

The Role and Popularization Practice of Mobile Phone Photography in College Students' Aesthetic Education

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Abstract: Teaching the knowledge of mobile photography and promoting the practice of mobile photography in photography courses can facilitate the popularization of photography knowledge among college students and enhance the effectiveness of aesthetic education in universities. Demonstrate the artistic characteristics of mobile photography through teaching videos. Focus on the key knowledge points of mobile photography for college students' daily shooting and creation. Make a series of teaching videos "Playing Mobile Photography at Henan University of Science and Technology" to popularize the knowledge of mobile photography for college students. In daily life, mobile photography builds a unique creative and aesthetic platform for college students, which can not only cultivate everyone's aesthetic awareness, enrich aesthetic experience, but also inspire innovative inspiration. Therefore, promoting mobile photography is an effective and important way to popularize college aesthetic education and improve college students' aesthetic education literacy.

Keywords: Mobile Photography; College Students; Aesthetic Education; Aesthetic Ability

1. Introduction

In the age of image consumption, photography education in higher education plays a pivotal role in nurturing comprehensive talents, particularly in fostering artistic talents [1]. In Britain, photography is positioned as part of the "digital revolution" and thus falls within government concerns in relation to the nation's digital literacy [2]. Many universities offer aesthetic education courses such as photography, video, and film appreciation.

However, in the current higher education environment, there are many shortcomings in the aesthetic education of college students. The traditional aesthetic education curriculum is biased towards theoretical indoctrination, and the classrooms are mostly boring explanations of aesthetic concepts, which lack close connection with real life, making it difficult to stimulate students to actively explore beauty. The practical activities of aesthetic education on campus are mostly in the form of music, dance, painting exhibitions, etc. The threshold for learning and participation is high, which makes some students hesitant.

With the continuous improvement of mobile photography capabilities and the advent of the mobile Internet era, mobile photography has rapidly become popular, bringing new opportunities for college students' aesthetic education. The affordances inherent to mobile phone camera systems have broadened the scope of semiotic resources accessible to individuals, facilitating the visualization of their existence through the production of photographic still images, and the opportunity for reflective engagement with these representations at later junctures [3]. Although mobile photography cannot compare with professional cameras in terms of imaging quality and operation expertise, it has advantages in terms of frequency of use and portability [4]. The process of mobile photography not only prompts students to take the initiative to discover the hidden beauty in ordinary daily life, but also inspires their inner perception and pursuit of beauty. Through mobile phone photography training, the threshold for photography can be effectively lowered, enabling more college students to get in touch with photography. An increase in the number of students who are interested in photography also helps to cultivate a large number of high-level photography talents who

can meet societal needs [5].

2. Emphasize the Role of Mobile Phones in Photography Education for College Students

In the "Digital Image and Photography Art" course that the School of Art and Design at Henan University of Science and Technology starts for design and fine arts majors, the number of students with cameras is relatively small, generally no more than 10% of the total class size. With only 8 hours of camera operation practice in the photography lab, students cannot master camera operation. After streamlining the practical teaching of "Digital Image and Photography Art" in 2024, it was declared as a public elective course in art education at Henan University of Science and Technology. In the two semesters of the 2024-2025 school year, a total of 230 students applied for the course, which shows that the students' interest in photography is relatively high. The number of students choosing courses has increased, but they cannot provide sufficient photographic equipment for students to practice. Mobile phones have become the most ideal tool to lower the threshold of equipment.

2.1 Lower the Threshold for Creativity and Stimulate Creative Enthusiasm

The essence of photography is to document [6]. The low cost of mobile photography has greatly reduced the threshold for photography creation. Smartphones with shooting functions have become a necessity for college students in their daily lives. Think of the mobile phone as a device that can be carried around 24 hours to shoot, record, mark time and location information [7]. College students do not need to spend a lot of money to buy professional photography equipment such as bodies, lenses, tripods, filters, etc., and only need a mobile phone to start the journey of photography creation.

The photography interface of the mobile phone is simple and there are many auxiliary features. Generally, the photographer only needs to determine the composition of the picture, and then press the shutter to complete the shooting, which is more convenient than the traditional camera operation. Mobile photography does not require consumables and accessories, and the subsequent use cost is

also very low. This low-cost and easy-to-operate feature makes mobile photography closer to life, allowing more college students who are interested in photography to participate in photography creation.

