Project Title :	Capitalizing on Hong Kong's Position in the Art World: An Innovative Platform for Objects Based Science and Arts Learning with a World Class Collaborative Incubator for Future Educational Teaching Resources
Leading University :	The University of Hong Kong
Participating UGC-funded University(ies) :	Hong Kong Baptist University
Project Leader(s) :	Professor Quentin PARKER, Associate Dean (Global), Faculty of Science, The University of Hong Kong

## **Summary of Proposal**

Hong Kong is rightly regarded as the world centre of the Chinese antiques trade with over 896 Million Euros (~HK\$ 7.8 Billion) traded to Europe in 2015 alone. Much of this trade is problematic and many items distributed globally via Hong Kong are often of uncertain provenance or have been acquired via other non-standard routes. Chinese cultural heritage is being compromised while the historical and archaeological contexts of the items traded are often unknown or highly uncertain. Many people are unaware of the cultural significance of the traded objects nor the artistic, historical, contextual and financial importance of this topic.

This proposal will bring a fresh, holistic and innovative educational, art-making and scientific approach to these issues. This will be via an educational program that sheds powerful aesthetic and scientific light on the magnificent cultural richness of real Chinese art, artifacts and antiquities residing in and passing through Hong Kong. This innovative teaching and learning initiative will cover: i) Chinese art, culture and history; ii) the reproduction/copying of Chinese artifacts and ritual items in ancient times; iii) modern issues of copying; iv) difficulties of verification and use of modern scientific testing; and v) the cultural, ethical and philosophical impact of this issue to China and the world.

The intention is to create an engaging educational experience, initially under the HKU Common Core Curriculum, with the strong potential to extend to majors at HKU, HKBU and elsewhere that speaks to the cultural soul of China. This will be through sound scientific principles and cutting-edge technology applied with both intellectual rigour and scholarship.

The program theme is innovation but the project addresses all strategic scheme areas:

- (i) Innovation (key theme) is through juxtapositioning of art and science in a Sinofocused educational program of deep but currently unappreciated cultural significance.
- (ii) Enhancement of student experience is via an artistic and broad cultural appeal to students of all backgrounds that incorporates the scientific process from the outset for an issue that has been ignored and poorly understood.
- (iii) Internationalisation/Mainland engagement comes from our world-class institutional links via the HKU museum. These include the Getty Conservation Institute and World Monument Fund that can offer input on teaching intangible and built heritage. There are also opportunities for experiential learning and internships at any number of museums and art galleries in Mainland China (e.g. Tongi University Shanghai, Zhejiang University Hangzhou) and globally that offers students diverse artistic, archaeological, scientific and laboratory experiences.
- (iv) Language enhancement comes from intensive language immersion from our partners in both English and Chinese (Putonghua).

## **Summary of Final Report**

**Key Objectives:** The intention was to bring a novel science based interdisciplinary approach to the appreciation, understanding and cultural values of Chinese antiquities of particular relevance to Hong Kong. We hoped to innovatively combine arts, art practice, preservation and forensic science to develop a powerful, collaborative, interdisciplinary educational platform that capitalizes on Hong Kong's position in the Art and materials culture world. We introduced students to relevant aspects of Chinese culture and history through direct investigation, hands-on experience with real artifacts and science-based forensic processes.

**Project Activities:** Most project activities were developed around the HKU CCCH9052 course and the HKBU Bronze workshops. These activities included trips

to museums; a laboratory component focusing on scientific forensics assisting identification and verification of antiquities; student team based powerpoint presentations on aspects of Chinese Bronze, Jades or ceramics, a student team-based poster presentations on a range of course topics and multiple choice and essay-based assessments. At HKBU the workshops focused around hands on bronze casting of copies of ancient Chinese bronze ritual vessels and associated technical and historical contexts.

**Project Outcomes:** The key deliverable was the development of the CCCH9052 common core course "Arts Science and Artifacts in Chinese Cultural Heritage". This course has taught ~ 250 students so far from across the ten HKU faculties. Many more participate through the associated materials disseminated by HKU Museum and Art Gallery. The HKBU bronze casting workshops reached about 100 students and created various legacy materials.

**Project Impact:** This was investigated by Dr. Tracy Zou from Centre for the Enhancement of Teaching and Learning of HKU via an independent study using our project as a case study in pedagogical interventions. The project achieved multiple types of impact. Immediate impact was through forums and workshops held. Teaching impact emerged as team members learned new approaches and perspectives to interdisciplinary education via the project. Applied impact came from the CCCH9052 course as a testing ground for our core ideas. CCCH9052 exemplified the value of interdisciplinary education and provided students with opportunities to adopt forensic science approaches to examining antiquities, unique and not available in other courses at HKU. Further tangible impact is the enhanced student learning experiences. The evidence is in students' comments that highlighted their enjoyment as well as their learning through the new interdisciplinary approach. The Science-Arts case also generated protocols to evaluate objects, which can be used in museums and related sectors as described in our refereed Heritage Science article.