



香港教育大學

The Education University
of Hong Kong

Designing and Developing Online Learning Materials for HD(ECE) Students

Dr. CHAN Po Lin, Pauline

Dr. NG Sau Man, Catalina



Department of
Early Childhood Education

幼兒教育學系



Who are HD(ECE) students

FACULTY OF EDUCATION AND HUMAN DEVELOPMENT

[Future Students](#)

[Current Students](#)

[Research Postgraduate Students](#)

[Staff](#)

[HIGHLIGHTS](#)

[ABOUT US](#)

[ADMISSIONS](#)

[LEARNING & TEACHING](#)

[RESEARCH](#)

[ENGAGEMENT](#)

Admissions

Sub-degree Programme



[Home](#) > [Admissions](#) > [Sub-degree Programme](#) > [Higher Diploma in Early Childhood Education](#)

Target Students

[Local](#)

Study Mode

[Full-time](#)

Normative Period of Study

[2 Years](#)

Enquiry Hotline

(852) 2948 7129

(852) 2948 6791

Email

mcheng@eduhk.hk

keiman@eduhk.hk

JUPAS Code

[JS8507](#)

Higher Diploma in Early Childhood Education

Programme Aims

This programme aims to provide students with the academic and professional preparation necessary to become competent, caring and reflective beginning teachers able to work in a range of early childhood settings and undertake further professional advancement.



“digital natives” or “Net Generation”
Pack curriculum: the need of student engagement
Active / passive learners



What is On-line Learning

- Using On-line Tools (internet, technology) for Learning
- The distance between the students and teachers can be various
classroom activities
take home activities

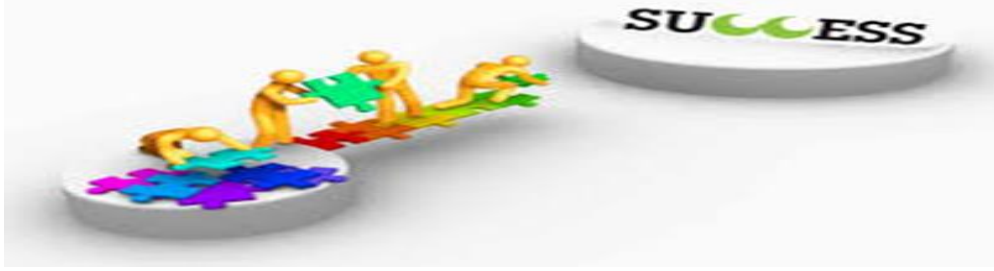


Why On-line Learning

- Extend teaching content (pack curriculum)
- Save the classroom time(student-centered)
- Take charge of their Learning
- Interactive & Fun
- Learning community



