

The Dilemma and Innovation Path of Teaching Digital Camera in Applied Universities under the Background of Short Video

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Abstract: Digital Camera is a compulsory course in related majors such as film and television, radio and television directing, digital media art, journalism, advertising, animation, and network and new media in applied universities in China. In the context of the development of short videos, "Digital Camera" faces many new problems in practical teaching. In this regard, this article proposes some innovative paths, hoping to provide meaningful reference for the current teaching of "Digital Camera".

Keywords: Short videos; Digital camera; Mobile camera; Drone camera

I. The Realistic Dilemma of Practical Teaching of Digital Camera under the Background of Short Video

With the rapid development of new audio-visual technology, short video represented by Tiktok, Kwai, watermelon video, B station, etc. has not only become a new media communication mode, but also a new way of image creation. It is loved by a large number of college students for its short, fast, and concise characteristics, driving them to learn professional digital photography knowledge, shoot short video works, and participate in learning, innovation, and entrepreneurship projects anytime and anywhere. At the same time, this situation has also had a significant impact on the course and teaching of Digital Camera. However, there are still many urgent problems to be solved in digital camera teaching in many universities.

1. Professional camera equipment is generally scarce. With the development of digital camera technology and the growth of market demand, various types of camera equipment have also been greatly enriched and developed. From professional DSLR cameras to portable smartphones, from high-resolution 4K cameras to miniature drones, various devices emerge endlessly. These devices can help students obtain higher quality images and also stimulate their creative inspiration. In various high schools, in order to meet the needs of students for camera technology, many schools regularly update and upgrade teaching equipment. These equipment are usually up-to-date to ensure that students can have the latest and most advanced shooting experience. However, in some cases, there may be a shortage of equipment due to limitations in educational resources or other reasons. For example, insufficient funds, aging equipment, excessive use and damage, high maintenance costs. These issues may result in schools being unable to update or purchase more photography and camera equipment in a timely manner, thereby affecting the quality of teaching.

2. Mobile phone photography has not received enough attention. To investigate the reasons, firstly, from the perspective of educational goals and priorities, although mobile phone cameras play an important role in daily life, in professional courses such as Digital Camera, the goals and priorities of higher education may be more inclined to enable students to master the basic theories, skills, and creative methods of photography. Although mobile camera is practical, it may not meet the theoretical depth and technical complexity requirements of professional courses. Secondly, from the perspective of technological limitations, although mobile phone cameras have made great progress in technology, in certain specific camera techniques and effects, mobile phones may not be able to compete with professional cameras. For example, for camera projects that require high image quality and professional control, mobile cameras may not be able to meet these needs. Again, it is the differences in teacher usage habits and student skills. Higher education and teaching are often influenced by traditional educational models, and some teachers and schools may be more accustomed to using traditional cameras for teaching. However, for the emerging teaching method of mobile phone cameras, it may still require time and adaptation. But "the position of mobile photography in art creation is constantly rising, and the industry demand is expanding accordingly, which also makes people start to think about the possibility of integrating mobile photography into the talent training program for film and television photography in universities."

3. The teaching venue is still trapped in the laboratory. It is undeniable that there are better teaching equipment and environment in the laboratory. In the laboratory, teachers can use various professional teaching tools and equipment, such as projectors, screens, professional photography and camera equipment, etc., to more accurately control and demonstrate teaching content, making it easier for students to understand and master photography and camera techniques. In addition, laboratories usually have good spatial layout and comfortable seats, which can make students feel more comfortable and relaxed during the learning process, which is conducive to improving learning efficiency. The teaching situation in the laboratory is relatively consistent. It can better ensure that each student has the same learning resources and teaching context, thereby avoiding the impact of external environmental differences (such as lighting conditions, terrain, etc.) on teaching effectiveness due to different shooting results. Meanwhile, the laboratory can better simulate and control shooting conditions. For example, lighting, background scenery, props, etc., this can help students better understand and master how to apply the knowledge and skills learned in actual shooting. However, by overcoming the limitations of laboratory space and equipment and conducting outdoor teaching, students can better understand and master how to apply the knowledge and skills learned in practical situations through on-site operations and shooting experience. A real shooting environment can help students better understand and experience the real shooting

environment.

II. The Innovative Path of Teaching Digital Camera

1. Introducing short video shooting teaching

Short video shooting has become increasingly important in daily learning and life. With the popularization of social media, people often share their lives and perspectives through short videos. Therefore, mastering the skills and strategies of short video shooting, highlighting the teaching of short video shooting, is crucial for students majoring in film, television, news, and other related fields. Firstly, teaching through short video shooting can help students improve their technical skills. Short video shooting requires mastering a series of shooting techniques and editing techniques, such as panning, sliding, shaking, rotating, and following the camera. These skills and methods not only require students to have a solid foundation in camera technology, but also require them to be able to flexibly apply these technologies to express their creativity and ideas. Through short video teaching, students can have a deeper understanding and learning of these skills and methods, and improve their technical level. Secondly, teaching through short video shooting can help students improve their creative skills. Short videos require students to express their creativity and emotions in a short amount of time, therefore requiring students to have a high level of creativity. By learning and practicing short video shooting, students can enhance their creativity and imagination, thereby better expressing their ideas and creativity. Again, short video teaching can help students understand market demand. With the development of social media, the demand for short videos in the market is increasing. By introducing short video shooting into photography and videography teaching practice, students can understand market demands and trends, thereby better adapting to market demands and developing their careers.

