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CULTIVATING DIGITAL MEDIA EXPERTS: LESSONS FROM COLLABORATIVE VENTURES BETWEEN UNIVERSITIES AND ENTERPRISES

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Abstract: Digital media technology education is a multifaceted field encompassing digital technology, media technology, and art design. It centers on fostering creativity, enabling students to employ digital media technology for research and innovation within related domains. The primary goal is to produce adept professionals capable of proficiently applying digital media technology in industries like media production and animation design. The incorporation of school-enterprise cooperation in digital media technology education serves a dual purpose. On one hand, it aligns more closely with market needs, allowing institutions to stay attuned to evolving market demands through feedback from collaborating enterprises. Schools can then tailor multimedia technology education to develop students' skills and aptitudes, producing professionals better suited to meet market requirements. On the other hand, school-enterprise cooperation nurtures a mutually beneficial relationship between educational institutions and enterprises. This cooperative model combines schools' theoretical expertise with enterprises' practical training and market insights, resulting in complementary strengths and resource savings. The collaboration forms a win-win training approach for cultivating digital media technology talents

Keywords: Digital media technology, School-enterprise cooperation, Multimedia technology education, Talent development, Win-win collaboration.

1. The necessity of school enterprise cooperation in cultivating digital media technology talents *1.1 It is the demand for a "win-win" situation between schools and enterprises*

Digital media technology is a composite profession that encompasses multiple disciplines such as digital technology, media technology, and art design. The core of its professional education is creativity, utilizing digital media technology to research and innovate in its related fields. The focus of professional education in digital media technology is to cultivate professional and technical talents who can proficiently apply digital media technology and engage in industries such as media production and animation design. The introduction of school enterprise cooperation in the cultivation of digital media technology talents, on the one hand, makes school enterprise cooperation more closely aligned with market demand, enabling timely understanding of changes in market demand. Based on market information feedback from enterprises, schools cultivate multimedia technology talents in a targeted manner, attach importance to students' skills and abilities, and provide professional talents for market development^[1]. On the other hand, school enterprise cooperation can promote a "win-win" relationship between school education and enterprise development, combining the theoretical abilities of schools and practical

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training of enterprises with market information, achieving complementary abilities between schools and enterprises, and saving training resources. It is a "win-win" training model.

1.2 The demand for cultivating practical talents

Since the beginning of the new century, vocational schools in China have received national support and been able to develop rapidly. However, the blind expansion of enrollment scale in vocational schools has resulted in a narrower range of majors, and the talents cultivated lack strong social adaptability and comprehensive abilities, making them clearly at a disadvantage in market competition^[2]. When college students leave school, they often find that companies have practical experience requirements for their employees, and many positions even require more than one year of work experience, which increases the difficulty of college students' employment. Although students in vocational schools have undergone systematic theoretical knowledge learning and consolidated their subject foundation, mastering theoretical knowledge does not necessarily mean that students have a high level of practical skills. For example, the most common is for students who have passed the English Test Band 6 but cannot understand C language compilation error prompts, and even use English software with difficulty. The existence of this phenomenon reflects an extreme inability to apply what is learned^[3]. The digital media technology major has extremely high practicality. Currently, promoting the application of the school enterprise cooperation model can further optimize the practical process, which can not only exercise students' practical operation ability and comprehensive knowledge application ability, but also develop their organizational coordination ability, cooperation ability, and innovation ability, so that college students can better meet the needs of the development of the digital media industry. In the cultivation of digital media professionals, the practical aspect occupies an important position and needs to be achieved through school enterprise cooperation^[4].

2. Analysis of the professional positioning and market of digital media technology

2.1 Professional analysis of digital media technology

The digital media major refers to one of the new directions in the development of information science towards the field of culture and art. It is also an emerging discipline that has emerged with the development of creative industries, with technology as the main focus, art as the auxiliary, and the combination of technology and art. The positioning of the digital media technology major is closely related to the changes in market demand of China's digital media industry. Usually, the cultivation of digital media technology professionals requires the cultivation of composite digital media technology application and design talents with high humanistic literacy, mastery of digital media core technologies, and strong artistic creativity.

