

## Part B: Project Summary

Project Title	Project Number
Enhancing aesthetic learning experience, involvement and creativity of students in art education	2017/0202 (Revised)

Name of Organisation: Institute of Textiles and Clothing, The Hong Kong Polytechnic University

- (1) Goals: enhance the aesthetic learning experience of Hong Kong secondary school students and their involvement in the creative process.

Objectives:

- (i) to examine the relationship between aesthetic learning experiences for aesthetic judgment and creativity,
- (ii) to enhance initiative and involvement in creative processes,
- (iii) to enhance cognitive understanding in applying art knowledge during generation of creative ideas,
- (iv) to improve creative thinking with application of visual arts knowledge in window display design assignment.
- (v) to develop an open and creative culture in art education,
- (vi) to recommend strategies for training in creative arts with reference to findings, and
- (vii) to provide direction on course contents and design of assignments in creative art education.

- (2) Targets: secondary school students at Immaculate Heart of Mary College (Forms 2 to 5)  
Expected number of beneficiaries: 300

- (3) Implementation Plan:

- (i) Duration: Sept 2018 to Nov 2019 (15 months)
- (ii) Process/schedule: September to October 2018: Recruitment and training of Project Assistant and student assistants; preparation and modification of workshop materials; and workshops for teachers  
November to December 2018: Continue workshops for teachers; examine creative background of students; visual display development; focus group discussions; evaluation; report preparation/dissemination of project findings  
January to June 2019: Continue visual display development, focus group discussions, and evaluation  
July to November 2019: Finish focus groups, evaluation, and reports/dissemination of project findings
- (iii) Collaboration with other parties/partners: Immaculate Heart of Mary College

- (4) Products:

- (i) Deliverables: window displays, teaching kit, online library, learning journals, interactive method for learning art, and exhibition that showcases the window display works and the learning journals.
- (ii) Outcomes: students will have enriched aesthetic experiences and improved cognitive understanding in applying art knowledge to generate new ideas; enhanced creative processing skills, initiative in thinking creatively and involvement in exploring new ideas from their surrounding environment and culture to develop their works. Teachers can use and modify teaching kit and workshop contents and use them in visual arts class to offer the project again in the coming years. Better understanding of the creative processing of Hong Kong secondary students to develop creative education contents.
- (iii) Dissemination of deliverables/outcomes: project website developed and incorporated into Immaculate Heart of Mary College website; online window display library; teaching kit and workshop information uploaded online – all of these can be publicly accessed by interested parties and other teachers for free. Research articles published in refereed journals and papers presented at international education conferences.
- (iv) Commercialization potential of deliverables/outcomes: n/a

- (5) Budget: Staff costs - \$132,300; general expenses - \$45,000; and other expenses (university administration fee) - \$28,845; (contact of service: Online platform and database maintenance and update) – \$15,000. Total of \$221,145 (Round up to \$221,200).

- (6) Evaluation:

- (i) Performance indicators: good attendance at workshops, window displays that demonstrate creativity and applied visual arts knowledge, use of online window display platform, comprehensive teaching kit, completed learning journals, publications in journals and conference proceedings
- (ii) Outcome measurements: focus groups, learning journals, survey based on Creative Personality Scale and Creative Achievement Questionnaire, feedback.

<b>Project Title</b> Enhancing aesthetic learning experience, involvement in creative process and creativity of students in art education	<b>Theme</b> Creative Arts and Culture Education 2017/0202 (Revised)
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**(I) Needs Assessment and Applicant's Capability**

**(i) Nurturing creative talent in Hong Kong**

Art is an important aspect of personal development with positive effects on students, and encourages expression of inner emotions. Art is also emotionally healing by bridging inner and outer feelings, thus improving the quality of life (Arian Parsa and Harati, 2013).

In Hong Kong, nurturing creative talent is important for the development of the creative industry. Recently, the government has implemented different strategies to facilitate local creative forces, such as establishing Create Hong Kong to promote the creative industry, organizing art-related programs in the West Kowloon Cultural District to increase public awareness of art, transforming the former Police Married Quarters into a creative landmark called the PMQ, which provides a platform for creative business enterprises, and educating young people through art (Home Affairs Bureau, 2014, GovHK, 2016; PMQ Management Co. Ltd, 2014). The aim is to create an environment that supports the local creative industry. However, the cultural uniqueness of Hong Kong, which is a hybrid of Eastern and Western values and thus constitutes a unique social environment, has had special impacts on the creative thinking of local young people. As Hong Kong Chinese people, they adhere to social standards and social expectations which inhibit their individual creativity yet at the same time, the Western influence of individualistic thinking due to colonialism has also had impacts. This fusion of the East and West is a dilemma during creative and aesthetic judgement as they need to fulfil the expectations of both cultures. Therefore, there is the need for arts education that would serve as the basis for facilitating the creativity and the development of creative thoughts of young people in Hong Kong. However, arts education is a unique area that requires understanding the aesthetic perception of learners in order to design the appropriate tasks and teaching contents that would enhance the cognitive understanding of students so that they can apply art knowledge in their daily life and able to be inspired by the surrounding environment and culture. Therefore, it is proposed in this project that an understanding of the aesthetic experiences of students could be obtained through an assignment that allows students to apply art knowledge to their daily life, which would enhance their cognitive understanding of how art is associated with daily life, encourage them to integrate creative thoughts and art knowledge to solve problems, and increase their involvement in the creative process (Leder and Nadal, 2014), all of which would contribute to the enhancement of creativity. This project also provides an in-depth understanding on how art knowledge can be integrated and applied to create new ideas, and contribute to the development of a draft of the appropriate curriculum, activities and facilities that would enhance the creative art education of youths in Hong Kong.