2.2 Expand Creative Themes and Enrich Creative Effects

Compared with traditional cameras, you don't need to carry extra heavy equipment. You can take out your mobile phone to shoot anytime, anywhere, and capture the wonderful moments in life. The high portability of mobile photography expands the subject matter of photography creation. Whether it is a wonderful moment in the classroom, the changing seasons in the campus, or the life of the people in the streets, it can become the theme of creation. The various filters, special effects, shooting modes, etc. that come with mobile photography allow users to easily achieve different artistic effects. Such as retro style, Japanese fresh style, dream special effects, etc., provide a broader creative space for college students. College students can transform ordinary scenes into creative works through various special effects and shooting modes, enriching the creative effect. At present, many mobile phones support special shooting methods such as ultra-wide-angle, panoramic shooting, slow-motion shooting, and time-lapse photography, which can meet the diverse creative needs of users and make mobile photography more creative and personalized.

2.3 Promote Creative Communication and Enhance the Level of Creativity

Photo-sharing and social networking sites now provide a platform for photographers to deliver their images to locations where millions can view them simultaneously [8]. After taking photos and videos, college students can easily upload them to WeChat, Weibo, Douyin and other social platforms. College students can display their photography and video works through different platforms, and can also receive likes, comments and shares from others, so as to obtain feedback and recognition, and continuously improve their shooting and creative level. College students can also train themselves in the competition and gain more creative inspiration by participating in various online photography

competitions and activities. In platforms such as Chaoxing, there are also functional modules such as work display and discussion. Teachers can use photos to stimulate discussion, creativity, and new ideas, resulting in good interaction in the classroom [9]. Classroom discussion can promote communication among college students, stimulate their creative enthusiasm, and form a good creative atmosphere.

3. The Practice of Popularizing Mobile Photography Education among College Students

3.1 Make a Series of Teaching Videos "Teaching You Mobile Photography at Henan University of Science and Technology"

"Digital Image and Photography Art Course" uses SLR camera as the main shooting tool,

and the teaching content is relatively traditional, which cannot meet the needs of modern college students to use mobile photography. Continuing traditional photography teaching without adjustment and improvement will be out of touch with society [10]. Future photography courses can try to specify training goals that are more close to the needs of the industry with the intervention of industry associations [11].

The members of the video making team all have a high interest in photography. Under the guidance of the teacher, the video making team has successfully applied for the SRTP (Student Research Training Program) project of Henan University of Science and Technology with the theme of "Teaching you mobile photography at Henan University of Science and Technology". This SRTP project will produce 10 mobile phone photography teaching videos, as shown in Table 1.

Table 1. "Teaching you Mobile Photography at Henan University of Science and Technology" Series Teaching Video

Video name	Teaching content
Basic parameters and exposure	Explain all the parameters in the professional mode of mobile photography. Focus on the relationship between shutter, aperture and ISO, so that the photographer can properly control the exposure.
Composition and shooting ideas	By giving examples of the composition of classic film and television works or excellent photography assignments, college students can understand the composition of the photo. Master the shooting ideas such as the visual center, concise picture, and balance of the picture, and gradually develop a sense of composition.
Focal length and perspective	Show the different perspective effects brought by different focal lengths to help photographers better understand the relationship between focal length and perspective. After mastering the relationship between focal length and perspective, photographers can choose the appropriate focal length for shooting in different scenes.
Color temperature and hue	By explaining the color temperature and hue values on the mobile phone, we can help photographers better understand the concept of white balance in mobile photography. After mastering the concept of white balance, photographers can restore true colors in different scenes and themes, and make bold artistic creations.
Mobile photography hardware and software	Explain the current mobile phone hardware and software for photography to college students. Help photographers better understand the hardware performance of their mobile phones, and perform post-processing of photos through software to get better creative effects.
Time-lapse photography and slow-motion photography	This video focuses on the shooting methods of time-lapse photography and slow motion photography. The first part of the video explains the time-lapse photography function of the native camera of the mobile phone and the skills of manual time-lapse photography. The second part of the video explains the suitable scenes for slow motion shooting, frame rates, and how to make simple post-adjustment.
Application of post-adjustment software	This video explains the mobile version of LR, Xingtu, snapseed, a total of three mobile phone photography post-adjustment software, to help creators understand the theoretical knowledge points required for post-adjustment, as well as the ideas for color matching and retouching.
Short video skills	Through the review of photography knowledge, this video gradually guides college students to understand the shooting of dynamic videos. The video mainly talks about the awareness of shot splitting, and the techniques of pushing, pulling, shaking, moving, following, and throwing, etc., to help creators better understand the shooting of short videos on mobile phones.
Application of video editing software on mobile phone	The video takes Jianying mobile version as the main editing software. The video introduces the interface, basic operation, common functions and post-editing ideas of the software.
Photography knowledge summary	In this video, I sort out the photography knowledge mentioned in the previous nine videos, and share with the creators some websites that are convenient for learning and improving aesthetics. At the end of the video, I will tell you the meaning of learning photography and the employment prospects.