Requirements



1. The Context

- infrastructure
- device

2. The Teachers

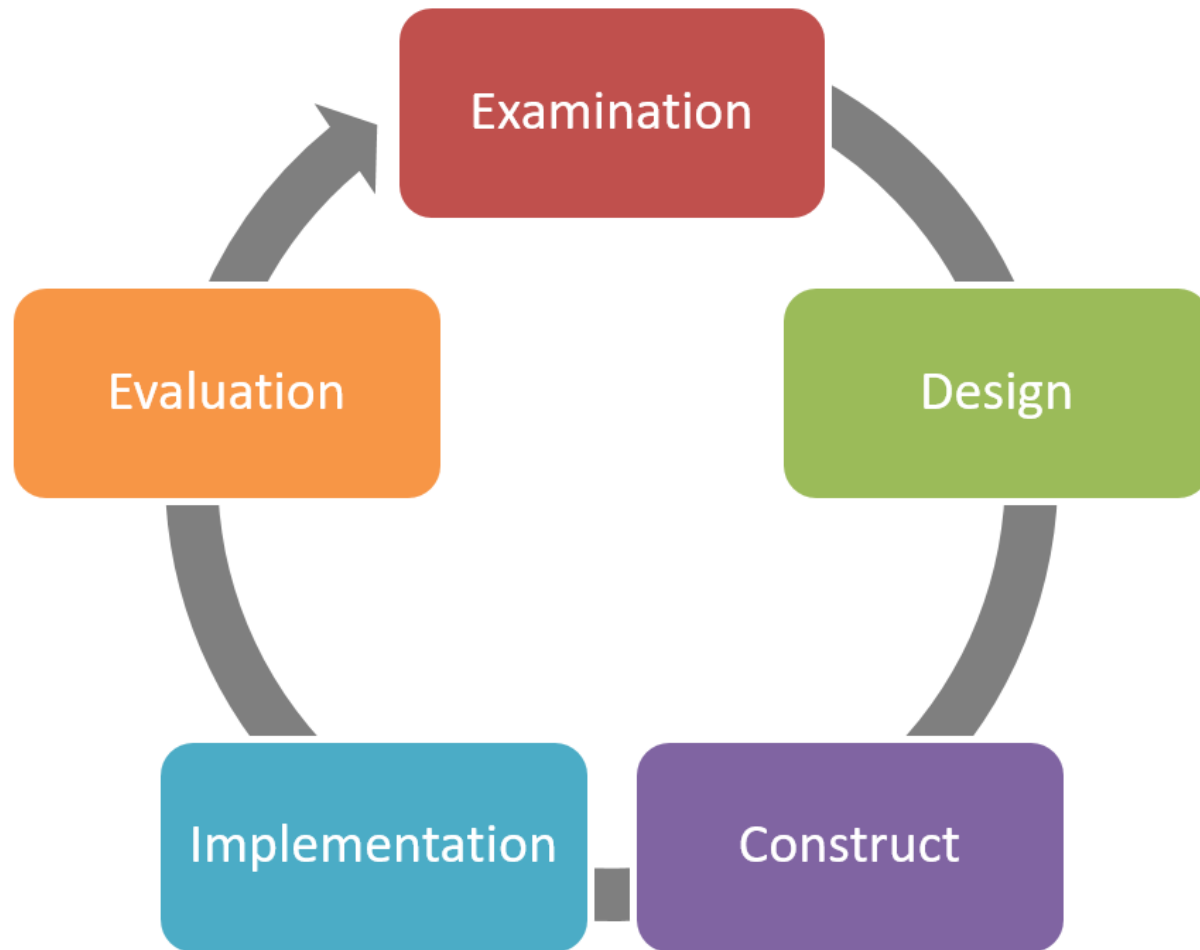
- motivation
- design, technology, time

3. The Students

- relevance
- attractiveness



ADDIE model for e-learning.



