

ENHANCING LEARNER AUTONOMY THROUGH TEACHER CURATORSHIP ON AN ONLINE LEARNING PLATFORM IN APPRECIATING HONG KONG'S CULTURAL HERITAGE

Seminar on Teaching Development Grant (TDG) Project Application
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Focus

- Quality Education, Sustainable Cities and Communities and Fostering Innovation
 - *out of the 17 Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development by the UN Development Programme.*
- Enhancing
 - *learner autonomy in utilizing technology, media, and telecommunications*
 - *interaction between student and teacher in higher education settings*
 - *STEAM learning*



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Projected outcomes/ Impact on student learning

- Guided to autonomously develop an understanding of local socio-cultural issues behind the heritage buildings
- Train for critical and creative thinking skills by creating their own multi-media work related to the cultural heritage and through peer evaluation
- Critiquing the aesthetics as well as functions of the buildings, students will be engaged in problem solving and ethical decision-making tasks
- Global perspectives be broadened by reflecting upon the implications of heritage conservation and sustainable development



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competencies for knowledge-based economy, which are also outcomes required of active and responsible citizens. Thus at EdUHK, we have established a set of seven GILOs. The following table provides a brief description to each of them:

Table 1:

Generic Intended Learning Outcomes (GILOs)	Operational Criteria
1. Problem Solving Skills	1.1 Identify the problem 1.2 Formulate a plan to solve the problem 1.3 Implement a solution and monitor the process 1.4 Reflect upon and evaluate the process and outcomes
2. Critical Thinking Skills	2.1 Identify the issue 2.2 Examine the influence of the context and assumptions 2.3 Analyse and evaluate the issue 2.4 Formulate a conclusion/position (perspective/thesis/hypothesis)
3. Creative Thinking Skills	3.1 Sensitivity 3.2 Flexibility 3.3 Innovative thinking 3.4 Connecting, synthesising, transforming 3.5 Elaboration
4a. Oral Communication Skills	4a.1 Convey a central message with context and purpose 4a.2 Use supporting evidence 4a.3 Display organisation 4a.4 Use proper language and engage the audience
4b. Written Communication Skills	4b.1 Consider context and purpose 4b.2 Use supporting evidence





SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD



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STEAM

Expected learning outcomes in this project from STEAM Learning					
	Science	Technology	Engineering	Arts	Mathematics
Student involvement	Physically studying the building science of the buildings including materials and physics, using the app and new online platform	Students will learn how to use the mobile app and thereafter produce a miniature video product as assessment, and sharing it on the new online platform	Analyzing the structure of the buildings via the new online platform and field trip reports	Appreciating the aesthetics of the buildings as well as script writing and design of the video assessment	Measurements of distances and time related to the built heritage
Learning Outcomes	Experiential learning and critical thinking skills	Social interaction and communication skills via utilizing multi-media technology	Problem solving and critical thinking skills	Creative thinking skills and enhancing global perspectives	Problem solving and critical thinking skills



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TDG Application

- 1. Clear objectives aligning with suitable innovative frameworks
 - *TMT and STEAM*

This project therefore aims at combining TMT (technology, media and entertainment, and telecommunications) and STEAM learning (Science, Technology, Engineering, Art and Mathematics) to enhance students' experiential learning in cultural heritage of Hong Kong (Deloitte, 2017; Jolly, 2014), to create a more realistic transdisciplinary learning experience for arts education (Rinne, Gregory, Yarmolinskaya & Hardiman, 2011; Miller & Knezek, 2013). Through learning autonomously from studying and analysing the heritage buildings, students will be involved in concrete experience, active experimentation, reflective observation and abstract conceptualization, which are Kolb's (1984) four major elements of experiential learning. Students will not only learn about Hong Kong cultural heritage from within the classroom, but also utilize the online learning web platform and the mobile app via tablets or mobile phones to engage in autonomous learning outside of class and in the actual environment. There is an existing mobile app called ARchiHK launched by the PI (see <https://play.google.com/store/apps/details?id=com.Aesir.ARchiHK&hl=en>), but more funding needs to be generated to expand the features and to create an interactive online learning platform as described above. Students will therefore not only appreciate the buildings' history and aesthetics with the enhanced mobile app, but also produce a miniature video based on the history or stories in relations to the heritage and submit the video through the online learning platform. They will then be engaged in peer assessment of each other's work on this platform, effectively enhancing the experience of evaluation as well as their social interaction and communication skills.