2.2 Analysis of the educational positioning of digital media technology major

From the analysis of the positioning of the digital media technology major in vocational schools in China, it mainly manifests in two aspects. On the one hand, it is inclined to computer graphics, digital image processing, etc., to provide professional talents for high-level games, virtual reality, Interaction design and other fields. On the other hand, it tends to cultivate talents in literary and artistic fields such as film and television, 3D modeling, and animation, with a focus on cultivating talents' software application ability, innovation ability, and practical ability. Therefore, digital media technology is different from art. Therefore, for the cultivation of digital media technology talents, universities such as 985 and 211 tend to prefer the first talent cultivation mode. Generally, ordinary higher education institutions focus on the second mode, while vocational colleges need to combine the two modes to cultivate different types of talents. Therefore, the digital media technology major has a high demand for teaching staff, and requires support from experts in various fields. Due to the differences in talent cultivation in digital media technology, the second type of talent cultivation is more difficult and challenging. If the teaching staff in this field is too weak, it will inevitably be difficult to cultivate professional talents. For the cultivation of the first type of talent, it must be linked to practice and cooperate with enterprises in the industry chain.

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2.3 Analysis of talent demand in the digital media market

The content of digital media technology is rich. Now, based on the main technologies of digital media and popular market demands, an analysis is conducted: in the gaming industry, there is a high demand for programming skills of employees; there is a clear division of departments in the animation design industry. The design department requires practitioners to have strong programming skills, while the post processing department does not have high requirements for practitioners' programming skills; In terms of film and television, there are high requirements for practitioners in special effects production and related software applications, but there are not many requirements for practitioners' programming skills^[5]. From this, it can be seen that in the digital technology industry market, practitioners are not required to have comprehensive abilities, but different industries have specific technical ability requirements. Therefore, this requires schools to pay attention to "specialization" and "refinement" in the cultivation of digital media technology majors, overcome the misconceptions of being broad and comprehensive, and focus on specialization and refinement. In addition, having a solid bachelor's degree foundation is a prerequisite to ensure the basic quality of talents. Currently, the creative industry has high requirements for digital media technology talents: firstly, high programming and application abilities; Secondly, strong operational skills, able to proficiently operate relevant software for operations such as architecture, scene, character modeling, animation design, etc; The third is to have a certain level of design ability and artistic literacy, be familiar with the theoretical knowledge of film and television editing, and have a certain level of creative ability, and be proficient in using software such as Premier and AE. Therefore, it is necessary to position the training direction of digital media technology talents based on the talent demand of the digital media market, and cultivate digital media technology talents with targeted measures.

3. The current situation of digital media technology talent cultivation under school enterprise cooperation

3.1 Unclear training objectives

The digital media technology major belongs to the interdisciplinary field of computer science and art. Different vocational schools have chosen different professional directions based on their own disciplinary environment and existing professional settings. Some focus on the later stage of broadcasting and television directing, some focus on game design, and some focus on the front-end design of handheld devices. At present, under the school enterprise cooperation education mode, the Intersectionality nature of digital media technology makes the professional talent training goal lack of a clear direction, and the single talent training goal of higher vocational schools will inevitably be difficult to meet the needs of enterprises for complex talents, and it is difficult to truly play the value of higher vocational schools in exporting talents to enterprises.

3.2 Incomplete policies and regulations

In the process of school enterprise cooperation training, relevant policies, regulations, and management systems are not perfect. Although the country attaches great importance to the development of the school enterprise cooperation training mode in a series of documents and regulations, there is no comprehensive management system established to provide guarantee for the effective implementation and smooth development of the school enterprise cooperation training mode, making the school enterprise cooperation training largely a form and wasting the educational function of the school enterprise cooperation. Moreover, the educational linkage ability between schools and enterprises is poor, and the constraints between each other are weak, ultimately leading to formalized cooperation between schools and enterprises, making it difficult to leverage the resource advantages of the two to cultivate composite digital media technology talents that meet the needs of social development.