Supports

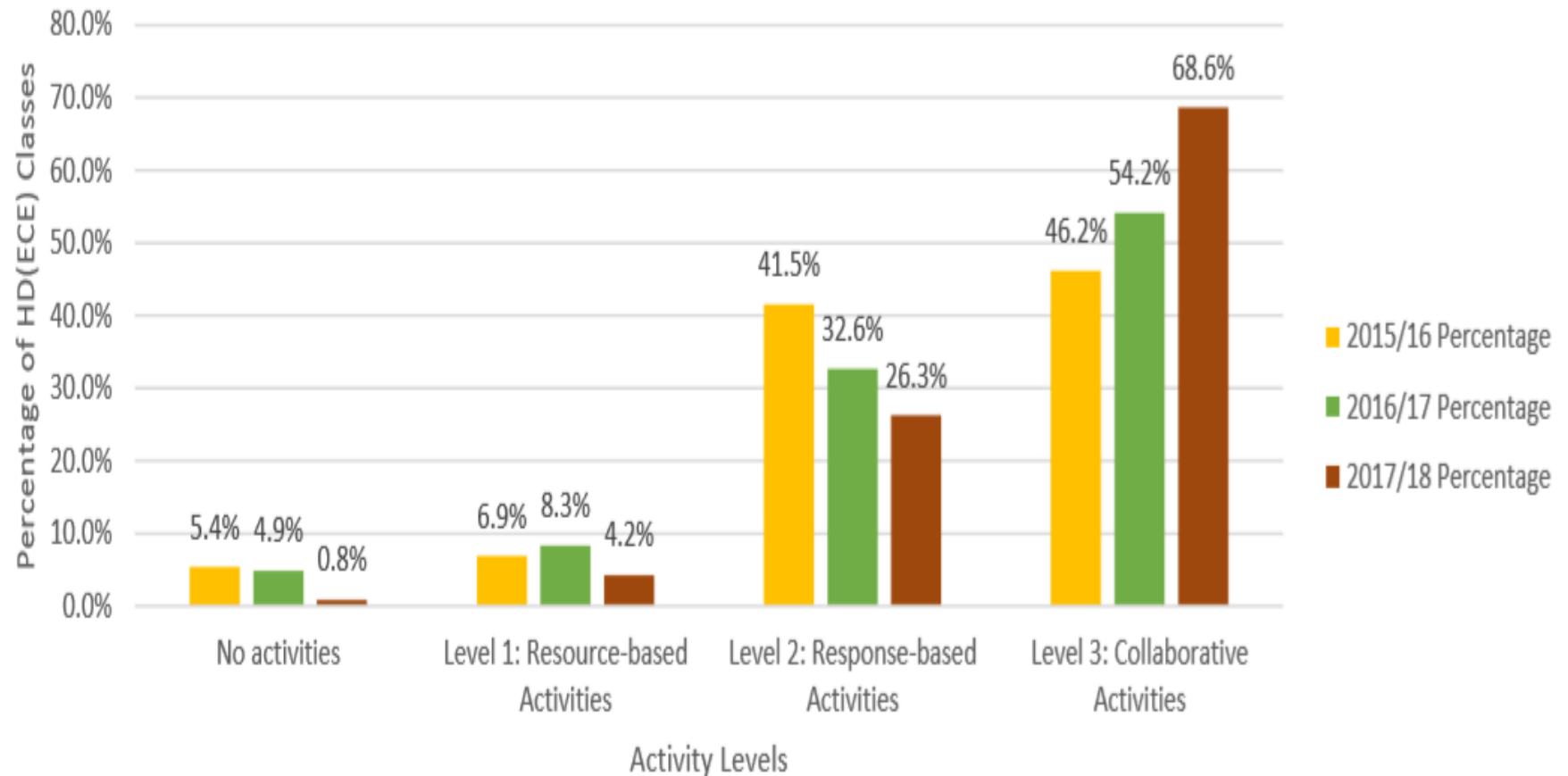
- **Training teachers** to get familiar with the implementation procedures
- Providing relevant **technological support** to teachers and students
- **Delivering** the online learning materials to students
- **Evaluation**



E-Learning Training Workshop

| Workshop | Content |
|---|--|
| Staff Induction Sharing: E-strategies for Student Engagement | <ul style="list-style-type: none">• Create a Padlet for in-class student engagement (collaborative learning)• Use Mentimeter to create an in-class quiz with real-time visual results (student feedback with voting)• Use Kahoot! to create an in-class game-based learning activity |
| Introduction to Moodle activities: grouping and group discussion forum) | <ul style="list-style-type: none">• Form different groups for Moodle activities• Import and export course materials in Moodle• Upload and add subtitles on Youtube videos |
| 30-minutes Hands-on using iPad in teaching supervision | <ul style="list-style-type: none">• Keeping multimedia records with using iPad.• Using e-forms with PDF expert. |
| Grade Submission through ARTS | <ul style="list-style-type: none">• Introduction of the grade submission system to new ECE colleagues |
| Discover More with Using Turnitin | <ul style="list-style-type: none">• Use Turnitin to review students work by giving marks and other comments• Create rubrics to assess students' work |
| Using Prezi and Google Slide to Make Attractive Presentation | <ul style="list-style-type: none">• Introduction of using Prezi and Google Slide to make presentation• Using Google Slide for students to give instant feedback |
| The New Look of Turnitin and for Grading | <ul style="list-style-type: none">• Introduction of the new look of Turnitin• Application of iOS App of Turnitin for Grading |

Moodle Activities Used by HD(ECE) Classes (excluding Field Experience and Practicum classes)



Online Activities for ECE0025

Child Development

Gross Motor Development




Every child goes through the same basic patterns of physical growth and motor skills development, but does so in a different time frame. Please **watch the video on gross motor development**, and **complete a quiz** (your quiz result will be counted into your final course grade).