**(ii) Needs of the collaborating school**

The Immaculate Heart of Mary College uses art as a medium to develop the creativity, critical thinking and cultural awareness of their students. In their Art Education class, different artists have been invited to present a variety of art work to nurture the aesthetic sensitivity of the students. In terms of general art awareness, the visual arts course teaches fundamental art knowledge and skills to the students. The aims are to build cultural awareness, develop self-expression and encourage the pursuit of a life-long interest in the arts among the students. However, the provision, revision and selection of the teaching contents are solely determined by the teachers. Student input, such as their aesthetic experiences, perception of art and association of creativity with personal development, are not included. However, understanding how students associate their personal experiences with the learning environment is useful for stimulating their learning interest in art (Burton, 2000) and serves as a criterion to evaluate creative works (Rogers and Fasciato, 2005). Thus, the current teaching approach needs to be modified to accommodate aesthetic experiences, and encourage students to take the initiative to generate creative ideas and become more involved in the process of doing so.

A preliminary study was carried out in October and November 2016 at the Immaculate Heart of Mary College to understand the relationship between aesthetic experiences and creative thinking. Three classes of visual arts students which included Forms Two to Five classes, with a total of 86 students, were invited to participate in a workshop to gain a better understanding of their creative processing and aesthetic experiences. The Applicant and undergraduate students from the Institute of Textiles and Clothing (ITC) at The Hong Kong Polytechnic University delivered a 2-hour workshop on window display designs to the students, and discussed developing the concepts, introducing design elements and executing design ideas. After the workshop, the students were given two weeks to work in groups on a creative fashion window display, followed by a focus group discussion to understand their creative processing. It was found that the window display works are not creative, which were rated by the Applicant and the school visual arts teachers (Figs.1 and 2). The findings from the

focus group discussions revealed that even though the students have learned visual arts skills and gained the knowledge, they are not able to apply them during creative processing as they are unable to fully relate the assignment with the elements in their daily life. For instance, the students were instructed to design a book cover by referencing the work of a new contemporary artist. However, their creativity was limited to the work of the artist so that none of their daily life components were included in the book cover design. They also sought the grading criteria from their teacher and aimed to meet the requirements for a good grade. They avoided incorporating overly creative ideas into their works as they feared that this result in a low mark. Also, they tended to apply art concepts that they had learned in class so as to fulfill the expectations of their teacher as they felt that this could secure a good grade even though they were told to be creative. The preliminary findings of the low involvement of students and their lack of creativity in completing a visual arts assignment imply that their creative performance is related to the lack of cognitive understanding of how art is applied in daily life and therefore an alternative way of teaching should be applied which could inspire students to be more forward-thinking and encourage them to envisage new ideas during their creative processing.

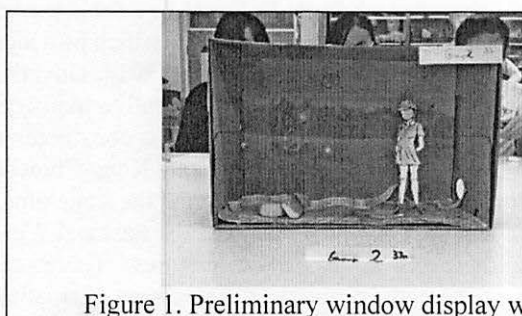


Figure 1. Preliminary window display work (1)

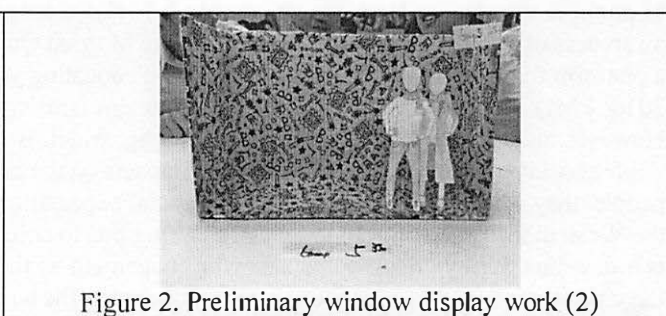


Figure 2. Preliminary window display work (2)

#### (ii) Applicant's Capability

ITC focuses on creative and innovative developments in fashion and creativity-related education. ITC is experienced in nurturing young design talents in Hong Kong. The institute also has solid experience in organizing workshops and programs throughout the years for secondary school students so that they can take part in experiencing fashion design, styling or fashion store design through school visit workshops or summer camps.

The Applicant has taught store displays and fashion design related subjects for the last 15 years and conducted research related to the creativity education of young people, aesthetics and human behavior. For instance, he has developed an integrated teaching approach which consists of a customized assignment, visual learning platform and online virtual interactive display library which help to facilitate the creative process for window and store display designs (Law et al. 2013a). The research findings have helped to enhance the aesthetic sensitivity of university students and reduce their inclination to merely fulfill the expectations of the instructor in their design work. In terms of generating creative ideas, the Applicant has investigated the relationship between visual display creation and the level of understanding of aesthetic elements and perceived patterns in evaluating design ideas which influence the process of idea generation among Hong Kong university students (Law, 2010). He has also studied the relationship between aesthetic perception and the creation of appearance style among the Hong Kong Chinese (Law, Yip and Wong, 2009). It was found that being socially accepted is more important than being fashionable as the former sustains face in the evaluation of fashion appearance style which implies that there are unique perceptions that govern the aesthetic preferences of product form. In terms of the relationship between behavioral response and visual aesthetics (Law and Yip, 2008), the amount of aesthetic education received and aesthetic knowledge contribute to level of curiosity when examining the creative contents of window displays in terms of conceptualization of the sensory aspects. The strengths of ITC and the background of the Applicant will ensure the successful implementation of the project.

