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Pedagogical experiment with digital humanities in cultural management: Using information literacy to teach public and community art in Hong Kong

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Abstract: Information literacy (IL) has been recognized as an important set of abilities to acquire and assess knowledge using information collection skills in digital humanities. The literature of IL discusses the definition, beneficial role of IL in undergraduate education, as well as its implementation. However, studies were set in— and presumed formal education in— a traditional classroom setting. The use of IL to facilitate the innovative pedagogy of experiential teaching has not been explored. The present paper documents a librarian—academic collaborative initiative that applies digital technology to enhance the IL of undergraduate students. It also

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evaluates the effect of this initiative. The context for this initiative is the Public and Community Art course for the BA Program in Cultural Management in Hong Kong. This paper argues that although IL is an encouraging concept for advancing knowledge, the establishment of IL faces many challenges. Fostering students' active learning attitudes, raising their awareness of IL, and formulating a conducive university administrative environment are the most pressing concerns in implementing IL.

Keywords: information literacy, cultural management, public and community art, SketchUp training, information search

Introduction

Information literacy (IL), a concept closely related to digital humanities, has received considerable academic attention since it was first proposed in the 1970s. IL is an important set of abilities for the acquisition, synthesis, analysis, interpretation and assessment of knowledge using information collection skills, such as digital, visual, textual, and technological media, as well as understanding the underlying rationales (ALA and PCOIL, 1989; ALA, 2015; Webber & Johnston, 2000; Kong, 2007; Price, et al., 2011). Students who live in an information-based society encounter daily waves of information from printed media and online resources. Although the ability to access information is essential, information resources also have to be integrated and utilized. Thus, how information is utilized is also of paramount importance to students (Hassani, 2015). High-level IL for undergraduate students is a critical learning outcome in university education, and more importantly, IL builds the foundation for the lifelong learning of students in the 21st century.

The literature on IL discusses the beneficial role of IL in undergraduate education for improving the self-critical assessment skills and information-acquiring capabilities of students (Shao & Purpur, 2016; Bruce, 2011; ALA, 2015). Previous discussions on the implementation of IL have revealed limitations in the learning effect (Webber & Johnston, 2000; Schaub et al., 2017; Scott, 2017). However, these studies were set in presumed formal education in а traditional classroom (Kuznetsova-Bogdanovits, 2015). The use of IL to facilitate the innovative pedagogy of experiential teaching has not been explored. Such an approach allows students to experience the process of planning and organizing a project in a real-life context. Given that community art projects involve the multiple skills of research and art practice, IL can assist students in developing their data collection skills for research and their mastery over design software.

The present study documents a librarian—academic collaborative initiative that applies digital technology to enhance the IL of undergraduate students. It also evaluates the effect of this initiative. The context for this initiative is the Public and Community Art course for the BA Program in Cultural Management at the Chinese University of Hong Kong in Hong Kong. This course in the specific program and university is a randomly selected sample for experiment. The teaching philosophy of this class is that students cannot learn how to plan and organize a community art project until they experience the entire process within a real community context. This real context can stimulate their interest in the project, and their participatory experience deepens their understanding of the organizing principles of a community art project. The need for collecting information for research aims and designing visual communication could motivate the students to develop IL.

We adopted four assessment methods to evaluate the effectiveness of applying IL in a community art project. First, the students were required to write reflections on what they had learned from IL workshops on SketchUp training and research. Second, students were required to produce SketchUp illustrations. Their course work was assessed to determine their mastery of the techniques that were taught in the IL workshops. The quality of their 3D modeling was used as an indicator for the effectiveness of the SketchUp tutorial video. Third, the quality of the students' community art project was used as an indicator of their ability for information search and adoption. Responses from the community and media were also employed as indicators. Fourth, regular course evaluation scores were compared with past scores. Our study, thus, provides a review of the assessment results and summarizes the experience in applying IL skills in teaching public and community art.

We also adopted Qualitative Research methods here, such as participatory observation, email and WhatsApp correspondence, and questionnaire surveys which include open-ended questions. The first author designed a course assignment and engaged all the students for participation. The second author gave a talk on IL use in one of the classes. The duration of the experiment was roughly one month, starting from March 20 to April 24, 2017, including 5 class meetings each Monday afternoon (see Table 1). Both authors were working with the students during the entire course of research, conducting observations, taking notes and gathering correspondence with the students. We observed students' reactions to the taught contents in IL training in two aspects: 1) degree of favoring our IL-based pedagogy and 2) effectiveness of this pedagogy (by assessing the learning outcome). We observed their facial expressions, their oral and written comments, the speed of their response and attitudes. Also, the quality of students' work was assessed in accordance with the professional technical criteria of SketchUp. We assessed societal impact based on feedback.

This study finds that video clips could help students catch up with or review the teaching contents in class for a better learning outcome. However, the extra workload (going over the in-class teaching contents and doing homework) introduced by the videos were not welcomed by the students. The students' passive learning attitude dominated the small-sized class in cultural management education. Even the video clips and social recognition from the media failed to stimulate their learning interests in IL. This paper argues that although IL is an encouraging concept for advancing knowledge, the establishment of IL faces many challenges. Fostering students' active learning attitudes, raising their awareness of IL, and formulating a conducive university administrative environment are the most pressing concerns in implementing IL.