🎯 Upon completion of this session, you should be able to explain the motor development from 0 to 1, and identify the major milestones.

Gross Motor Milestones in the First Year

 You are encouraged to take some notes while watching.



 Gross motor skills involve the large muscle groups of the body (for example, the legs and arms). The other type of motor skills is fine motor skills, which involve small movements, mostly of the hands and fingers, but also of the lips and tongue.

 Quiz on motor development

Examples of Moodle Activities

Online Case study with Story Jumper



Additional SET Question Results 2017-2018

Total No. of Students: 2768

Total No. of Courses: 32

| | Agree | Disagree |
|--|--------|----------|
| Quality of ELearning Activities (Q.1-4) | 85.52% | 14.48% |
| Students' Perception of ELearning Experience (Q.5) | 80.86% | 16.57% |



| | Questions | Percentage | |
|---|--|----------------|--------|
| Quality of E-Learning Activities | 1. The online learning activities enhance my interests of the topics | Strongly Agree | 16.91% |
| | | Agree | 65.50% |
| | 2. The online learning activities allow me to learn independently | Strongly Agree | 17.64% |
| | | Agree | 66.41% |
| | 3. The content of the online learning activities is appropriate | Strongly Agree | 19.59% |
| | | Agree | 68.37% |
| | 4. I spend appropriate time to finish the online learning activities. | Strongly Agree | 18.69% |
| | | Agree | 68.98% |
| Students' Perception of E-Learning Experience | 5. The teacher's / classmate's feedback from the online learning activities enhance my learning motivation. | Strongly Agree | 16.33% |

Methods of Evaluation

Teachers' self-efficacy and self-confidence in using blended learning approach

- Quantitative method → Survey
- Qualitative method → Focus group interview

Students' online learning experiences

- Quantitative method → Survey
- Qualitative method → Focus group interview

Teacher and student satisfaction towards the blended learning

- Quantitative method (Subjective Outcome Evaluation) (i.e. Client Satisfaction approach)



Participants

Students

- N=219
- Age: Mean=19.42
- Female=211 (96.3%), Male=8 (3.7%)

Teachers

- N=30 joined the project;
- 4 completed both P_0 and P_1
- 4 are females
- Age₍₃₁₋₃₅₎=1, Age₍₄₁₋₄₅₎=1, Age₍₅₁₋₅₅₎=2
- 3 full-time teachers and 1 part-time teacher
- Taught Sub-degree=2, Sub-degree & undergraduate=2
- 3 teachers had online teaching experience



Quantitative Results

- Students (N=219)
 - Table 1. A pair samples T-test on differences in students' online learning experience

| | P ₀ | | P ₁ | | T-test | ETA square |
|--------------------|----------------|------|----------------|------|----------|------------|
| | Mean | SD | Mean | SD | | |
| General perception | 3.48 | 0.50 | 3.58 | 0.62 | -2.42* | 0.03 |
| Motivation | 3.32 | 0.53 | 3.48 | 0.65 | -3.61*** | 0.06 |
| Effectiveness | 3.45 | 0.57 | 3.51 | 0.64 | - | - |
| Attitude | 3.56 | 0.52 | 3.55 | 0.62 | - | - |
| Needs | 3.51 | 0.49 | 3.44 | 0.59 | - | - |

Note. *p<0.05, **p<0.01, ***p<0.001



Quantitative Results

- Students
 - Table 2. Hierarchical multiple regression for predicting students' overall satisfaction with online learning

| DV | IV | <i>B</i> | SE | β | <i>t</i> | <i>p</i> | R ² | Adjusted R ² |
|--------------|---------------------------------|----------|------|---------|----------|----------|----------------|-------------------------|
| Satisfaction | (Constant) | 0.59 | 0.40 | - | 1.47 | 0.144 | 0.55 | 0.54 |
| | Age | 0.01 | 0.01 | 0.02 | 0.51 | 0.609 | | |
| | Gender | -0.03 | 0.15 | -0.01 | -0.20 | 0.843 | | |
| | Effectiveness (P ₁) | 0.58 *** | 0.06 | 0.58 | 9.97 | 0.000 | | |
| | Needs (P ₁) | 0.26 *** | 0.06 | 0.24 | 4.17 | 0.000 | | |