#### (II) Goals and Objectives

This project aims to enhance the aesthetic learning experience of Hong Kong secondary school students and their involvement in the creative process. Arts education is a subject that contributes to the all-rounded development of a person. In terms of the personal development of students, this project enhances their cognitive understanding and knowledge of art by coaching them to integrate and apply art to their daily life. The project also encourages students to share their creative ideas in class and become self-motivated to take the initiative to note the art-related aspects of their surroundings. In terms of the development of the creative arts and culture, the project results will contribute towards better insights of the creative process of Hong Kong secondary students, so as to contribute to the development of creative education curriculum that will

nurture young creative talent and enhance their creativity. For example, design educators can enrich current creative art programs based on the study findings which will stimulate and enhance the creativity of students, and training techniques for the arts can be developed based on patterns of aesthetic judgment and perceived understanding of design elements among Hong Kong secondary students. The attributes and patterns of aesthetic judgment and the ability of the local Chinese to appreciate art-related topics are all helpful in selecting art exhibits and programs, designing the contents of promotional materials, and making changes to existing visual art program contents to increase the public awareness of art. The following objectives will be achieved in the study.

(i) Short-term objectives:

1. to examine the relationship between the aesthetic learning experiences of students for aesthetic judgment and creativity,
2. to enhance the initiative taken by students for creative processes and their involvement in the creative processes,
3. to enhance the cognitive understanding of students in applying art knowledge when generating creative ideas, and
4. to improve creative thinking in students with the application of visual arts knowledge to a store display design assignment.

(ii) Long-term objectives:

5. to develop an open and creative culture in art education,
6. to recommend strategies for training in the creative arts with reference to the findings, and
7. to provide direction on the course contents and formulation of assignments in creative art education.

(iii) Mode of collaboration with partner school

Workshops on being creative through store displays, which is a training program for visual art teachers and students, will be designed to instill sensitivity and appreciation towards the arts, create awareness of the cultural arts, and facilitate creative applications of art when designing store displays. Meetings will be held with visual arts teachers, the art education coordinator and the principal for their input in terms of the school direction for art education and workshop contents in order to align with their curriculum and provide evidence-based outputs for future amendments to the workshops.

The workshops and the assignment on developing a store display will be added as components to the visual arts course. The visual arts teachers are the co-facilitators who will jointly develop the teaching kit and assignment contents. Their role is to make arrangements for the training workshops and assist the Applicant with outlining the elements and the development and design processes of a store display, as well as the use of the online store display platform to the students. They will also assist the students from conception to the development of a physical model of a store.

**(III) Targets and Expected Number of Beneficiaries**

The target beneficiaries are Forms Two to Four students at the Immaculate Heart of Mary College. The expected number of students is 400. They will be divided into three groups that consist of Forms Two, Three and Four students who are enrolled in the visual arts, respectively. Forms One, Five and Six students are not included as Form One students have not yet received art education training in secondary school and the class schedules of the Forms Five and Six students are already fixed as they prepare for their DSE examination and new course contents cannot be added. The findings of the project will enrich their aesthetic experiences, and enhance creative involvement and thinking creatively by integrating visual arts knowledge into a project that calls for developing a fashion and lifestyle store.

**(IV) Conceptual Framework**

(i) Aesthetic experiences

Aesthetic experiences have three features, which include the evaluation of the symbolic attributes of objects or engagement with them, the feelings that emerge from the affective dimensions through viewing, and meaning derived from the objects or feelings of unity with them (Bergeron and Lopes, 2012). That is, humans rely on individual internal processing algorithms to develop their sense of aesthetics, respond to aesthetics and identify patterns that are related to aesthetics (Verzyer, 1999). The patterns are due to the cognitive understanding of the design elements (Lauer, 1979) and meaning dimensions, such as the sensory qualities; that is, feelings that are evoked from the design elements of an object (Casakin and Kreidler, 2011). These patterns are developed and accumulated from aesthetic experiences and subjected to continuous

modifications (Salapatek, 1975). Therefore, continuous learning by taking in the details of the surrounding environment is crucial for developing aesthetic preferences (Lauer, 1979) and the fundamental means of formulating internal algorithms for evaluating aesthetics (Bornstein, Ferdinandsen and Gross, 1981). People subconsciously use their internal algorithms to judge the aesthetic aspects of the environment and objects (Verger, 1999). They rely on their cognitive understanding of such aesthetic-related elements to further form their beliefs about different objects (Schmitt & Simpson, 1997). Also, aesthetic-related elements evoke emotions and influence how people approach an environment/object and their 'liking' responses to an environment/object, and these responses further affect their cognitive judgment of the features of an environment/object and contribute to their aesthetic experiences (Eagley & Chaiken, 1993). In terms of the motivation for creativity, aesthetics experiences are an important factor (Chapman, 2010) which stimulate imaginative seeing; it is the subtle perception of aesthetic qualities that is not limited to only visual judgment by the eyes, thus creating a set of perceptual standards to judge aesthetics to determine the aesthetic quality of a creative piece of work (Chang, 1980). In art education, individual aesthetic experiences direct students in their creations and views of a topic as well as transform these creations and views (Lam, 2000).

There is correlation between stimulus and acceptance; that is, between social and aesthetic experiences. Bloch (1995) indicated that object forms and features evoke both cognitive (functional details of an object) and affective (positive and negative emotions) responses that influence aesthetic responses which then affect stimulus acceptance in general. However, the acceptance is also governed by other factors, such as social and cultural contexts, individual taste and innate design preferences (Basisya, 2008) which will further influence the psychological and behavioral responses towards a stimulus.

