

SWOT Analysis of CZIMT Packaging Studio

Liu Zhiwei

School of Design and Innovation, Changzhou Vocational Institute of Mechatronic Technology, 213164, Changzhou City, China

Abstract: *The "studio teaching mode" which originated in Europe in the 1920s was gradually recognized and popularized in the field of Chinese art education in the 1980s. The Packaging Studio of Changzhou Vocational Institute of Mechatronic Technology (CZIMT) was founded in 2016. Although it encountered many obstacles and challenges in the process of development, it still achieved plentiful accomplishments. As an efficient and time-saving tool, SWOT analysis contributed to identify CZIMT Packaging Studio's strengths and weaknesses, and clarify the current opportunities and threats. After analysis and discussion, the author affirmed the multiple functions of Packaging Studio in serving students, teachers, CZIMT and enterprises. At the end of paper, it suggested that CZIMT was better to pay more attention and give more supporting to Packaging Studio on policy, financial and human resource. So that, Packaging Studio could play a greater role in talent training, project output, scientific research achievements and so on.*

Keywords: *SWOT Analysis; Packaging Studio; Teacher's Studio; Higher Vocational Education*

1. Introduction

The concept of "studio" originated in Europe in the 1920s and entered the Chinese education field around the 1960s. The Packaging Studio of Changzhou Vocational Institute of Mechatronic Technology (CZIMT) was founded in 2016. In the past 7 years of development, the studio has attained prominent achievement, but also confronted with some obstacles and challenges.

1.1 Development of Teacher's Studio

"Studio teaching mode" first appeared in the field of design education in Europe. As the first college in the world to fully develop modern design education, Bauhaus-Universitaet Weimar which is an art and design institute in Germany pioneered the studio education model in 1919. Its operating mode of "equal emphasis on knowledge and technology, and synchronization of theory and practice" has had a profound impact on design schools all over the world. Walter Gropius, the founder of Bauhaus, created a renew type of workshop-based teaching mode based on the purpose and desire of combining art and craftsmanship. Craftsmen who teach technology, handicrafts, and materials serve as the instructors of technical education, and teachers who teach design forms, colors, and aesthetics serve as the instructors of art forms, and different workshops for metalworking, pottery, woodworking, and textiles are set up in different directions. Students learn while participating in the production process, and the teaching outputs are directly reflected in the form of products. Since then, this teaching model has gradually spread to many countries in Europe and America. The studio teaching model was used in quantities of art professional colleges and has become the mainstream teaching method in the West. The "studio teaching mode" has formed an operation mode that combines teaching and practical projects, with specialized technicians in charge of students' technical teaching^[1]. The effective operation of the studio is conducive to maintaining Europe's leading position in the field of design art in the world, and has a far-reaching impact on global art education.

Teacher's studios came into view later in China than in Western countries. In 1959, the oil painting department of Central Academy of Fine Arts drew on the experience of several art universities of East German and took the lead in establishing teacher's studios in China. However, until in the 1980s, after other higher education institutions began to adopt the Bauhaus studio education model such as Guangzhou Academy of Fine Arts, Shanghai Art & Design Academy, Hunan University that the Chinese art and design education circle gradually accepted the studio teaching idea. This mode has been widely adopted in teaching practice and has gradually grown into the dominant mode of art design teaching.

In generally, higher vocational colleges set up teacher's studio later than regular higher education institutions. Among them, some higher vocational colleges in the Yangtze River Delta are at the forefront.

Since 2005, various higher vocational colleges have successively carried out a series of education reforms in design and architecture majors based on "studios", such as Wuxi Vocational Institute of Commerce, Zhejiang Business Technology Institute, and Ningbo City College of Vocational Technology. At this stage, teachers' studios were basically confined to design, architecture, and computer majors, and their operation mode was similar to that of regular higher education institutions.

Although the forms of teacher's studios vary widely due to the dissimilar policies of various colleges and universities, they can be roughly divided into five categories.

Design Institute. It mainly exists in regular higher education institutions and consists of multiple working groups. Most of the work content of the Design Institute is to engage in research projects and undertake enterprise horizontal projects.

School-enterprise cooperation platform. It is managed by higher education institutions as a department of school. In charge of accepting commissions from off-campus companies and recruiting teachers and students on campus to complete design projects.

School-resident enterprises. It mostly exists in higher vocational colleges, with independent work content, and regularly accepts students and teachers in the school.

Teacher's studio within curriculum. Since a part of the teaching system, it is managed by the college or department. All senior students have to be trained in this type of studio in order to earn their credits.