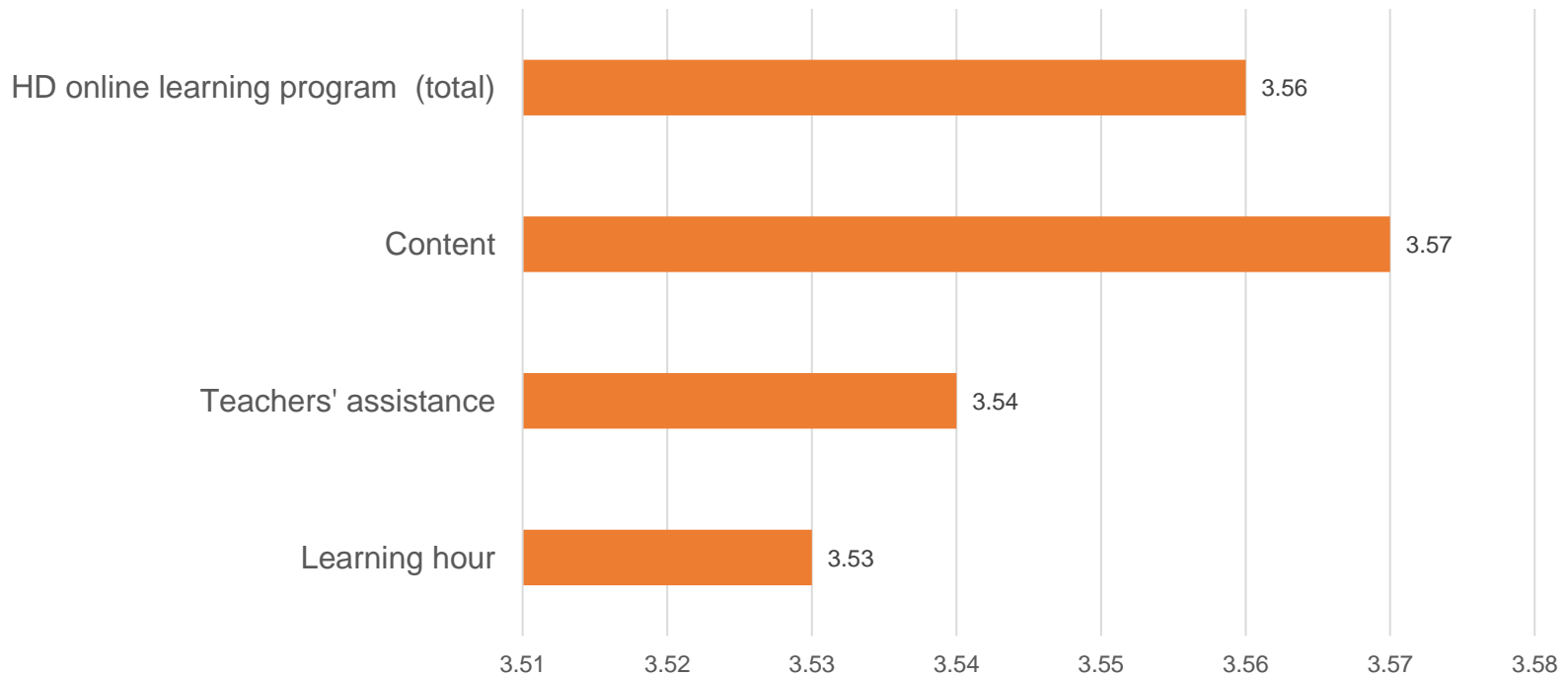
Note. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. DV=dependent variable, IV=Independent variable. P₁=post-course



