THE CHINESE UNIVERSITY OF HONG KONG

Micro-Module Courseware Development Grant

<u>Final Report (August 2015)</u>

Report due 31 August 2015.
Please return by email to The Ad hoc Committee on Planning of eLearning Infrastructure
<u>mmcd@cuhk.edu.hk</u>

<u>PART I</u>

Project title: <u>Flipped Classroom Teaching – Introduction to Peace Studies</u>

Principal supervisor: <u>Dr. CHOW Wai Yin</u>

Department / Unit: <u>Department of Cultural and Religious Studies</u>

Amount Granted: <u>HK$ 86, 000</u>

Project duration:<u> From January 2015 to August 2015</u>

Date report submitted: <u>31 Aug 2015</u>

1. **Project objectives**

   The objective of this project, as set in the proposal, is to produce three micro-module teaching videos used as a part of Flipped Classroom in the course "Introduction to Peace Studies." This objective has been achieved by producing 3 short multimedia micro-lectures (around 13 mins each) to facilitate students to understand the key concepts before the class. Topics included are (1) Why religion is a cause of conflict in traditional and contemporary societies? (2) However, on the other hand, religion historically has been a source of peace. The second module explores the rich resources of religions for peace, and (3) how spiritually-based practice inhibited in traditional religions could be creatively used for peacebuilding in contemporary society?

2. **Progress on process, outcomes or deliverables**

   3 Micro-Modules in video-lectures were accomplished from January to April 2015.   As the ITSC staff's professional support on how to producing micro-modules teaching by Surface Pro 3, Camtasia and Plantronics Headset, and my academic background in education and psychology, the production process was quite smooth and the project was completed satisfactorily.

3. **Evaluation Plan**

   The Evaluation Plan is operated according to the proposal:

   a. The effectiveness of the flipped classroom strategies have been evaluated by the **short quizzes** set in the micro-module and *in-class discussions*. Based on the quiz scores shown on the Blackboard, it can say that students' participation rate is high, and their

quiz results are satisfactory. Student feedbacks showed they can well understand the concepts presented in the micro-teaching, and therefore it is assumed that the objectives set for the micro-teaching are achieved.

b. Students' perception on the effectiveness of Flipped Classroom Teaching were evaluated by quantitative and qualitative surveys. The surveys have been conducted on 30 Mar 2015. The results are shown in the next session.

4. Dissemination, diffusion and impact

3 MMCDs are output as mp4, and then uploaded as SCORM package onto the Blackboard through the course platform CURE 2377 "Introduction to Peace Students" at Blackboard (under the category "Course Content") for students to download.

At the completion of the semester, students were asked to complete a 9-question survey about their experiences in flipped classroom. A 7-point Likert scale ranging from "strongly ineffective" (1) to "strongly effective" (7) was used to capture students' perceptions on the learning effectiveness of flipped classroom. Two open-ended questions asked students to comment o the model.
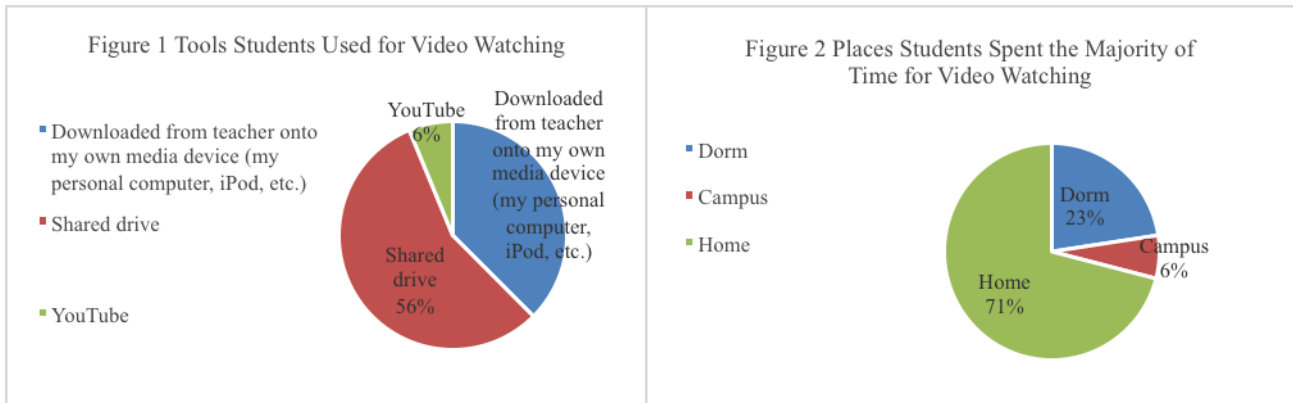
The Impact of MMCD