Teacher's studio outside curriculum. It only accepts part of the school's students to participate in project design in their spare time. The teacher's studio outside curriculum is managed by teachers of certain professional field.

The packaging studio of Changzhou Vocational Institute of Mechatronic Technology should be classified as teacher's studio outside curriculum.

1.2 Packaging Studio of CZIMT

Changzhou Vocational Institute of Mechatronic Technology (CZIMT) which is founded in 1963 is a public full-time higher vocational college. In 2010, CZIMT stood out among the 1,423 higher vocational colleges nationwide and became one of the 50 national demonstration (backbone) vocational colleges in China. In order to respond to the development of local creative design industry and the transformation and upgrading of modern manufacturing, CZIMT has set up 7 majors in Product Art Design, Industrial Design, Digital Media Art Design, Digital Media Application Technology, Visual Communication Design, Environmental Art Design, and Architectural Decoration Technology to cultivate high-quality skilled professionals in art design for the society.

As an Art Design teacher of CZIMT, the author has long been engaged in courses teaching of Packaging Design, Brand Design and Graphic Innovation in front-line teaching positions. In the course of many years of teaching, the author found that although students can grasp the theoretical knowledge of design more comprehensively through classroom teaching, the practical application and hands-on capability of theoretical knowledge are insufficient, and the integrated quality development is uneven. Thence, responding to this situation, the author formed the "Packaging Studio" with two other colleagues in 2016. Based on the principles of voluntary application, open competition and merit-based admissions, about 20 excellent students are selected to become members of the studio each academic year. The goal of Packaging Studio is to cultivate students' capabilities to complete design projects independently by guiding students to complete actual design projects and participate in various professional competitions. This goal is mainly achieved through the implementation of one-to-one guidance, group discussion within the team and inter team cooperation. CZIMT offered an office room for Packaging Studio as a dedicated place. The operating funds of the studio mainly come from the prize money of students participating in the competition, and the insufficient part is subsidized by the individual in charge of teachers, and CZIMT also gives financial support to a certain extent. Packaging Studio is opened after class.

The mission statement of Packaging Studio is as follows: to help students solve the problems which they faced in design, broaden their ideas and improve their hands-on operation ability. Our mission is to strengthen students' comprehensive professional capacities and raise the quality of cultivating upscale skilled talents.

The Packaging Studio offers the following services to achieve this mission (See Figure 1): 1) Leading studio's members to visit design exhibitions, grasp contemporary design trends, and collect cutting-edge

information in design field; 2) Guiding students to participate in design competitions to promote comprehensive design capabilities; 3) Assisting students to carry through actual design projects, in order to enhance their professional capabilities and career attainment; 4) Instructing graduation design and displaying the design results of graduation in a panoramic view; 5) Launching regular lectures and salons, make face-to-face communication chance to exchange design experience for both teachers and students.

