Case-based Blended Learning

(The findings of TDG CBBL project 2017/18 Jan-June)
Basic information for Sem 2

- 11 instructors
- 13 classes with 528 students
- 9 student focus groups
From student’s data, students were positive towards CBBL.

The case materials offered concrete examples to illustrate relevant concepts/content in the course.

- agree + strongly agree: 96.0%
- disagree + strongly disagree: 4.0%
The case materials helped me understand relevant concepts/content in the course

- disagree + strongly disagree: 4.0%
- agree + strongly agree: 96.0%
The online tasks and face-to-face lessons were clearly connected.

- 93.0% agree + strongly agree
- 7.0% disagree + strongly
The online tasks helped me further master relevant concepts/content in the course.

- **disagree + strongly disagree**: 15.0%
- **agree + strongly agree**: 85.0%
The overall CBBL experience increased his/her engagement in the course.

agree + strongly agree
92.0%

disagree + strongly disagree
8.0%
The overall CBBL experience was useful to extend his/her learning

agree + strongly agree: 93.0%

disagree + strongly: 7.0%
CBBL Design

**Interlocking components** (not a linear relation)

1. Content: selection for case material
2. Case material: development
3. Lesson delivery: online and face-to-face
4. Technology
Content: selection for case material
1. Embedding concept(s) in cases (not only facts, but concepts to learn)

Example:

ES Core Course: Teacher Emotions and Professional Agency
Weekly Theme: Emotional Labor and Rules in Teaching

Online task (before class): watching a teacher movie + worksheet (students to identify social structures and emotion rules as well as a critical incident to apply conceptual understanding)

Face-to-face: discussion and analysis of online responses; lecturer led further discussion

Online task (after class): photographic journal, students to capture a visual metaphor (image) to elaborate individual understanding of emotional labor and rules.
2. Students to provide case materials - increasing connectivity and authenticity of case materials

Example
-because class: each student to submit one case for analysis; asking permission from teacher students (實習老師) to use their authentic cases in FE
3. Prior knowledge to understand the cases

- Prior knowledge is important to shape students’ points of view (widening perspectives)

Example (1):

ES Core Course: Children in Transition

Prior knowledge: ecological system

Face-to-face: Students could analyze the factors in the case and match them with the ecological system

- Using Padlet to express points of view → group discussion → using Mindmap to summarize factors affecting the children and match with the ecological system
3. Prior knowledge to understand the cases

Example (2):
ES Core Course: Teachers and Teaching in Context
Weekly Theme: professional ethics in teaching practice
Reading: ethical practice-ethical dilemma and knowledge
Prior skills needed: distinguish “fact” or “principle” in a case
Prior knowledge needed: code of ethics (for students analyzing cases in face-to-face lesson)

Face-to-face: Analyze the judgement and actions of teachers

- Comment from instructors interview:
  - without code of ethics: students focusing mainly on ”for student wellness”
  - with code of ethics: students analyzing the actions and making judgement based on the code of ethics
4. Developing cases with **media or technological means** in mind
   • not only developing content, but **considering content + means in the beginning**
   • not only using media / technology to present cases, but also considering **what student responses / data to collect**
   • seek for technological help in this stage (if necessary)

**Example:**

- Selecting cases + exploring blending learning possibilities at the same time (consulting faculty E-learning support team for training and set-up and observing another colleague’s lesson)
Communication: development of case materials

- stimulate student thinking through good cases
- enhance communication through different means
Stimulate student thinking through good cases

<table>
<thead>
<tr>
<th>Students</th>
<th>Instructors</th>
</tr>
</thead>
<tbody>
<tr>
<td>concern</td>
<td>emphasize</td>
</tr>
<tr>
<td>• Authenticity</td>
<td>• Authenticity</td>
</tr>
<tr>
<td>• Connectivity</td>
<td>• Connectivity</td>
</tr>
<tr>
<td>• Transferability (practical knowledge and skills)</td>
<td>• Transferability (practical knowledge and principles)</td>
</tr>
<tr>
<td>• Complexity</td>
<td>• Complexity</td>
</tr>
<tr>
<td>• Ambiguity</td>
<td>• Ambiguity</td>
</tr>
<tr>
<td>• Openness (multiple points of entry)</td>
<td>• Openness (multiple points of entry)</td>
</tr>
<tr>
<td>• Conceptual challenge</td>
<td>• Conceptual challenge</td>
</tr>
<tr>
<td>• Human touch</td>
<td>• Human touch</td>
</tr>
</tbody>
</table>
From student data, cases with less ambiguity are difficult to develop in-depth discussions.