IL in literature: Concept, role in undergraduate education, and implementation

This section focuses on the definition of IL, its relationship with digital humanities and undergraduate education. Undergraduate education has limited exposure to the proper access and utilization of academic information in the past. Therefore, this section also discusses the benefits of IL to undergraduates and the potential limitations on the implementation of IL programs in the university.

IL is a terminology under debate: it is doubtful if 'information' matches 'literacy.' Commentators have been trying on replacing the word 'literacy' with other alternatives, such as 'competency' (Goetsch & Kaufman, 1998) or 'mediacy' (Carbo, 1997). Some argue that the word 'literacy' would denote as 'illiterate,' a person who has not yet mastered information processing. Notwithstanding the disagreement on the specific term, commentators are generally in accordance with the characteristics of IL. American Library Association Presidential Committee on Information Literacy (ALAPCOIL, 1989) postulated the influential definition of IL: "to be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information" (para. 3). The American Library Association (ALA, 2015) redefines IL as a "set of integrated abilities" encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning" (para. 5). IL is typically identified as stages, such as need recognition, inquiry formulation, access to sources, source selection and evaluation, information incorporation and assimilation, and the proper utilization of the final product (Doyle, 1992; Bruce, 2011; ACRL, 2000).

Information science is sometimes conflated with IL owing to their overlapping natures. However, IL and information science have a key distinction: IL emphasizes

the ability of an individual to perform information-processing activities and the penetration of acquired skills or knowledge to be carried from an intermediary role (Webber & Johnston, 2000). In contrast, information science focuses on the properties and behavior of information; in particular, body of knowledge to be organized and processed (Borko, 1968). In general, the definition of IL is enumerated and ascribed as a set of personal attributes that an information-literate individual should possess and utilize to improve society, involving multiple capacities from data-cognitive to cultural-social perspectives (Kong, 2014).

Digital humanities is a broader concept, defined as utilizing digital technologies to develop humanity scholarship, providing technical support for literature search and information collection, nurturing information literacy, academic information literacy in particular. It is conceived as an intersection of digital technology and the humanities (Baer, 2013; Bergen, 2013). In particular, it is characterized by collaborative research efforts (e.g., engaging a variety of expertise that is based on the use of library materials) and highlights the contribution of libraries who provide literature and other academic information resources to their research partners, such as establishing a digital library of scanned documents (Cunningham, 2010; Hauck, 2017).

The literature on IL has revealed the beneficial roles of IL in higher education, particularly in undergraduates. The discipline of librarianship, which is closely related to IL, transmits the core features of IL to undergraduates. For example, researchers have shown that the number of library services and resources that students utilize is correlated with their writing ability and academic performance (Shao & Purpur, 2016). Some scholars have mentioned that a library is not the only venue that provides scholarly resources for students; Shao and Purpur (2016) provided evidence that the percentage of the utilization of library resources (such as database logins, reference service, and the number of check-outs) is positively correlated with the academic performance of students as reflected in their term GPA and retention rates.

Teaching the proper access and use of information to undergraduates is also vital in enhancing their self-motivated learning capability in the long term. The five standards set by the ALA (2000) indicate that undergraduates must be equipped with critical self-reflection skills, which assist them in acquiring self-directed learning skills beyond classrooms. An information-literate student can determine the kind of information required, access the required information effectively and efficiently, evaluate and select the sources of information sceptically, and integrate and use the information to achieve a particular objective. With the appropriate use of technology and proper access to library resources, students who are off-campus can obtain distance learning (ALAPCOIL, 1989). Bruce (2011) proposes the Seven Faces of IL; the essential IL skills acquired by undergraduates can eventually be brought to their

initial workplace. Her view aligns with those published by the ALA (2015), which enumerated six frameworks that are practical for undergraduates in their academic practice and are crucial in enhancing their critical thinking skills.

On a separate issue, the implementation of IL in higher education has some limitations. First, IL skills cannot be successfully transmitted to students because this approach puts users at the center of the learning process and requires self-motivation of learning (Webber & Johnston, 2000). The same authors doubted that the 'tick the box' approach of the current IL fragments knowledge acquisition by students because it mainly involves increasing numbers of lists. Webber and Johnston (2000) considers a 'tick the box' learning approach superficial, which only focuses on short-term tasks rather than deep learning, in which knowledge is contextualized. The school's refusal to add IL-training sessions to credit-bearing courses is also a concern because undergraduates lack substantial IL skills. A quantitative study reveals key relationships between students' knowledge in IL terms and their ability to access and use academic recourses; the authors state that students' unfamiliarity with IL terminology hinders their application of IL (Schaub et al., 2017). A library instruction session may be useful to familiarize undergraduates with specific IL terminology but is not the only venue where the terms are used. Even by following the frameworks, students may not fully understand the relationship between authority and research; this lack of understanding also impedes their academic performance (Scott, 2017). Scott also claims that the co-existence of the standards and frameworks of the ALA would be confusing even for academic staff. Thus, identifying the students' responses to IL through pre- and post-test assessment is essential in understanding the actual effect of implementing IL in higher education.

The rationale of applying IL to facilitate experiential pedagogy is that such a project has open-ended solutions. Acquiring and synthesizing information through research is an important step toward formulating community art schemes. The exploration of alternative vehicles for the delivery of artwork is unlimited and will strengthen the design skills of students for visual communication.

