Construction and Discussion of Practical Teaching System of Digital Media Technology Major in Independent Undergraduate Colleges

Xianfeng Zeng a, Junshan Li b, Eryou Wei c

Guangdong University of Foreign Studies, South China Business College, Guangzhou 510545, China.
a19613818@qq.com, b 603344033@qq.com, c 970100654@qq.com

Abstract. Practical teaching is an important guarantee for cultivating talents, the practical teaching system contains the various elements of practical teaching activities. This paper introduces the main content of the practical teaching system, and discusses the characteristics of digital media technology major practical teaching and the construction of practical teaching system in Guangdong University of Foreign Studies, South China Business College, We think that the practical construction method of “Taking the design works as the guide, promoting the innovation through competition, and coordinating the education between the college and the enterprise” is a feasible strategy for the training of applied and innovative talents in the digital media technology of independent undergraduate colleges.

Keywords: Independent Colleges; Digital Media Technology; Practical Teaching System; Applied Talents.

1. Introduction

With the emergence of new technologies and new applications in the era of "Cloud computing, Internet of Things, Big data, Mobile Internet, Artificial intelligence", the expression of digital media is also becoming more and more abundant. In recent years, universities applying for digital media technology or digital media art are on the rise, as of July 2018, there are 232 colleges or universities offering undergraduate level in digital media technology, there are 256 colleges or universities offering undergraduate level in digital media art. And there are 18 undergraduate colleges offering digital media technology major, and there are 19 undergraduate colleges offering digital media art major in Guangdong [1]. Among the 18 colleges and universities offering digital media technology, there are more independent undergraduate colleges. The digital media technology major of independent college relies on the flourishing development of the digital content industry in the Pearl River Delta region, they are tasked with delivering talents in digital media for local development.

2. The Connotation of Practical Teaching System

Practical ability is the core competence of applied talents. Practical teaching is an important guarantee for the cultivation of applied talents. Practical teaching is compared with theoretical teaching, it mainly acquires skills and techniques through experiments, training, internships, etc. It deepens the perceptual cognition of theoretical knowledge, thereby improving the practical ability of a class of teaching activities [2]. The objectives, contents, models, guarantees, management and evaluation of the practical teaching implementation process are also a self-contained system, they constitute a practical teaching system together, and it mainly shows the integrity of practical teaching. Generally, the practical teaching system is composed as shown in Figure 1.
2.1 The Target System of Practical Teaching

The target system of the practical teaching system is formulated with reference to the requirements of each major training target and training specifications. The target of each major is based on the overall target and the sub-teaching target of each specific practical teaching part to be settled.

2.2 The Content System of Practical Teaching

The content system of the practical teaching system is the main part of the practical teaching system. Usually, "practical teaching" mainly refers to the content system of practical teaching. It is a manifestation of the target of achieving practical teaching, practice teaching content generally has credit requirements, it mainly includes courses experimental teaching, practical teaching, training teaching, graduation design and innovative practice.

2.3 The Model System of Practical Teaching

Practical teaching model is the general way to achieve of practicing teaching content. It is an intermediary between theoretical learning and practical learning, practical teaching models not only include case-driven in the class, the flipping of class, but also includes lectures, visits, competitions, studios, such as practical teaching models out of classroom. The practical teaching model includes not only the practical methods such as curriculum experiment, curriculum design and major’s training in the college, but also the practical methods such as college-enterprise cooperation, various competitions and college exchanges outside the school. The practical teaching model is constantly evolving and changing, and there is no fixed pattern, in the process of implementation, the practical teaching model must form a stable and operable model in combination with the specific conditions of the college and the requirements of major construction, gradually.

2.4 The Guarantee System of Practical Teaching

The guarantee system of practical teaching is an important factor affecting the effect of practical teaching. The guarantee system of practical teaching includes the construction of double-teacher faculty, construction of on-campus laboratory, construction of off-campus practice base, internship teaching material construction, and the guarantee of practical teaching funds etc.

2.5 The Management System of Practical Teaching

The implementation of practical teaching requires the cooperation of many departments, they perform their duties in the implementation of practical teaching, and they work with Separation or cooperation. The management system of practical teaching mainly includes the organization and
management of practical teaching, operation management and institutional management, a good practice management enables all aspects of practical teaching to be closely linked and orderly organized.

