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# Project-based Learning and Work Integrated Learning in Product Design: Work-based Learning Immersing Students in Authentic Contexts

Sonny Yip Hong Choy

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***Mr CHOY Yip Hong Sonny, Assistant Professor***
***BA (Hons) in Product Design, Faculty of Design and Environment,***
***Technological and Higher Education Institute of Hong Kong (THEi)***

## Background

The Technological and Higher Education Institute of Hong Kong (THEi) emphasizes the provision of Work-integrated Learning (WIL) and Project-Based Learning (PBL) opportunities by exposing students early to the world of work, thereby nurturing work-ready graduates. The Product Design (PD) Programme is enhancing work-based learning by infusing 'industry engagement' into its core curriculum. During 'industry engagement', students will work on works tasks set out by real industry partners in an authentic context, including through real interactions with industry partners and tackling challenges of the projects in real-world context. This poster explores the process of using 'Gold Standard' PBL as a means to enhance 'industry engagement' and student directed learning in Product Design.

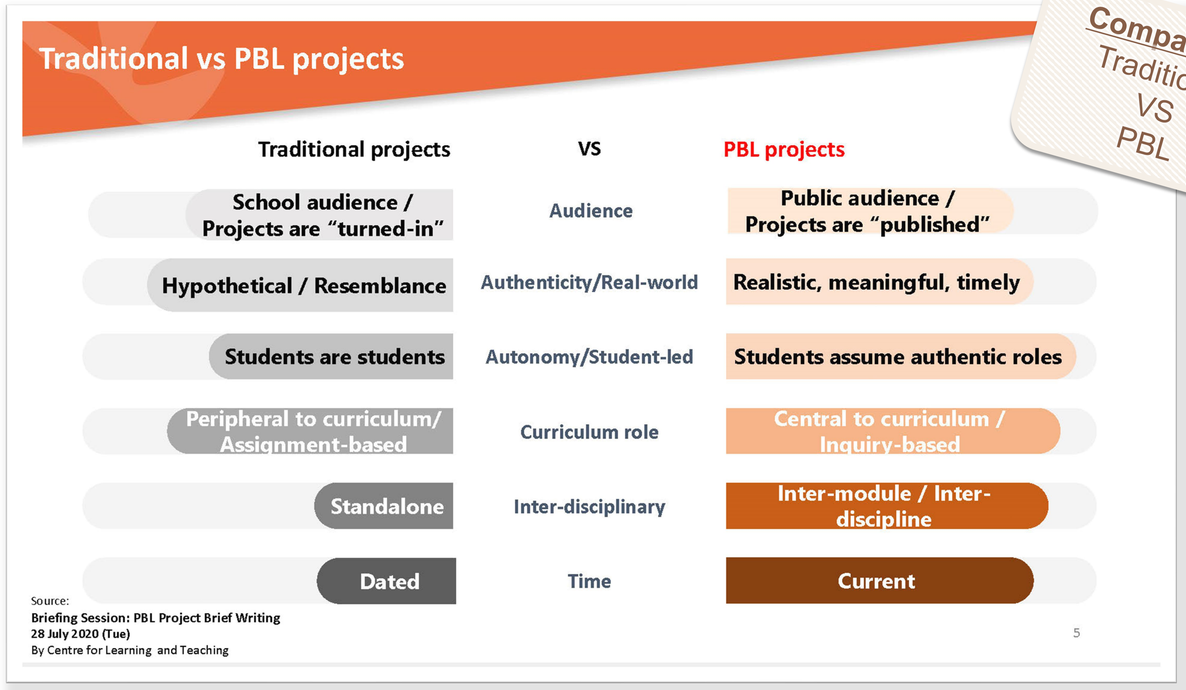

## Industry Collaboration

Exemplified by a project with the offset printing industry of Hong Kong, THEi collaborated with printing firms and paper suppliers to push the boundaries of offset and digital printing into 3-dimensional creative works. These designs employ 3D folding, paper collage, computer-controlled cutting, upcycled materials and test print paper stock that would otherwise go to waste. Students engaged with this work integrated learning to output spectacular designs to embody 3-dimensional transformations of plat paper and card to become a wide range of highly ornate and creative lighting products. The semester long project involved studio work and featured several industry master talks. These talks explained the current developments in the printing industry and their wish to transform and expand with Hong Kong government's re-industrialization plans. Students visited offset and digital printing facilities in Hong Kong to learn first-hand about the intricacies for commercial printing for real clients. Industry partners were also invited to give students professional reviews and critiques on their design work at the beginning, mid-way and final stages. A prize presentation ceremony was also arranged to recognize the efforts and collaborations between THEI and the printing industry.