Community art project in the public and community art course

This section provides the background information on the project, such as 1) the collaborative teaching enhancement project at the Chinese University of Hong Kong (CUHK) and 2) the Hatuen Community Art Project in the Public and Community Art course in the Cultural Management Program, and 3) the IL initiative for teaching enhancement for the public and community art course.

Course enhancement fund of IL

Despite the global trend of emphasizing IL in student learning, it was found that the first-year university students in Hong Kong had very limited experiences in information use in their school years (Wong, 2011). There was a pressing demand for embedding IL in the university curricula in order to uplift the IL proficiency of university students in Hong Kong. Funded by the University Grant Committee of Hong Kong SAR Government, the eight university libraries in Hong Kong launched in 2015 a three-year project titled 'Enhancing information Literacy in Hong Kong Higher Education through the Development and Implementation of Shared Interactive Multimedia Courseware' which aimed:

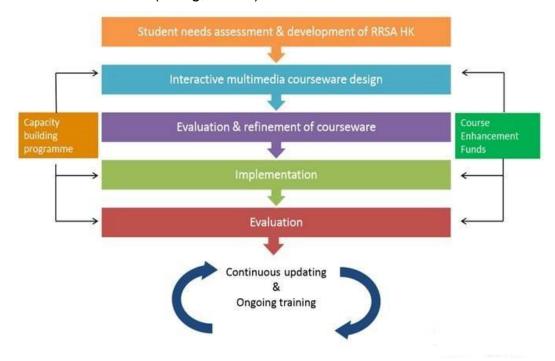
- To enhance information literacy among students in UGC-funded institutions by developing and implementing a shared interactive multimedia courseware;
- To foster their capacity to use information to learn;
- To build students' awareness of themselves as informed learners.

The ultimate goal of this large-scale cross-institutional project is to advocate the importance of IL among university management and faculty, and to embed IL into the university curricula (Wong, 2015b). There are altogether five interconnected sub-projects representing different stages and phases in student learning which can be best described by the following diagram (Wong, 2015a):

- Assessment of information educational needs of undergraduate students
- Research Readiness Self-Assessment questionnaire instrument
- hared online IL courseware
- Capacity Building Programme for librarians of JULAC libraries
- Course Enhancement Funds

Among these five sub-projects, we focus on the Course Enhancement Funds. The objectives of providing the Course Enhancement Funds is to further develop strong librarian partnerships with faculty members to enhance IL teaching and learning in subject-related course contexts, in particular, for those parts of the curriculum with strong research components. There are altogether 40 Course Enhancement Funds available for teaching staff to work together with librarians of the participating institutions to develop new IL objects, or to embed IL, the shared interactive multimedia courseware and its elements into their teaching or other

Chart 1. Five sub-projects of 'Enhancing information Literacy in Hong Kong Higher Education through the Development and Implementation of Shared Interactive Multimedia Courseware' (Wong, 2015a)



activities. In this paper, the authors use the Course Enhancement Funds to enrich IL components in the 'Public and Community Art' Course which will be described in more detail below.

'Hatuen Community Art Project' in the 'Public and Community Art' course

Cultural management is an emerging field that has evolved from the traditional core field of arts management (established in the 1960s, specialized in the management of public and non-profit cultural organizations) towards a more inclusive cultural sector that encompasses both for-profit and non-profit cultural organizations (Dewey, 2004). Roles of cultural managers are compared to 'entrepreneurs,' 'explorers' and 'architects,' who are equipped with the mindset and ability of exploring new technologies, cross-disciplinary insights and methodologies (Sikes, 2000). To fulfill these training objectives, it is essential to develop students' problem solving and explorative skillsets of acquiring, analyzing and synthesizing information (IL). In this way, IL has been included as one of the key components in cultural management training.

Public and Community Art is one of the main elective courses in the BA Cultural Management Programme at CUHK. Public and community art became popular in the West in the 1960s. It refers to 1) traditional artwork specifically commissioned for sites

open to public access (Miles, 1997); 2) aesthetic and symbolic objects that attract investments and visitors (Zukin, 1995); and 3) 'new genre art' devoted to empowering disadvantaged social groups and addressing community demands (Sharp et. al., 2005). Community art aims to achieve social changes through community involvement and collaboration (Lippard, 1995). The development of modern urbanism in Asia has been accompanied by growing public art scenes, which mostly comprise traditional monuments and aesthetic objects. The authoritarian political tradition in Asia has restrained the understanding and navigation of the new genre of public and community art. Although public art practice in Hong Kong involves all three types of artworks, the understanding and appreciation of the third form is limited, thus posing a challenge to teaching public and community art in the non-Western context without democratic traditions. This study involved a class with nine students. Seven are Year 3 and 4 students in the cultural management program; others are English and Sports majors.

The Hatsuen Community Art project aims to help students develop a deep understanding of community art and acquire hands-on experience in operating a real community art project. It requires students to apply a normative approach of community art (i.e., five conceptual territories (Knight et al., 2005)) to the community art project in Yuen Long. Students are expected to know that community art involves empowering community members for social changes, with emphasis on community involvement and participation. The key purposes and features of a community art project are 1) to change the mainstream media views of the community and 2) to help to convey the community's viewpoints and needs. The five conceptual territories (Knight et al., 2005) are 1) contact- cultivate trust, mutual understanding and commitment; 2) research- collect information about people, places, and issues; 3) action- produce an artwork that benefits the community; 4) feedback- extend influences, generate discussions, and repercussions in the community; 5) and teaching- transmission of knowledge and skills to others. The application of the conceptual framework for organizing the Hatsun community art project and the timeline is as follows.

