

Case-based Blended Learning

**From Departmental Special Project Initiative 2015/17 to
New Faculty TDG Project Initiative 2017/18**



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Departmental special project initiative 2015/17

Localizing the curriculum of the ES core course through building ICT support (EDA 3026 Teachers and Teaching in Context)

1. To evaluate and explore ways to improve a LTTC-funded pilot project which aims at producing locally relevant resources and blended learning strategies for use in the targeted course in Semester II 2015/16; and
2. To expand the pilot project with further development of locally relevant resources and blended learning strategies.



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Departmental special project initiative 2015/17

The team:

Co-Principal Investigator	Co-Investigator
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Faculty TDG project initiative 2017/18

Case-based blended learning (CBBL) pedagogies for pre-service teachers: Building a community of practice in higher education settings

Overall goals

1. To explore and examine innovative blended learning pedagogies that effectively integrate case-based learning to enhance student engagement and learning of pre-service teachers; and
2. To build professional capacity of BL in higher education settings.



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Objectives

1. **Experiment, document and refine CBBL pedagogies** in selected ES Core Courses.
2. **Identify patterns and good practices** in the use of CBBL pedagogies.
3. **Engage participating faculty members** in developing, implementing and reflecting on the CBBL pedagogies used for course delivery.
4. **Cultivate a community of practice** that is open to further adoption of BL for innovative practices in courses offered within the Faculty.
5. **Develop a training package** with an online library of exemplary practices and resources for faculty members to formulate their own desired path of BL in using case-based pedagogies.



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Departmental special project initiative 2015/17



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Departmental special project initiative 2015/17

Lesson	Digital Materials and Online Tasks	Lesson	Topics
		1	Teacher identity: Being and becoming / Course Introduction
2	Teacher interview + Online task	3	Teacher professionalism and professionalization
4	Animated video case + Online task	5	Professional ethics in teaching practice
6	Animated video case + Online task	7	Teacher roles in education and society

Topic	Digital Material	Online Task
Teacher professionalism and professionalization	Teacher interview	Identify from the interview 5 conceptual ideas related to teacher professionalism mentioned in the article.
Professional ethics in teaching practice	Animated case: Sexually harassment	You are the fourth teacher in the group of the case. What will be your choice of decision? Explain and justify your stance.
Teacher role in education and society	Animated case: Territorial-wide Student Assessment (TSA)	Identify an issue in conflict with teacher professionalism. Why is it an issue?

Use of the Digital Resources for Blended Learning

Practice	Online	Face to face	Remarks
1	Video + task	Brief summary or comments	<ul style="list-style-type: none"> • Not to show the video again in class: <ul style="list-style-type: none"> • Too much to teach • Concern about repetition • A summary file of responses for students • Confusion among students (Task 1) • Online task and reading too abstract (Task 1)
2	Video + task	Further discussion on students' responses: <ul style="list-style-type: none"> • A summary • An initial analysis 	<ul style="list-style-type: none"> • Add discussion to make learning more personal • Use of additional IT or visual strategies e.g., Word Cloud, pie chart
3	Video or task	Show selected parts of the video in class	<ul style="list-style-type: none"> • Use as appropriate • Video and online task as standalone activities

Interface between online and face-to-face lessons: Use of students' online responses

Practice	Face-to-face	Varying degree of integration into the process of teaching and learning	Positioning of students' responses
1	Consolidating initial learning	<ul style="list-style-type: none"> • Provide summary feedback • Upload online discussion comments with feedback for students' reference 	More for introductory purpose
2	Generating further discussions	<ul style="list-style-type: none"> • Choose some responses to introduce the lesson • Focus on key or missing conceptual ideas • Personalize learning by highlighting some critical responses written by students • Create additional activities in subsequent lessons to help students internalize the new learning as part of their own practice 	More centrally located in the lesson



Pedagogical reasons for using the digital resources

For students

- Prepare for class
- Link to concepts in readings
- Broaden conceptual perspectives
- Develop critical thinking
- Increase motivation
- Increase participation
- Take ownership of learning

For instructors

- Introduce the topic / set the scene
- Reveal students' conceptual understanding
- Identify misconceptions, gaps of knowledge and prior experience
- Offer authentic examples in real settings
- Facilitate online and face-to-face discussions