Objectives:

- (i) To enhance student learning autonomy by utilizing technology, media, and telecommunications (TMT) in experiential learning of cultural heritage
- (ii) Combining STEAM learning with teacher curatorship of multi-media resources on an online learning platform in enhancing quality education
- (iii) To develop students' concept of sustainable development and broaden their global perspectives in relation to cultural heritage



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TDG Application

- 2. Referencing previous projects/ pilot work
 - *Project achievements*
 - *Teaching experiences*
 - *Relating experiences with projected impacts*

Platform:



Existing AR Mobile App, enhanced with and an Online Learning Platform by this TDG project:

<https://www.youtube.com/watch?v=0nI3Y4JKA04>

The project ideally enhances the PI's past ECS project (Early Career Scheme) on cultural heritage education in Hong Kong that is nearing its completion. She has already launched a mobile app for both the public and students in enhancing experiential learning in appreciating modern architectural heritage in Hong Kong. The PI proposes to join forces with her colleague with expertise in multi-media, technology, and education to focus on heritage education with a point-line-plane approach, concentrating on cultural heritage sites and certain entertainment (e.g. theatre) buildings along the tram route of Hong Kong island. This project also ties in with the PI's teaching in courses on cultural heritage and sustainable development, Hong Kong architectural history, and the Co-I's experience in mobile apps development, curating exhibition for immersive media, teaching experience in virtual reality (VR) and other multimedia technology (see www.leecheng.info).



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TDG Application

- 3. Designing the project with manageable and foreseeable outcomes
 - *Intended focus groups/ class/ beneficiaries*
 - *Design with a reasonable work plan and scale*

9. Expected types and number of beneficiaries:

Primarily EdUHK students from the GE course on Hong Kong Architectural History (GEF2037, around 30 students), Cultural Heritage and Sustainable Development (CAC3019, around 50 students), Hong Konger Art and Music (CAC2010, around 50 students). Students taking courses on virtual and augmented reality as well as media and technology will also be the expected beneficiary from this project. Moreover, as the digital creations will be publicly available online, the general public will also benefit from the outcomes of this project. Hong Kong Tramways is one targeted collaborative partner of this project, and by utilizing their social and community platform it is aimed that heritage education and tourism/promotion will also be the outcomes of this project.



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13. Project plan

Period (MM/YY)	Work plan / Activities
Aug-Sep /18	Collecting initial research to pinpoint and target and specific locations of cultural heritage sites, most probably along the tram route of Hong Kong. A part time research assistant to help with the administrative work in the project and students to engage in data collection in the early stage.
Oct-Dec/18	Hiring an external software designer to design an online learning platform and enhancing the current mobile app (ARchiHK) in appreciating modern architecture to enrich the list of buildings; part time research assistant and students to engage in interviewing local community or tourists from the community on the theatre/ heritage buildings along Hong Kong island with a focus on those along the tram route. Also, after the implementation of this project as part of the two courses mentioned, students (N~60) will be asked to complete a questionnaire survey for their self-assessed achievement in GILOs as developed in this project. Some (n~15) will further be invited for a semi-structured interviews with the project team to evaluate qualitatively their achievement of GILOs.
Jan-Mar/19	Having students produce a video documentation or 'mini-video' of the cultural heritage sites, with a narration and storyline related to the building's history or function. Then the students will upload their work to the new online learning platform, which will be periodically monitored and updated by the software designers and the part time research assistant.
Apr-Jun/19	Students will engage in peer feedback and commenting of the videos, enhancing their learning in not only the buildings but also a positive psychology in learning from and sharing with each other and enhancing the generic learning outcomes of EdUHK.
Jun-Jul/19	Final arranging of the data on the online learning platform with the help of the part time research assistant and presentations or seminars on using the digital creations from this project and disseminating to students and the public. The funding from this project will maintain the rent of the online server and maintenance for the newly developed online platform for a year.