For calculation of each question's mean and standard deviation, the Likert Scale was given values of 1 (strongly ineffective) to 7 (strongly effective).   The open-ended questions were examined for common themes among the students. Completion of the survey was fully anonymous as no identifying questions were asked within the survey. Of the 40 students who completed the course, 30 completed the survey.

Of the respondents, 24 were female while 6 were male; 6 of them were second year students, 21 were third year students, and   the remaining 3 were unknown. For the major election, 29 of them were from the Department of Cultural and Religious Studies, where 13 of them majored in cultural studies and 15 of them majored in religious studies, and the remaining 1 is unclassifiable. There was 1 student majored in integrated business administrations.
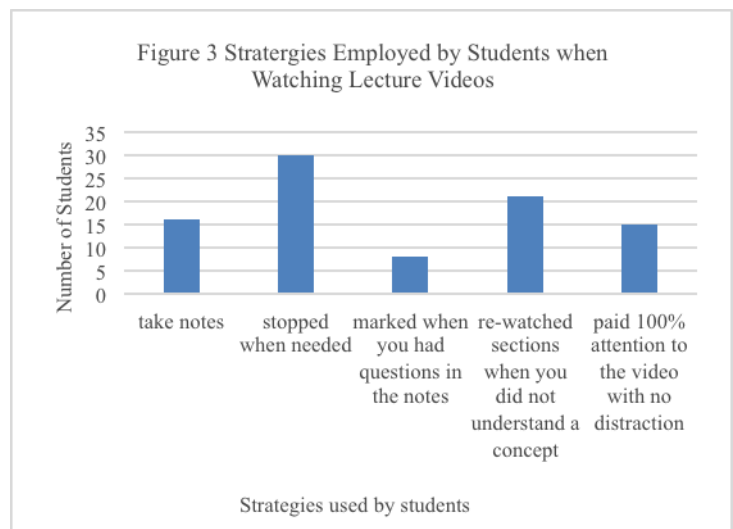
Learning Takes Place At Home

The flipped classroom essentially reverses traditional teaching. Instead of lectures occurring in the classroom and assignments being done at home, the opposite occurs. The data from Figure 2 show that 71% of respondents viewed micro-lectures at home via podcasts (created by the teacher; see Figure 1). 23% of respondents watched micro-lectures at dorm, and the remaining finished them on campus. According to the self-reports, students' average time spent per video is 36.6 minutes, ranging from a quarter of an hour to an hour, with the standard deviation of 15 minutes. Class time thus could be devoted to discussions or projects based on the concepts learnt at home. Theoretically speaking, our flipped classroom learning

Figure 1 Tools Students Used for Video Watching

- Downloaded from teacher onto my own media device (my personal computer, iPod, etc.)
- Shared drive
- YouTube