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Six challenges of student engagement	Blended learning advantages (Stein & Graham, 2014)	Our effort
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1 Personal interaction	<i>One-to-one online interactions via email, texting, or video chat are students' preferred ways to communicate personally with instructors. These ways of communicating are flexible and meet their needs</i>	?
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2 Preparation	<i>Online assessments can be used to control real-time access to content or progress in a course. Additionally, access to data from online assessments can provide data that help guide instructors' planning for in-class sessions.</i>	Yes
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3 Place / Authenticity	<i>Blended learning courses can turn authentic contexts into learning spaces. For example, live video might be used to virtually transport the classroom to a place of interest.</i>	Yes
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4 Participation	<i>Because online discussions can be done asynchronously, 100 percent of students in a class can be expected to participate in an online discussion.</i>	Yes
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5 Personalization	<i>In the online environment, students can be provided with different learning options that best match their learning preferences.</i>	?
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6 Pacing	<i>The pacing for online instruction can vary for each student. So a student who does not understand a particular concept can review the material multiple times before moving on.</i>	?
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Improvement of teaching : Instructors' perspectives

Technical enhancement	Content enhancement	Overall course delivery
<ul style="list-style-type: none">• Easy to use• Easy to adapt• Migration problem	<ul style="list-style-type: none">• Visualize/illustrate theory• Provide real examples• Diversify pedagogies in face-to-face lessons• Inform teaching strategies• Enrich discussion content• Enable students' expression and understanding of their own views	<ul style="list-style-type: none">• Facilitate systematic linkages between the materials and various topics (beyond the beginning lessons) to help students gain a better understanding the complex concept of professionalism• Sharpen individual lesson focus• Reduce pressure caused by a tight time schedule• Enhance understanding through bilingual materials



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Improvement on learning: Instructors' perspectives

Class preparation	Conceptual thinking	Student engagement
<ul style="list-style-type: none">• More motivation with marks provided• More for active students• Able to see peers' responses• Clear guiding questions considered as crucial• Conscious about increasing students' workload	<ul style="list-style-type: none">• Helpful to some extent• Difficult to rely on online tasks only for deep thinking• Adding other strategies to extend understanding	<ul style="list-style-type: none">• More to say in class• More engagement in group discussions• Face-to-face discussions better than online ones



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Students' feedback on the initiative

16 student groups (582 students) of BEd and non-BEd students

More than 70% of the students agreed or strongly agreed that:

1. The digital materials enhanced my understanding of important concepts in different topics.
2. The digital materials offered concrete examples for me to understand the teaching profession in local schools.
3. The online tasks were appropriately designed to stimulate my conceptual thinking.
4. The use of blended learning strategies (e.g. online tasks and class discussions) increased my engagement in the course.
5. The overall blended learning strategies effectively supported my learning in the course.



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Students' feedback on the initiative (written)

Positive

- Friendly video design
- Interesting videos
- Well-made videos
- Practical materials
- Useful online tasks
- Love online tasks
- Helpful online tasks
- Very good, especially online group discussions

Negative

- Don't like to do online tasks
- Too many online tasks
- Useless online tasks
- Remove or reduce online tasks
- Different learning styles
- Unattractive cartoons
- Reading copies not clear
- Difficult readings – more Chinese readings

Suggestions

- Brief introduction of the topic before online sessions
- More guidelines
- Google form (first task) question not clear
- Questions for online tasks not concrete enough
- Connections between reading and online tasks not strong enough
- Online tasks to include personal comments on the view and lecturer can discuss it with the class

Lessons learned from the special project

Professional background and choice

1. Professional repertoire

- e.g. years of experience, lots of real examples

2. Individual orientation and interests

- e.g. analytical lens, philosophy
- Whether the materials and online tasks can meet the intended goals of the instructor



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Lessons learned from the special project

Digital materials

1. Having good materials (especially cases)
 - Connecting online and face-to-face components – offer the content
 - Extending key concepts through the materials
 - Offering authentic examples that students feel connected to their daily life
 - Challenging thinking by revealing complexities and ambiguities in terms of dilemmas or paradoxes



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Lessons learned from the special project

Interface between the online and face to face lessons

1. Position of the online tasks in relation to face-to-face lessons, e.g. simple add-ons, integrated delivery
2. Online task design – students make individual judgement or take stance (stretch thinking and apply knowledge)
3. Ownership of learning – students contribute to the content of learning through online tasks (more desire to learn in face-to-face lessons)
4. More doors to know the students and build rapport – understand personal characteristics, learning styles, values, prior knowledge, misconceptions, etc.