The literature has indicated that there are relationships among aesthetic experiences, understanding of aesthetic aspects and quality of judgment. Studies have been carried out to examine the impact of aesthetic perception on fine art (Chang, 1980) but there are a lack of studies on the impact of aesthetic experiences on the development of perception in Eastern societies. However, it is important to focus on how aesthetic experiences influence art judgment, and the corresponding impact on creativity. As design elements (color and form combinations) influence the meaning dimensions of a perceived item, such as the form of expression and type of relation (Casakin and Kreitler, 2011), which are important for creativity, there is therefore value in gaining a better understanding on how aesthetic experiences affect the development of aesthetic standards, preferences and judgement in terms of the degree of innovation put into a creative piece of work.

### **Creative aspects of the Chinese population**

In contrast to Western society, Chinese people take into consideration social expectations during the creative process (Rudowicz and Yue, 2002) as the expression of personal truth (Batey, 2012), and being self-expressive is not the only outcome of being creative (Wiener, 2000). Equally important are aesthetic preferences that are socially acceptable in being creative (Dunn et al. 1988). Social perceptions and values therefore affect aesthetic preferences (Yang and Wang, 1999). The understanding that there are acceptable social standards is due to the Chinese collectivist culture as opposed to an individualistic culture where a creator can express his/her inner thoughts without regard for others (Markus and Kitayama 1991). This relationship between Chinese cultural values and society is one that is unique (Fan, 2000) and those values are shared among the Chinese worldwide, because sharing the same cultural identity shapes their behavior (Li and Su, 2007). For instance, the Chinese prefer abstract patterns as ornamentation (Li, 1994). Western and Eastern perception of aesthetics also differs in that the former incorporates cognitive-rationality whereas the latter is influenced by Taoist and Confucian values in which beauty is associated with "Dao" - a way of life that focuses on that natural order of things (Liu, 2006). Liu (2006) provided a new perspective on contemporary Chinese aesthetics in that the Chinese aim for existence (work hard) yet live their lives with beauty at the same time. However, Hong Kong is influenced by both the East and West and uniquely combines both types of perceptions. Therefore, there is an alternative set of aesthetic values, and the aesthetic senses of Hong Kong individuals have been developed from exposure to both commercial art and subculture art such as art that mixes Chinese slang and graffiti (Clark, 2009)).

Although there are different schools of thoughts on Chinese aesthetics, they are all based on traditional Chinese art in which contemporary views are neglected. There is also no united view that describes the dimensions of Chinese aesthetics due to the vagueness of ideas in the literature (Batey, 2012; Fan, 2000; Liu, 2006; Rudowicz and Yue, 2002). Also, the special context of Hong Kong which has been deeply influenced by both Chinese and Western values may affect values during aesthetic judgment, but there are also few studies in this area (Wong, 2011). Factors that govern such values are unknown, but they are indeed influential on aesthetic judgment and creativity which is worthy of further study.

### **Enhancement of creativity**

Creativity is related to the integrative thoughts that take into consideration both aesthetic experiences and the surrounding environment (Dewey, 1929) which result in new, surprising and innovative ideas (Boden, 2004). Different

academics have suggested different techniques to enhance creativity. For instance, brainstorming, changing perspectives and hierarchical techniques have been suggested by Butler and Thomas (1999). However, it is important to have visual references to stimulate creativity (West, 1991) during the idea development stage, and mind-mapping is suggested for linking possible ideas in the development of a creative framework (Rittel, 1984). Others (Butler and Kline, 1998; De Bono, 1969; Grossman and Catling, 1985) have suggested that creativity can be stimulated by changing the perspective towards a problem, such as linking unrelated areas and concepts to form new concepts that address the problem in a logical manner in order to step outside of one's comfort zone. Osborn (1969) proposed the SCAMPER (i.e., Substituting; Combining; Adapting; Magnifying; Putting to a different use, Eliminating and Rearranging) model as a way to link unrelated areas and concepts together in a systematic way. However, the most important way to enhance creativity is not to use any technique, but create paradigm shifts in the habitual thinking of the creator (Boden, 1993). It is important to understand the attributes that stimulate creative ideas in the minds of individuals (Osborn, 1948). Amabile (2000) also supported this idea and recommended the use of heuristic tasks to reveal habitual thinking patterns. Edwards (2001) even suggested that studying one's childhood can help to locate the attributes that shape creative development. Although there are different suggested methods of enhancing creativity, it is important to understand that the aesthetic experiences of students which contribute to the development of creative thinking (Leder and Nadal, 2014) add to an enabling learning environment and combined with an appropriate technique, will increase the participation of students in the creative process (Burke, 2007; Karna-Behm, 2016). Figure 1 shows the relationships among social and cultural environments, aesthetic experiences and perception, how art is taught and the level of creativity.

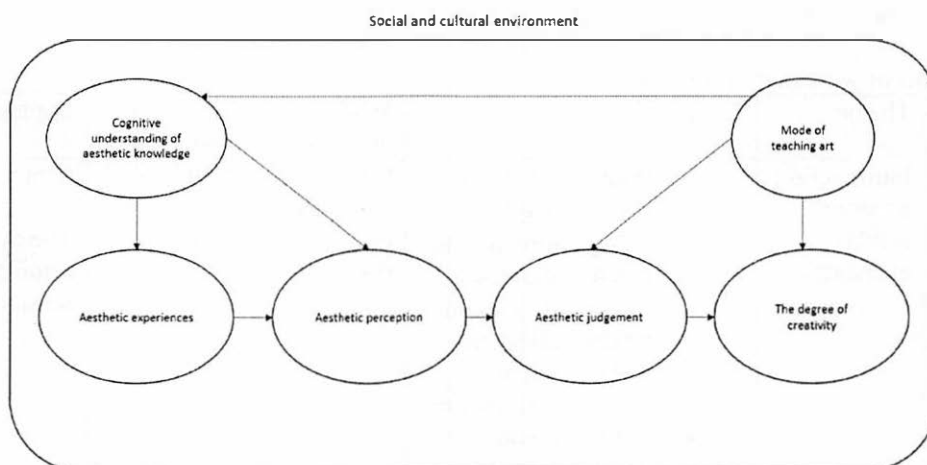


Figure 3. Relationships among social and cultural environments, aesthetic experiences, aesthetic judgement and creativity

This project therefore aims to cognitively enhance the aesthetic learning experience of students, by focusing on their aesthetic knowledge, aesthetic experiences, involvement and creative thinking during the creative process.