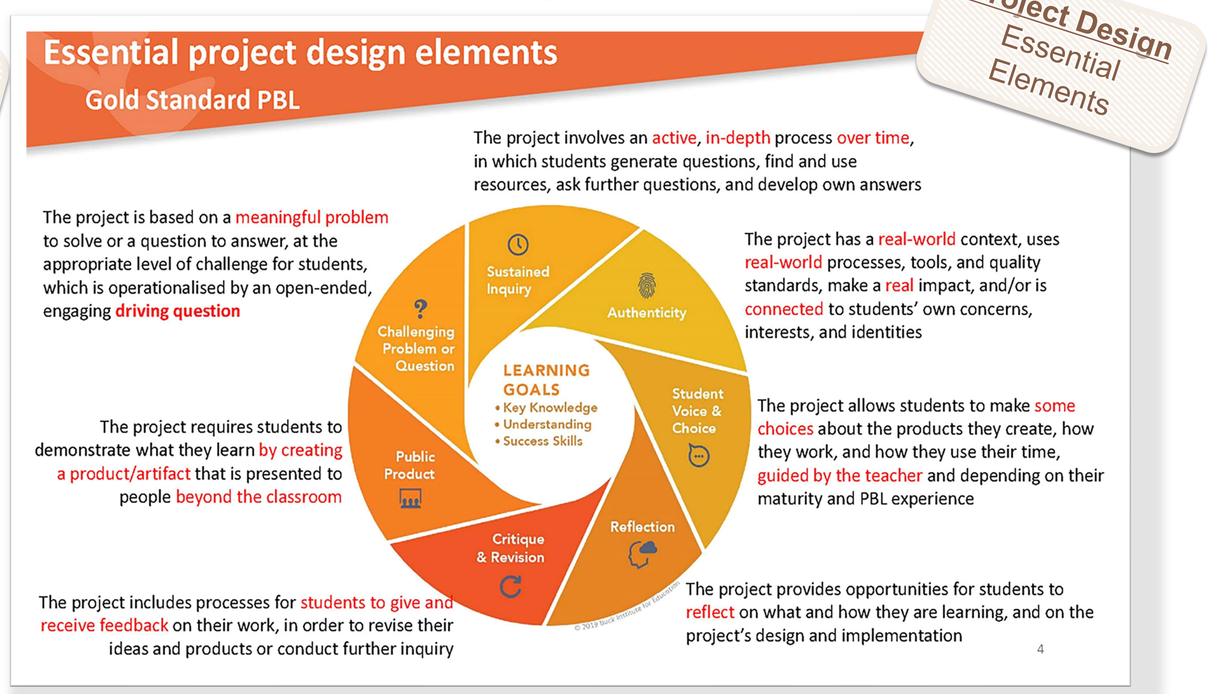

3-Dimensional outputs of lighting products by BA(Hons) Product Design Students.

## Gold Standard Project-Based Learning

The Product Design programme observes the 'Gold Standard' in PBL when planning industry linked projects. Core elements (7-Core Elements) are addressed to give maximum engagement and impact for both students and industry partners. To achieve this, the planning stage is communicated in detail to the industry partners so that a consistent and student driven learning experience is delivered. The keys to PBL success rely on strong links with industry and their contributors. Authentic learning experiences come from industry partners who acknowledge the limitations in student ability but are willing to help push their learning to new heights with honest and demanding critique. Another key aspect is to have projects be student driven, where learning commences with industry partners' overall direction but the learning progresses with a strong student voice. Teaching staff allow students to discover their own ideas and to work open-endedly toward an original and creative final solution.




Comparison between traditional student project and a PBL project. Source: Centre of Learning and teaching (VTC)




Learning Goals of Gold Standard PBL. Source: Buck Institute of Education (2019)

## Work-based Learning

The 'Yeung Kin Man Youth Industrial Incubation' programme was a highlight of THEi PD' programme's work-based and industry collaboration efforts. Involving industry from fields such as timepiece, furniture, eyewear, toys, 3D printing, lighting and Jewellery, the project saw close to 50 final designs and hundreds of design concepts which addressed authentic industry needs. The success of the project was founded in strong learning and teaching outcomes in undergraduate design education touching on key industries driving economic growth in Hong Kong and the Greater Bay Area of China. Strong industry connection providing work related opportunities is a key cornerstone of THEi's work and future ready philosophy.

**Yeung Kin Man Multiple PBL Project**

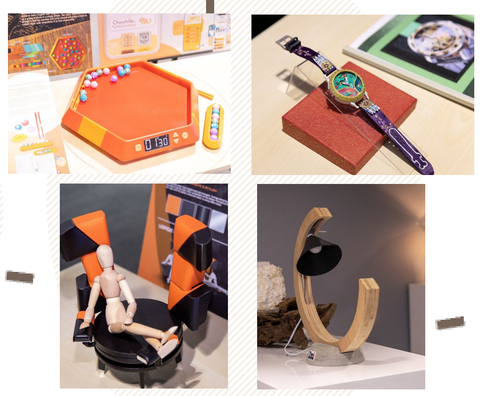
**1st Step**


*Connecting with Industry*

**2nd Step**

*Briefing Students*

**3rd Step**



*Creating Designs*

**4th Step**

*Final Presentation*

**Final**


*Determination of Winners*