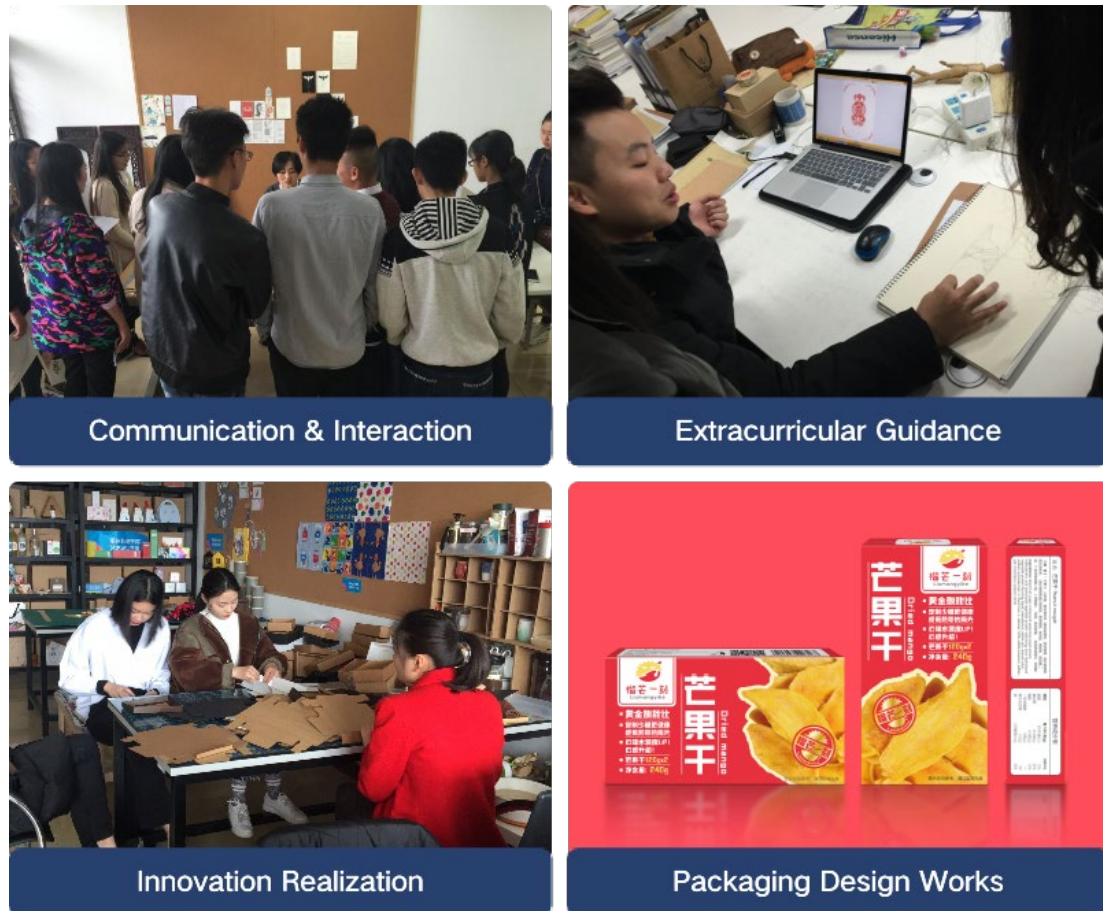


Figure 1: Packaging studio provides multiple services to achieve goals

After nearly 8 years of active exploration, CZIMT Packaging Studio has achieved fruitful achievements in “school-enterprise cooperation, project research and development, competition cultivation, productive training”, and has become a highlight in the construction of national demonstration (backbone) higher vocational colleges. According to statistics, the packaging studio has absorbed and guided more than 100 students to participate in 52 design projects and 12 subject projects, and won 36 awards in design competitions at national, provincial and school levels. For instance, the work "DIAMONGS Vase Packaging Innovative Design" directed by the author won the first prize in 2017 China Competition of Creative Packaging Design, and the author won the prize of “The Outstanding Instructor Award” (see Figure 2); In 2019, instructors of Packaging Studio directed students to win gold, bronze and excellence awards in the second “Vision, Beautiful China” Art Design Competition. However, in the process of development, packaging studio is also facing obstacles and challenges such as lack of projects and teachers, a shortage of funds and low conversion rate of scientific research subjects and so forth.



Figure 2: The Certification and the work of "DIAMONGS Vase Packaging Innovative Design"

2. SWOT Analysis

Organizations express their requirements and addressing potential deficiencies by formulating a strategic planning. A good strategic planning requires basic knowledge in strengths, weaknesses, opportunities and threats of the organization. "A SWOT analysis is a commonly used tool in business settings which helps administrators understand stakeholders' perceptions about the operational effectiveness of an organization by focusing on four perceptions—strengths, weaknesses, opportunities and threats"^[2].

2.1 SWOT Definition

SWOT is an acronym that can be remembered and used by convenience as a word, which is consisted of the initials of strengths, weaknesses, opportunities and threats, and it is regarded as an integral part of the strategic planning procedure^[3]. The Strengths and Weaknesses are evaluated as the controlled factors of organization's internal environment, while the opportunities and the threats are considered as the uncontrolled factors of organization's external environment.

According to Albert Humphrey, the SWOT analysis includes the following elements ^[4].

Strengths are commonly the internal characteristics of an organization (e.g., geographical location, human resources, assets and financial, value proposition, products and services, renown, etc.) that enable it more advantageous and competitive than its competitors.

Weaknesses are also the internal characteristics of the organization. Weaknesses must be minimized and eliminated because they enable to prevent organization from accomplishing the mission and achieving its full potential. Weaknesses of an organization may be not only the lack of funds, equipment, and projects, but also the loss of key employees, imperfect management, and complex decision-making process etc. Weaknesses are controllable.

Opportunities are external factors that are presented by the operating environment of organization. Opportunities may emerge from polity, society, economy, industry and technology etc. Both of an overgrowing market, launching new products or service, weak competition, improving management, or establishing new partnerships can supply new opportunities for organizational development. When opportunities emerge, organization should accurately identify and seize them.

