

# Application of Virtual Simulation Technology in Journalism and Communication Education in Colleges and Universities

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## Abstract

**This paper can be found through the detailed analysis of the relevant data of the virtual simulation experiment teaching project of national and provincial journalism and communication majors in China. The project approval rate of virtual simulation research in journalism and communication has always been difficult to improve. The specific project planning is mainly concentrated in the field of traditional news business, and less involved in advertising creative communication, new media digital product communication and other aspects. Therefore, colleges and universities should strengthen the continuous improvement of the education level of Journalism and communication, and give full play to the role of virtual simulation technology in the field of Journalism and communication education by analyzing the universality and typical experience of successful projects, so as to lay a solid foundation for further improving the teaching quality of Journalism and communication.**

## Keywords

**Virtual Simulation Technology; Colleges and Universities; Journalism and Communication; Professional Education; Application Approach.**

## 1. Introduction

Driven by the all-round development of artificial intelligence technology and computer technology in China, the advantages of virtual simulation experiment technology are becoming more and more mature, and the degree of integration with higher education and teaching is becoming more and more comprehensive. Strengthen the in-depth integration of modern information technology and higher education and teaching, and further improve the quality of experimental teaching of various majors in Colleges and universities. With its diversified advantages, virtual simulation experiment teaching has become an effective way to promote the full integration of modern information technology into experimental teaching and innovate the quality of talent training in Colleges and universities. In this regard, colleges and universities should not only ensure that the experimental teaching content has high accuracy and suitability, constantly enrich and innovate the experimental teaching methods, and always follow the idea of taking students as the core of experimental teaching. In the long run, it is bound to bring the role and value of virtual simulation technology into full play in the education and teaching of Journalism and communication specialty in Colleges and universities[1-2].

## **2. The Necessity of the Application of Virtual Simulation Technology in the Field of Journalism and Communication Education in Colleges and Universities**

### **2.1. It Can Effectively Solve the Problems Existing in Traditional Teaching**

In the process of teaching traditional journalism and communication in Colleges and universities, the equipment commonly used in the laboratory mainly includes news editing room equipment, studio equipment, UAV, camera, camera and so on. However, due to the continuous development of science and technology, the rapid renewal of these equipment, coupled with the constraints of policies, experimental sites, experimental funds and other factors, colleges and universities need to go through a series of links such as application, approval, purchase of equipment, hardware construction and so on in the process of establishing a professional laboratory of Journalism and communication. When the laboratory construction is completed, the relevant equipment is often out of date, which not only causes a serious waste of teaching resources, but also hinders the improvement of students' practical ability. In order to effectively solve this problem, colleges and universities should strengthen the full use of virtual simulation technology on the premise of always maintaining "real but not virtual", so as to ensure that students are in the process of experimental operation training. It will not be constrained by the quality and quantity of equipment, nor will it damage expensive equipment, nor does it need professional venues. On the contrary, it will make the teaching of Journalism and communication more intuitive, save a lot of time and economic costs for colleges and universities, and effectively make up for the shortcomings of traditional teaching methods[3-4].

### **2.2. It Helps to Improve Students' Media Literacy and Adaptability**

Usually, news reports need to effectively improve students' editing and writing ability through field interviews, especially news reports on some major emergencies and natural disasters, which can provide rare training opportunities for students to improve their media literacy and adaptability. Through the use of virtual simulation technology, students can not only intuitively feel the occurrence process of events, but also learn how to flexibly use interview tools and media means to protect their own safety, effectively complete the task of interview and report, and realize the educational goal of applying what they have learned[5-6].

## **3. Effective Application of Virtual Simulation Technology in Practical Teaching of Journalism and Communication Specialty in Colleges and Universities**

Although different typical projects have different characteristics in the practical teaching of Journalism and communication specialty, most of the successful virtual simulation projects have certain commonalities. These common factors mainly include: the selected experimental teaching content has high accuracy and suitability, the adopted experimental teaching methods have obvious richness and innovation, and follow the teaching concept of always taking students as the core. The following takes the "virtual simulation experiment project of public security event integration news reporting" carried out by the journalism major of a university in China as an example to explore the application of virtual simulation technology in the field of Journalism and communication education in Colleges and universities in detail. In the process of implementing the project, it is necessary to comprehensively consider and overcome three obstacles in the reporting of public security events in the traditional experimental environment: to characterize public security events as "unsafe" events, we must report on the basis of ensuring our own safety. Defining public security incidents as "emergencies" requires reporters

to have the professional ability to "recruit and fight". To characterize public safety events as "social focus" events, reporters need to be able to achieve all media communication and first-time communication. The project not only won the recognition and approval of the virtual simulation experiment teaching project of colleges and universities in the city that year, but also was recommended by colleges and universities to apply for national recognition and approval. So far, the characteristics and effects of the project are still obvious[7-8].