3.3 Low participation of enterprises

From the analysis of the situation of school enterprise cooperation in education, it can be seen that the current motivation for enterprises to participate in school education is insufficient. In the process of school enterprise cooperation, schools are often in a passive position and set talent training goals based on the needs of enterprises. However, the essence of enterprises is to pursue the maximum Surplus value. If school education cannot bring

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profits to enterprises, school enterprise cooperation will fall into an awkward situation, affecting the continuation of school enterprise cooperation training activities. In addition, the depth of school enterprise cooperation is not enough, and it is popular in form, which does not comply with educational norms. From the perspective of enterprise teachers, they have strong project and practical skills, but lack certain abilities in classroom control. For example, the implementation of graduation programs outside of school, relying solely on teachers outside of school, will inevitably result in graduation programs that do not meet educational and teaching standards. Especially during the school enterprise cooperation period, enterprises tend to use the cheap labor force of the school to seek more benefits, but instead do not provide too much resource support for talent cultivation in the school, making it difficult for students to truly understand the job requirements of the enterprise.

3.4 Insufficient training resources

Due to differences in their own educational conditions, vocational schools also have differences in the allocation of practical teaching resources. Despite the implementation of the current school enterprise cooperation model and the enrichment of practical training resources in vocational schools, it is still difficult to meet the needs of practical teaching. Overall, vocational schools have insufficient practical teaching resources. Firstly, they lack professional training equipment, and secondly, they lack teachers who are familiar with cutting-edge practical skills; Thirdly, there is a lack of practical training projects closely related to the industry, especially those related to the game and animation industry, which are almost zero; Fourthly, the construction of training bases is insufficient, making it difficult to complete practical training for students.

4. Construction of a digital media technology talent training model for school enterprise cooperation

4.1 Based on industry demand, determine the direction of talent cultivation

The setting of talent cultivation direction needs to meet the requirements of school learning and then market development. Therefore, the setting of digital media technology talent cultivation goals under the cooperation between schools and enterprises should comprehensively consider various needs, based on the development of students, consider the need for students to continue in-depth learning, improve the level of education, and design targeted talent cultivation plans based on market development and the trend of vocational position skill development. The cultivation of talents in school enterprise cooperation should establish a targeted and comprehensive digital media technology talent cultivation model. Due to the limited teaching hours in the school, in order to avoid students from experiencing excessive and imprecise learning situations, the school has designed professional class hours, general course hours, and elective course hours. Professional class hours provide in-depth teaching based on the majors chosen by students, with the most class hours and strict assessment systems, with the aim of cultivating students' professional abilities. The general course is to teach comprehensive core knowledge in the field of digital media technology, with the aim of enabling students to establish an overall cognitive structure of digital media technology. Elective courses are auxiliary teaching hours selected based on students' personal interests and hobbies, with the aim of enriching their digital media knowledge and skills. In addition to these three, each student should conduct practical learning based on their own major, and provide internships and practical opportunities for students under the school enterprise cooperation training model, so as to fully integrate theory with practice, learning with society.

4.2 Collaborate between schools and enterprises to educate students and improve the practical teaching system

In the process of cultivating digital media technology professionals in vocational schools, the linkage between schools and enterprises can further improve the practical teaching system and provide assurance for talent cultivation. It can not only encourage students to apply the theoretical knowledge they have learned to practical operations, stimulate their interest, but also enable them to understand enterprise standards and apply what they have learned in the process of practical operations. Discovering the distance between oneself and the actual position through practical exploration, and conducting targeted theoretical learning and practical training. From the perspective of the current school enterprise linkage education model, the setting of practical links mainly

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focuses on course experiments, project training, enterprise internship training, graduation design, etc. The construction and implementation of the practical teaching system needs to start from the following aspects:

Firstly, contact enterprises or institutions, sign cooperation agreements, and through communication between the school and relevant departments of the enterprise, introduce internship students in relevant majors according to different departments. Through joint training between the school and the enterprise, provide students with the greatest room for improvement. For example, vocational schools can cooperate with local enterprises, television stations, broadcasting and television institutions, media institutions, etc., sign talent cultivation cooperation agreements, provide experienced enterprise personnel for vocational schools to carry out teaching activities, provide practical training platforms for college students, and collaborate with various directions to cultivate professional talents, enabling college students to develop games, design and produce architectural animations, and display virtual reality. Significant progress has been made in areas such as interior design. College students majoring in digital media technology can receive training from corporate teachers to learn practical skills, further enhance their work output ability, and enhance their enthusiasm for professional technology learning.

