions)

2 🎲 ⚙ **Random** (CHAPTER 20 Applications of price e
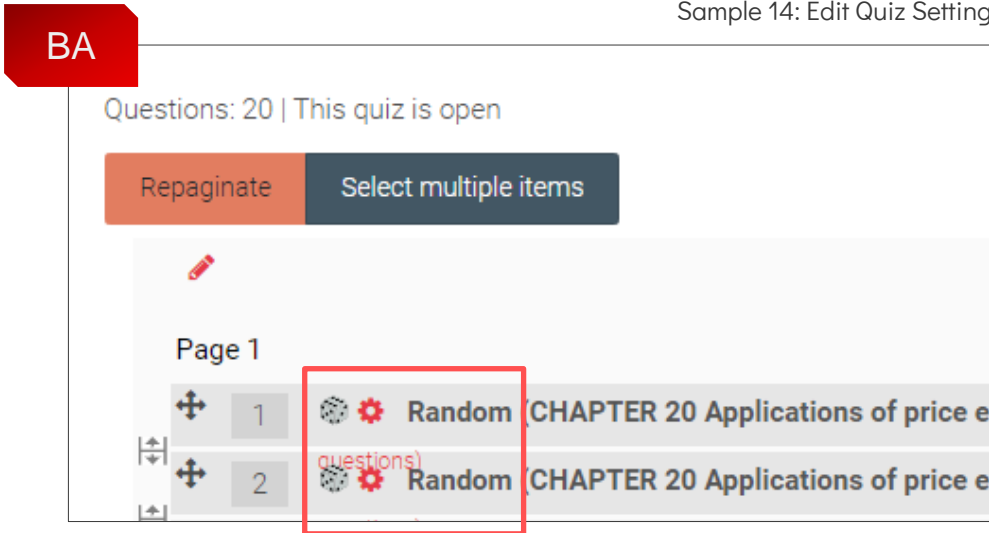
✓ Create larger question banks and giving quizzes with random subsets, make several slight variants for each particular question and use Moodle's random question feature for students to get one of the variants picked at random. (see sample 15)

ITE3102 Online Final Test 2021 (0) 🗑 ⚙ ↑ ↓ →
Q1a (3) 🗑 ⚙ ← ↓
Q1b (3) 🗑 ⚙ ← ↑ ↓ →
Q1c (3) 🗑 ⚙ ← ↑ ↓ →
Q1d (3) 🗑 ⚙ ← ↑ ↓ →
Q1e (3) 🗑 ⚙ ← ↑ ↓ →
Q2a (5) 🗑 ⚙ ← ↑ ↓ →
Q2b (4) 🗑 ⚙ ← ↑ ↓ →
Q2c (5) 🗑 ⚙ ← ↑ ↓ →
Q2d (4) 🗑 ⚙ ← ↑ ↓ →
Q3a (3) 🗑 ⚙ ← ↑ ↓ →
Q3b (3) 🗑 ⚙ ← ↑ ↓ →
Q3c (3) 🗑 ⚙ ← ↑ ↓ →
Q3d (6) 🗑 ⚙ ← ↑ ↓ →
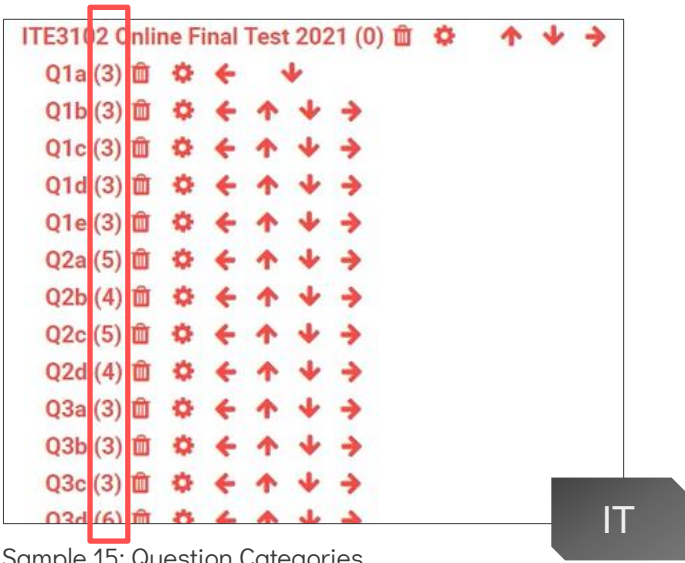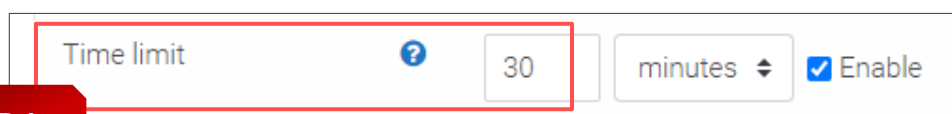
Sample 15: Question Categories

