Reflection on the Education of Design Management Course

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Abstract. As an important part of the education of postgraduate course in design, design management has been established and offered in some colleges and universities in China. However, as an emerging course system, it is still imperfect in the arrangement of domestic postgraduate curriculum. How to understand and identify the importance of design management course education and how to determine the knowledge structure associated with the course to ultimately facilitate the establishment of relevant systems of this course are the questions that the public concerns most now. Based on the analysis and summary of the design management course offered by North China University of Technology, this paper strives to proceed with teaching practice and further explore the significance, objectives and systematization of the design management course for postgraduate so as to promote the teaching level of design management course.

1. Necessity of design management education

Since the 20th century, the changes in modern industries and the development in global economy have been redefining the scope of design. The influence of design on enterprise innovation and economy has grown day by day, and its strategic position in enterprises and its role in the market are getting more important. This role, though not a new one, has its new significance—design becomes a valuable method for enterprises to gain competitive advantages and the most potential tool to cope with fierce competition. As the significance of design for enterprises becomes prominent around the world, design management also develops into a vital component of enterprises’ business strategies.

The basic starting point of design management is to raise design efficiency. It emphatically studies the corporate design strategies and management systems worked out by enterprises under the pressure and challenges of the global market environment focusing on the demand of users and market; it deals with the means for safeguarding the path, resources and management standard for strategy planning; it centers on the integration of brand, culture, cost, technologies, and services of enterprises for innovation, as well as the management and application in its implementation. It discusses how to identify the relationship between the design development and market environment of enterprises, how to determine the design development direction and competition strategy of enterprises, and how to identify the corporate culture embodied in design. Development plan and action program shall be formulated and selected for the realization of said targets according to the overall strategic targets of enterprises.

The crucial status and role of design management accelerate its emergence as a new research field and a new discipline, which is not only the need of design, but also the need of management.
2. Objectives of design management course

2.1. To realize the specialization, centralization and marketization of education of design
In order to meet the demand by the society for the constantly increasing high quality material resources, education of design management must focuses on the specialization, detailization and centralization of design. The specialization of design is the intrinsic requirement of education of design management and the inevitable choice of design market and educational reform in design.

2.2. To develop and cultivate interdisciplinary creative talents acquainted with cultural resources of design industry
To achieve this target, it is necessary to explore regional culture and state traditional culture and establish an integrated cultivation mechanism combining cultural industry and talent resources with the education of design management, so as to train students’ various qualities related with design on an overall basis.

2.3. The strategic vision is to build top discipline, foster globalized and diversified designers and design management leaders
In order to build a national top discipline in design education, integrated education combining innovative design and management shall be implemented. Reformation in English teaching programs shall be strengthened to enable students to overcome regional barriers. Long-term cooperation concerning the subject shall be promoted with the design agencies, enterprises, cultural and educational institutions at home and abroad. Students shall be guided to participate in international forums and internationally influential design competitions and more other strategies shall be adopted for the cultivation of diversified globalized talents in design management.

3. Exploration of and reflection on design management course

3.1. Crossing and integration among design management studios and colleges and enterprises
Design management studios shall be established. Colleges shall cooperate with local governments, design institutions and enterprises to develop design projects. Teachers are encouraged to guide students to enhance their practical ability and facilitate the flexible use in industries. Design management research studios can be established to foster creative talents in the cultural resources of design industry. Other measures for strengthening scientific design management include: to advance the development and production of excellent designs, to explore regional cultures and combine traditional state cultures and design education, to establish cultivation mechanism integrating cultural industry and talent resources, and to improve the branding of colleges.

3.2. Joining Design Management Institute
Design Management Institute (DMI) is an international organization of design industry in the Europe which is devoted to raising people’s awareness that design is an integral essential part of business strategy. By joining DMI, students are able to acquire advanced design capability and raise international status by participating in exchange programs. DMI offers courses corresponding to its tenet which create a design education environment and foster the publishing of high quality papers.

3.3. Practical teaching based on industry-university-research cooperation
By the teaching method integrating industry, universities and research, the growth in regional innovation system (RIS) can be fostered for technical and innovative researches, and advantage can be gained for competitiveness in the market. It is required to expand students' scientific research practicability and achievements, to cultivate talents and scientific research project development required by enterprises and to establish network of contacts with industry and local enterprises.
During teaching process, the education integrating industry, universities and research is conducive to the competition among colleges, the cooperation among enterprises, the utilization of enterprises’ and the government’s R&D resources and the enhancement of education of students towards knowledge application in enterprises.