e.g. “too good/nearly perfect” or “too bad”, because the answer is very obvious.
Enhance "Communication" through different means

• Changes in discussion

Traditional lessons

• Learning mainly come from instructors
• dominated by few students (raise hand and answer)
• Limited perspectives

CBBL lessons

• Learning from all classmates (e.g. responses to online tasks)
• Communication happens among all students
• different types of communication e.g. summarizing student responses, analyze student responses, online forum, online feedback, discussion in face-to-face lesson
• Perspectives were broadened
**Construction: lesson delivery (online and face-to-face)**

**Student readiness**
- Online task (before class) serve as a preparation for CBBL lessons, and increase student readiness for face-to-face lesson.

<table>
<thead>
<tr>
<th>Traditional lessons</th>
<th>Online Task (before class)</th>
<th>CBBL lesson</th>
</tr>
</thead>
<tbody>
<tr>
<td>• did not have time to “digest” the concepts</td>
<td>• process of thinking happened</td>
<td>• opinion/stand was constructed in student’s mind</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• easier to facilitate deeper thinking</td>
</tr>
</tbody>
</table>
### Data of media used in this project (Sem 2)

<table>
<thead>
<tr>
<th>From student’s data</th>
<th>Text</th>
<th>Animation</th>
<th>Video</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>● text-based case with high authenticity, connectivity helps understanding of concept</td>
<td>● some students think it is a &quot;pretend case authenticity maybe affected</td>
<td>● the visual and audio stimulation, (e.g. concrete image, dialogue, tone) in video enhanced “human touch” and “authenticity “, which helped students gain a deeper understanding of the character</td>
</tr>
<tr>
<td></td>
<td>● should have adequate time for student to &quot;digest&quot; the text</td>
<td>● could be a pretend case or a real case</td>
<td>● Case from Website/ Youtube: 1) time to search case(s) 2) some concepts maybe missing</td>
</tr>
<tr>
<td></td>
<td>● quick and efficient way to collect student’s case, variation of case increase</td>
<td></td>
<td>● Tailor-made video: need adequate time to produce</td>
</tr>
<tr>
<td></td>
<td>● production time is lesser than video higher confidentiality e.g. case from teacher student</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- The table records the data of media used in the project, distinguishing between student’s data and instructor’s data. The text-based case is highlighted for its high authenticity and connectivity, which aids in understanding the concept. Some students, however, perceive it as a "pretend case," possibly affecting authenticity. Visual and audio stimulation in videos enhance the "human touch" and "authenticity," helping students gain a deeper understanding of the character.

- From the instructor’s data, it is noted that adequate time is required for students to digest the text. Quick and efficient methods are to collect student’s cases, with variation increasing. Production time is lesser than in videos, and higher confidentiality is maintained. Case acquisition from websites or YouTube is mentioned, with potential issues in time to search cases and missing concepts. Tailor-made videos require adequate time for production.
Integration between online and face-to-face component

• Make use of student responses:
  • Describe (summarize feedback) or interactive (challenge students’ thinking)
Example(1):

Es Core course: Teachers and Teaching in Context
Theme: Teacher roles in education and society TSA

Online tasks: reading article and code of ethics; watching an animated case on TSA and responding to a specific question online.

Online task and face-to-face Integration: use students’ responses to facilitate more interaction and conceptual challenge

1. Instructor sharing a preliminary analysis of students’ online responses (without clear answer, ambiguity)
2. Students reviewing peer’s responses in groups and analyzing the responses (with worksheet e.g. code of ethics)
3. Students writing their analyses on the board; instructor challenging their analyses
Discussion: Professional Change / Gains

- Design of lesson
- Pedagogical Strategies
- Interaction with student
- Use of technology
- Other
Example(2) :

ES Core Course: Teachers and Teaching in Context
Weekly Theme: professional ethics in teaching practice
Reading: ethical practice-ethical dilemma and knowledge