2. Introducing drone shooting for teaching

Firstly, drone aerial photography technology is an emerging direction in the field of photography. With the flexibility and height of drones, it can achieve multi angle and multi perspective aerial photography, providing students with a broader creative space. Through drone photography, more visual elements can be captured from a unique perspective, enriching the expressive power of photographic works. Secondly, the learning of drones can not only be achieved in the classroom or laboratory, but also through theoretical teaching and the game experience mode of connecting drone simulators with mobile software, to master the basic principles and simulation techniques of drone aerial photography. You can also personally control drones for aerial photography and practice through outdoor operation practice. Today, drone aerial photography technology has a wide range of applications, not only in photography courses, but also in various fields such as film and television production, advertising shooting, surveying, disaster prevention and control. Mastering drone aerial photography technology can greatly enrich the breadth and thickness of photography and video teaching content, lay a solid foundation for students' future career development, and increase their competitiveness in the workplace. Therefore, the combination of theory and practice, knowledge and skills, and aesthetics and creativity in drone imaging teaching will be beneficial for improving the teaching reform of the "Photography and Camera" course in universities.

3. Introducing necessary ideological and political elements

The introduction of "ideological and political education" is an inevitable requirement in response to the international situation, the development of the times, and the development of universities themselves. Therefore, in the teaching of photography and videography, we can first combine the historical background to deeply explore the ideological and political elements in photography works. Teachers can combine photography and short video works with the background of the times, guiding students to understand the historical and cultural background and social environment of that time. While helping students understand the contemporary value of their works, it also deepens their understanding and comprehension of historical culture, cultivates patriotism, national spirit, socialist core values, and social responsibility. For example, by filming volunteer activities, charity activities, etc., students can be guided to pay attention to socially disadvantaged groups, cultivate their awareness of public welfare and empathy. By capturing natural scenery and ecological environment, students can be guided to love nature, protect the environment, and cultivate their environmental awareness. Secondly, in photography and short video works, there are many themes that can be used to cultivate students' correct values. For example, by shooting social hot topics, volunteer activities, charity activities, etc., students can be guided to pay attention to vulnerable groups in society, cultivate their sense of social responsibility, public welfare awareness, empathy, and humanistic care. By capturing natural scenery and ecological environment, students can be guided to love nature, protect the environment, and cultivate their environmental awareness. Once again, teachers can organize classroom discussions and sharing, allowing them to explore the ideological and political elements in their works from their own perspectives. This helps cultivate students' independent thinking and oral expression abilities, while also allowing them to gain new insights from the perspectives of other classmates. Finally, it can also be integrated with other courses, such as "Ideological and Moral Cultivation", "Chinese Traditional Culture", etc., to jointly carry out ideological and political education. This can enable students to expand their ideological, moral, and cultural qualities while learning professional knowledge. In short, by revitalizing teaching content, we can achieve the integration of excellent traditional Chinese culture and ideological and political education in photography and videography courses.

4. Strengthen the combination of "three innovations"

The "three innovations" refer to creation, entrepreneurship, and innovation. First of all, students should be encouraged to create a team or their own new media platform account according to their own strengths and interests, such as creating and sharing on Toutiao, Watermelon Video, Little Red Book, Station B, Tiktok, Kwai, video number, etc. By planning, positioning, operating, and managing these platforms, we can fully understand the important role that photography, photography, and production play in them. Secondly, encouraging students to

participate in competitions can also enhance their creative abilities. Under the recognized advanced teaching method of “promoting teaching through competition, learning through competition, and practice through competition” in teaching reform, competition has not only become an important practical teaching content, but also can enhance students’ competitive awareness and reduce teacher performance pressure. But it is necessary to reform the course assessment method based on the practical situation of the course, and make reasonable competition one of the final assessment content methods.” By carrying out teaching activities such as the second classroom and “integration of competition and teaching”, students are provided with broader learning space and practical opportunities, promoting their active participation and exploration, and stimulating their innovative thinking and comprehensive ability development.” In terms of entrepreneurship and innovation, students can expand the channels and ways of entrepreneurship and innovation by participating in Internet plus innovation and entrepreneurship projects, or various maker spaces, entrepreneurial bases, creative workshops, school enterprise cooperation, graduation internships, etc., so as to cultivate more talents with excellent creative, entrepreneurial and innovative abilities.

III. Conclusion

In short, the development of short videos has profoundly changed the mode of people’s image creation and has had a profound impact on the teaching of the course “Digital Camera”. Only by continuously learning, summarizing, and thinking, facing existing problems, and proposing innovative paths to solve them, can we promote greater achievements in the teaching of the “Digital Camera” course in Chinese universities, and cultivate more innovative image creators who can adapt to the job market and national needs.

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