#### (V) Implementation Plan with Timeline

The length of the project is 15 months, which includes training through workshops for the visual arts teachers, developing a teaching kit, implementing workshops on store displays and evaluating the performance of the students. The first stage involves training through workshops for the visual arts teachers on various themes related to the project. The second stage will be a survey to gauge the creative background of the students. The third stage will be involve developing a fashion and lifestyle store and the last stage is carrying out focus group discussions on aesthetic experiences and involvement in the creative process followed by evaluation, report preparation and dissemination of the project findings.

#### Methodology

A mixed methods study design is applied in order to obtain a better understanding of the aesthetic experiences and judgment of Hong Kong Chinese secondary students and their corresponding impacts on the creativity of the students. A mixed methods study design can provide more comprehensive findings on creative personality and creative achievements, and the grounds to interpret the qualitative results (Morgan, 2014) through both quantitative and qualitative approaches;

that is, surveying and focus group discussions. The project has four stages: 1) workshops for the teachers on art, store displays and developing a teaching kit; 2) a quantitative study through the use of a survey to examine the aesthetics judgment and creative background of the students; 3) a workshop on designing store displays given to the students to examine their creative thoughts and ideas; and 4) focus group discussions to obtain an in-depth understanding of the association between aesthetic experience and aesthetic judgment (Teddlie and Yu, 2007), as well as the involvement of students in the creative process and their creative works. The four stages of the project are elaborated below.

(i) Stage 1 Workshops for teachers

The workshops provide training to the visual art teachers so that they gain a good understanding of the elements and functions of creative art and store display design; sensory, cognitive and affective aspects of displays; virtual display platform; and teaching kit design. Invitations will be sent to secondary schools in the learning circle of the Immaculate Heart of College to invite other visual art teachers to participate in the workshop. It is expected that a maximum of ten visual art teachers will be participated in the workshop. The duration of this stage is three months.

Roles of the parties involved,

- The applicant is responsible for content design of the workshop and the integration of visual display and visual art knowledge for preparing the teaching kit.
- The project assistant is responsible for the collection and preparation of workshop materials, such as visual examples of contemporary store displays, contemporary trends in visual art and retailing, youth fashion trends.
- The teachers will provide information of visual art class materials, evaluate and comment the integration of visual displays and visual art training and co-design the teaching kit with the applicant.

Table 1. Contents of workshops for teachers

Participant	Theme	Contents	Mode of delivery	Personnel involved	Implementation period
Visual Art Teachers	Introduction on store display elements	<ul style="list-style-type: none"> <li>• Purpose and types of store displays.</li> <li>• Design principles to create visual focus.</li> <li>• Color coordination, product categories, and cultural and emotional responses.</li> <li>• Functions and designing of store atmosphere.</li> </ul>	9-hrs of seminars and discussions	Applicant and Project Assistant	Sept to Oct 2018  The duration of each seminar and discussion session is 3 hours in length.
	Creative art elements and store display designs	<ul style="list-style-type: none"> <li>• Contemporary trends and examples of integrating art into retail displays.</li> <li>• Introduction on current youth fashion trends.</li> </ul>	9-hrs of seminars and discussions	Applicant and Project Assistant	
	Sensory, cognitive and affective responses	<ul style="list-style-type: none"> <li>• Relationships among store displays, products, brand attributes and the sensory, cognitive and affective responses of the viewers.</li> </ul>	9-hrs of seminars and discussions	Applicant and Project Assistant	
	Virtual display platform	<ul style="list-style-type: none"> <li>• Introduction on virtual display platform.</li> </ul>	3-hr workshop	Applicant and Project Assistant	

		<ul style="list-style-type: none"> <li>Developing virtual displays.</li> </ul>			
Visual Arts Teachers, Art-education Coordinator, Principal	Developing teaching kit	<ul style="list-style-type: none"> <li>Co-designing of materials for store display assignment and evaluation criteria</li> </ul>	3-hr workshop	Applicant and Project Assistant	
	Reflection	<ul style="list-style-type: none"> <li>Group discussion on using the teaching kit to enhance student creativity</li> </ul>	2-hr workshop	Applicant, Art-education Coordinator, and Principal	

(ii) Stage 2 Examining creative background of students

To obtain a better understanding of the creativity of young people in Hong Kong, the students will be asked to complete an assessment which uses the Creative Personality Scale (Gough, 1979) and Creative Achievement Questionnaire (Carson et al., 2005). The former is a self-reporting tool that provides a preliminary understanding of creativity through personality by using a scale with 18 positive and 12 negative items. The latter is a test to further understand the creative achievement of the students through ten domains of creativity, which range from the arts to science. The two measures provide a general idea of the creative background of the subjects which can help to interpret the findings from the qualitative study. Also, they are appropriate for examining the level of creativity of the creator (Batey 2012; Eysenck, 1993).