5. Alignment of subsequent lessons and pedagogical strategies



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Lessons learned from the special project

Obstacles to blended learning

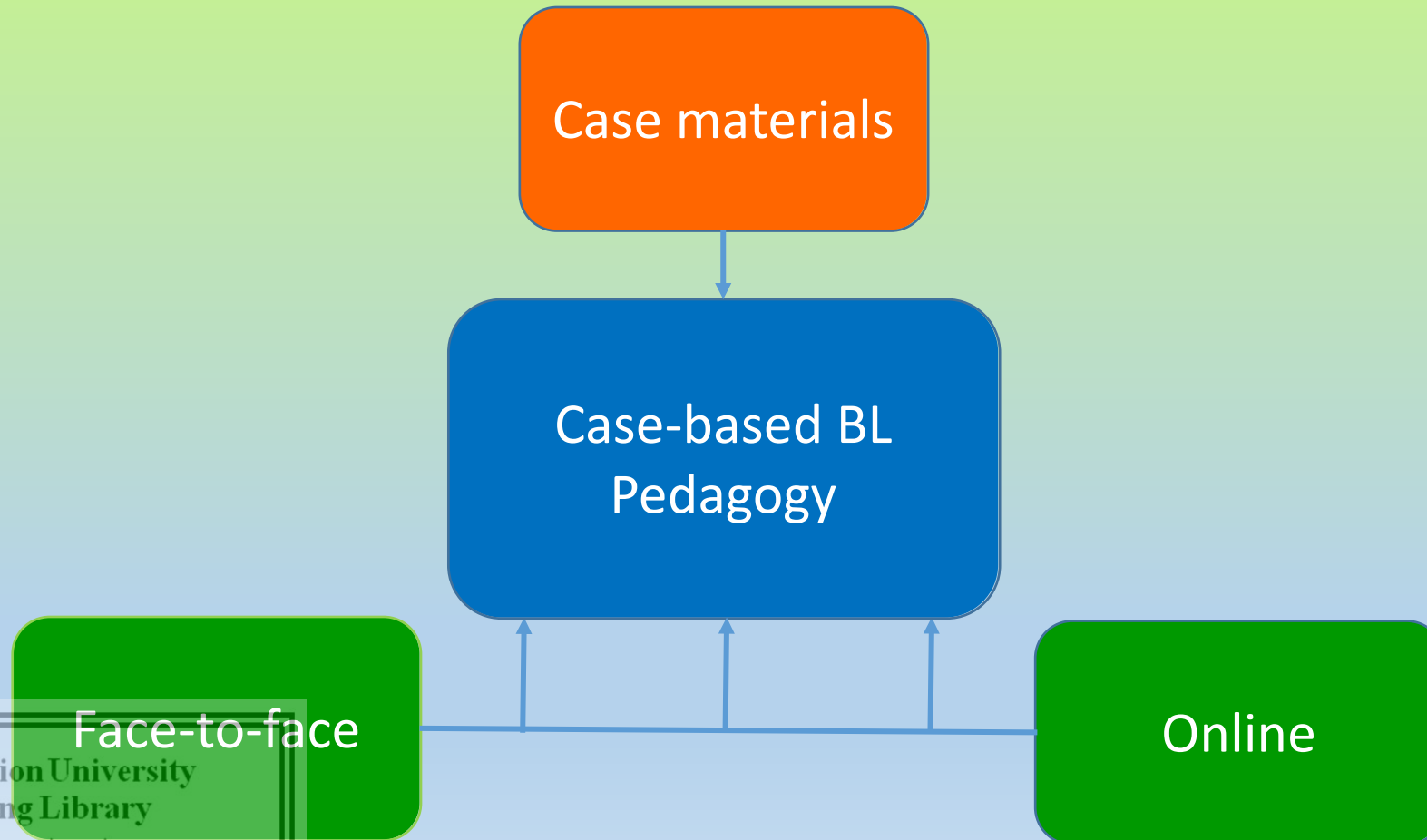
1. Technological competence
2. Human resistance (misconceptions or inadequate understanding)
3. Hard to engage emotionally - no add-on value or human touch
4. Remote connection with the content/reality



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Informed the faculty TDG project: integration of case materials, online learning and face-to-face components



