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Exploration of Teaching Mode Path of Video Production Course under the Background of Digital Intelligence

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Abstract:
With the advent of the digital intelligence era, the application of technology under the background of digital intelligence has penetrated into various industries.From the perspective of college education, this paper expounds the changes faced by video production courses under the background of digital intelligence, analyzes the existing problems in teaching, and explores teaching paths from deepening course functional positioning, improving student ability training, teaching platform application, expanding teaching dimensions and other aspects, in order to form a new teaching mode and provide new teaching ideas.

Key words:
digital intelligence;video production;teaching path;teaching mode

1. Introduction

In recent years, with the rapid development of new generation of digital intelligence technologies such as big data, cloud computing, artificial intelligence and mobile Internet, the advent of the digital intelligence era has been promoted.The digital intelligence era is inseparable from digital intelligence.Digital intelligence refers to the use of digital technology to achieve intelligent, efficient and automated lifestyle and work style.Digital intelligence covers artificial intelligence, Internet of Things, cloud computing, big data and other fields, aiming to improve production efficiency, improve people's lives and promote social progress (Wang,Wu&Wang,2024).Digital intelligence is not simply the addition of digital and intelligent, but the integration of "digital intelligence" and "intelligent digital". In the field of education, the content of digital intelligence is mainly reflected in the application of various digital intelligence technologies. Digital intelligence technology can reconstruct the value standard of educational resources and the form of teaching mode, providing new teaching elements (Hou&Zhang,2023). The application of digital intelligence technology in the field of education also promotes its digital intelligence transformation.

2. The changes faced by video production courses under the background of digital intelligence

2.1The promotion of video production technology

Video production courses cover two parts: video, digital technology and audio-visual language art, which

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are comprehensive and practical courses.The video production course system includes nonlinear editing, synthesis, 3D animation and other courses. The traditional production methods are mainly based on software operation, such as common Photoshop, Premiere, After Effects, Cinema4D and so on.These video production software have large volume, complex operation, many parameters and a large number of plug-ins. Using such software requires professional technology and experience, and students usually need to spend a lot of time to learn and master.In the digital intelligence enabling, especially under the promotion of artificial intelligence technology, many video production software have adjusted the overall operation framework through update and upgrade, accessed AI (Artificial Intelligence) functions, and simplified some complicated operations. For example, the introduction of AI in ROTO Brush in After Effects 2024 has greatly improved the accuracy of dynamic mask drawing, object edge processing and tracking, and has simplified the process and reduced the difficulty of learning the software. At the same time, the use of intelligent functions such as intelligent speech recognition and intelligent dubbing provides an effective solution to the simultaneous subtitles and dubbing, which greatly improves the work efficiency.With the deep integration of digital intelligence and media, mobile media has gradually become the mainstream. Mobile software such as editing has been launched, and the operation mode that is more intelligent, automated and provides a large number of materials has been developed, with a large number of users.

2.2The change of video content production mode

From the perspective of content production, traditional video production is completed on the basis of "material selection". The operation of the software is completed through menu selection and appropriate parameter selection and adjustment. The order of materials and elements can be adjusted, and the man-machine interaction in the whole process is relatively simple.Under the enabling of digital intelligence technology, artificial intelligence generates content, which has a great impact on the traditional video production mode. In particular, the generation mode of artificial intelligence cross-modal, text to image, text to video, text to audio, etc., has broken the traditional production mode and realized "creation from nothing".Take the trailer "Trailer: Genesis" as an example. The trailer is less than 1 minute long. Without any shooting materials, it is completed by using the mode of Midjourney+Runway Gen-2 to generate video. The overall picture quality is high. Although the length is limited, the ability to complete the video is really amazing.

From the perspective of the completion of the delivery content, under the traditional way, the delivered content is unified, and the users are passive to accept. In the whole production process, the users are invisible. In the digital intelligence technology-driven data, based on big data, real-time feedback and personalized experience can be completed by collecting, storing, analyzing and using a large amount of data. By collecting and analyzing the user's data, the system can provide customized services according to the user's preferences and needs, push personalized videos, and the user participates in the creation and interaction, which improves the user's satisfaction and participation.In this case, the form of production content is moving from single to diversity, from commonality to individuality.