### **3.1. Ensure that the Selected Experimental Teaching Content has High Accuracy and Suitability**

The reason why the university always adheres to the implementation of this project is mainly because it follows the problem-oriented education principle and focuses on solving the specific problems that do not have the conditions for real experimental projects and have difficulties in the operation process. For public safety events in the field of news coverage, there are many contents involved, mainly including social security events, public health events, accidents and disasters, natural disasters, etc. Therefore, in order to interview valuable first-hand information, reporters often put themselves in an "unsafe" high-risk environment. In other words, the field practice of public security event reporting carried out by the teaching of Journalism and communication has high risk and environmental security obstacles. Using virtual simulation technology to carry out experimental projects can avoid students facing the dangers in the report of public security events and improve students' personal safety.

### **3.2. Ensure that the Experimental Teaching Methods Adopted are Rich and Innovative**

Generally, public security incidents are mostly emergencies. The reporter should realize the all media communication of network, newspaper, wechat, web page and large screen at the first time. Therefore, the reporter must have strong multi-media communication capabilities such as planning, editing, publishing and feedback. However, due to the influence of the curriculum mode of the division of the traditional teaching system of Journalism and communication, there is no effective comprehensive training for students' ability to integrate media reporting in the teaching process. By carrying out the virtual simulation experiment project, various limitations of traditional teaching can be completely broken, mainly in the following two aspects:

First, through the implementation of the virtual simulation project, the specific presentation mode of experimental teaching project resources can be continuously innovated. Both the scenes in the project and the project equipment can be made by using 3D modeling technology. Not only the specific operation details are clear and the simulation degree is high, but also can be observed from different angles. When students capture and record news materials in the virtual scene, they can freely use different tools such as UAV, camera and camera, so as to further improve students' ability to integrate media reporting and effectively strengthen students' learning ability and practical ability of theoretical knowledge of news reporting.

Second, compared with the traditional "cramming" teaching method, the cases of virtual simulation project have the characteristics of inquiry learning and autonomous learning. In this project, two typical cases of "Chongqing forest fire" and "COVID-19 security incident" were selected to carry out virtual simulation. Relevant contents include the use of news interview equipment, practical operation, collection of news materials, etc. specific project teaching includes explaining the theoretical knowledge of news reporting, providing camera tools, equipment explanation and use practice, practical recording, etc. On this basis, the use of animation, graphics, interactive operation, assessment and other diversified forms to carry out professional training for students can start from the theoretical and practical levels, so that the students' ability to integrate media news reporting can be further improved.

### 3.3. Always Follow the Experimental Teaching Concept of Taking Students as the Core

In the process of implementing the virtual simulation experiment project, colleges and universities should always take the actual needs of students as the starting point, and pay high attention to imparting students' professional knowledge, cultivating students' journalism practice ability and improving students' sense of social responsibility. We can start from the following aspects:

First, before carrying out the project experiment, students should be required to take the way of self-study and fully master the safety knowledge involved in public safety accidents, such as emergency rescue and escape knowledge at the scene of the accident, infectious disease prevention knowledge, traffic safety knowledge, fire safety knowledge, etc. We should also flexibly use various operating skills of news interview and reporting equipment to effectively realize the educational purpose of imparting professional knowledge to students.

Second, in the experiment of virtual simulation project, we should strengthen the professional training of students' first response to public security emergencies, so as to effectively exercise the students' ability to deal with the "emergency nature" of public security events, such as the ability to find interview objects, the ability to observe interview sites, the ability to select interview equipment, the ability to use UAVs, etc. With the help of the above two typical public events, the students' abilities of collecting, compiling, evaluating and broadcasting are trained to ensure that the students' ability to integrate media communication of public security events is further improved, and the educational goal of cultivating students' journalistic practice ability is effectively realized.

Third, colleges and universities should strengthen the positive education of news reporting ethics and Marxist news outlook of students majoring in journalism and communication, and shape students' positive and healthy ideology by means of simulated questioning and comprehensive assessment. For example, students can be asked the question "what is the most basic one in the code of professional ethics for Chinese journalists?" "When the forest fire rescue work is over, if you are assigned to the fire force to interview the staff involved in fire rescue, what correct interview methods will you choose?" In this process, we must ensure that only the students who pass the examination can enter the next operation link, so as to strengthen the active cultivation of students' awareness of social responsibility.

## 4. Conclusion

In the process of carrying out the education and teaching of Journalism and communication specialty in Colleges and universities, through the rational application of various functions of virtual simulation technology, it can not only achieve the goal of full-time teaching, but also effectively reduce the educational cost and improve the teaching quality, and further strengthen the reporting mode of financial media. Therefore, colleges and universities should start from the ideological and action level, correctly recognize and attach great importance to the importance of virtual simulation technology in improving the education and teaching quality of Journalism and communication specialty, continuously combine the modernization concept and diversified measures, deeply tap the potential value of virtual simulation technology, and provide technical support for further promoting the modernization development level of Journalism and communication specialty in Colleges and universities.

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