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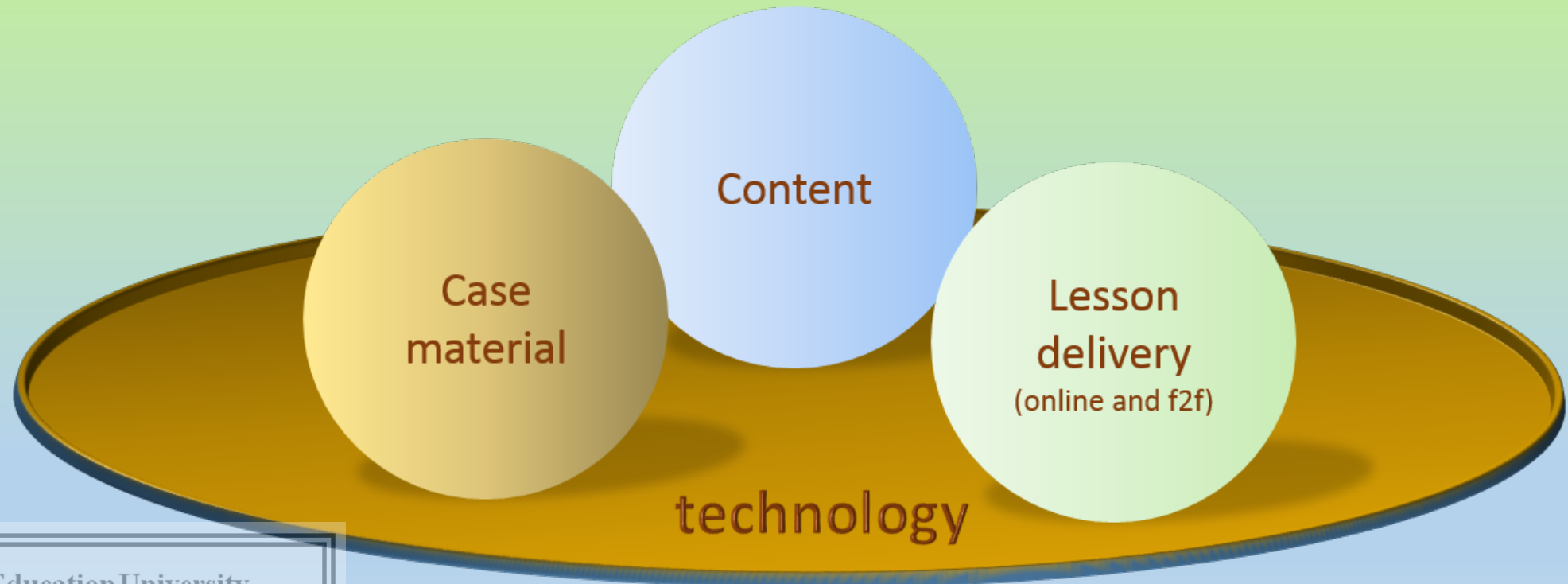
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'marbling' metaphor

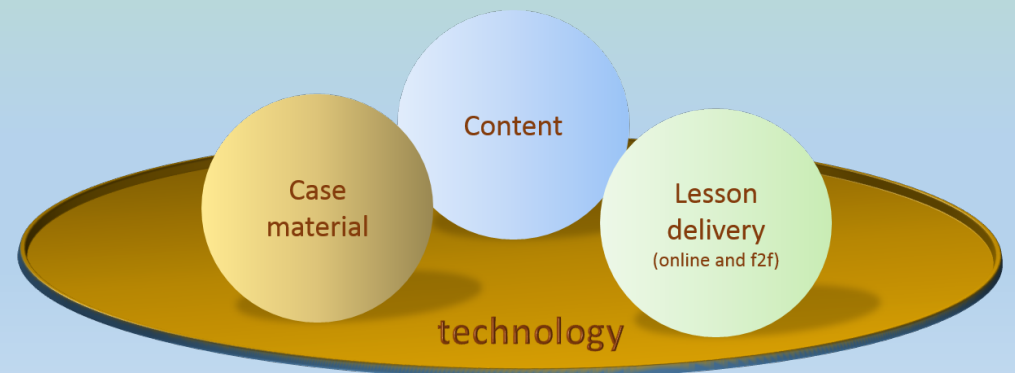


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CBBL Design

- 1. Content: selection for case material**
 - Interface with case material
- 2. Case material: development**
 - Interface with lesson delivery
- 3. Lesson delivery: online and face-to-face**
 - Interface with selected content for case material
- 4. Technology**
 - Interface with #1, 2, 3