3.4. Establish an education composition system centering on the scientific research projects of the industry

In this respect, it is necessary to formulate relevant agreements on the industry and the exchange in industry-university education and to develop the details of agreements on industry-university-research cooperation in order to ensure the D-BASE of the industry and develop the enterprise information DB system of local enterprises. The specific processes and expected results are as follows:

Table 1. Arrangement of design management course.

| Reflection on education | Contents                                                                 | Expected result                                                                 |
|-------------------------|--------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Crossing among design management centers, colleges and enterprises | Process • Establish design management research studios • Develop DBs for enterprises and offer relevant education courses • Combine design management studios and industry-university-research cooperation | Teachers • Technical transfer in the industry and enhancement of research tasks • Increase scientific research projects and research expenditures
| | Expected result Students • Cultivate students’ overall quality related to design to ensure the quality of credits obtained and increase students’ employment rate |
| | Industry • Enhance scientific design management and the development and production of excellent designs • Joint resource mechanism of cultural industry and talent resources |
| | Colleges • Explore the combination of regional culture, traditional state culture and design education • Enhance the branding of colleges |
| Joining international design management institutes | Process Participation in DMI’s international activities and projects • Research exchange and collaboration • Student exchange • International seminars • Exhibitions and exchange • Students participate in international competitions • Promote scientific research projects based on exchange of teachers • Strengthen international design management projects | Expected result Teachers’ research exchange and collaboration—once per year
| | Expected result Students take part in international competitions—more than 50 works per year
| | International seminars—more than once per year
| | Enhancement of scientific research projects by teachers exchange 1 teacher per year
| | Promotion of international design management projects—manage 1 international project per year |
| Practical education by combining industry, universities and research | Process • Establish network with industry • Select local enterprises as objects • Visit enterprises and provide relevant design management strategies and R&D • Formulate course components of the discipline and joint development of scientific research projects integrating industry, universities and research • Operate textbooks on industry-university-research cooperation and R&D institutions | Teachers Based on the cooperation, information sharing and internet cooperation among universities, research institutions and industry, research and development information shall be provided.
| | Expected result Universities It is conducive to the competition among colleges, the cooperation among enterprises and the ability of financial self-support for colleges, the utilization of enterprises’ and the government’s R&D resources.
| | Students College students can be trained in their cooperation spirit and they are able to accumulate practical experience. During this process, global market, productivity and competitiveness can be promoted. Students can get better
opportunity of employment and can obtain more scholarship. The most important is that they may gain the opportunities to receive on-the-spot education.

Strategic vision: to build a top discipline and train global multiple designers and design managers

| Process | Expected result |
|---------|-----------------|
| • Formulate the highest targets for design education  
• Visit the universities in the US, the UK, Japan, and Korea, etc.  
• Visit enterprises and collect data  
• Research the requirements and demand of the industry at home  
• Adjust the development in design management teaching course  
• Maximize the reformation of design management discipline | • Enterprises to find the work flow of the exemplary enterprise they need to follow during business reformation  
• Enhance the cultivation of students’ abilities and provide employment opportunities  
• Raise communication ability and English ability |

Establishing a composition system of education centring on scientific research projects of the industry

| Process | Expected result |
|---------|-----------------|
| • Guarantee the D-BASE of the industry  
• Develop the DB system for enterprise information of local enterprises  
• Formulate relevant agreements on the industry and the exchange on industry-university education  
• Facilitate the details of the agreement on industry—university—research projects  
• The industrialization of design management and product development | • The practicing of industry-university-scientific research projects  
• Defend the copyright of design and increase colleges’ earnings  
• Guide the reformation of local enterprises and expand employment |

4. Conclusion

The core for the exploration of design management course is established based on the teaching platform integrating inter-disciplines and multiple specialties. The traditional teaching relying on specialties and skills account a lot for the fundamental training in specialties. As to the teaching of students of higher grades and postgraduates, design management teaching plays an important role for the fusion by students of the knowledge of multiple disciplines and for the cultivation of students’ application of design thinking, knowledge and skills they learnt to solve enterprises’ problems and problems in the market. As it is found through the exploration of this course, the education of design management will be the most important and most effective way for the further cultivation of enterprise designers and the inspiration of their creativity.

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