Table 2 Surveying creative background of secondary school students

Participants	Theme	Contents	Mode of delivery	Personnel involved	Implementation period
Forms Two to Four visual arts students	Understanding creative background of students	Scale and questionnaire that measure creativity	In-class survey	Applicant and Project Assistant	Nov to Dec 2018

(iii) Stage 3 Developing a fashion and lifestyle store

After obtaining a preliminary understanding of the creative background and aesthetic judgment of the students, two training workshops will be carried out in class for a student project which is an activity on store design. The aim is to enhance and stimulate the creative processing of the students through the designing of their ideal shop. They will be provided with training in workshops that discuss the designing of store displays and use of the virtual display platform to set up a physical model of a fashion and lifestyle store. The process has two steps: 1) the students will be required to use an online visual display platform to develop and record their design ideas which was developed by the Applicant to facilitate the creativity of non-design undergraduate students in his visual merchandising course at Poly U. The platform will allow them to envision their own display; that is, they can input customized pictures in a virtual environment to present their ideas (see Figs 4 and 5). These ideas will be stored in the system to analyze their aesthetic preferences through the color and design elements (lines, texture, proportion, etc.) and their creativity, and how they apply their aesthetic preferences and creativity in presenting a display theme. Also, customized online visual art databases will be developed that fit the needs and syllabus of Forms 2, 3 and 4 students. The focus of the database for Form 2 students will on the use of basic geometric solids, painting techniques and transferring creative ideas into artwork through art concepts. The database for the Form 3 students will focus on the integration of masterpieces of visual art and the integration of color paintings, drawings and art movement/concepts in the contemporary art market. The database for the Form 4 students will focus on learning about art and the design process, including examples to instill art appreciation, facilitate art evaluation and apply online art learning resources in developing creative ideas from the research stage through to idea execution. They will be asked to make use of their respective database to incorporate the corresponding visual art concepts and techniques into their design. The application, demonstration and extension of visual art knowledge learned in class are realized through a practical design exercise, which involves designing the visual components of a store, such as displays and store highlights, using visual graphics, and selecting colors to deliver their themes which align with the corresponding Visual Art syllabus.



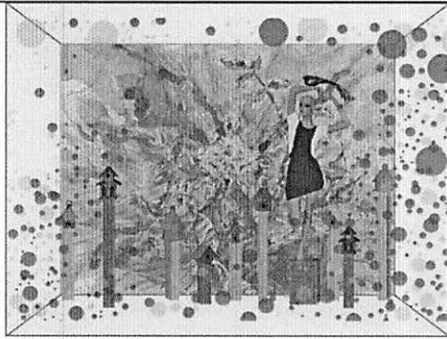


Fig. 4 Virtual display: Sample 1

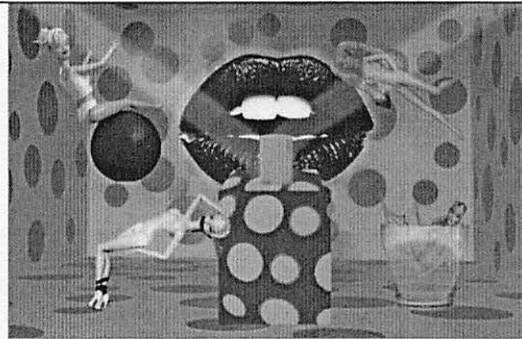


Fig. 5 Virtual display: Sample 2

2) In order to increase the interest of the students and help them in the creative process, they will be given the task of developing and designing a fashion and lifestyle store (see Figs. 6 to 7). Fashion and lifestyle products (e.g. decorative goods) are chosen as the theme as they have strong symbolic meaning since physical cues are integrated into the display, such as style, color, etc., as well as cultural values and beliefs (Soloman and Rabolt, 2004). These are important elements of appearance creation which reflect the aesthetics norms of the collective group (Law, 2009). The use of a physical visual display also shows the level of cognitive understanding of using visual art knowledge to generate creative ideas and organize aesthetic elements. Since the students will be required to design their own store, they have more control over the creative process as it is based on their preferences, and aesthetic experiences and perceptions. Also, they will not be instructed to apply any art concept or theory to create their art work so that their creativity is not restricted.

However, they will be allowed to bring in customized props and materials to enhance the corresponding theme. The students will be divided into groups of five to design and execute their store displays. The assignment has three components. The first component is the submission of the 2-D store design; and the second component is developing a model of a physical store. The students have to submit the works, their inspiration and descriptions after each component for comments and follow-up. All the groups will work on the same topic: a design that best reflects their store and thus, their works can be compared. The set-up process will be recorded in an online learning journal for further analysis. By uploading design inspirations, their thoughts and their visualized ideas onto a virtual design platform, students and teachers can review and organize their ideas and extension of their ideas, as well as apply their visual art knowledge which can be systematically reiterated through the online journal and database. In this stage, the creative processing and ability to produce creative works in terms of cognitive understanding and application of art knowledge are demonstrated, as well as the role of aesthetic judgment in creative direction.

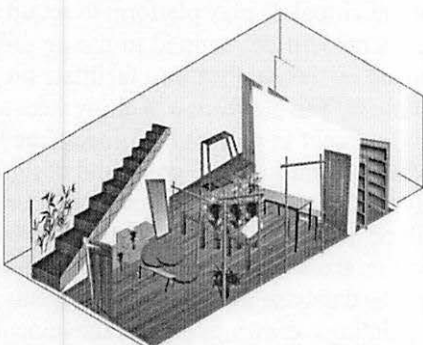


Fig. 6 Sample of virtual store design

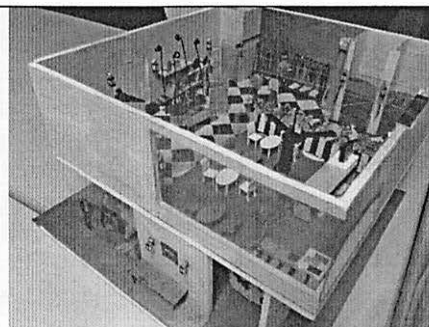


Fig. 7 Sample of physical model of a fashion store

Workshops will be offered to the students which provide instruction on store displays and the online display platform. The workshops will provide systematic guidelines by outlining and demonstrating the integration of art and local cultural elements into display design which will help the students to enhance their creative thinking, record their creative processes, and transform their ideas into physical store displays. The development of store displays for their store exemplifies the use

of real-life examples and is a new learning experience which applies visual arts knowledge and local cultural elements in theme development, and at the same time, increases involvement, observation and participation in the creative process.