Figure 2 Places Students Spent the Majority of Time for Video Watching

- Dorm
- Campus
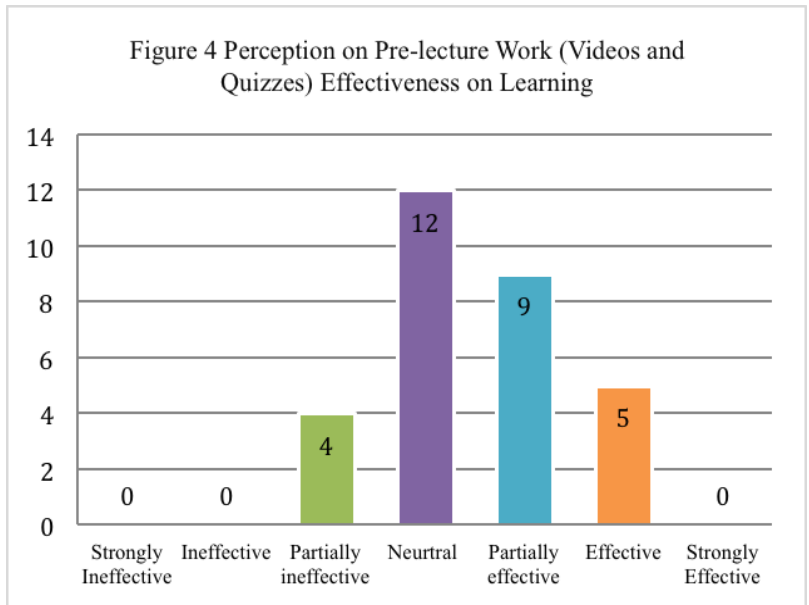- Home

occurred.

Creating Independent Learners

The flipped classroom model is a method for creating an independent learner. The data in Figure 3 show that students gained control of the learning process at their own pace. 100% of respondents said they stopped or rewinded lectures to focus on key points.   70% of them re-watched the sections that they do not understand. About half of them said they paid 100% attention while watching *and* took notes. However, no more than 30% of the respondents marked down their questions on the video-lectures.

Figure 3 Stratergies Employed by Students when Watching Lecture Videos

Student Perceptions of the Flipped Classroom
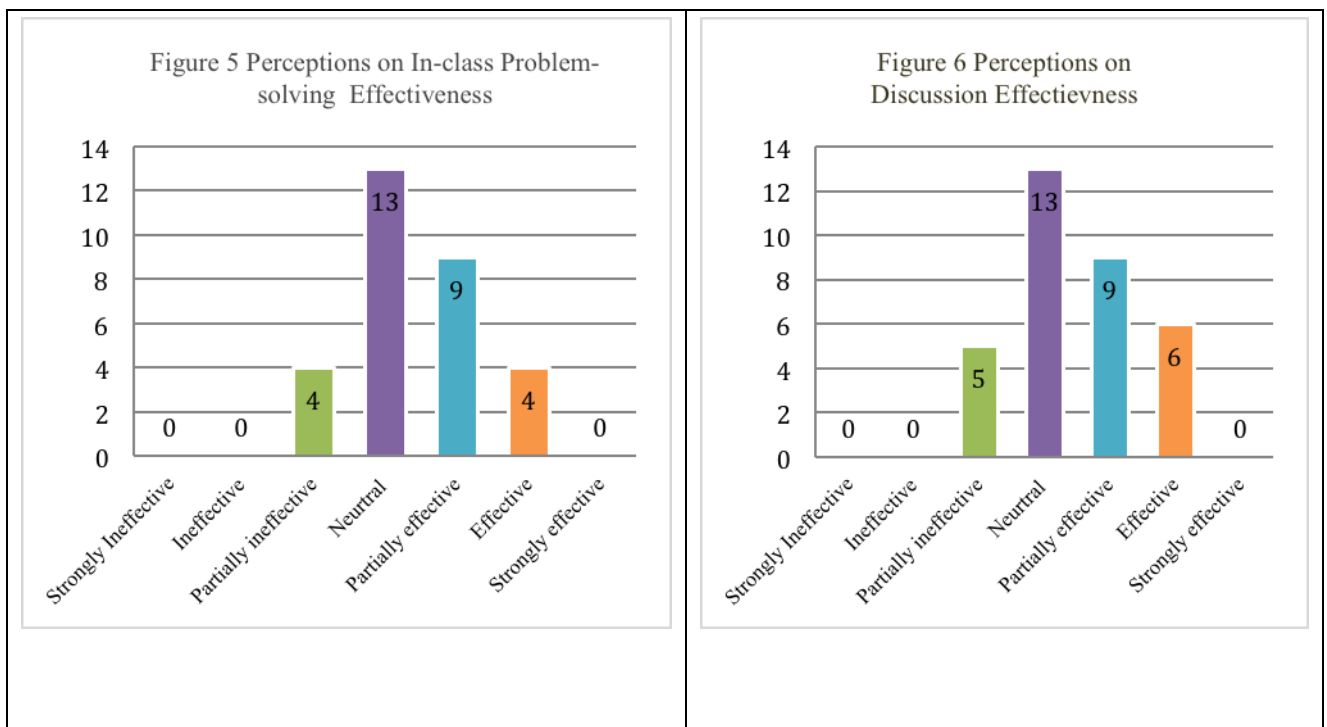
<u>*Pre-lecture Work*</u>