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TDG Application

■ 4. Evaluations

- *Creating suitable assessment criteria and method*
- *Assess according to timeframe and adjust the project flow with comments*

Objectives / Outcomes / Impact on student learning <i>(same as those mentioned in Items 8-9)</i>	Evaluation Mechanisms <i>(including measures and methodology, etc.)</i>
1. (Student) learner autonomy	By selecting a heritage building of their choice and critiquing its revitalization and/or history, students are required to produce individual reflective reports based on their on-site observations as well as designing and writing unique scripts for the video assessment. Individual learner autonomy will be evidenced and assessed via these reflective reports as a means of documentation of their progress throughout the course of utilizing the platform. As indicated in the above project plan, the final stage of this project involves seminars and presentations of the students' works as well as sharing of their feedback on utilizing the online platform and creating the video artworks.
2. Problem solving and ethical decision-making skills	Critiquing the building's aesthetics and proposing current/ future use; students will be evaluated by their peers and would also learn

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	how to provide constructive feedback
3. Social interaction and communication skills	Students' may work together on the video shooting, and peer evaluation of the videos will be done on the online platform
4. Critical and creative thinking skills	Students' capacity building in critical thinking and creativity will be demonstrated and evaluated by the mini-video they will make
5. All of the above GILOs	Apart from the Student Evaluation of Teaching (SET), survey and semi-structured interviews will be implemented for students' feedback and quality assurance on the approaches adopted in this project



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Main Platforms now in-use

■ Online platform

- *Testing version completed in Sep 2019 and using in the class ART1156 Contextual Studies of Art*
- *For instant interaction and response*
- *Allow in-class comment and boost discussion*

Discussion Title	
What is art? Posted on 2019-09-02 17:26:57	28
Group 1 discussion Posted on 2019-09-02 17:30:01	1
Group 2 discussion Posted on 2019-09-03 16:01:58	2
Group 3 discussion Posted on 2019-09-03 16:03:05	3
Assigned artwork 1 Posted on 2019-09-03 16:36:26	2
Assigned artwork 2 Posted on 2019-09-03 16:39:19	1
Assigned artwork 3 Posted on 2019-09-03 16:40:25	2
Assigned artwork 4 Posted on 2019-09-03 16:44:36	1
Assigned artwork 5 Posted on 2019-09-03 16:46:58	3
Assigned artwork 6 Posted on 2019-09-04 09:35:03	1
Assigned artwork 7 Posted on 2019-09-04 09:37:32	0
Assigned artwork 8 Posted on 2019-09-04 10:23:44	0



Assigned artwork 5

Starry Night by Vincent van Gogh, 1889

comment...

Send



LUO GUANLAN Posted on 2019-09-04 15:21:46

Who: Vincent Van Gogh When: 1889 Where: Netherlands What: the Starry Night How: post- Impressionism, modern art, not belongs to classic art Why: according to some documentaries, Van Gogh is not an extroverted person and in his life he had only few close friends. And according to many resources, he painted the Starry night in his own ground-floor studio during the day. Before this painting, he had sketched many times of the background, the field, we can see that he is a emotional person and he devoted himself to what he exactly in love.



WEN JIE Posted on 2019-09-04 15:21:11

the whole picture is made by countless curved lines. Van Gogh utilize this special technique to create a strong sense of movement, just like moving river. However, the color is cold, the painter is full of passion for life and art, but he is calm and even cool in his heart, This contradiction is deeply in this painting.



CHAN WING LAAM Posted on 2019-09-04 15:20:56

Medium: oil on canvas Dimension: 73.7cm x 92.1cm Visual elements: dot and line, cool colors Design principles: expressionism Visual impact: a sense of gloomy and sad