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CBBL Design

Clearly defined learning outcomes
and pedagogical goals***

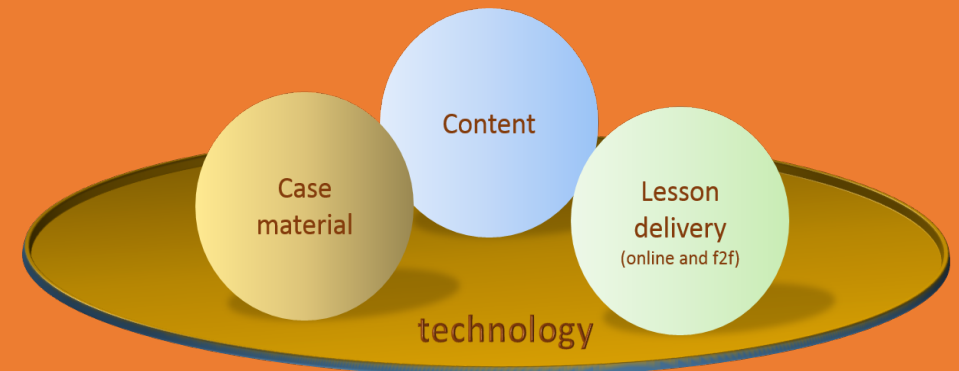
Learning outcomes:

- Content-related

Pedagogical goals:

- Student-related - independence, autonomy, and diversities in ability and learning styles
- Six challenges of student engagement

(Stein & Graham, 2014)



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(adapted from McGee & Reis, 2012)

Few extra things to know about students' satisfaction for effective blending learning

1. More receptive among students with better grades (A or B) and in shorter studying experience (1 to 2 years/freshmen)
2. Gender differences in terms of students' self-efficacy (female only), instructor characteristics (both genders) and facilitating conditions (both genders)
3. Personal problems (e.g. boredom, pressure, workload)
4. Language problems (e.g. learning difficult concepts in English)
5. Reward system (e.g. participation marks)



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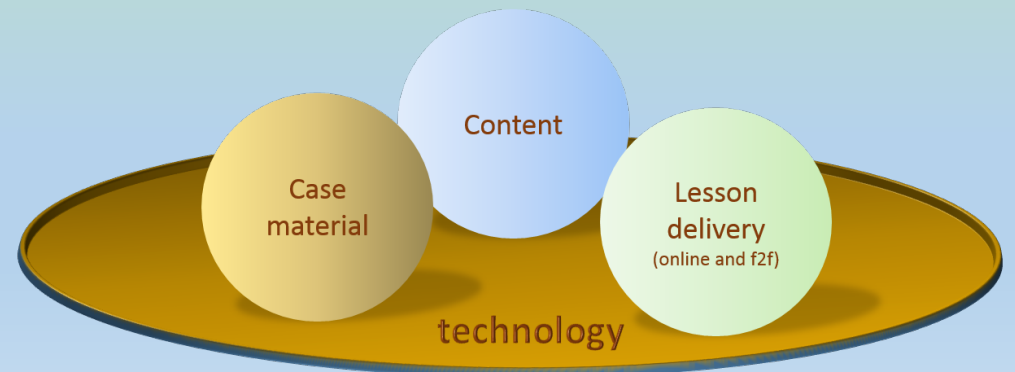
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Dang, Zhang, Ravindran, & Osmonbekov, 2016; Lam, 2015; Leung, 2012; Žuvic-Butorac, Roncevic, Nemcanin, & Nebic, 2011

CBBL Design

Three main components (Kerres & De Witt, 2003)

1. Content
2. Communication
3. Construction



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CBBL Design: Content

1. Content (Kerres & De Witt, 2003)	CBBL
<ul style="list-style-type: none">• Facts or rules the learner should be able to recall• Can be explicated and communicated by media or technological means• Specific information as a prerequisite for other communicative or constructive learning activities	Selection of content for case material