Quantitative Results

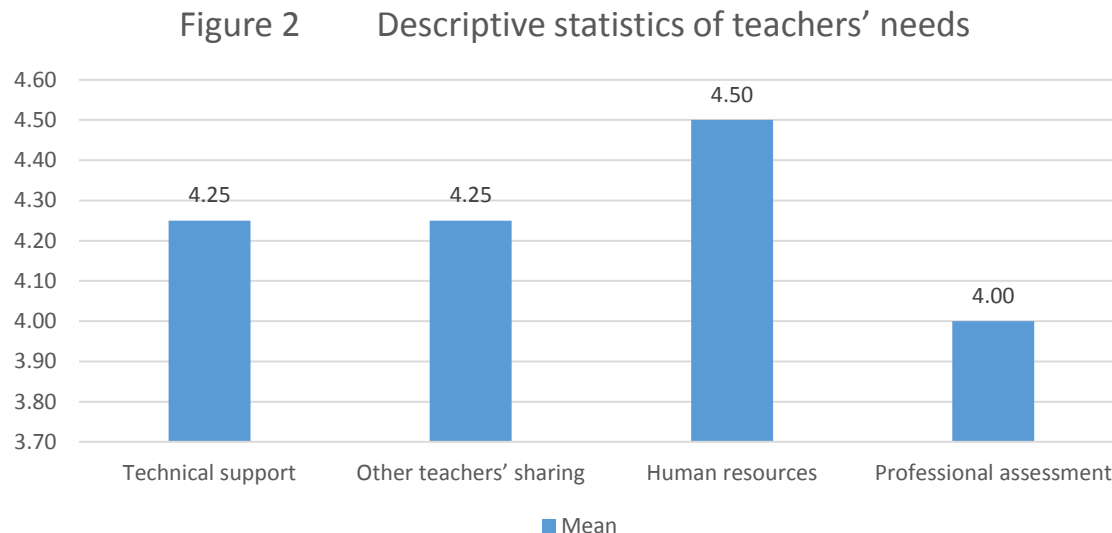
- Students
 - Students' satisfaction towards blended learning

Fig.1 Level of Satisfaction (5 points)



Quantitative Results

- Teachers
 - Compared with baseline (pre-course) level, teachers' self-efficacy and self-confidence both increased by 35.3% and 14.3%, respectively.
 - Teachers' needs when they used online materials (see Figure 2).



Qualitative Results

- Students
 - Learning motivation increased when concepts and videos were clearly corresponding to the teaching materials
 - Use of short videos in elaborating the learning contents enhanced their level of engagement and interest in the topic of the course
 - Long passages with many difficult words, English videos with no Chinese subtitles, and no lecturers' feedback lowered their level of engagement
 - Preferred more individual work
 - No time limit for online quizzes as this would give more flexibility and sufficient time to complete the assessment



Qualitative Results

- Teachers
 - Teachers had more confidence when they designed online activities
 - Students' engagement increased the interactions between students and teachers and further resulted in a higher level of self-efficacy
 - Teachers needed more time to prepare and design online learning activities
 - Learnt and kept themselves updated about the technology while enhancing learning materials



Impacts

- For course programme leaders
 - Encourage teachers teaching other programmes such as PGDE, MA, and MEd to use more online learning lessons
 - Online materials from HD programmes can serve as references to other programmes
- For senior management
 - Consider providing a more supportive environment for teachers so online learning can flourish and grow



Future Development 1

- Cultural changes: encourage more tryouts
Ask for different forms of technology
(bottom up)



Different forms of technologies (top down)



Examples of Moodle Activities

Blended Learning for University Enhancement @ EdUHK

– Stories from the Frontline

Name: Dr. Chan Po Lin Pauline

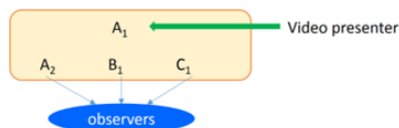
Department: ECE Department

Online Lessons for <Develop Positive Thinking through Reflection>: My Learning Journey

- (1) What is the course about?
 - In this GECC course, students learn positive way of thinking(e.g. personal strength and limitations) and reflect critically on their past experience. They are expected to articulate their own strategy and plans, and communicate their reflection effectively to audiences. Students need to construct an e-portfolio at the end of the lesson
- (2) Why did I choose to implement online lessons to the course?
 - Students are not interested in the others' presentation. They are in low attendance rate and lack of feedbacks
- (3) What are my prior experiences with online technologies in education?
 - I opened a chat room on Moodle during the presentation lesson, but only some students participated. In another course, I required students to make e-poster using online software and present in the class