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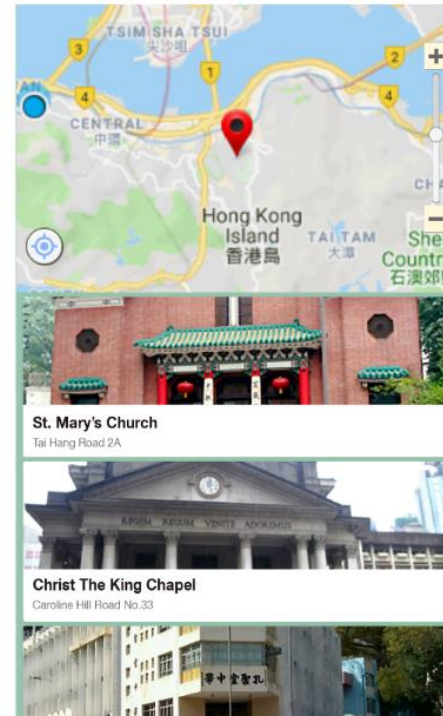
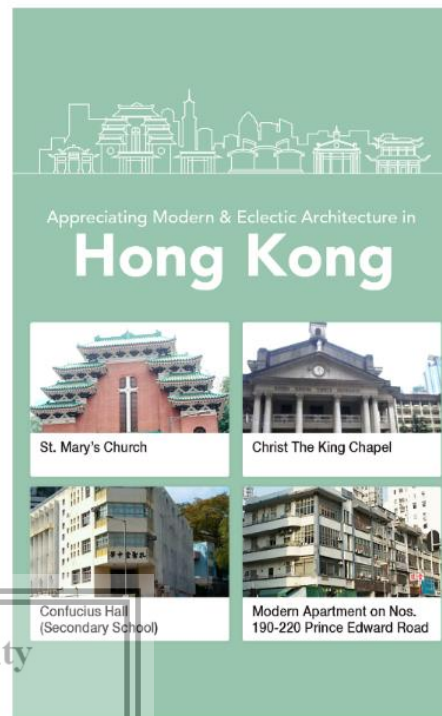
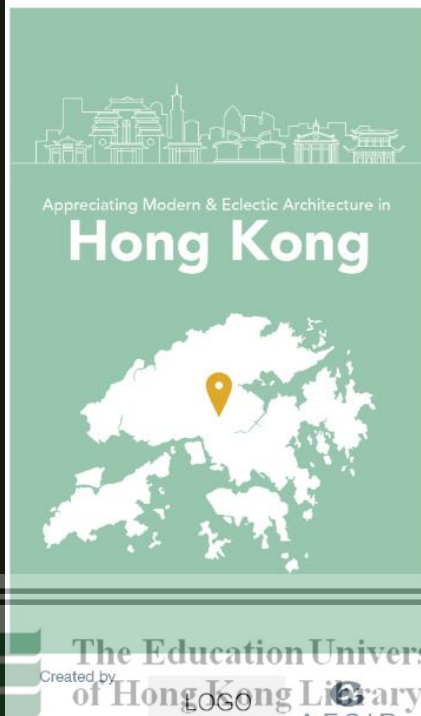
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<https://architectureedu.com.hk/Discuss/index.php>

Main Platforms now in-use

■ Mobile App ARchiHK

- *Onsite AR visualization of architectural features and terms*
- *Detailed introduction with built-in location spotting function*



Main Platforms now in-use

- Mobile app with information that cross-referenced with instant AR effects



At the side view it is clearly an eclectic architecture as large colored windows can be seen in churches appeared here but in geometric shape rather than arched and pointed arch. A white line with Chinese-character like motif can be seen here to express its Chinese identity.

Interior



Looking back to the big cross on the main facade from inside. The voids of cross allow light to penetrate into the dark church and created a sense of coming down of god from heaven.



Decorative concrete beams are on the top of the church space which is imitating a Chinese wooden structure. The rose window can be seen in this photo and it is facing east from exterior.



At the transept, some curly cloud motifs are found and these are the symbol of luck and prosperity in Chinese iconographies.



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Fieldtrip Photo-hunt activity

Please follow the instructions to capture photos to unlock another level.

St. Mary's Church

1. Find a current location that used to be the seashore in 1930s
2. Find the most iconic figure of a church
3. Find an architectural element that must be facing East
4. Find 3 Chinese motifs inside the church
5. Find 3 eclectic decorations inside/outside the church

Christ the King Chapel

1. Find a place that indicates the significant year of construction
2. Find 3 classical architectural elements
3. Find an instrument that is commonly found in a church
4. Find an arch or a vault

Confucius Hall

1. Find 3 features that appears in Chinese architecture
2. Find 3 Chinese motifs
3. Find a bracket system/ dougong 斗拱

Po Leung Kuk Museum

1. Find an external Chinese structure
2. Find a porch
3. Find an element that is typical in Western buildings
4. Find the completion year of the building



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In progress

- APP: Public release (To be done after evaluation and improvements)
- APP: Mini game
- Small booklet publications of the project
- Users' review



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Thank you!

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