2.6 The Evaluation System of Practical Teaching

To establishing a scientific and complete practical teaching evaluation system is the main means to promote the quality of practice teaching and standardize management. The evaluation of practical teaching should not only have an evaluation of the effect of students' practical learning, but also an evaluation of the effect of teachers' practical teaching, the evaluation method should be quantifiable, coexist in multiple ways, and have a certain reward and punishment feedback mechanism.

3. The Construction of the Digital Media Technology Major's Practical Teaching System in Independent Undergraduate Colleges

3.1 Characteristics of Practical Teaching of Digital Media Technology Major in Independent Undergraduate Colleges

The construction of a practical teaching system cannot be same or uniform, different levels of colleges have different priorities for the construction of practical teaching systems, practical teaching systems of different major also have their own characteristics. Although the practical teaching systems of different majors are different, a practical teaching system of major must serve the talent training objectives, and practical teaching must conform to the characteristics and connotation of this major [3]. The construction of digital media technology in independent undergraduate colleges is more based on the region, facing the industry, the orientation of training talents should emphasize application and innovation, and strive to form major’s characteristics based on the region. The time for digital media technology majors in independent colleges in Guangdong is not long, usually the construction of practical teaching system is not deep in the construction foundation, practical teaching teachers are weak, insufficient investment in laboratory construction, practice evaluation mechanism is not clear, etc. Digital media technology emphasizes application characteristics, making colleges and universities pay more and more attention to practical teaching, more and more independent undergraduate colleges are meeting or will meeting the new major assessment of undergraduate colleges in Guangdong Province, practical teaching occupies key indicators in major assessment, the major assessment of practical teaching is comprehensive and specific, it can be a one-vote veto. So, the construction of practical teaching system for digital media technology must be based on the training target of talents in college, and clarify the target of major’s talent training, and clearly connotation of the construction of practical teaching system, to explore a practical and stable teaching model for practical teaching, to form a distinctive and characteristics of practical teaching system in the college.

3.2 Construction of the Practical Teaching System of Digital Media Technology Major in South China Business College

The training target of digital media technology major in South China Business College is consistent with the target of training talents in college, talent training target require “application” and “innovation”, the major constantly explores the construction process and gradually forms a practical teaching system with the characteristics of this specialty.

There are seven modules in the practical teaching content of the digital media technology major's training planning. The “Military Training and Military Theory” module is arranged by the college; the “Social Practice” module includes visits exchanges, lectures; the “Course Practice” module refers to the hours of experimental practice assigned to a course; the “Professional Practice” module is scheduled for the second to seventh semesters and focuses on training during the 19th to 20th week of each semester; the “Innovation Capability” module is an addition module outside the classroom, this module is an additional reward module for the project that include college students in innovation
and entrepreneurship projects, software capability exams and awards for various competitions; the "Comprehensive Internship" module will be held in the 7th semester, and the students will conduct 2 to 4 weeks of training in the college-enterprise cooperation enterprise; The "Graduation Design" module is completed in the 8th semester, and the practice time is little longer. Students can be choosing the graduation instructor on campus or enterprise freely. The practical teaching content system of digital media technology major in South China college shown in Table 1.

Table 1. the Practice Teaching Content System of Digital Media Technology Major

<table>
<thead>
<tr>
<th>The Content of Practical Teaching</th>
<th>The Model of Practical Teaching</th>
<th>Two-way Selection (on Campus or within Enterprise)</th>
<th>The Results of Practical Teaching</th>
<th>Works; Graduation Papers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduation Project</td>
<td>Comprehensive practice</td>
<td>College-enterprise cooperation (within Enterprise)</td>
<td>Works;</td>
<td>Works;</td>
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<td></td>
<td>The Innovation Ability</td>
<td>Projects, Contests, Software Capability Exam (by Advising Teacher)</td>
<td>Works; Certificate</td>
<td>Works</td>
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<td></td>
<td>The Practice of Major</td>
<td>Practical Training in The End of Semester (within Enterprise)</td>
<td>Works</td>
<td>Works</td>
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<td></td>
<td>The Practice of the Course</td>
<td>Cases, projects (on campus)</td>
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<td></td>
<td>The Practice in Social</td>
<td>Visit, Lecture, Exchange (off Campus)</td>
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After a gradual exploration, the practical teaching of digital media technology major in South China Business College follows the rules of talent cultivation and builds into a practical teaching system of “Content of practice oriented by works, competition-driven innovation, and college-enterprise collaborative education” gradually.