Threats are external factors that may hazard the sustainable development of an organization. Threats emerge when the circumstances of the external environment endanger the reliability and development of the organization's business. Then, the stability and survival of the organization are at stake. Examples of threats may include the promulgation of new policies and laws, financial conditions, the emergence of new competitors, or the lack of key partners or projects, constantly changing technology, and so on. These threats may be beyond the control of the organization.

All elements (strengths, weaknesses, opportunities and threats) must be considered equally and comprehensively while carrying out a SWOT analysis. It's essential for researcher to avoid only focusing on certain factor, such as Packaging Studio's strengths and what is operating well. Because the ultimate purpose of SWOT analysis is to recognize and consolidate strengths, minimize the impact of weaknesses, make the best use of opportunities, and counter threats ^[5].

2.2 SWOT Analysis in Educational Institutions

Strategic planning not only plays a crucial role in enterprises but also in educational institutions. As playing the role of a compass, it describes the route that the organization will follow a certain direction in the future ^[3].

Since SWOT analysis is designed for "for-profit" organizations, and educational institutions are commonly considered to be "non-profit" organizations, some terminology may not be appropriate, but the concept itself does apply ^[6]. In fact, SWOT analysis can be implied in both for-profit and non-profit circumstance and at any level of analysis (e.g., business, industry, project, and even studio) because of its extremely flexible. Obviously, as an educational organization, teacher's studio may also benefit from SWOT analysis, because it displays a snapshot of the studio through the eyes of stakeholders. While implementing appropriately, it enables teacher's studio to get an entire presentation of its current circumstance in relationship with its educational institution. An understanding of opportunities and threats, coupled with internal inspections of strengths and weaknesses, will help teachers' studios to make adjustments to implement appropriate development strategies.

In this SWOT analysis, strengths and weaknesses of teacher's studio constitute the internal environment, while opportunities and threats are regarded as sections of its external environment. To be more specific, elements of the internal environment of CZIMT Packaging Studio are staff (including instructors and students), training equipment and funding sources etc. The influence of political, social, financial and technical forces, school policies and regulations, and other studios with similar functions outside the school represent the factors of the external environment of Packaging Studio.

2.3 SWOT Analysis of the Packaging Studio

The SWOT analysis of CZIMT Packaging Studio based on five annual reports (from 2016 to 2020) compiled since the establishment of the studio and a student satisfaction survey conducted in the 2019-2020 academic year came to the following conclusions.

2.3.1 Strengths

The Packaging Studio has developed recruitment process and guidance strategy to server students

who are have eagerness and able to improve their professional abilities in design field.

The Packaging Studio has formed the tradition of writing annual reports at the end of each year to point out the obstacles and challenges encountered.

The instructors of Packaging Studio also report to the School of Design and Innovation, which enhances their responsibility to the position.

The teachers who serve as studio instructors are all professionals who have been engaged in teaching and design work in the field of design for many years, with solid basic knowledge and rich teaching and practical experience.

Students are very satisfied with Packaging Studio. The packaging studio has a band of loyal students who are not only taking an active part in the studio's work, but also actively promote and recommend the studio to other students.

CZIMT Packaging Studio is known as its quality outputs. Both education institutions, design industry and enterprises think highly of design works and trained students of Packaging Studio.

2.3.2 Weaknesses

Lacking of sufficient financial support may have a debilitating effect on development of the packaging studio. The main source of funding is the prize money awarded by the students for participating in the competition, the shortfall was paid by the instructors personally. Certainly, CZIMT had also given a certain of financial assistance.

The training equipment was not adequate. Despite CZIMT located a fixed and dedicated room for studio, it didn't furnish teaching equipment such as workbenches, conference tables, computers, printers, and projectors. Therefore, instructors had to purchase some of the most urgently needed equipment by themselves.

Lacking of instructors. Since it is established, there are only 3 instructors keep working in studio. Packing Studio recruit 20 new members per academic year on average. According to the academic plan of higher vocational education, 3 grades of students are studying at the same time. That means more or less of 60 students are trained simultaneously at studio. Each instructor has to instruct an average of 15-20 students.

Low level of conversion rate of academic research subject from design works. The design works produced by the united and cooperative efforts of the packaging studio have a reliable guarantee in terms of quantity and quality. But only 5 academic subjects have been successfully transformed.