Table 1. Theories, arrangements, and rundown for this project

Period	Conceptual	Activities Output	
	Territory		
March 20 -	Preparations for	Project briefing	Purpose of 'research':
April 2	'Contact' and	Lectures on 'community	Brainstorm to prepare
	'Research'	art' by Prof. Jane Zheng	questions for the 'contact'

	1		
		(March 20 & 27)	and 'research' stage during
		Talk on library	the fieldtrip
		information search by Mr.	Identify a few possible key
		Leo F.H. Ma, senior	issues to address in the
		librarian at CUHK (on	community art project
		March 20)	Develop a theme for the
		Self-directed research on	project
		Yuen Long community	Suggest possible metaphor
		culture (data collection	
		on the history, custom	
		and media coverage on	
		Yuen Long)	
April 3	'Contact' and	Fieldtrip to Yuen Long	Purpose of 'contact': Initiate
	'Research'	• 4:00-4:30pm: Talk by Mr.	the exploratory workshop
		Simon Ng (chair of Hulu)	and generate interactions
		on Hulu's Yuen Long	with the community
		community art project	Touch based on community
		• 4:45-5:15pm: A	members and make them
		community walk in Ha	accept out students as
		Tsuen (led by a local	external community cultural
		docent)	workers
		• 5:15-6:00pm: Group	Uncover the shared
		discussion interviews	experiences and events of
		with community	the community
		members to listen to their	Identify the heartbeat of the
		stories;	community
		Ice-breaker workshop	Collect symbols, signs,
		to meet with the village	rituals and stories
		head and other	
		community members in	
		the Yuen Long	
		community	
		ice-breaker questions	
		2) interview questions	
		3) schedules for further	
		interviews	
		4) possibilities of artwork	
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April 4 - 7	'Research'	 Identify target community members Conduct interviews with the target community members Further reading and data collection on the key issues 	 Decide the key issues to address for your community art project Decide the theme of your project The key metaphor
April 8 –16	'Action'	 Self-directed meetings on 'actions' to produce community artworks (if possible, the artworks should be produced together with community members in Yuen Long) When the theme and the plan for artwork have been set, contact the local media to prepare for the feedback workshop Meet with a guest fine arts professor for advices on artwork making 	Purpose of 'Action': making community artwork(s) Transform your investigations into one or more community artworks by weaving the perspectives, abilities, ideas and symbolic elements
April 17	'Feedback' Workshop in Ha Tsuen	Rundown for the 'feedback' workshop Display artworks in the community (2 hrs) Students explain the process of this project (10 mins) Panel discussion on the project (30 mins) Media to give feedback (30 mins) Discuss how people will change their actions after	Purpose of 'Feedback': Transform a successful work of art into a successful campaign for community change

		this project (15 mins)Closing remarks and keep contact (15 mins)	
April 24	'Teaching'	 Identify the key skills and knowledge that you want to pass on Demonstrate teaching in the class on April 24 (10 mins per person) Sketchup illustrations are desirable. Make sure that all the students in this class can learn what you teach within the 10 minutes 	 Reflections on the way to operate a community through this project (in-class discussions) In addition, we hope to collect comments on the two video clips. 200 words (or above) reflection report on the two video clips produced from the library collaboration IL project Due 5:00pm April 28
			1

Two video clips for course enhancement

SketchUp is a software programme used to generate three-dimensional digital models. It is widely applied in professional architecture and urban design. Part of the teaching plan is to teach students how to build three-dimensional digital models to convert their public artwork proposal into digital models or to make illustrations for visually communicating their viewpoints. The use of this software has been taught in this course for three consecutive years, without recording the process of demonstration. The new subject element in this research is a tutorial video that demonstrates the use of SketchUp software in class and a video clip of a special talk on information search for the research task for the Ha Tsuen Community Art Project. The special talk demonstrates online information search using various search engines. We commissioned JcMotion, a new media company at CUHK, to make two video clips for the teaching objectives. The media production team captured the search and demonstration processes for class learning.

The first video clip is a demonstration by the first author about the way to use SketchUp. The video lasts for 35 minutes and includes five sections. First, the first author teaches students how to create lines, polygons, and dots on two-dimensional maps to illustrate the spatial distribution of public artworks using Microsoft Word. Second, the author provides a brief introduction to the major characteristics of SketchUp. This introduction is followed by a tutorial on generating the basic forms of

houses (e.g., Western and Chinese style houses). Third, the author demonstrates the creation of a site for the installation of public art to emphasize the monumentality of the work. The creation of sun-and-shadow effects is also demonstrated. Fourth, the author demonstrates the creation of a row of art works along a path. Fifth, the author demonstrates the techniques of tracing a 2D image outline and generating a continuous tube using the 'follow-me' function. Students are reminded of the five-component urban design principle (Lynch, 1960), which was discussed in a previous lecture of this course.