3.3 Content of Practice Oriented by Works

In this major, whether it is curriculum practical teaching, the practical teaching of major, major’s internship and graduation design, they are parts of the practical teaching content, which are based on the works and quantify the effect of the works. If the course with experiments, the technical course will be collected one to three typical cases or items at the end of the period, designed courses will collected one to five student representative works at the end of the period, the number and quality of the project well be as one of the evaluation criteria for the final period. The practical training of the core direction courses, with the quality of the works or project as the only evaluation standard at the end of semester, these two types of works are collected and submitted by practical teaching teachers and submitted to the department for archiving. Each grade holds an open class exhibition at the school during the sophomore year, every people in the class must participate; it not only encourages students to establish good study habits to accumulate works, but also enhances students' professional self-confidence by the exhibition. The works of graduation internship and graduation design is more complicated and comprehensive than the lower grades, graduation internship includes comprehensive internship in the 7th semester and self-internship in the 8th semester, comprehensive internships are usually conducted through corporate practical projects, and the works is the final result; graduation design topics include theoretical research, application system design and media design, in the 8th semester, the department will select excellent works as sample of the class graduation exhibition, the graduation exhibition is not only exhibit about of graduating students' major learning, but also a good way for freshman to learning from exhibit.

3.4 Competition-driven Innovation Practice Model

During the professional practice period, the credits for “innovative ability” is variable, it is based primarily on the individual effort of the college student. For the students of digital media technology
major, students' innovative ability is mainly in the participation of various discipline competitions, science and technology creation activities, college students' innovation and entrepreneurship projects and access to professional competence certification.

Our major requires students not only should have works, but also should have recognized works, and the competition is the most direct way to get the works to be recognized. The department assigned a teacher to organize students to participate in representative competition with the provincial or national level, by participating in the competition, students get the opportunity to learn from others and constantly optimize their works to make breakthroughs and innovations. The award-winning students will be publicly rewarded, and the winning works will be publicly displayed, which will enable the students in the lower grades to learn and participate more actively.

We encourage some students to actively compete for provincial or national university students' innovation and entrepreneurial projects through two-way choice, through the university students' innovative and entrepreneurial projects, our students learned teamwork and improved their initiative learning ability, and our students continue to break through the limitations of the implementation of the project, so that the ability to innovate is improved. In recent years, the number of papers published by digital media technology students in our school has increased year by year, and the number of teams applying for innovation and entrepreneurship projects has increased year by year. At the same time, we encourage students to participate in the professional certification of the national computer software exam, and encourage students to apply for Intermediate Certificates for Multimedia Application Designers during their sophomore years, the faculty freely holds a free soft test review class for students every year, our students’ soft test pass rate has also been improved year by year.

3.5 College-enterprise Collaborative Education as a Practical Guarantee

Our digital media technology major is not long, practical teaching teachers, double-teachers are relatively scarce, the total number of students is not big, the laboratory construction of this major can only meet basic needs, and have long construction period. So, in the part of major training internship, we can make full use of the geographical advantages of Guangdong province, and actively connect with industrial parks and enterprises in various digital industries, it makes full use of the college-enterprise cooperation and education model to make up for the lack of basic conditions for practical teaching. In the major's training section, we engage Enterprise engineers to conduct centralized training through project methods, it improved the practical ability of the core curriculum of students in a short time; During the internship, we guide students to cooperative companies for intensive training. The fact has proved that making full use of the advantages of the enterprise can better realize the integration and development of human resources, to share the hardware resources and software resources, and improve the industrial chain, and improve competitiveness. Our major has built 7 off-campus practice bases in the past three years, the practice training of major's every direction can find a suitable docking enterprise. Every student is assured of professional practice opportunities.

4. Conclusion

The application and innovation characteristics about the training target of digital media technology major, that determine the practical teaching system should not be the auxiliary of the theoretical teaching system, should be as important as theoretical teaching. The practical teaching system has a rich width in content, and each part will have an important impact on the quality of practical teaching. Different college and different major in practice teachings should not be all same and uniform, the implementation of practical teaching requires teamwork in different departments, and to cooperate with different companies, so there is no fixed model to follow. There are some unavoidable constraints in the development of digital media technology in independent undergraduate colleges. It had to study the needs of the industry in depth, the characteristics of the major, and the actual situation of the college, it should strengthen works-oriented practical results, and drive innovation by competition, and explore industry-university cooperation actively, and standardize all aspects of practical teaching step by step. Only by building a practical teaching system that is in line with the
digital media technology major of our college can we better carry out major construction, and gradually form features of major to enhance the core competitiveness of students.

Acknowledgments

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