Packaging Studio has not formulated a salary system yet. All instructors and students are working voluntarily and unpaid by their leisure time. It's really a challenge for those instructors who are not very financially and healthy.

The student satisfaction survey of 2019-2020 academic year shows that still a few numbers of students have not heard of Packaging Studio, and they have never visited it.

2.3.3 Opportunities

The promulgation of relevant policies at the national level has laid a solid foundation for improving the quality of higher vocational education. Especially after the Chinese State Council published its "Implementation plan on National Vocational Education Reform" on February 13, 2019, signaling a significantly strengthened focus on cultivating students' practical capability.

With the development of China's economy and society, Chinese enterprises are transforming from "Made in China" to "Innovation in China", and the demand for high-level art and design professionals is increasing day by day.

The educational institutions' administration has generally been supportive of having a teacher's studio. Packaging Studio has seen as an indispensable part of CZIMT.

Packaging Studio has established an intimate cooperative relationship with other teacher's studios of CZIMT. For instance, Packaging Studio cooperated with Multimedia Studio to accomplish the graphic design and multimedia dynamic design of 7 design projects.

Recently, Packaging Studio submitted a proposal for strengthening the construction of studio and appointing a full-time supervisor to manage it to the dean of School of Design and Innovation. The dean agreed to discuss with the president of CZIMT.

Some teachers have willing to introduce those teacher's studios of CZIMT to students in curriculum teaching, and encourage them apply for take part into the corresponding teacher's studios according to their profession, interests and capability.

2.3.4 Threats

Lacking of sufficient design projects is the most fatal threat to Packaging Studio. Due to the education procedure are based on actual design projects, Packaging Studio is going to extinct gradually with less and less design projects. Consequently, instructors had to bring corporate design projects into Packaging Studio by personal relationships to ensure it operate normally.

The sustainable development of Packaging Studio demands official support from CZIMT. Unless CZIMT issues policies on recruitment, appointment, salary and assessment, Packaging Studio is unable to draw more excellent instructors, thereby reducing the development of studio's sustainability.

Those similar teacher's studios in other educational institutions also pose a threat to CZIMT Packaging Studio in terms of competing for projects and participating in competitions.

3. Recommendations

A crucial thing is to translate conclusion of analysis into concrete action. "The ideal action plan based on a SWOT analysis would be to convert internal weaknesses into strengths and external threats into opportunities"^[6].

Based on the SWOT analysis discussed above, some recommendations could be put forward to advance the Packaging Studio at CZIMT. At this moment, the priority task is for CZIMT to take corresponding specific actions according to the school's development strategic plan to support and assistant packaging studio carry forward its strengths, seize opportunities, overcome weaknesses and eliminate threats. In this way, it's possible for Packaging Studio to thrive into a unique talent cultivation position and a vigorous supplement to classroom teaching.

Balamuralikrishna and Dugger indicated that opportunities and threats aren't absolute^[7]. Nyarku also argued that today's strengths may be tomorrow's weaknesses^[8]. When considering the resources of organization or the expectations of society, it seems to be an opportunity at first, but this may not happen. Therefore, plans can be tailored to current or changing circumstances, so a more effective and positive approach should be to identify the most attractive opportunities, and then plan to expand the capacity of educational institutions to meet these opportunities.

In short, SWOT is a time-saving and effective tool on account of its simplicity. Situations will change at any time and should be update and analyzed frequently. SWOT analysis will be inefficient unless it can be used flexibly. If SWOT analysis is used effectively, it can be a foundation of construction of strategic plans for Packaging Studio.

4. Conclusions

After above-mentioned analysis and discussion on Strength, Weakness, Opportunity and Threat of CZIMT Packaging Studio, it can be concluded that: 1) benefit from both designing actual projects and taking competitions based on Packaging Studio as a platform, the practical skills and comprehensive capabilities of higher vocational students have been significantly promoted; 2) the studio teaching mode has effectively contributed to improving the teaching and academic research abilities of instructors; 3) CZIMT come true its function of higher education serving the society through the output of Packaging Studio; 4) the enterprises not only used higher education resources to complete projects, but also participated the cultivation of educational institutions, and then have achieved double-layer economic and social profits. Nevertheless, the normal operation of Packaging Studio at this stage relies excessively on the individual ability, enthusiasm and financial resources of instructors. Once the composition of instructor members is adjusted, such as vacation, resignation and retirement, it will be a fatal blow to Packaging Studio. Fortunately, this phenomenon has attracted attention of administrators of CZIMT, and it may be ameliorated in the near future.

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