The series of videos "Teaching you mobile photography at Henan University of Science

and Technology" will concentrate practical mobile phone shooting knowledge, skills and

post-processing methods in the video. This series of videos will take you to appreciate the beauty of Henan University of Science and Technology and the youthful style of college

students, while mastering the relevant knowledge of mobile photography. As shown in Figure 1, some screenshots of the completed videos are shown.



Figure 1. Screenshots of "Teaching you Mobile Photography at Henan University of Science and Technology"

3.2 The Innovation Points of the Videos "Teaching you Mobile Photography at Henan University of Science and Technology"

3.2.1 Teaching content close to the needs of college students

Use mobile phone as the main shooting tool of this tutorial to adapt to the shooting equipment of college students. The tutorial not only covers the basic camera settings, composition and exposure principles, but also explores the hardware characteristics of the mobile phone camera, professional retouching and editing software, and how to use AI algorithms to enhance image effects. This series of tutorials fully explains how to use mobile photography from entry to advanced, step by step to guide college students to improve their mobile photography skills.

3.2.2 Close to the campus life of college students

This series of video tutorials is mainly filmed on the campus of Henan University of Science and Technology, making full use of various elements and scenes on the campus for shooting and teaching. The teaching content is more close to the daily life of college students, so that students can better understand and apply photography skills.

3.2.3 Show real photography experience

The teaching videos contain a large number of real shooting cases, showing shooting skills in different environments. The videos include cases of dealing with low-light environments,

fast motion capture and other difficult subjects. Through the learning of these videos, college students can also create better shooting works when facing different scenes, lights and themes.

3.2.4 Enhance the Aesthetic Ability of College Students

This series of mobile photography tutorials can not only popularize photography knowledge among college students, but also spread through the Internet to make more people realize that mobile phones can also shoot excellent works. Having a good level of photography, retouching ability and video editing ability will not only help college students have their own skills in future work, but also help stimulate their enthusiasm for life and higher pursuit of art.

3.2.5 Broaden the Influence of Teaching Videos

This series of mobile photography tutorials can not only be used as teaching cases for the digital image and photography art public elective course of Henan University of Science and Technology, but also will be broadcast on public platforms such as Douyin, Watermelon Video, and Xiaohongshu, playing a dual role in popularizing mobile photography knowledge and promoting Henan University of Science and Technology.

4. Conclusion

Mobile photography has profoundly affected the photography creation and aesthetic experience of college students by virtue of its

artistic characteristics such as convenience, immediacy and strong interaction. Under the guidance of the teacher, the SRTP team formulated the shooting plan and completed the relevant videos of "Teaching you mobile photography at Henan University of Science and Technology". This series of videos has not only become the teaching video of the public elective course "Digital Image and Photography Art" of Henan University of Science and Technology, but will also be broadcast on the public platform, becoming an effective tool to publicize mobile photography, popularize mobile phone photography knowledge, and enhance aesthetics of college students. Due to the small number of team members, insufficient shooting equipment, and short production time, this series of videos still has shortcomings in artistic level and editing level. The SRTP team will continue to update and improve the videos in the future. In the era of rapid technological update, colleges and universities should build a "science and technology + aesthetic education" double helix training model, which not only teaches science and technology in different disciplines, but also maintains the independence of college students' humanistic perspectives through aesthetic education.

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