Table 3 Workshops and activities for secondary school students

Participants	Theme	Contents	Mode of delivery	Personnel involved	Implementation period
Forms Two, Three, and Four students	Training workshop	1) Background information on designing store displays; 2) elements of store displays, color coordination for store design; 3) manipulating spatial design principles, examples of integrating art and local culture into theme development process	Three 1-hr seminars for each component of training workshop (see Contents)	Applicant, Project Assistant	Forms Two and Three classes: Jan to April 2019.  Form Four:  May to June 2019.
	Training on online display platform	Using online display platform, preparing learning journal, and briefing on fashion and lifestyle store project	2-hr workshop	Applicant, Project Assistant	
	Developing Store displays	Developing creative ideas for store display, Set-up of physical model of store display	Two – month activity	Applicant, teachers, Project Assistant	

(iv) Stage 4 Focus group discussions

Following Stage 3, focus group discussions will be arranged to obtain a better understanding of the aesthetic experiences of the subjects which include examining how aesthetic sensitivity is linked to the surrounding environment of the students, aesthetic experiences, and aesthetic training and how it has affected the creative works. The purpose of the focus group discussions after the students have created a store display is to understand in depth, the relationship between aesthetic values which stem from the experiences of the subjects and their impacts on the generation of creative ideas. The findings can be applied to understand the elements that influence the creativity of students and how these elements are associated with the development of creative work by these students. The discussions will be carried out in a semi-structured format to allow the subjects to express their opinions in different areas.

The interviews in the focus groups will refer to the heuristic framework in Batey (2012) to study the creative works. The framework incorporates four dimensions of creativity: from the person, process, press, to product. Person is analogous to the individual who creates (i.e. the Hong Kong secondary school students); process to the interaction of the groups through which creative work is produced (i.e. generating ideas and creative processing for the display); press to the cultural influences and social setting of the surrounding environment of the creative groups (i.e. social values) and product to the creative work produced (i.e. store displays).

Table 4 Focus group discussions

Participants	Contents	Personnel involved	Implementation period
Forms Two and Three students	Focus group discussions	Applicant	Jan to May 2019
Forms Four visual arts students	Focus group discussions	Applicant	June to Nov 2019

(v) Project timeline

The timeline of the project is shown in Table 5.

Table 5. Project timeline

	Project Period			
	Q1	Q2	Q3	Q4
	Sept-Oct 2018	Nov-Dec 2018	Jan-June 2019	July-Nov 2019
• Recruitment and training of Project Assistant	X			
• Preparation and modification of workshop materials	X			
• Stage 1: Workshops for teachers	X			
• Stage 2: Examine creative background of students		X		
• Stage 3: Visual display development		X	X	
• Stage 4: Focus group discussions			X	X
• Analysis and Evaluation			X	X
• Report preparation and dissemination of project findings			X	X

**(VI) Expected Project Outcomes**

(i) Outcomes - Students

Students who have completed the workshops and the project will find that their aesthetic experiences are enriched and cognitive understanding of applying art knowledge to generate new ideas improved. The experience will enhance their creative processing skills, initiative in thinking creatively and involvement in exploring new ideas from their surrounding environment and culture to develop their works.

A teaching kit that enhances the aesthetics and art learning experiences of students, their involvement in the creative process, and integration of visual art knowledge with real life situations will be developed. The kit will contain: 1) the overall learning objectives, 2) an introduction on store design elements; examples of integrating art concepts into store designs; the relationships among art concepts, store design and audience response; 3) guidelines for using the virtual display platform and examples, as well as the online database to develop a store design; 4) a project brief for integrating store displays with visual art knowledge and local cultural elements; that is, the procedures and factors that need to be considered for enhancing the creative potential of students when using real life examples, the use of a learning journal and virtual display platform to record, modify and evaluate creative ideas; 5) a draft of the study, evaluation and reflection plan, and 6) references. The teaching kit serves as a guideline for teachers so that they can encourage the creative processing of students and a reference source for revising the curricula in art education and visual arts in the future specifically for the increased involvement of students in the creative process and understanding how to apply art in daily life.

The creative ideas of the students will be transformed into physical models of store displays. An online library (see Fig. 8) will be created on the website of the Immaculate Heart of Mary College to showcase the display works along with details on how the displays were developed as well as feedback from teachers and peers. It will be shared with all of the students in an online library, and categorized in accordance with the different types of art elements. The site will serve as a reference source for students when they attempt to develop new ideas. Other students can also access this system to seek examples from their seniors for reference purposes. This will also serve as a record of their creative process.



Fig.8 Sample of online library of window displays

Learning journals will be maintained by each participant student which will detail their research work for the displays, development of ideas, and execution of the window/store displays as well as their reflections. The journal will help the participants to understand their own experience in learning art and mentally exploring other creative aspects and ideas that would give them insights into the development of their works.

#### Outcomes - Education

Research articles related to the project are anticipated to be published in refereed journals that focus on creativity, art and education, and papers presented at international education conferences. These articles and papers will contribute to the conceptual development of the relationship between aesthetic experiences and the creative education of students.

#### **(VII) Involvement of Personnel in Project**

The visual arts teachers will participate in the development of the teaching kit and the training workshop for developing the store displays, use of online display platform and execution of the activity in class. The principal and aesthetics development and arts education team coordinator at the school will oversee the program to ensure that it aligns with the objective of enhancing the creativity and critical thinking of students by nurturing their aesthetic sensitivity and increasing their cultural awareness so that they express and communicate their creative ideas effectively. The Applicant will oversee and develop the overall program, from teaching materials to training workshop, data collection and analysis. The Project Assistant will participate in administrative, data collection, data entry and liaison duties throughout the period of the study.

