



Utilizing University-based Enterprise
to Foster Industry-Academia Collaboration in the Field of Product Development

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University-based enterprise (UBE) system has been adopted and implemented in diverse fields focusing on practice-based learning. The aim of the presentation is to introduce the UBE system integrated into product development course and active collaborations with regional government and other companies to enhance students' practical abilities. Presented are the UBE system and two cases utilizing the system for product development education.

University-based enterprise (UBE) is the university-supported education system that students participate in activities to produce and provide goods and services for the purpose of sales and use of other parties (Stern, 1984). In Korea, UBE started to be actively emerged from the 2000's and most of universities are sponsoring several UBEs. Goal of UBE is to teach entrepreneurship to students, to provide opportunities to apply knowledge and skills learned from classroom, and to stimulate regional economy through diverse cooperative projects. UBE in Korea should be linked to a department's education program to encourage students to more actively participate in the work environment.

The UBE in our university is linked to the department of fashion marketing and is operated as four parts including: 1) retail business for two university souvenir shops on campus, 2) university souvenir product development, and 3) souvenir product development for other organizations and companies. The president of the UBE is the department head and other professors at the department as well as two full-time employees are engaged in operation of the UBE. In addition, a group of students are participating in product development as linked to "capstone design", "start-up business", "fashion marketing project", and "fashion marketing internship" courses.

The first case is to foster regional government-academia collaboration based on the UBE system and 'capstone design and start-up business course' in the department of fashion marketing. In 2013, Jung-gu (regional government) made a MOU(memorandum of understanding) with the UBE for collaboration to develop tourist souvenirs and retail strategies for "cultural heritage street tour program of Jung-gu district". In the first step, special lectures of the head of the cultural heritage street tour program were provided to students to enhance students' understandings on goals, conditions, and restrictions of the project. In the second step, students actually participated in the street tour program to obtain ideas about souvenir items and retail strategies. In the third step, students conducted market research using surveys and interrupt interviews with tourists. In the fourth step, students developed ideas for souvenirs and retail

strategy of souvenir shops and made a presentation in front of Jung-gu personnel as well as patent attorney. Based on feedbacks of the Jung-gu personnel and patent attorney, student groups modified their ideas and developed souvenir samples as well as final retail strategy reports. In the fifth step, the final samples of souvenir and souvenir retail shop strategy reports were submitted to the Jung-gu and they gave awards for best performances. In the sixth step, some samples were selected for real production for sales by Jung-gu personnel and retail strategies for souvenir shops were implemented. In results, students acquired 17 design patents out of this cooperative project.

Hereafter, some souvenir items such as tumbler, memo pad, and t-shirts are being provided by UBE. In three souvenir kiosks operated by Jung-gu as well as the two university souvenir shops operated by UBE, souvenir products developed in this program are being sold. Students obtained valuable knowledge and hands-on experiences in developing products, achieving patents, serving as a supplier, and building on-going business relationships with Jung-gu personnel through this education program cooperated with UBE, department, and regional government.

The second case is to apply the similar process to the industry-academia collaboration. In 2014, Lotte World that is one of the best amusement parks in Korea collaborated with UBE and the fashion marketing department. In courses of capstone design and fashion marketing project, student groups developed souvenir samples based on lecture and mentorship of the head of souvenir team in Lotte World. Newly developed items following the same procedures as the first case (i.e., visit and experience the facilities and environment, conduct market research, develop idea report, develop mock-up samples, receive awards based on evaluations of the practitioners, etc.) included character tattoo stickers, LED(light emitting diode) nail stickers, board games, and t-shirts. In the stage of mass production and trade contracting, UBE was involved to develop products in various versions, achieve safety marks, develop packages, and make contracts to supply products. Since April 2015, tattoo sticker sets are being sold in two souvenir shops in Lotte World and t-shirt items are being prepared for the mass production.

Often, industry-academia collaboration is ended at the stage of developing samples or idea reports. However, the education model integrated with UBE allows students to experience the stages after sample making to mass production, supply management, order handling, cost control, delivery, display in retail shop, sales record/consumer response checks, and development of advanced product samples. This industry-academia collaborative education model utilizing UBD will be helpful to enhance students' practical skills and adaptability to the real world of business.

Stern, D. (1984). School-based enterprise and the quality of work experience: A study of high school students. *Youth and Society*, 15(4), 401-427.