Example - Content

Selection for case material

ES Core Course: Teachers and Teaching in Context

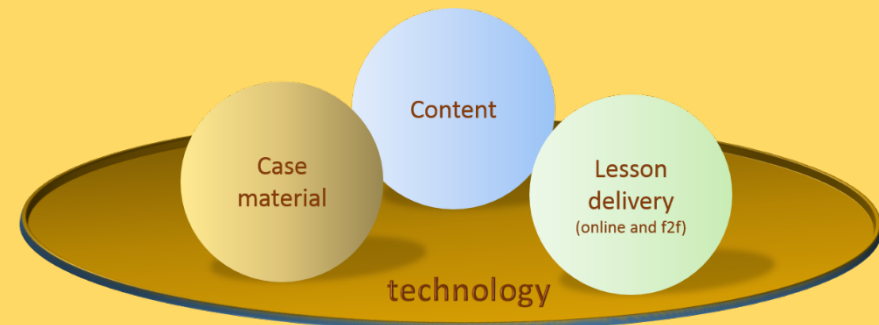
Weekly theme: professional ethics in teaching practice

Reading: ethical practice - ethical dilemma and knowledge

Key idea: teaching as making professional judgement and choice of action

'Prerequisite' information: code of ethics

– responsibility for different stakeholders



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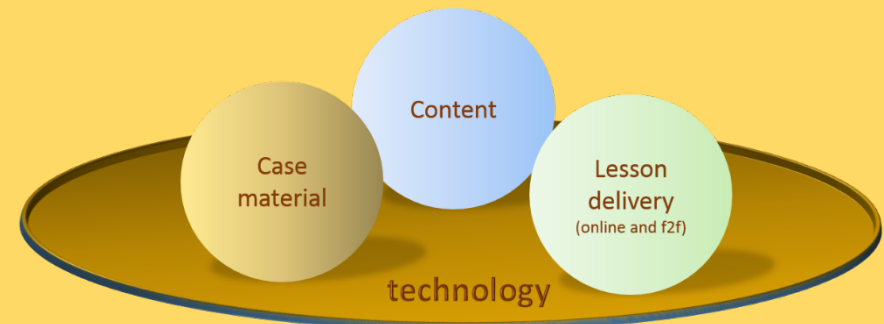
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Example - Content

Selection for case material

Learning outcomes

- To gain a clear understanding of the meanings of ethical practice and dilemma.
- To articulate the importance of professional ethics (or ethical practice) in upholding teacher professionalism.



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CBBL Design: Communication

2. Communication (Kerres & De Witt, 2003)

CBBL

- Knowledge reaching a certain complexity
- Knowledge consisting of different competing concepts
- Require a deeper understanding of a theoretical framework
- Students learn to formulate, express and discuss a personal point of view
- Students learn to participate in discussions, formulate and receive feedback in discursive settings

Development of
case material



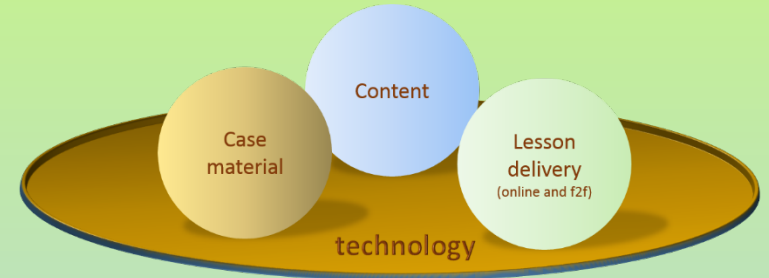
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CBBL Design: Communication

Case material: development

- Criteria for a good case
 1. Conceptual challenge - abstract ideas
 2. Authenticity - real life example
 3. Connectivity - familiar to students
 4. Complexity - different peoples/competing perspectives
 5. Ambiguity - no absolute solution/right or wrong
 6. Openness - multiple points of entry for discussion and decision making
 7. Transferability - general application
 8. Human touch - story telling through dramatization, direct quotations of the characters, etc.



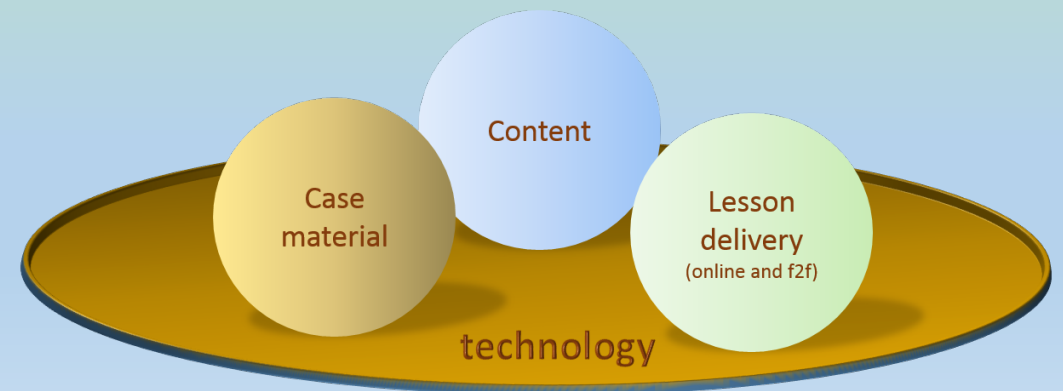
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CBBL Design: Communication