Blending the learning venue between online and the classroom, and shifting the responsibility of learning the basic concepts onto the students, there might be no small adjustments for some teachers. Similarly, for some students, this might be also a new challenge. The data from Figure 4 to Figure 9 show the flipped classroom model was effective in some ways and ineffective in others.

Figure 4 Perception on Pre-lecture Work (Videos and Quizzes) Effectiveness on Learning

In terms of pre-lecture work (including video-lectures and quizzes), Figure 4 shows that half of the respondents find the micro-lecture effective or partially effective for their learning; nearly another half experience a neutral effect; and about 13% found this new pedagogy partially ineffective.

Problem Solving Effectiveness and Discussion Effectiveness

Similar responses were found in the measurements of in-class "Problem-Solving Effectiveness" and "Discussion Effectiveness" (see Fig. 5 and 6 in the below).

Figure 5 Perceptions on In-class Problem-solving Effectiveness

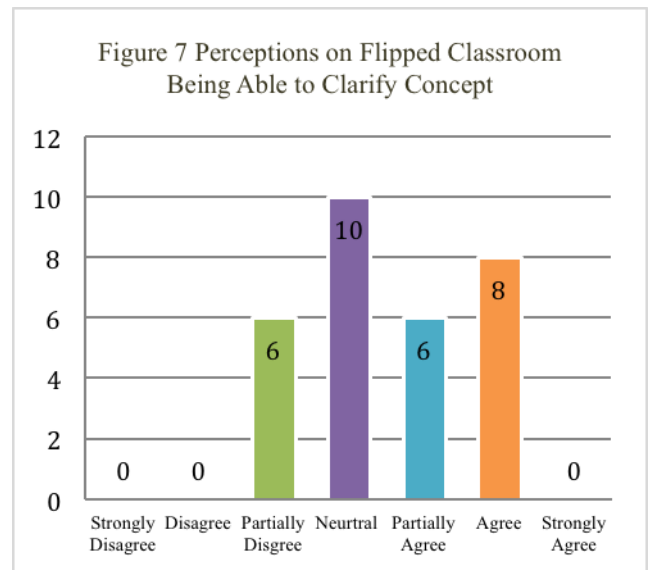**Figure 6 Perceptions on Discussion Effectievness**