3. Problems existing in video production courses under the background of digital intelligence

3.1. Insufficient coupling with industry demand

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The ultimate goal of teaching is to cultivate students, and the demand of corresponding jobs often becomes the vane of teaching.From the requirements of previous employers, video production teaching focuses on cultivating practical ability, and it is very important to use it skillfully. Therefore, the teaching focuses on technical teaching, supplemented by artistic feeling, which can meet the needs of employers. However, with the development of the times, the deep integration of media, the popularization of 5G mobile communication network, the digital and intelligent new Internet ecological mode has penetrated into every corner of life, and the media industry has also undergone earth-shaking changes.In such a situation, the industry needs compound talents. In addition to professional knowledge and technical ability, it also needs aesthetic creativity and other abilities, as well as knowledge related to video production in the digital intelligence era.In the face of the new requirements of the industry, some parts ignored in the past teaching have also surfaced. Students have the ability to deal with traditional production methods, but they need to strengthen practice to adapt to the new digital intelligence production mode. Therefore, there is a problem of insufficient coupling between teaching and industry demand.

3.2 Lagging response to new technologies and methods

In the process of teaching, teachers are prone to information gap when receiving industry development information for various reasons, and can not real-time understand the latest trends and needs of the industry. At the same time, the curriculum design and teaching methods are restricted by the environment, and can not respond quickly to new technologies and methods and make adjustments. The teaching process of video production course mainly stays in the classroom, and the teaching output content more reflects the commonness and standardization of video works, which is insufficient to respond to personalized needs and insufficient to use new content production methods under the support of digital intelligence technology, resulting in a delay in the response to new application scenarios in teaching.

3.3 Slow iteration of new and old tools

The tools used in video production course are mainly traditional software, which is powerful but complex in operation and takes a lot of time to complete teaching and learning.Tool and software updates often require the support of hardware systems, software upgrades, and stability tests, which are easily restricted and affected by physical space, copyright use and other factors. At the same time, although artificial intelligence technology has been introduced in software operation, it cannot be fully automated and intelligent, and the integration with digital intelligence technology needs time to develop and improve.

4. Exploration of teaching mode path of video production course under the background of digital intelligence

As can be seen from the above, with the change of media environment, the introduction of digital intelligence technology into the production link of video production provides a new production power. Using machine intelligence to replace part of manual operation, reshape the production process of video production, build an intelligent media production platform, effectively improve the production efficiency and reduce the cost, and also greatly improve the video output and quality suitable for Internet communication. Through the calculation of big data, the user's preference is matched, and the personalized communication has become the main trend of technological change in the media industry.In the face of new production scenarios and meth-

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ods, video production, as an important part of the communication chain, has been unstoppable in accordance with the trend of development and change. The corresponding courses should change their ideas in teaching, take the accumulated experience as the premise, and explore the teaching path, in order to form a new teaching mode.

4.1 Deepen the applicability and practicability of video production course

Video production course is a highly operable course, which is positioned as an applied course. In the context of digital intelligence, the teaching method of the course should be constantly adjusted in the teaching process to adapt to the requirements of the digital intelligence era for talents. Training students in the digital intelligence era to use production software and tools to improve work efficiency and video work creation quality, to achieve diversified and accurate content creation, and the corresponding course objective is to focus on training students' logical cognition, deconstruction and remodeling, overall synthesis, technology transfer, creative aesthetics and other abilities of video production, so that students can adapt to new production methods and processes.By highlighting the teaching practice content of the course, the applicability and practicability of the video production course are deepened. Therefore, the original teaching ideas are adjusted, so that the new digital intelligence technology is embedded into the whole teaching process, providing students with new learning motivation.The teacher has formulated the corresponding effective teaching content for the whole course, highlighting its position to undertake and connect with relevant professional theoretical courses, and arranged reasonable practical content for it in different stages, integrating the theory and practice of the integrated course, combining the generality and personality of the software and tool operation described in the course, so as to make the course specific and scientific, so that the course is free from the empty generalization of the paper and fall into the repetition of the mechanization, so that students have a strong competitiveness.

4.2 Improve students' comprehensive ability

With the development of science and technology, the output mode of knowledge has also changed. From the sporadic connection of knowledge between different disciplines to mutual support and penetration, the cognitive context of a single discipline has been gradually broken and transformed into a knowledge construction under the state of multidisciplinary integration (Liu,2023). Especially in the rapid development of digital intelligence technology, the number of mobile terminal users has increased, and the content production of video works has also changed. Compared with the traditional media era, the types of video works are more refined.The requirements for video production talents by employers have changed from a single professional ability and production technology to a compound talent who understands the profession and adapts to the development of the times.For students, in addition to professional knowledge and professional skills, in addition to aesthetics, they also need to improve their comprehensive quality to meet the requirements for talents in the digital intelligence era.