Security and Cheating

✓ Set timed quiz for students to answer the questions in a certain amount of time, e.g. give 30s per multiple-choice question, make the time short enough to let them won't have time to look up all the answers. (see sample 16)

Time limit ❓ 30 minutes ⬍ ☑ Enable

BA

Sample 16: Timing Setting

✓ Use VeriGuide to assist teachers to check the similarity on content of students' assignment files, e.g. with classmates' assignments, all past submissions, academic journals, electronic documents, internet resources and other provided databases.

04

Grading

Grading

✓ Set attempted once for the quiz to make the quiz more of an assessment rather than a learning activity. (see sample 17)

Sample 17: Grade Setting

HT

☑ FINA Competition Standard

Only the first attempt will be graded.

✓ Set the maximum grade specified for the quiz and assign appropriate marks for each question. (see sample 18)

Questions: 20 | This quiz is open

Maximum grade 100.00 Save

Repaginate   Select multiple items

Total of marks: 100.00

☐ Shuffle ❓

Page 1

Add ▾

1 Random (CHAPTER 20 Applications of price elasticity L3 new and subcategories) (See questions) 🔍 🗑 5.00✏

2 Random (CHAPTER 20 Applications of price elasticity L3 new and subcategories) (See questions) 🔍 🗑 5.00✏

3 Random (CHAPTER 20 Applications of price elasticity L3 new and subcategories) (See questions) 🔍 🗑 5.00✏

4 Random (CHAPTER 20 Cross and income elasticity L3 new and subcategories) (See questions) 🔍 🗑 5.00✏

BA

5 Random (CHAPTER 20 Cross and income elasticity L3 new and subcategories) (See questions) 🔍 🗑 5.00✏

Sample 18: Maximum Grade and Mark

✓ Use auto marking for the close-ended questions to save on marking time and enable feedback to be given quickly to students.

Grading

✓ Use review and grade panel to view and grade directly on the student's assignment files (PDF, docx or odt format) in Moodle.

✓ Use a rubric instead of a single grade scale in the advanced grading section of the Moodle Assignment. (see sample 19)

Sample 19: Define Rubrics

R3: Self-assessment on Team Roles	☐ NO / irrelevant answer **0 points** ✕	☐ Identify the student's own team role **1 points** ✕	• Identify student's own team role (mentioned in question 1.2 is also accepted) • Provide relevant example with brief elaboration (e.g. why the team role: personality, task nature assigned, behavior in team etc.) **3 points** ✕	• Identify student's own team role (mentioned in question 1.2 is also accepted) according to Belbin's classification eg. Coordinator, Plant etc. • Provide relevant example with detailed elaboration (e.g. why the team role: personality, task nature assigned, behavior in team etc.) **5 points** ✕
R4: Self-assessment on Supporting Others - Identify Others need	• NO / irrelevant answer **0 points** ✕	• Able to identify the team member's difficulty in the team / project without explanation **1 points** ✕	• Able to identify the team member's difficulty in the team / project with brief explanation **3 points** ✕	• Able to identify the team member's difficulty in the team / project with a detailed explanation **5 points** ✕
R5: Self-assessment on Supporting Others – Provide Support	• NO / irrelevant answer OR • Discouraging/ destructive/ negative action or feedback OR • The feedback or helping hand is not devised from the issue observed (not valid answer for question 2.1, e.g. issue have not been identified) **0 points** ✕	• Able to provide relevant helping hand with no explanation (caring or task-base is also accepted) **1 points** ✕	• Able to provide relevant practical helping hand based on peer's need with brief explanation (caring or task-base is also accepted) **3 points** ✕	• Able to provide relevant practical helping hand based on peer's need with detailed explanation (caring or task-base is also accepted) **5 points** ✕

SD

05

Feedback

Feedback

✓ Use deferred feedback to let students get any feedback, e.g. whether correct, right answer and marks after submitting the quiz.