Case material: development

- Digital and non-digital forms
 1. Digital
 - Voice or visual
 - Audio recordings, video clips, PPTs
 2. Non-digital
 - Texts – e.g. news articles
 - Drama or role play
 - Stories



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Example - Communication

Case material: development

An animated case – sexual harassment

- Present a real incident experienced by a serving teacher.
- Show an ethical dilemma and diverse perspectives involved in making professional judgement and choice of action.

Animated case <https://drive.google.com/open?id=0B-C2l9x82slkYXE0MHdwS0VtYU0> (bilingual)

Script for instructors

<https://drive.google.com/file/d/0B-C2l9x82slkeWZ5MHNsdE41cGc/view> (Chinese)

<https://drive.google.com/file/d/0B-C2l9x82slkSUNjZmJGMEh0ZFU/view> (English)

Conceptual challenge

Authenticity

Connectivity

Complexity

Ambiguity

Openness

Transferability

Human touch



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CBBL Design: Construction

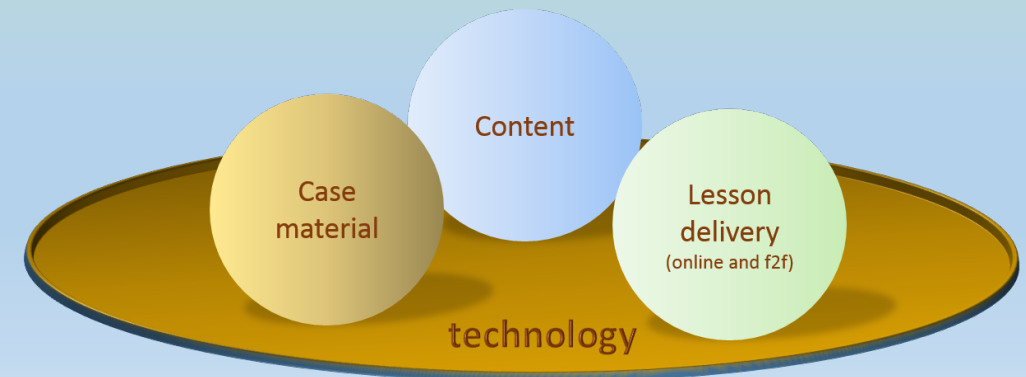
3. Construction (Kerres & De Witt, 2003)	CBBL
<ul style="list-style-type: none">• Knowledge to be applied (and not only to be recalled)• Knowledge consisting of procedures (and not only of declarative knowledge) that require practice• Content including ‘fuzzy’ knowledge	Lesson delivery: Online and face-to-face



CBBL Design: Construction

Lesson delivery: online and face-to-face

- Strategies and technology
- Integration between online and face-to-face components
- Student readiness for blended learning
- Achievement of learning outcomes



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CBBL Design: Construction

Strategies and technology

Pedagogical strategies

- Online and face-to-face
- Varied interactivity and prompt feedback
- Active learning

Assessment strategies

- Watch for a disconnection between pedagogical goals that focus on active learning and knowledge construction and assessments that focus on objective rather than performance
- Online tasks as *formative* assessment

Technology utilization

- Online and classroom
- Alignment with learning outcomes and pedagogical strategies



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(adapted from McGee & Reis, 2012)

Example – Construction

Lesson delivery: online and face-to-face

Strategies and technology & integration

Online task – Google Form

https://drive.google.com/open?id=1c4zIHTBj5rhv0_VVumR8zltLx5ipN5ak20QM77FZu7E

- You are the fourth teacher in the group of the case. What will be your choice of decision? Explain and justify your stance.
1. Apply knowledge of ethical dilemma and code of ethics
 2. Practice the process involved in making professional judgement and choice of action
e.g. listening to different perspectives, investigation, handling conflicting views
 3. Take note of with ‘fuzzy’ knowledge – no absolute solution or right/wrong



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Example - Lesson delivery

Face-to-face – group discussion

<https://www.youtube.com/watch?v=j7yEgXRJEjY&feature=youtu.be>

1. Analyze students' online responses
 - patterns of these responses (e.g. some views more prominent than others)
 - reasons behind the different stances shown in the case and online responses
 - refer to the code of ethics
2. Discuss how professional ethics may help uphold teacher professionalism and what is most important to consider in the face of an ethical dilemma.