Online task: Students submitting a case before the lesson

Online task and face-to-face Integration: Use student case in a board game
1. instructors distributed student case sin different groups
2. student distinguished “fact” or “principle” before judgement, and analyze code of ethics in different cases
3. each group selected one case to share
4. instructor led further discussion with whole class
• Students more concern about the particular “solutions and skills” (how to tackle problems in future)

Difficulties in student learning:
(1) from concrete knowledge to abstract/conceptual knowledge
(2) Handling cases in different contexts, as the transferability does not build on theories /concepts

• This may be related to students’ habits of learning or the absence of conceptual elements in the case selected.
Design of Lesson: more conscious and precise

e.g. sharpen the focus in discussion, sharpen the content of case

Example: sharpen the content of case

1) Adding family background through dialogue of mother
2) In future, highlight the change of child during transition, information of Day 1 in school, Day 2 in school, Day XX in school
Design of Lesson

Example: ● Change in concept of “lesson” → change in mode/structure? of lesson delivery → change in means for student learning

<table>
<thead>
<tr>
<th>In the past</th>
<th>With CBBL</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Lecture: teaching</td>
<td>• Lecture: more interaction with student</td>
</tr>
<tr>
<td>• Tutorial: activity</td>
<td>• Tutorial: case analysis and in-depth discussion</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Topic(s)</th>
<th>Case-Based Blended Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutorial</td>
<td></td>
</tr>
<tr>
<td>· What is curriculum?</td>
<td>Face-to-face: Video case posted to Moodle Online task (Post lesson): discuss curriculum definitions + Self-reflection</td>
</tr>
<tr>
<td>· Analyzing how the “Activity Week Experience” helps students fulfil the seven learning goals</td>
<td>Online Task(during lesson) + face to face: Activity Week Experience of two schools + group discussion on Padlet,, followed by analysis of online responses &amp; self-reflection</td>
</tr>
</tbody>
</table>
The case materials helped me understand relevant concepts/content in the course.

- disagree and strongly disagree: 13.0%
- agree and strongly agree: 87.0%
Data from Student feedback form in this class:

The case materials offered concrete examples to illustrate relevant concepts/content in the course.

- agree and strongly agree: 93.0%
- disagree and strongly disagree: 7.0%
The online tasks helped me further master relevant concepts/content in the course

- disagree and strongly disagree: 20.0%
- agree and strongly agree: 80.0%
The online tasks and face-to-face lessons were clearly connected. The overall CBBL experience increased his/her engagement in the course. The overall CBBL experience was useful to extend his/her learning in the course.

- Disagree and strongly disagree: 20.0%
- Agree and strongly agree: 80.0%
Pedagogical Strategies

○ Change in *pedagogical strategies*, increase Pedagogical richness

• Facilitate student preparation before lesson, instructors design *more engaging activities* in lesson

• Instructors collect student data before lesson, *more time to prepare feedback*, the richness and quality of feedback increase e.g. summarize student feedback, highlight key points and have further discussion
• CBBL increase pedagogical options in lesson design

**Options of student responses**

1. collect data: e.g. students submit any case happened in school, reading and question to answer
2. collect analysis: e.g. student submitted photo image related to the concept taught and briefly explain their application or analysis
3. collect responses by text: e.g. Q & A in google form
4. collect response by image: e.g. Mindmap, photo

**The use of student responses / data**

1. Instructors summarize student online responses feedback
2. Student highlight key point online responses and discuss in group
3. Online task during face to face and instructors give Immediate feedback
4. Students submitted case for analysis
Pedagogical strategies: Student-centred practices

- Increase in student-centred CBBL design, increase personal agency
  e.g. students participated in case selection, discussion, presentation of case, analyze the case
  e.g. choice on time to complete online task, choice to select which date to participated in online forum
Interaction with students: Means of interaction

• Varied interactivity, technology makes different types of interaction possible e.g. online forum, Padlet, Kahoot, Mentimenter vs. Q&A

• More time for student-led activities, e.g. discussion, presentation of case, online forum for students to ask questions

Example:

- Instructors divided student into different small groups, each group join one discussion session.
- Students ask any questions through online forum, peer feedback, and instructors facilitate students’ thinking.
Use of Technology

• The use of different technology e.g. Padlet, Kahoot, google +, photo journal, online forum

• Technology as a facilitator, making learning visible (externalize new learning & explicit)
  E.g. show student responses on Screen, different mindmaps and photo journal