The instructional session on 'Public and Community Art: Information Searching Session' (the second video clip, Fig.1) adopted a case study approach to design this 20-minute class. The instructor used the project 'Village for Life' initiated by Hulu Culture as an example to illustrate in practical terms the common retrieval strategies applied for searching various types of information resources on this project. This session consisted of four parts, namely Google search, AV resources, academic resources, and government resources, to introduce the common search tools and resources available for CUHK students. There is no doubt that students were very familiar before with Google, but they may not necessarily use more advanced features available in Google such as Google Books and Google Scholar. They may not even know that Google Scholar provides access to journal articles through Findit@CUHK which directs users from Google Scholar's citations to subscribed content, library catalogue, and interlibrary loan services by CUHK Library. AV materials are useful resources for showcasing the audio and visual effects of public and community art projects. The instructor also emphasized the importance of searching academic journal articles to locate high quality research results for writing academic papers. Projects on public and community art very often use government resources which are not only reliable but sometimes also unique historical and archival materials on the community concerned. Apart from film-shooting the instructor in class, the video clip on the instructional session also captured screenshots of searching various information resources, such as CUHK Library Catalogue, Google, ProQuest 5000, the Hong Kong Heritage Discovery Centre Library Catalogue, etc.

Findings

Among the nine students in this class, the extreme minority actively fulfilled the requirement of feedback for our IL product, and the rest produced feedback and illustrations using SketchUp. The overall finding is that students are not active enough to learn IL despite their acknowledgment of the project's value.

Passive learning and inadequate application of IL

Evident progress was made in the use of SketchUp. Few students in this class had relevant SketchUp experience prior to the course. Only one student claimed such experience but was limited to 2D images:

This is not my first time using SketchUp software... Before the workshop, I thought Sketchup can only be used to build and create walls and floor plans or blueprints. However, I learned how to use the 'push/pull' bottom to make the 2D shape into a three-dimensional form which is fundamental in building any 3D objects. (A student's written feedback, April 2017)

The students' overt comments on the SketchUp tutorial video were positive although we should recognize the effect of a non-anonymous survey. One comment stated:

SketchUp provides a resourceful and huge libraries and picture for us to use in our graphic which make the building look more real in the setting. People and tree can also be added in the drawing. We can preview the building from different perspective in 360 degree. SketchUp allow us to build and draw different shape and various forms. (A student's SketchUp feedback, April 2017)

Three comments stated appreciation for the teaching style of the tutorial video. One comment mentioned that the video utilized a step-by-step approach to systematically teach the SketchUp software. The video provided explanations for the various functions of the software, followed by a demonstration on modeling Chinese- and Western-style houses. The video taught the method for generating cubic- and curve-surfaced objects. It also showed how to schedule date and time to create sun-and-shadow effects, which is an advanced operation. It guided the learners to master the software from scratch toward a relatively advanced stage:

I believe this video is valuable to students aspiring to do cultural management, architecture and urban planning. Through this video, we are able to visualize 3D objects of art and space, which has gone beyond plain textural descriptions and conceptual discussions (A student's SketchUp feedback, April 2017).

The student then elaborated on modeling the architectural structure of the Tang Ancestral Hall using Sketch-Up. The video assisted students in digesting the taught contents after class.

Other positive comments were about the practical implications of SketchUp skills. One student wrote that she would use the software in creating any 3D object in daily life, such as drafting a floor plan in interior design or making a booth design for exhibitions (A student's SketchUp feedback, April 2017). Another comment mentioned that learning SketchUp benefits site design because it helps convert design concepts into 3D models: "In this process, 3D modeling does not only facilitate communication in a more clear and vivid manner, but also urge people to reflect the suitability of the sites for installation of artworks" (A student's comment, April 2017). However, only two comments revealed genuine appreciation for the SketchUp software and the tutorial video. One comment read:

...(SketchUp) is a great tool for drawing... Prof. Jane's video teaches me how to build the model. Her notes teach me how to use the shortcut of the software... I enjoy playing around with it... I still love drawing 3D models. Now, I have a new skill. I would write it into my CV. It is so fantastic! I am so happy that I have had taken the course because I have learned a lot of new things and have a lot of fun! (A student's feedback, April 2017)

Only one student provided in-depth reflections on lessons from SketchUp practices. She understood that SketchUp uses a real-world scale; thus, she must first obtain the measurements of real objects and input the figures into SketchUp. She also wondered about the role of a human figure included in the interface and suggested that it serves as a scale reference for other objects. She then designed procedural steps to complete the drawing from a structural to material selection and object detailing. She became used to using quick keys (e.g., 'E' for eraser and 'A' for arch), which help enhance the proficiency of a SketchUp user. The response of this student is an exemplary case that perfectly followed SketchUp training. A broad variety of genres included in her illustrations (e.g., architecture, costume, and artwork) shows that she has watched the entire tutorial video. The progress she has made since her initial clumsy performance in the SketchUp workshop proves the practical value of the video.

Table 2 presents the statistics of students' learning attitudes and their works. Despite the positive feedback, most students did not seriously watch the video to hone their techniques. They only fulfilled the minimum requirements of this assignment. Many positive comments on the software were unaccompanied by any detailed or solid examples in the community art project. One essay repetitively stressed considerable benefits but only provided one example for application.