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CBBL Design – Lesson Delivery

Integration

- **Creative mix** between the face-to-face and online pedagogies
- **Strategic planning** to integrate face-to-face and online pedagogies to enhance student engagement.
- **CBBL** to facilitate the integration of the two components within a spectrum
 1. **Low integration** means learning happens through minimal connections made between face-to-face and online pedagogies.
 2. **Deep integration** means learning happens through purposeful connections made between face-to-face and online pedagogies.



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Integration

Case materials



CBBL Pedagogy

Face-to-face

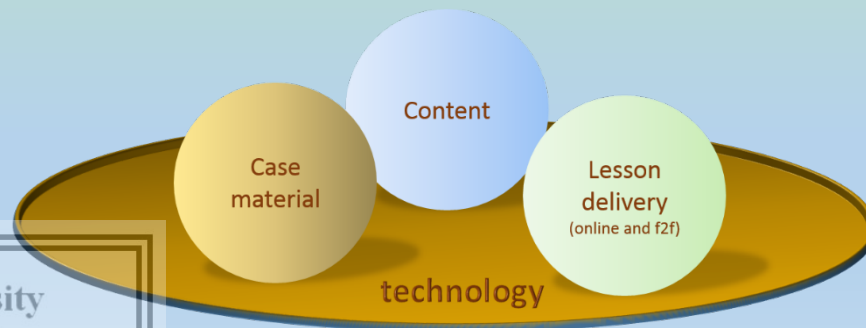
Online learning



CBBL Design – Lesson Delivery

Student readiness for blended learning

1. Clear communication: the blended design, expectation and process
2. Concrete guidelines and preparation for online tasks



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(adapted from McGee & Reis, 2012)

Example - Lesson delivery

Student readiness for blended learning

- **Students' study guide of the course**
 - Course delivery (13 lessons) = online + face-to-face
 - Class participation (10 points) – online tasks
- **Instructors to introduce the online task in the face-to-face lesson beforehand**



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Example - Lesson delivery

Student readiness for blended learning

Instructions for online task

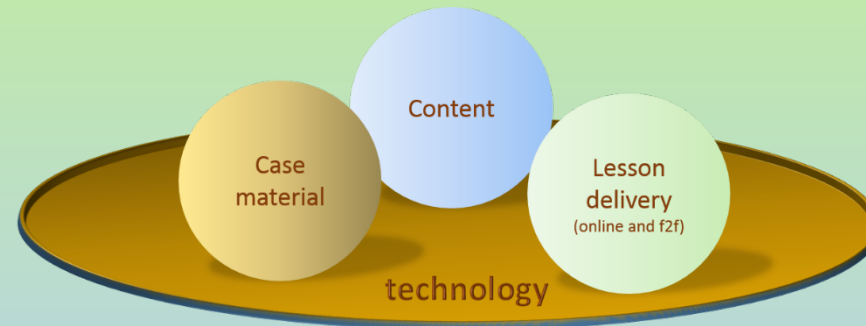
1. Read the required reading and code of ethics first.
2. Watch the case online, with what you have read about ethical dilemmas and professional ethics in mind.
3. Answer the question on the Google form.
4. You are the fourth teacher in the group of the case. What will be your choice of decision? Explain and justify your stance.
5. Submit the completed form.



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CBBL



In support of

best practices for blended learning



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Six goals for design of BL environment

Pedagogical richness: change the use of class time

Access to knowledge: increase pedagogical options

Social interaction: higher levels of mastery in learning and openness of students to redefine and reposition themselves in the world

Personal agency: “learner control”

Cost effectiveness: saving institutional resources

Ease of revision: potential to create a learning atmosphere that is flexible, responsive, and spontaneous

(Osguthorpe & Graham, 2003)

Best practices for blended learning: one thought

“those pedagogical strategies that help and facilitate learning and instructional processes within a blended learning situation and the advantages that they imply”

(Mortera-Gutiérrez, 2006, p. 323)



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