✓ Provide specific feedback on correct and incorrect answers in the individual question to enhance the learning process. (see sample 20 and 21)

Sample 20 and 21: Specific Feedback

Feedback

✓ Provide overall feedback to students after they have completed the quiz, summarise the student's performance based on their grade boundary. (see sample 22)

Sample 22: Overall Feedback

DE

Feedback

✓ Provide individual feedback comments on the student's overall performance directly in the feedback comment inline.

✓ Use annotation tools, e.g. highlighter, line and Pen, etc. to annotate directly on the student's assignment to enhance the written comments. (see sample 23)

Sample 23: Review and Grade Panel

Feedback

✓ Use Moodle Discussion Forum to collect students' feedback for the online quiz. (see sample 24)

Sample 24: Discussion Forum

06

Data Analysis

Data Analysis

✓ Collect the wrong answer help teachers diagnose student thinking and take further course improvement. (see sample 25)
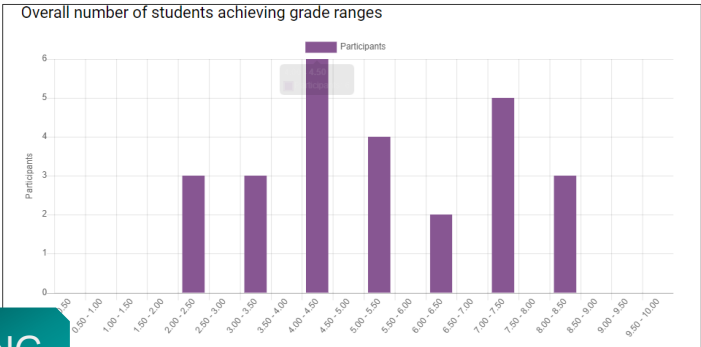
Sample 25: Report

ENG

ess	State	Started on	Completed	Time taken	Grade/10.00	Q. 1 /1.00	Q. 2 /1.00	Q. 3 /1.00	Q. 4 /1.00	Q. 5 /1.00	Q. 6 /1.00	Q. 7 /1.00	Q. 8 /1.00
@stu.vtc.edu.hk	Finished	30 April 2021 11:00 AM	30 April 2021 11:19 AM	19 mins 32 secs	8.00	✓ 1.00	✓ 1.00	✓ 1.00	✓ 1.00	✓ 1.00	✓ 1.00	✓ 1.00	✗ 0.00
@stu.vtc.edu.hk	Finished	30 April 2021 11:00 AM	30 April 2021 11:12 AM	12 mins 37 secs	7.00	✓ 1.00	✓ 1.00	✓ 1.00	✗ 0.00	✓ 1.00	✓ 1.00	✓ 1.00	✗ 0.00
@stu.vtc.edu.hk	Finished	30 April 2021 11:00 AM	30 April 2021 11:11 AM	11 mins 10 secs	6.00	✓ 1.00	✓ 1.00	✗ 0.00	✗ 0.00	✓ 1.00	✓ 1.00	✓ 1.00	✗ 0.00
@stu.vtc.edu.hk	Finished	30 April 2021 11:00 AM	30 April 2021 11:13 AM	13 mins 18 secs	7.00	✓ 1.00	✓ 1.00	✓ 1.00	✗ 0.00	✓ 1.00	✓ 1.00	✓ 1.00	✗ 0.00
@stu.vtc.edu.hk	Finished	30 April 2021 11:00 AM	30 April 2021 11:07 AM	7 mins 34 secs	7.00	✓ 1.00	✗ 0.00	✓ 1.00	✓ 1.00	✓ 1.00	✓ 1.00	✓ 1.00	✗ 0.00

✓ Use quiz reports and statistics to monitor the classes performance, it helps teachers to know students' understanding of their learning. (see sample 26)

Overall number of students achieving grade ranges

ENG

Sample 26: Grade Range