Table 2. Statistics of	f students'	learning attitudes	and their works

Degree of participation	Number of students
Watching the whole video and being devoted to the assignment	1
Partially watching the video and being devoted to the assignment	3
Partially watching the video and being careless with the assignment	1
Not watching the video and doing fine with the assignment	1
Not watching the video and being careless with the assignment	2
Deliberately avoiding SketchUp	1

Therefore, the student did not really spend time watching the video, and her comment simply came from an incomplete impression of the training workshop. Other problems are as follows:

First, the first author suggested that students should download the free version of SketchUp. However, the students discovered an online version and excitedly shared this information because they no longer needed to download the software. This reveals a rather perfunctory attitude with this assignment and the missing motivation for mastering SketchUp techniques for future use.

Second, the students' assignments covered few genres and utilized the methods for generating the basic forms of buildings introduced in the initial section of the training video. Only two cases involved art objects; the rest simply modeled buildings or structures in Ha Tsuen (e.g., Tang Ancestral Hall, Guest House of the Tang Ancestral Hall, and Memorial Archway of Ha Tsuen (Fig. 1)) and disregarded the fact that public art, instead of architecture, is the subject of this course and the main genre taught in the workshop and the video. The main subject of this course was not covered in the students' coursework.

One student even deliberately avoided using the video and made her illustration by following an on-line YouTube video on architecture model. In addition, limited original creativity is found in students' works. Most of them simply followed other students' drawing and the Tang Ancestral Hall becomes the most popular subject. Third, the students' assignments displayed a limited variety of techniques. The 'push/pull' button was the most popular function for generating 3D objects and

provided a completely new experience for humanities students. The 3D warehouse was also helpful because it provides millions of existing models that can be easily downloaded to enrich the students' artistic representations. One student commented

Figure 1. Students' graphics generated by Sketch-up in comparison with the real objects



that '...the function of 3D warehouse is highly helpful in that it provides a large number of components too complicated to create on our own, e.g., lantern, gate. It helps to be time-efficient and improving the quality of our models' (A student's feedback, April 2017). Two students imported 2D pictures to decorate objects' surfaces. Other design techniques (Table 2) were used only once. One student highlighted the importance of a few techniques (e.g., marking dimensions, scaling objects for installation, and making ridged rooftops) (A student's feedback, April 2017). Table 3 presents a list of techniques taught in the workshop and tutorial video in contrast to their use in students' coursework.

Table 3. Techniques taught and their application in the students' assignments

Design techniques taught in the video	Design techniques used in students' assignments (unclear positioning)	Times of use
Marking spatial patterns on 2D maps	X	
Making polygons	X	
Making 3D objects with convex surfaces	√	6
Pulling up a separate line to create a ridged roof	√	6
Applying textures and colors to surfaces	√	6
Importing 2D images onto object surfaces	√	4
Downloading objects from a 3D warehouse and installing them onto models	√	5
Making sunken in-site design for public artworks	х	
Creating a sun-and-shadow effect according to specified date and time	Х	
Specifying dimensions for objects	X	
Using a measurement tool to control distance and drawing dotted lines for orientation	√	1
Creating a row of objects	X	
Changing one object and generating consistent changes in the replicas	х	
Tracing the contour of a 2D image and turning it into a 3D object	√ ·	1
Using the 'Follow-me' function	X	

Fourth, imprecise understanding prevailed, thus indicating superficial learning from the workshop and video. For instance, one student wrote that she hoped that the workshop and video should also teach techniques for importing highly complicated decorative components onto her building model (e.g., Chinese landscape paintings and calligraphy). However, this technique was covered in the lesson. Another student stated in his presentation (April 24) that rotating and moving imported pictures to the building surfaces required too much effort. The workshop and video covered efficient techniques for this task.

A comparison of students' levels during and after the course shows that the two video clips worked in certain degrees to assist students' learning. However, a low

degree of utilization is evident.

Insufficient application of information search techniques

Feedback on the talk on information search and data collection was also positive. However, only one student (this student is the only one who watched the entire video and seriously completed the SketchUp assignment) utilized the taught methods and fulfilled the research requirements for the community art project. This student summarized four information search methods: Google search, audiovisual resource search, academic resource search, and government document search. She reviewed the key tips that the second author (Leo) provided in his talk. She cited Google search through keywords, event information, and pictures as an effective search method. She also cited Leo that searching YouTube and Podcasts enables students to find useful information and resources from government websites (Feedback from a student, April 2017).

Moreover, she was the only student who fulfilled the 'research' requirement for the Ha Tsuen Community Art Project. She applied the techniques that Leo taught and said that prior to Leo's talk, she only relied on Baidu and Wiki Encyclopedia to find academic materials despite their lack of academic objectivity. She learned about the China Academic Journals Full-text Database, the Hong Kong Chinese Periodical Index, Wanfang Data (for Chinese journal articles, theses, and conference papers), ProQuest 5000, JSTOR, and Duxiu Knowledge Search Database (for Chinese-language books); learning about these databases had broadened her horizon (feedback from a student, April 2017). Before the first field trip, she searched the keyword 'Yuen Long' in Duxiu and obtained 160 book entries. She browsed the introductory sections of the books and filtered items. She recommended Deng Guixiang and Deng Dazhi's book series titled *Yuen Long Customs and Lifestyles*.