#### **(VIII) Budget**

The total amount of funding requested is HKD 221,200

Breakdown	HK\$
<b>Staff Cost</b>	
- One Project Assistant (\$14,700 for 9 months, including 5% MPF)	<b>132,300</b>
<b>General Expenses</b>	
- Focus group transcription fee (\$1000/group x 40 groups)	
- Auditing fee	<b>45,000</b>
<b>Other Expenses</b>	
- Contact of service: Online platform and database maintenance and update.	<b>15,000</b>
- 15% University overhead administration fee (e.g., research project and finance administration)	<b>28,845</b>
<b>Total</b>	<b>221,145</b> <b>(Round up to \$221,200)</b>

### **Justification for the requested funds**

1. One Project Assistant will be recruited to perform the following duties.
  - Liaise with the secondary school for the teacher and student training workshops.
  - Provide administrative support throughout the project.
  - Assist with online communication with the students through the online platform.
  - Collect data and conduct data entry.
  - Provide assistance with data analysis.

Qualification: The project assistant should have a degree or above in the relevant area; experienced in aesthetic, creative and education research.

2. General expenses include consumable materials for the window displays, stationary, printing and travel costs related to data collection and workshop delivery.

3. Other expenses include contract of service for the development, management and updating of the visual art database, such as the interactive discussions and student works on the virtual platform.

### **(IX) Project Evaluation**

The triangulation approach will be used to evaluate how the aesthetic learning experience of the students has been improved, as well as the level of their involvement in the creative process and their creativity. There will be professional evaluation of the art education, the learning journals and focus group discussions (student feedback), and displays (deliverables).

#### **Evaluation plan**

1. The student works will be evaluated by the visual art teachers and the applicant in terms of ideas generation; creativity; application and integration of visual art knowledge in displays.
2. The learning journals and focus group discussions will be analyzed to understand and evaluate students' involvement in the creative process and the aesthetic learning experience.
3. The evaluation and assessment will be supported by the students' display works.

#### **Aesthetic experiences of students**

The aesthetic experiences of the students will be evaluated by examining the survey results and focus group discussions. Their creative personality and creative achievement will be examined with the Creative Personality Scale (Gough, 1979), and Creative Achievement Questionnaire (Carson et al., 2005) respectively. The mean, standard deviation and Pearson's coefficient will be calculated in terms of creative personality and by using ten domains of creative performance to gauge creative achievement which would indicate the creative potential and creative personality of the students. All of the data will be processed by using SPSS software.

Focus group interviews will be carried out with each student group to obtain their feedback and opinions on the creative process for the displays in terms of the development of their aesthetic perceptions, the application of art knowledge into their works and the creative process itself. The data will be transcribed professionally and the grounded theory approach will be applied to analyze the data. The aim is to develop a framework based on the viewpoints of the students to understand their aesthetic learning experiences and contribute to facilitating creativity in art education by systematically examining the data through open, axial and selective coding with the constant comparative method (Corbin and Strauss, 1990). All data will be coded and categorized through open coding followed by formulating interrelationships between the categories with axial coding. Finally, the data will be conceptualized at a higher level with selective coding to reveal how ideas are generated during creative processing and the role of aesthetic experience in carrying out the window display assignment.

#### **Student involvement in creative process**

Each group of students are required to complete a learning journal which will record how they have developed their ideas; demonstrate their thinking process for the window display; and individual comments and feelings during the execution process. The journals will be evaluated in terms of the level of involvement in creative thinking and how much they have applied their visual art knowledge. The contents will be reviewed by the Applicant, two visual arts teachers and the individual responsible for art education at the school by using content analysis to evaluate the input of students, their

involvement and generation of creative ideas. Factors that influence the involvement of the students in the creative process and idea execution will be revealed. The result will supplement the findings of the focus group discussions and comparisons can be made, thus providing a complete picture of their art learning experience.

**Creativity**

The display works will be evaluated by the Applicant, the two visual art teachers and the individual responsible for art education at the Immaculate Heart of Mary College in terms of creativity and application of art knowledge. Evaluation from different professionals will provide a holistic assessment of creative performance.

**(X) Sustainability of Project Outcomes**

The teaching kit and workshop contents will serve as the basis for developing an interactive method that would increase the interest of students in learning art. Teachers can modify the contents and use them in visual arts class to offer the project again in the coming years. The online display library and the student works will be uploaded onto the Immaculate Heart of Mary College website so that other schools can access and use them for reference in developing art education. They also allow students to reference the works if there is ever the need to apply visual arts knowledge in real-life situations. The contents of the online display library will thus serve as a source of inspiration for students in the many years to come.

An exhibition that showcases the window display works and the learning journals will be organized at the school. This will serve as a form of creative idea exchange and provide inspiration to other students.

**(XI) Dissemination/ Promotion of Project Outcomes**

A website for this project will be developed and will be incorporated into the Immaculate Heart of Mary College website. The project details, such as objectives, execution and the results will be uploaded. An online display library will also be included to illustrate from the concept development to the execution stage. The teaching kit and the workshop information will also be uploaded. The website can be publicly accessed, and interested parties and other school teachers can obtain the information for free. Therefore, the results and outcomes can be disseminated to other art educators for reference in art education development.

**(XII) Asset Usage Plan**

This is not relevant to this project.

**(XIII) Report Submission Schedule**

Project Management		Financial Management	
Type of Report and covering period	Report due day	Type of Report and covering period	Report due day
Progress Report 1/9/2018 – 31/8/2019	30/9/2019	Interim Financial Report 1/9/2018 – 31/8/2019	30/9/2019
Final Report 1/9/2018 - 30/11/2019	29/2/2020	Final Financial Report 1/9/2019 - 30/11/2019	29/2/2020

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