Theoretical and Pragmatic Nature of Product Design Curriculum

Using Product Design Curriculum in Japanese and Oversea Universities as an Example-

Abstract: The purpose of this study is to compare the professional education contents of product design curriculums offered at universities in Japan and Oversea. The theoretical and pragmatic nature of the product design curriculums in different universities was examined. The research mainly focused on product design curriculums at undergraduate level. Product design programs with substantial historical background and a sizeable student intake were used for the study. A total of 25 product design curriculums were selected as comparative inputs, 16 Japanese sample universities (9 government and public universities and 7 private universities), 3 European universities (1 Italian, 1 German and 1 Dutch) and 6 Asian universities (3 Chinese and 3 Korean) were selected for the study.

1. Introduction

The Japanese education at undergraduate level is understood to provide fundamental knowledge where the industry’s concern of how knowledge and skills acquired could be applied in the industry secondary. The trainability of students in the industries upon graduation is often more concerned for Japanese industries as professional specialized training is most likely provided through in- firm training [1]. Students who participated in internship as part of undergraduate degree course were few in Japanese universities as compared to students in European universities [2]. In Europe, universities consistently reviewed courses to look into how knowledge and skills obtained through undergraduate education could be applied in the occupational career [3]. The industries in Europe expect the capabilities of future employees to be oriented through their study during their tertiary education. The product design curriculums seemed to offer a pragmatic approach in delivering knowledge and skills through studios and integrative projects. The difference between education-employment systems may have seen education curriculums developed and focused differently in different countries. The purpose of this study is to clarify the theoretical and pragmatic nature of the product design curriculums in different universities in different countries.

2. Target Group of the Study

The study mainly focused on product design curriculums at undergraduate level. Product design programs with a substantial historical background and a sizeable student intake were used for the study. A total of 25 product design curriculums were offered by departments of art oriented faculties. In Figure 1, 5 universities offered 20% or more of the professional education contents. The Japanese universities offered a broad spectrum of study in specialized subjects where theoretical knowledge and specific skills are learned. There seemed to be a slight different in the trend for offering integrative subjects for knowledge and skill synthesis.

From Figure 1, it could be observed that about 7 out of 16 Japanese sample universities offered 20% or more of the professional education content in the form of integrative subjects. The industries in Europe expect the capabilities of future employees to be oriented through their study during their tertiary education. The product design curriculums seemed to offer a pragmatic approach in delivering knowledge and skills through studios and integrative projects. The difference between education-employment systems may have seen education curriculums developed and focused differently in different countries. The purpose of this study is to clarify the theoretical and pragmatic nature of the product design curriculums in different universities in different countries.

3. Research Methods

A qualitative research, based on hearing survey and literature review of relevant and available documents and publications in the 2000s. The relevant documents and publications were student handbooks, School, Faculty and Department magazines/brochures, study guides, course syllabuses and any historical documents that provided an understanding of the product design programs. Using the data from the Japanese sample universities as a comparative basis, the findings are presented in the upcoming section.

4. Product Design Curriculums in Japanese and Oversea Universities

4.1. Proportion of Professional Education Content

Based on the data collected from the 25 sample universities, the proportion of professional education contents are presentation in Figure 1 and 2. It could be understood that in general, most sample universities offered a broad spectrum of study in specialized subjects where theoretical knowledge and specific skills are learned. There seemed to be a slight different in the trend for offering integrative subjects for knowledge and skill synthesis.

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5. Conclusion

The limitations of this study rest on the limited number of overseas sample universities (e.g. inclusion of American universities) at the moment to provide a more accurate overview. Nonetheless, from the findings, the following main points can be presented:

1) In general, product design curriculums offered in the Japanese sample universities seemed to focus on the study of theoretical knowledge and specific skills through a broad spectrum of specialized subjects. In Japanese universities, synthesis of knowledge and skills through integrative subjects in the professional education seemed to vary in art oriented and design and engineering oriented faculties.

2) In general, European sample universities seemed to focus more on how knowledge and skills can be synthesized and applied through integrative subjects. The learning of theoretical knowledge and specific skills seemed to be more pragmatic with concerns on how they can be applied in projects and industries. The Korean sample universities seemed to present similar trends.

3) The pragmatic approach of learning in the European sample universities could also be understood from the mandatory participation of internship programmes which can last for 1 semester or more. Although internship is mandatory for the Chinese sample universities, the introduction of internship seemed to be in the second half of the 1990s.

References