4.2.1 Interdisciplinary ability improvement

The video production course itself is supported by video technology, audio technology, computer technology, coding technology and other technical bases, and combines audio-visual language expression to present artistic expression of value orientation and emotion.The course itself has interdisciplinary characteristics. In the integration of digital intelligence technology, it is more necessary to cultivate talents with interdisciplin-

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ary ability. In addition to learning production technology, the basic knowledge of big data and artificial intelligence should be added to the course, so that students can understand AIGC, model, language, calculation, algorithm, computing power and underlying logic, learn the frontier dynamics, increase the sharing of technology hot spots, and create a pluralistic learning structure.At the same time, master the connection points and intersections between disciplines, integrate them into the teaching design and into the teaching process, and improve students' interdisciplinary ability to cope with new production methods.

4.2.2 Improvement of innovation ability

The improvement of video production ability needs to accumulate experience, and innovation is produced on the basis of certain experience.In the context of digital intelligence, both the application of big data and artificial intelligence technology provide new ways for video production.Therefore, for students' innovative cultivation, teachers need to improve students' perception of the world and logical cognitive ability. Students should read more, watch more, practice more, think more, accumulate more experience value, and be familiar with the advantages and disadvantages of known models and methods, so as to develop new ideas for solving problems and complete creative, correct value orientation, full of emotional inspiration video works.

4.3 Application of digital intelligence wisdom teaching platform

By using the digital intelligence wisdom teaching platform, work scenarios can be simulated. Students can cultivate advanced concepts and practical ability in this simulation environment and complete relevant content. Taking Sichuan University of Media and Communication where the author works as an example, the main teaching platform is the high simulation, system, production-oriented experimental equipment and facilities system with Chuanchuan Cloud · Fusion Media Experimental Teaching Center as the core. For video production courses, the current intelligent media resource management can realize intelligent retrieval, automatic cataloging, AI writing, intelligent drawing, intelligent content identification, one-click film, user portrait, intelligent release and other functions. Using the intelligent intelligent teaching platform teaching, on the one hand, the whole process of video production can be simulated under the intelligent mode, so that students can practice the collection, editing, synthesis and release process of embedded digital intelligence technology through man-machine cooperation, master new technologies, understand new methods, familiar with new processes, docking new posts, and zero distance contact with future work scenarios. By using the intelligent intelligent teaching platform, the new and old tools and software can be integrated through the Internet, cloud computing, big data and other ways. Students with account and password can use front-end devices such as computers and mobile phones to learn and practice video production, break the limitation of physical space between teaching and learning, and broaden the teaching scenario. On the other hand, through the digital intelligence teaching platform, the learning data of students are collected. Through big data calculation, teachers can push learning resources related to video production according to students' learning characteristics, conditions, habits and other ways, so that teachers, students and digital intelligence teaching platform can fully realize human-computer interactive learning from three dimensions. Teachers change from knowledge imparting to knowledge leading, students change from receiving learning to active learning, and finally form effective learning experience and learning plan through data capture, analysis, review and summary of the teaching platform, and build new learning methods.

4.4 Strengthen cooperation with the industry to expand the teaching dimension

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Colleges and universities are the cradle of talent cultivation. Through cooperation with the industry, the boundary between teaching and work can be broken through, seamless docking can be realized, and the teaching dimension can be expanded. Students can enter the industry during the learning stage to understand what kind of talents are needed by employers, and realize two-way interaction.Video production course has strong practicality and is closely linked with the industry. Through cooperation with industry units, results-oriented, the teaching reform of video production course is promoted in turn, so as to materialize the teaching and training objectives to meet the market demand for video production talents. The professional technology required by the industry is internalized into the elements of the video production course. In the teaching process, the teacher can teach accurately, so that the teaching requirements and the ability points of the industry are consistent.Through cooperation with the industry, let the students strengthen practice and achieve ability upgrading in actual combat.Through the practice in the front line, the students accumulate relevant experience, improve their level of video production, train their ability to resist pressure, learn to turn pressure into power, engage in creation, enhance confidence, establish a self business card, and learn to treat people and enhance communication ability.The students absorb industry experience, and then reply to the classroom. They can find out the gap, make up for their own deficiencies, enhance their independent learning motivation, grasp the key points of knowledge, adjust the structure of knowledge, strengthen professional skills, and realize self-value added.In this way, from the classroom to the industry and back to the classroom, a virtuous cycle of teaching and learning is formed, and the students' competitiveness is rapidly improved.

5. Conclusion

Nowadays, the era of digital intelligence has arrived. The application of digital intelligence has brought changes to the development of various fields, and the field of education has been deeply affected.Under the trend of the increasing development and growth of digital and intelligent technology, for the video production course that needs technology and artistic feeling, it is very necessary to explore effective teaching paths and form a new teaching mode. Education is people-oriented, and it is hoped that the teaching experience summarized by this exploration can bring students a broader vision and comprehensive ability, enough to face the new wave of technology, and also hope to open some new directions and perspectives for how to cultivate talents when technology is upgraded again in the future.

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