Half of the respondents found the "Problem-Solving" and "Discussion" sessions

effective or partially effective; nearly another half experience a neutral effect; and about 13%-20% feel partially ineffective in this new pedagogy.
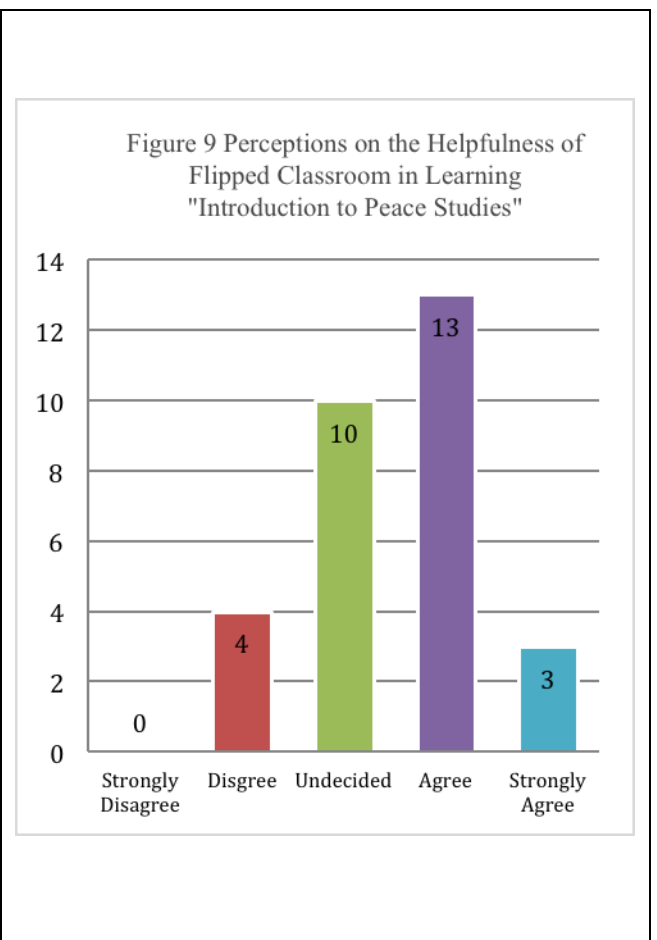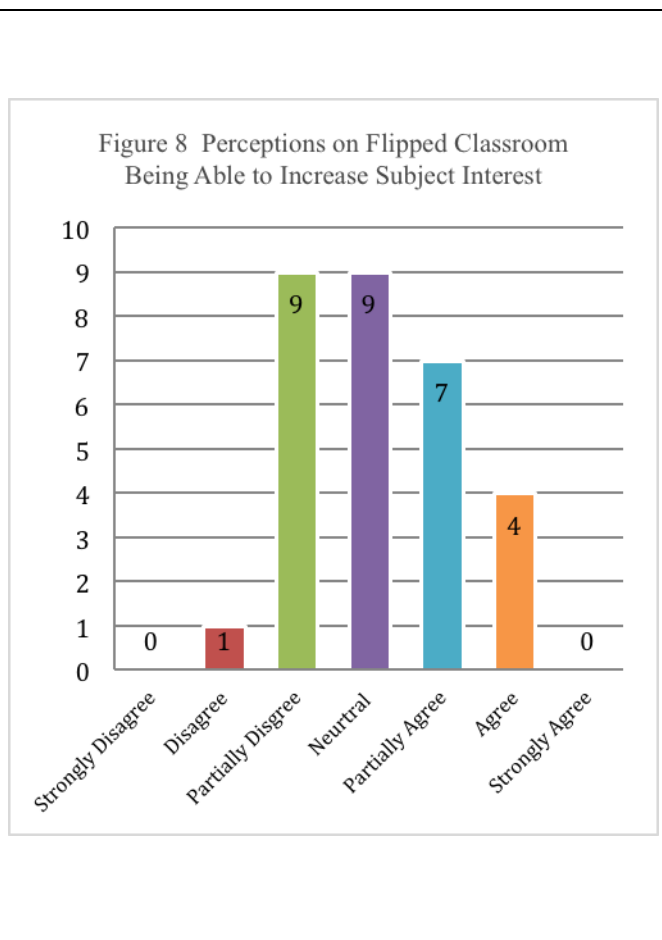
Concept Clarification Effectiveness

Our flipped classroom model used internet technology to facilitate students to learn, clarify and extend their learning of the basic concepts outside the class. Figure 7 shows that more than a quarter of the respondents agreed the flipped classroom model was able to clarify concepts; another 20% of respondents partially agreed with the model. Only 20% of the students partially disagreed with the new model.

Figure 7 Perceptions on Flipped Classroom Being Able to Clarify Concept

Interest Rise On the Issues Studied and the Course "Introduction to Peace Studies"

Figure 8 shows that 13% of the respondents agreed the effectiveness of flipped classroom to raise their interest towards the subject; 23% partially agreed; 30% showed neutral responses; 30 % partially disagreed ; nearly 3% disagreed.

Figure 8 Perceptions on Flipped Classroom Being Able to Increase Subject Interest

Figure 9 Perceptions on the Helpfulness of Flipped Classroom in Learning "Introduction to Peace Studies"

For the question on the helpfulness of flipped classroom in learning "Introduction to Peace Studies", nearly 43% of the respondents agreed that the flipped classroom was helpful to their learning of the course; 10% strongly agreed; 30% were unsure about the helpfulness of the flipped method to their learning of the course; and nearly 13% disagreed the efficacy of the flipped learning model for the course (see Fig. 9).