Secondly, schools can invite professionals from enterprises to conduct school teaching alliances and send school teachers to participate in enterprise activities, strengthening the professionalism of their own teaching staff and improving the linkage ability between schools and enterprises. For example, vocational schools introduce relevant teaching staff from enterprises, select digital media technology teachers to rebuild professional course training, encourage teachers to delve into enterprise learning, timely understand the current development status of your industry, and adjust the focus of practical teaching.

Thirdly, the utilization of domestic and international competition platforms allows for the provision of high-quality projects that serve as practical activities for students. Vocational schools need to attach importance to the development of digital media competitions both domestically and internationally, encourage college students to actively participate in these competitions, and stimulate their enthusiasm for learning. At present, many students majoring in digital media technology in vocational schools in China have won some awards in animation and programming design in national vocational information technology innovation and practice activities.

4.3 Building a professional teaching team based on educational needs

At present, the digital media industry, which emerged from the integration of digital media, network technology, and other related cultural industries, is developing at a rapid pace. The employment industry is widely distributed in industries such as media, internet, IT software, advertising, education and training, online games, telecommunications operations, system integration, real estate, etc. Due to the lack of industry background among in-service teachers in vocational schools, and the fact that the talent training program in vocational schools is updated every three years, there is a certain delay in the knowledge learned by college students and the cutting-edge market demand, which is not conducive to the cultivation of applied subject talents. Therefore, in the process of cooperation between digital media technology majors in vocational schools and multiple enterprises, companies dispatch skilled and dynamic "enterprise teachers" with experience in enterprise project development to teach, effectively filling the above shortcomings and providing a solid teacher guarantee for talent cultivation.

4.4 Jointly building courses between schools and enterprises to cultivate versatile talents

The digital media technology and animation design industry has a strict industry product development process. The digital media technology major in vocational schools combines with enterprises to complete professional courses on the training platform. Taking advantage of the opportunity of graduation internships and graduation designs at the training base, they jointly build multiple professional courses with enterprises to jointly determine the curriculum and teaching methods, which not only combines industry needs but also integrates the school's talent cultivation philosophy. At the same time, during the graduation internship and graduation design period, a "dual mentor" system is implemented. Enterprise mentors are responsible for cultivating students' industry awareness and technology, while campus mentors are responsible for regulating students' compliance with various

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standards in the school's talent development plan. Both parties work together to cultivate high-quality applied talents who not only meet industry requirements, but also have a sense of social responsibility and professional ethics.

4.5 Establish a joint evaluation mechanism for both school and enterprise management

In the training of digital media technology talents under the school enterprise cooperation model, students need to accept the management of both the school and the enterprise. Therefore, in terms of student evaluation, it is also necessary for both schools and enterprises to jointly develop a student evaluation mechanism, with the school as the leader, requiring students to achieve certain results in practical activities and internships to meet the assessment requirements. At the same time, the development of a joint evaluation mechanism by both parties needs to include both theoretical and practical evaluations of the school, as well as evaluations of students' practical training and job adaptability, in order to comprehensively evaluate students. Under the promotion of the evaluation mechanism, it can not only enable students to have a deep understanding of corporate culture, understand the requirements and needs of the industry for talents, but also help college students establish a sense of professionalism and effectively improve their own constraint ability.

5. Conclusion

In summary, after years of exploration and experience in the talent cultivation model of school enterprise cooperation, it has been shown that joint education between vocational schools and enterprises can leverage the educational advantages of both parties and cultivate composite talents required for market development. In the process of cultivating digital media professionals in vocational schools, implementing the school enterprise cooperation talent cultivation model can improve the efficiency and quality of digital media technology talent cultivation, enhance the social competitiveness of digital media technology talents, provide broad development space for the vast number of digital media talents, and also input fresh blood for the development of enterprises. Therefore, in the process of cultivating digital media technology talents, it is necessary to further deepen school enterprise cooperation and enhance the quality of digital media technology talent cultivation.

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