Two more students wrote their reflections on the information search video. Both commented positively on the second author's talk and video, which expanded their horizons by providing more information search methods and engines. Their comments were superficially commendable; none of these students applied the taught techniques in their research. The students did not perform information searches as required by the project. One student commented:

Mr. Ma's sharing on information searching really broadens my horizon... Academic resources in Google Scholar/Book always not allow us to read the whole passage due to copyright or interest of the owner but the resources in HKInChip allows us to read the whole passage. (Feedback from a student, April 2017).

She acknowledged her lack of knowledge on academic research, even as a Year 3 student, and that Leo's talk had benefited her information search. However, her essay failed to provide even one example of the application or the actual outcome of the search. Her commendable comments thus lacked supporting evidence. Her additional comments focused on Leo's manner of teaching. Her praises also focused on Leo's experience and carefully made PowerPoint slides (Feedback from one student, April 2017). The second author's presentation was conducted professionally, but students provided no feedback on applying his searching methods, thus suggesting that students made no effort to learn IL. This observation is further supported by two additional pieces of evidence, as follows.

Table 4. Statistics of information search methods covered in Leo's talk and their application in students' projects

Information search methods	Search methods applied by students	Times of use
Google search (keywords)	√	3
Google search (images)	√	3
YouTube	X	
Podcasts	X	
China Academic Journals Full-text Database	√	1
Hong Kong Chinese Periodical Index	√	1
Wanfang Data	√	1
Duxiu Knowledge Search Database	√	1
Government resources	√	1

First, the comments on the second author's talk and video positively acknowledged Leo's efforts and the value of the introduced search engines, such as ProQuest and JSTOR, but were superficial. One student devoted most of the assignment content to praising Leo's background according to his perception to meet the minimum word requirement. He wrote:

[Leo]...is really familiar with information searching in the topic of arts. He had prepared the research which we were going to do and demonstrated clear steps to organize an effective searching.... With professional guidance of information research, I can be a skilled student in deeper research. (A student's feedback on Leo's talk, April 2017)

However, no information about applying the lectured searching methods was provided.

Second, other students did not provide feedback on Leo's talk, and the quality of their proposed interview questions did not meet requirements. On March 27 (a week after Leo's talk), the first author gave the class an information search task to prepare interview questions for the field trip. Some were responsible for the customs and history of Ha Tsuen, and others were assigned to collect mainstream media information about the Ha Tsuen community. The purpose of the research was to identify a theme for the community art project. I called for a WhatsApp group discussion to prepare interview questions on the day before the field trip. None of the students responded. Two hours before the field trip, the most active student replied, and others followed. However, their work showed that little research was conducted. The students responsible for the research on media reports failed to report progress. Leo's talk could not exert immediate influence on the students, thus affecting the quality and outcome of the community art project.

Ha Tsuen Community Art Project: Failing to encourage student participation despite successful media coverage

The project was deemed successful by outsiders because it attracted media coverage. This indicated that the ultimate goals of the community art project— to raise public awareness about certain problems that must be fixed, create social repercussion, and achieve social changes— were met (Fig. 3). *The Standard* published a report on the day when the feedback workshop was held. The report was titled "Performers aim to put fading village culture in limelight." Through the report, Ng (2017) notes:

Students donned animal hats and skyscraper costumes to raise awareness of the New Territories' diminishing village culture. A dozen cultural management students from Chinese University of Hong Kong held a community art project in an empty space in Yuen Long Ha Tsuen yesterday before some 100 villagers and students. The village's cultural symbols, such as mangroves, free-range poultry farming, valleys, crabs, oysters and architecture, were featured by the students. These signature scenes are now rarely seen in Ha Tsuen, and the students wanted to stress how important it is to conserve the environment despite land shortages. (para. 1-3) (Fig.2).

Another Chinese-language newspaper report stated that strong conflicts in brownfield

development have been witnessed in recent years. University students expressed concerns about cultural conservation in traditional villages through their interviews with village residents. They conveyed the message by putting on costumes of a 'drifting city' to represent the interactions of different social forces in the hope that the issue could be included in public discussions (Anon, 2017).

Figure 2. The Standards news reports on the Ha Tsuen Community Art Project



Figure 3. Oriental Net's news reports on the Ha Tsuen Community Art Project



度村原居民鄧勵梅則抵導城市發展離以避免,不少村民已搬出市區或 移民外地,坦富發展是雙刃刀,「以前方車」行出元朗賈舊蛋糕要半 日,4-5點就起身割英,簡單生活像好,鄉情濃厚,但就不及依家嘅 物質享受。」

Moreover, the original teaching plan of engaging different professionals to advise the project was actualized. Hulu Culture, a major non-profit cultural organization in Hong Kong, collaborated on this project. Its rich experience in community art projects, community network, and research findings in the recently completed project titled "Hong Kong Jockey Club Heritage Arts and Design Walk Project: Village for Life in Yuen Long and Tuen Mun" inspired students. I took the students to the Hulu Culture's Jockey Club project site prior to the visit with Ha Tsuen. Fig.4 shows the photos of the students' site visit. Iman Fok, the leader of Hulu, relayed her experience of operating community art projects and guided the students' tour. Two local leading public artists, Kacey Wong and Tam Waiping, were invited to give talks and advice on art creation by students. At the art workshop on April 10, Professor Tam Waiping commented on the feasibility and craft of individual student's costume designs and advised alternatives. Dr. Kacey Wong commented on students' assignments and showcased public art crafts in his studio in Ap Lai Chow (Fig. 4). The artwork of the course's final project derived inspirations from Kacey's artwork 'drifting city.' Senior residents in the Ha Tsuen community also joined the workshop during the fieldtrip.