The Efficacy of Flipped Classroom - Flipped Classroom Learning and Term Paper Scores

Further, we explored the flipped classroom on students' application concepts acquired out of class. As short quiz embedded into the video-lectures aimed to help students learn the new concepts, the scores of quiz were not used to measure students' academic progress. Rather, we expected the students could apply the concept learnt in their reflection paper. We thus examined the relationship between the time the students spent in the video-lectures and their paper scores.

Three variables were measured: the total time spent on merely video-lectures, learning materials on Blackboard (including video-lectures and assigned readings), and non-video learning materials on Blackboard (merely assigned readings). Video-lectures were moderately correlated with student term paper scores ($r = .279$, $p = .082 > .05$, $n = 40$) in comparison with the time spent on learning materials on Blackboard ($r = .357^*$, $p = .024 < .05$, $n = 40$), and non-video learning materials on Blackboard ($r = .329^*$, $p = .038 < .05$, $n = 40$).

PART II
Financial data

Funds available:

Funds awarded from MMCDG	$ 86,000
Funds secured from other sources (please specify_____)	$ _____

Total: $ 86,000

Expenditure:

Item	Budget as per application	Expenditure	Balance
Senior Staff (Teaching relief)	48,000	38,430	
Subordinate Staff (Research Assistant)	36,000	11,025	
Fixed Assets (Tablet PC)	4,000	16,136	
Software for Micro-Modules and Flipped Classroom Teaching	3,000	--	

Total:		65,591	20,409

PART III

Favorite Experience in the Flipped Classroom

Two open-ended questions were used to ask students to share their favorite experience in the flipped classroom. Theme analysis shows that some of the students liked flipped classroom because

a. they could learn new material at their own pace; and reviewed material anytime and anywhere;

b. they could watch the online lecture at home and came to class prepared;

c. class became the place to work through problems and discussions;

d. class time was used to deepen their understanding of the course materials.

Challenge in the Flipped Classroom

On the other hand, theme analysis shows that some of the students did not enjoy the new learning model because:

a. lecture class became tutorial class;

b. when reviewing lecture content at home, students could not get immediate answers to their questions as often happened in the traditional classroom;

c. experienced technological problems with flipped classroom;

d. high-quality discussion activities could not be maintained if the classmates came to the class unprepared;

e. a lecture by video was still a lecture.

Suggestions

Based on the student responses collected, it could say that *learner-content interaction*, *learner-teacher interaction*, and *learner-learner interaction* were important elements for effective flipped classroom learning. Flipped classroom learners may spend most of their time digesting content through thinking and reflection. Well-organized presentation, interactive videos, ease of accessing online content may increase learners' motivation to interact with course content (Havice, Davis, Foxx, & Havice, 2010).

On the other hand, the self-paced nature of the flipped classroom is a benefit for those using it, but this may also be a disadvantage for some students. Some students may not be capable of managing their study and time in discipline manner. Students may benefit from

deadlines and support provided by teachers.

Learner-teacher interaction also contributes to effective flipped classroom learning. Respondents gave feedback that they could not get immediate answers to their questions in video-lectures as often happened in the traditional classroom. Although students could keep notes and began class with Q&A discussions, teacher might employ other remedies like online discussion forums, blog posts, and journal writings in order to help students record their spontaneous reactions and questions to new information.

Also, course design would affect learners' interaction with their teacher. Course design with low flexibility can reduce learner-teacher interaction. The more rigid the course outline, the less autonomy a learner has (Giossos, Koutsouba, Lionarakis, & Skavantzos, 2009). A structured course design may provide basic course information (e.g., course objectives, teaching strategies, evaluation methods) as well as specified guidelines along with each task or assignment (Lee & Rha, 2009).

The amount of collaborative learning design in online settings seems to be an important factor that leads to the effect of flipped classroom learning. However, if the flipped classroom teaching is used in a short period of time (e.g. within 13-weeks), the given time constraints may decrease students and teachers' willingness to involve a great amount of group activities.