Implementation

- 24 students are divided into 6 groups
- Group: A1, A2, B1, B2, C1, C2 (4 students each: A1, A2, A3, A4, B1, B2, B3, B4)
- Students are required to upload their VIDEO presentation on Moodle
- They have to watch the video presentation in groups



- Original: 4 individual presentation lessons → 1 Non F2F lesson(video production) + 3 F2F lessons(video presentations and peer evaluation)

| |
|--|
| Q.1 Demonstrate active critical thinking and cogently/convincingly of understanding learning experiences. (2/4) |
| Q.2 Present relevant materials and artifacts covering understanding student with clarity of description, and structure and substance to evidence. (2/4) |
| Q.3 Demonstrate reflection for an effective presentation and strategic good timing with reference to course more theories and focus areas in overall design and structure. (3/4) |
| Q.4 Present material and artifacts with reference to core or course selected theories or focus areas in overall design and structure. (2/4) |
| Q.5 Demonstrate understanding of personal beliefs, values, goals, and connects to personal vision for living a worthwhile life. (2/4) |
| Q.6 What is the most impressive part of the presentation? |
| Q.7 Suggestions for improvement on further presentation. |

Student Engagement and outcomes

1. Video Presentation



2. Peer Evaluation Period



3. E-portfolio Showcase



Reflections: Challenges and Feedbacks

Benefits:

- Student involvement is increased
- More solid evaluation from the peer evaluation and after the discussion
- The atmosphere of the class is good
- The capacity of using video will be higher

Students' Feedbacks

- Not really like this presentation format, however, it is creative
- Higher workload
 - Time consuming for producing the video(15 mins)
- Insufficient technical support in the process of producing YouTube
- The presentation format/requirement is not consistent with other groups

Some Solid Comments to Presentation Students in Google Form

- Q.8 What is the most impressive part of the presentation?
 - the table (Portfolio outline), clearly show her flow
 - the most impressive part is she is brave enough because she go to New York city herself and she most difficulties
- Q.7 Suggestions for improvement on further presentation
 - need deeper reflection in each character strengths as she only describe the event but didn't show her potential
 - more concise (too short for 15mins video), could contain deeper reflections
 - she can have a deeply reflection for her experience

Future Plan:

- Using video is preferred
 - The duration will be shorter, and limit to about 6mins
- Teaching students skills to make their own videos

Individual presentation (Group A1)

Video 1



1.1 Demonstrates analytic/critical thinking and originality/creativity of undergraduate learning experiences.

| | 1 | 2 | 3 | 4 | 5 | |
|-----|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------|
| Low | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | High |



Future Development 2

- From on-line learning activity to on-line lesson

Children's Health and Care Knowledge Transfer Package

25% COMPLETE

- 簡介 Introduction
- 個案學習 Case Study
- 訪問 Interviews
- 補充資訊 Additional Info

Case Study I

The toys corner

Context: Two kids are fighting over a toy. One scratches the other's hand because she has long nails.

Question: If you were the teacher, what would you do?



0:42

- ☐ 若有出血情況，教師利用藥料止血，再以生理鹽水協助幼兒消毒傷口，然後塗擦藍藻水。
If there is bleeding, the teacher can apply a dressing, sterilize the wound with saline solution, and then use the violet solution.
- ☐ 教師無需特別理會，只需帶幼兒到洗手間沖洗傷口後用紙巾印乾便可。
The teacher does not need to pay special attention, but take the child to the restroom, clean the wound and dry it with some tissue.
- ☐ 若有出血情況，教師利用藥料止血，再以生理鹽水協助幼兒消毒傷口，然後貼上面水膠布。
If there is bleeding, the teacher can apply a dressing, then sterilize the wound with saline solution, and put on a plaster.

EXIT COURSE



Future Development 3

- More high quality and demanding independent learning tasks to extend learning



Q & A



Thank you !