Figure 4. Fieldtrips and workshops of the course



However, despite the media coverage and the support of leading artists and professionals, this project turned out to be less successful because of the reluctant participation of students and their overall low degree of course satisfaction. The score for satisfaction of the course was only 3.3 out of 6, much lower than the average score of the department (4.68). It is also even far lower than the score of the other course taught by the first author in the same semester (5.22). The score of this course in the previous year using regular pedagogy was 4.71. The main complaint of students was that the project-based coursework had brought in extra work, and the students resisted the process of the project. The first author's unpleasant teaching experience on this project began on the day the project was announced. Although the project was clearly included in the original course outline, students did not expect the five steps of operation, particularly the fourth step of community engagement and feedback workshop. The class openly voiced their protest. Some students questioned the possibility of media participation. Other students said that community engagement would cost extra time and effort, and that they were busy during the last month of the academic term and did not want to conduct a project without guaranteed success. The first author proposed an alternative scheme of coursework, but the students stuck to the former scheme with reluctance. The first author only realized the reason for their decision when the project was over: the students only wanted to minimize the workload of academic writing rather than being interested in the experiential project, which encountered severe resistance. The call by the first author for an internal meeting elicited a cold response. No student helped make posters. Few students helped move art materials from storage to the classroom. No community engagement was conducted after the first field trip. Simple artworks were produced. Costumes were incomplete. However, terminating the project halfway was not possible due to the input of Ha Tsuen and Hulu Culture, who assisted our project. The first author had to finish whatever students failed to complete. The research fund of the first author was used to pay her research assistant to complete the remaining costumes. The first author made the posters (Fig. 5) and artworks, contacted organizations for publicity, and wrote and finalized the press release, exhibit description, and invitation letters.

The students even refused to click 'like' and share the Facebook posts about the project by internal and one external organization. Similar to community engagement, publicizing the project was important to achieve a wide social effect. However, our project failed in community and social engagement due to students' low degree of participation. Few community residents were present at our feedback workshop, and little discussion took place. No external friends or cultural bodies, except for two of my students, attended the event on April 17. The quality of students' speeches at the

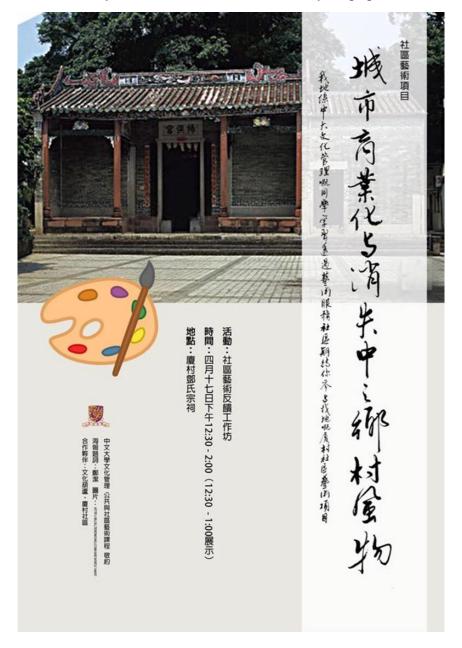


Figure 5. Poster made by the first author for community engagement in the project

workshop was also relatively poor because of the lack of research and community-based preparation. The student who attracted journalists' attention for further interview was actually not part of the class. The outsider's casual talk without preparation was more successful than those of the students in this class. The students also isolated and excluded the only active student in class to create an atmosphere of collective resistance to the coursework.

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Conclusion

This case shows that although IL is a promising concept for encouraging life-long learning, its implementation faces practical barriers in cultural management education. Most of these numerous barriers are embedded in conservative learning styles and habits, which led to a lack of motivation in IL learning.

First, students were overly concerned with deliverable assignments in physical forms (e.g., reports and artwork). However, the community art project aims to achieve social change through promulgation. The assessment of students' performance concentrates on their contribution to the project through participation (e.g., community engagement, media engagement, research, and social publicity). Students appeared to be less interested in the societal aspects of the project but made efforts in producing artworks and writing reflections.

Second, cultural management is an inter-disciplinary subject that extensively involves short-term cultural projects to achieve certain target cultural goals. This means handling an intensive workload within a certain period. However, students were not used to this work style. They did not expect extra academic activities that exceeded the fixed timeslots of classes and were resistant to extra project-related activities (e.g., field trips and community engagement activities). Thus, IL for visual communication was not well studied or developed.

Third, grade-driven pragmatic logic dominates students' studies. The students expressed little interest in exploring new topics or information, as required by a community art project. Therefore, IL for information search and data collection was not seriously studied for mastery. Thus, IL could not succeed in exploratory pedagogy, given the unwillingness of students to explore innovative tasks or experience the real contexts of cultural projects.

It should be admitted that the deviation of the experiment result from hypotheses

can be caused by certain unknown attributes of this specific case study. To future researchers, an expansive study perhaps is needed. Sampling another batch of students in an alternative institutional context (e.g., using different assessment method design and expectation management) may supplement to the current understanding about the role of IL in cultural management higher education.

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