PART IV
Information for public access

Summary information and brief write-ups of individual projects will be uploaded to a publicly accessible CUHK MMCDG website. Please extract from Part I the relevant information to facilitate the compilation of the publicly accessible website and reports.

1. Keywords

Please provide five keywords (in the order of most relevant to your project to least relevant) to describe your micro-modules/pedagogies adopted.

(Most relevant)   Keyword 1: Religion, Conflict and Peace Movement

                     Keyword 2: Flipped Classroom

                     Keyword 3:

                     Keyword 4:

(Least relevant)   Keyword 5:

2. Summary

Please provide information, if any, in the following tables, and provide the details in Part I.

Table 1: Publicly accessible online resources (if any)	

MMCD1:

https://elearn.cuhk.edu.hk/webapps/portal/frameset.jsp?tab_tab_group_id=_2_1&url=%2Fwebapps%2Fblackboard%2Fexecute%2Flauncher%3Ftype%3DCourse%26id%3D_43544_1%26url%3D

MMCD2:

https://elearn.cuhk.edu.hk/webapps/portal/frameset.jsp?tab_tab_group_id=_2_1&url=%2Fwebapps%2Fblackboard%2Fexecute%2Flauncher%3Ftype%3DCourse%26id%3D_43544_1%26url%3D

MMCD 3:

https://elearn.cuhk.edu.hk/webapps/portal/frameset.jsp?tab_tab_group_id=_2_1&url=%2Fwebapps%2Fblackboard%2Fexecute%2Flauncher%3Ftype%3DCourse%26id%3D_43544_1%26url%3D

	A Brief Description of the Content
MMCD 1	The first MMCD provides a general framework to understand why religion is a cause of conflict in human history. Two major paradigms are explored, from theoretical approach focusing on the conflict of religious beliefs to cultural approaches on religion and conflict. For the latter approach, primordial, instrumental and constructivist perspectives will be touched on.
MMCD 2	The second MMCD then moves to an examination of theories of the role of religion in peacebuilding, including the role of religious teaching, religious identity, religious ritual and religious actor.
MMCD 3	People today are yearning for a spiritually based politics guided by moral values. The third MMCD explores (1) the link among religion, spiritually-based practice and inner peace; and (2) how the contemporary peace projects embody spiritual values to promote compassion, justice, and peace.

Table 2: Resource accessible to a target group of students (if any)	
If resources (eg. software) have been developed for a target group of students (eg. in a course, in a department) to gain access through specific platforms (eg. Blackboard, facebook), please specify.	

Course Code/ Target Students	Term & Year of offering	Approximate No. of students	Platform

CURE 2377 Introduction to Peace Studies	*2ⁿᵈ term 2015*	*40*	*Blackboard*

Table 3: Presentation (if any)	
Please classify each of the (oral/poster) presentations into one and only one of the following categories	**Number**
(a) In workshop/retreat within your unit (eg. department, faculty)	1
(b) In workshop/retreat organized for CUHK teachers (eg. CLEAR workshop, workshop organized by other CUHK units)	
(c) In CUHK ExPo jointly organized by CLEAR and ITSC	
(d) In any other event held in HK (eg. UGC symposium, talks delivered to units of other institutions)	
(e) In international conference	
(f) Others (please specify)	

Table 4: Publication (if any)	
Please classify each piece of publications into one and only one of the following categories	**Number**
(a) Project CD/DVD	
(b) Project leaflet	
(c) Project booklet	
(d) A section/chapter in a booklet/ book distributed to a limited group of audience	
(e) Conference proceeding	
(f) A chapter in a book accessible internationally	
(g) A paper in an referred journal	
(h) Others (please specify)	

3. A one-page brief write up

Please provide a one-page brief write-up of no more than 500 words or a short video (~2 minutes) (preferred).

Three micro-modules produced were used as a part of Flipped Classroom Teaching for the course "Introduction to Peace Studies." The micro-modules aim to help students understand:

1. why religion can play as mobilizing factor in human conflicts;

2. how religion can be a source (e. justice, forgiveness, and compassion) of reconciliation and peace-building;

3. why religious practices (e.g. prayer, meditation and compassionate listening) could be major peacemaking practices in contemporary world: