

Retraction

Retracted: Application Analysis of New Internet Multimedia Technology in Optimizing the Ideological and Political Education System of College Students

Wireless Communications and Mobile Computing

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

- (1) Discrepancies in scope
- (2) Discrepancies in the description of the research reported
- (3) Discrepancies between the availability of data and the research described
- (4) Inappropriate citations
- (5) Incoherent, meaningless and/or irrelevant content included in the article
- (6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their

agreement or disagreement to this retraction. We have kept a record of any response received.

References

- [1] H. Yu, "Application Analysis of New Internet Multimedia Technology in Optimizing the Ideological and Political Education System of College Students," *Wireless Communications and Mobile Computing*, vol. 2021, Article ID 5557343, 12 pages, 2021.

Research Article

Application Analysis of New Internet Multimedia Technology in Optimizing the Ideological and Political Education System of College Students

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Ideological and political education is the most important part of the daily education management of college students. The methods and methods of ideological and political education are very old, and students' learning efficiency is very low. How to use ideological and political education technology combined with modern technology for teaching has become a current research hotspot. Based on this background, this article proposes to use a new type of Internet multimedia technology interactive teaching. In the ideological and political network multimedia teaching system, use occasions suitable for IP multicast applications, such as broadcast teaching, group discussions, and on-demand courseware. Among these functions, the IP multicast mechanism is appropriately used. The adoption of the extended conversation node scales each conversation group to a multicast group, and the members of the multicast group represent the participants, which brings convenience and ease of management. Through case study analysis, it can be seen that this method can reduce the burden on the system and improve efficiency, and the number of multicast members is unlimited, which has a very good auxiliary effect on course learning. Through the Internet multimedia technology, the innovation of ideological and political education has been realized, the learning environment of students has been improved, the ways of ideological and political education have been broadened, and the education system has been better optimized.

1. Introduction

In recent years, with the rapid development of information technology, digital technology, and mobile communication technology, multimedia has increasingly penetrated into many aspects, such as politics, economy, culture, and social life [1]. It has become an important field closely related to the future of the country in the wave of information technology [2]. In particular, the typical representative of the new media—the Internet has entered every classroom, every dormitory, into the daily study of college students, and in their daily lives, college students have obviously become the most active group using the new media [3]. College students acquire a great deal of knowledge and information through new media, which also affect their way of life, study, and

thinking. The ideological and political education of students brings both new opportunities and great challenges [4].

In the 3G era, the CPC Central Committee and the State Council have attached great importance to making good use of the mobile Internet to carry out ideological and political education and have repeatedly stressed the need to actively explore new ways and methods of ideological and political education for college students under the new situation [5]. Take the initiative to occupy the new position of network ideological and political education and firmly grasp the initiative of network ideological and political education [6]. As an important place for ideological and cultural exchanges and collisions, colleges and universities should make good use of new media technology, which is a favorable medium to carry out ideological and political education for college

students, and how to deal with the adverse effects of new media on college students [7]. To improve the effectiveness of ideological and political education for college students has become a major issue we are facing [8].

In the mature network communication environment of mobile Internet, we should correctly understand the main characteristics of mobile Internet and its position and role in ideological and political education of college students [9]. Actively explore the psychological and behavioral characteristics of college students' use of mobile Internet, solve the problems in ideological and political education of college students under mobile Internet environment, and innovate the ways and methods of ideological education work [10]. It is the mission of ideological education in colleges and universities in the new situation to seize the new network platform, give play to its greatest advantage, and reform its unfavorable factors [11–13].

Based on the existing research results in related fields, this paper attempts to explore this topic from three aspects [14]:

First, based on the existing research results of mobile Internet and network multimedia teaching, this paper defines the concepts of mobile Internet and ideological and political education and generalizes the application and construction of mobile Internet teaching model.

Second, this paper investigates the use of mobile Internet in college students and opportunities and challenges faced by ideological and political education of college students under mobile Internet environment. Mobile Internet as a double-edged sword, on the one hand, is conducive to expand the time and space of ideological and political education of college students and to enrich the content of ideological and political education of college students [15]. It provides a new communication platform for the ideological and political education of college students and helps to improve the effectiveness of the ideological and political education of college students. On the other hand, the mobile Internet brings a series of negative influences to the values and behavior of college students; the authority of ideological and political educators is challenged; the traditional ways and methods of ideological and political education are challenged [16].

Third are the thoughts on optimizing the construction of ideological and political education for college students under mobile Internet environment. This part is the focus and difficulty of the full text, but also the foothold of the full text. This paper gives some suggestions from five aspects: the construction of wireless network platform, students' self-education, educators, colleges and universities, and the state [17].

The research contributions of this article include the following:

- (1) This article proposes a method of interactive teaching using new Internet multimedia technology
- (2) In the ideological and political network multimedia teaching system, use occasions suitable for IP multicast applications, such as broadcast teaching, group discussions, and on-demand courseware
- (3) The use of extended conversation nodes extends each conversation group to a multicast group,

and the members of the multicast group represent participants, which brings convenience and ease of management

The rest of this paper is organized as follows. Section 2 discusses related work, followed by opportunities, and challenges faced by college students' ideological and political education under mobile Internet environment are discussed in Section 3. Countermeasures of ideological and political education for college students under mobile Internet environment are discussed in Section 4. Section 5 concludes the paper with summary and future research directions.

2. Related Work

What is the new media? Many scholars believe that the “new media” we are talking about is born in the 1960s, when P. Goldmark (P Goldmark) proposed a commercial development plan in 1967. He is here to refer to electronic video as the new media (new media). However, the popular view is not accurate, and the concept of “new media” dates back at least to 1959. In March of that year, Marshall McLuhan gave a speech at a national conference on higher education called “the Electronic Revolution: new revolutionary influence of the media”. So, even since Marshall McLuhan's speech, the word “new body” has been in the public eye for at least half a century. But the fact is that since the 1960s, as the public has seen, the term “new media” has become popular in the United States, and the word “new media” has since been accepted worldwide [18].

After more than ten years of scientific research exploration and research accumulation, many achievements have been made in the future network research [19]. There are several important directions in network architecture: information-centered network, supporting mobile network, the fusion network of integration of computing perception and storage, and the network of separating control plane and data plane, etc. Information-centric network (ICN) represents projects such as NetInf [20], NDN, and DONA. The purpose of this project is to represent the current “location-centric” network structure [21]. Become the network structure centered on “information” changes the current network “end-to-end” transmission mode, and the content becomes the most important entity of ICN network, and ICN makes the network focus on the information itself rather than the location of the data [22]. It can solve the current network content and repeat transmission and other issues. The network supporting mobility is mainly represented by Mobility First [23]. At present, the network is based on fixed end-to-end links and cannot meet more and more requirements of mobile devices and mobile services. Mobility First is a mobile scene oriented network architecture [24]. It is able to provide services such as car networking strong, credible mobility support. The integration of computing, perception, and storage can widely introduce perception, computation, and storage into the network, so that computing leads transmission, storage helps transmission, and breaks through the single simple data transmission function of current network. Enhance the integrated service

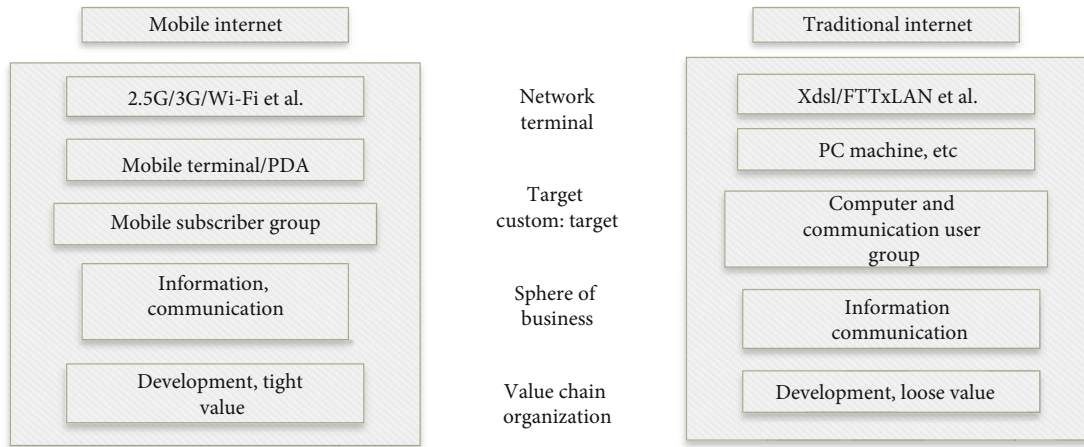


FIGURE 1: Comparison between mobile Internet and traditional Internet.

capability of the converged network. Figure 1 shows a comparison between the current mobile Internet and the traditional Internet [25].

3. Design of Network Multimedia Teaching System Model

In order to effectively control in multicast mode and give full play to the function of the teacher machine, we use the conference control mode of H.243: the chairman control mode [26]. This model is mainly used in group discussion, where the teacher machine is equivalent to the chairman node, controls the teaching process, coordinates the students' learning process, and avoids the possible confusion in the teaching process (screen switching, group discussion) [27]. In this mode, the usual processing process is as follows:

- (1) The master initializes and listens for the message in the group
- (2) A student who wishes to speak makes a request to the teacher's machine for a right to speak [28]
- (3) The teacher machine records the mark (address, port) of the student machine in the list of group member attributes (Table 1) and continues to listen
- (4) The teacher machine arbitrates and multicasts the result to the student machine in the group
- (5) The students who have the right to speak multicast information to other members
- (6) The students multicast the information to the group members
- (7) The teacher machine removes the student machine from the group member attribute list and continues to select the student machine that wishes to speak. List of member attributes is shown in Table 1

Its status diagram is shown in Figure 2.

TABLE 1: List of member attributes.

Number	Priority	Local ID (local IP)	Group ID (multicast group IP)	Data port	Control port
1	0	61.14	224.0.0.8	5050	6666
2	3	61.14	224.0.0.8	5050	8888

It can be seen from Figure 2 that the state of ideological and political learning has a good relationship with tool technology, and each link can affect the effect and efficiency of learning.

3.1. Application of IP Multicast in Network Multimedia Teaching System. IP multicast is the latest technology in the field of IP. The main way to implement it is to broadcast multicast with class D address on the net. IP multicast adopts the concept of group address, and a class D IP address represents a group of hosts. Put the users who need the data into the user group and pass the data to the user who really needs it. The network for establishing a multicast environment is shown in Figure 3.

In the network multimedia teaching system, there are not few occasions suitable for the application of IP multicast, such as broadcast teaching, group discussion, and courseware on demand. In these functions, the IP multicast mechanism is used appropriately [29]. Undoubtedly, it can make the system make full and reasonable use of the limited bandwidth. It expands the scale of the session node to map each session group with a multicast group, whose members represent the participants, which can bring convenience in implementation and easy to manage. It can reduce the system's burden and improve efficiency, and the number of multicast members is unlimited. IP's A characteristic determines the possibility that the node size of the group has almost unlimited growth.

3.2. Multimedia Features of the Internet

3.2.1. Immediacy, Openness, and Convenience Are the Characteristics of New Media. Generally speaking, the

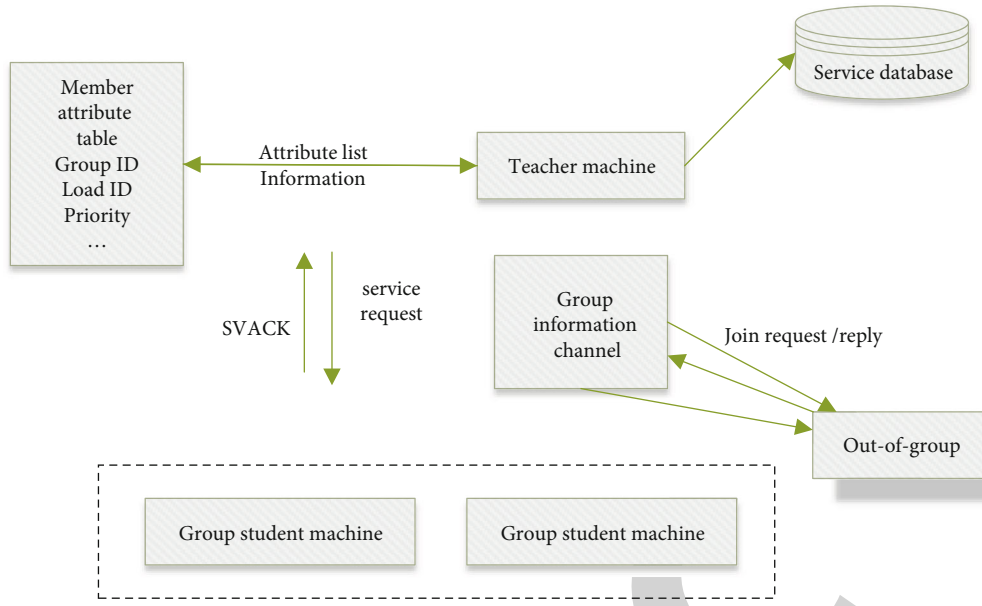


FIGURE 2: State diagram.

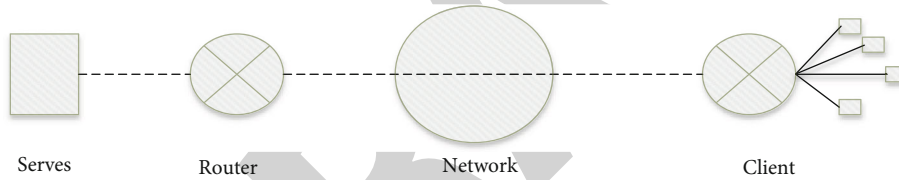


FIGURE 3: Multicast communication model.

publishing, broadcasting, and feedback of traditional media have a certain period, and the layout and duration are strictly limited, so their dissemination will be limited by time and space. New media based on digital technology can send and receive information at anytime and anywhere, breaking the boundaries of time and space completely. The traditional media information dissemination needs “gatekeeper” examination, and the audience must rely on “information collection and compilation center”. The dissemination of traditional media is limited to countries and regions, while the new media use the Internet and communications satellites, completely breaking the time and the space. With the restrictions on speed and time, people can even use “net names” and other means to conceal personal real information, thus using the corresponding devices as “virtual” through Weibo, WeChat, and other platforms without any obstacles to their own articles and viewpoints. Video and other information sent and received the real realization of space and information openness. And the new media has the powerful information reserve function, and the use of the retrieval function can quickly and accurately find the information, which is rich in means of communication and content to meet the needs of different audiences. People can also have their preference-personalized choice, as far as possible to show themselves, which greatly enriched the work of people, study, and life.

The conference video codec and transmission flow is shown in Figure 4.

3.2.2. *Rich Content, Various Forms, and Multiple Values Are the Important Features of New Media.* Under the new media environment, the information source is more diverse, and the new media is not limited by the layout and broadcast time, and its information capacity is infinite from the whole mankind. His message covers almost all aspects of human history and can span several continents and reach users all over the world at the same time. People can use new media to send text, pictures, video, audio, and so on and express their views to forward other people’s information and so on. But at the same time, the same information has different values for different people because of the different subject. Sometimes it is profit-making information to the unscrupulous plotters, but harmful to the victims. Information or junk information, which make the value of information, vary from one person to another. In short, it can be seen from the analysis of the characteristics of new media that multimedia technology has been applied in all aspects of life. New media has not only changed people’s life world. Multimedia technology has also changed the way people accept new things.

3.3. *Measurement of Available Network Bandwidth.* In networks, bandwidth refers to the rate of data transmission over

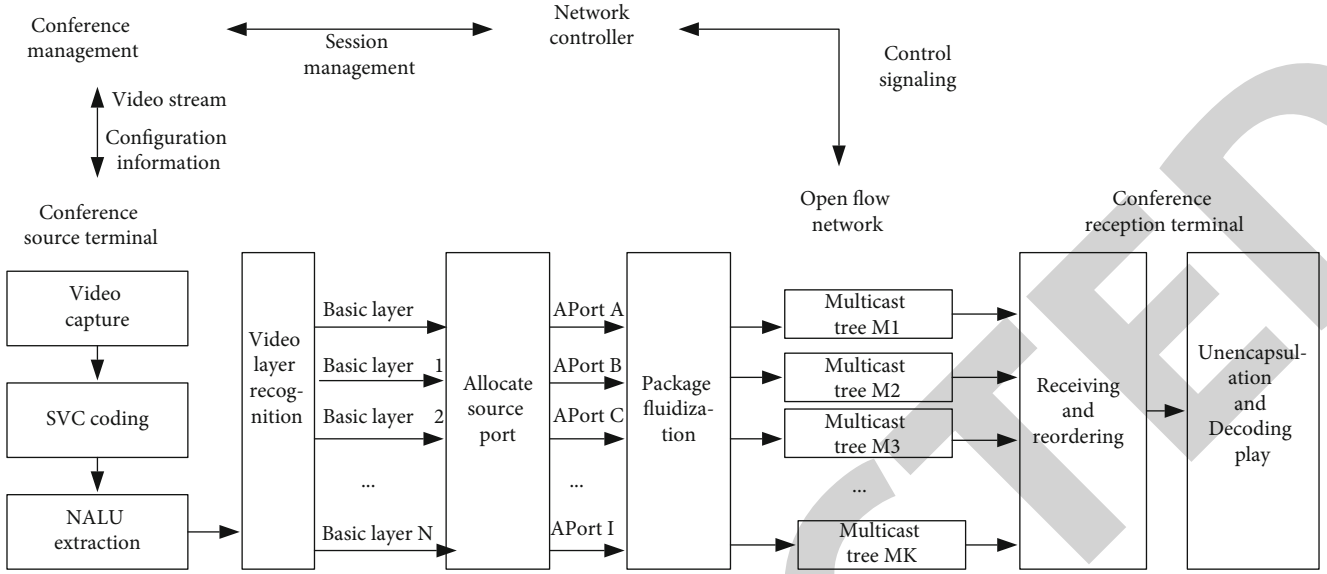


FIGURE 4: Flow chart of conference video codec and transmission.

network links or end-to-end paths, which can be measured by bit rate (bit per second, bps). The bandwidth resources in the network are usually limited. The current multimedia applications such as videoconferencing and IPTV will consume a lot of network bandwidth resources, and the available bandwidth of the application program will directly affect the performance of the application program. It is very possible for various applications to share network bandwidth resources to influence and compete with each other. The continuous increase of data traffic may eventually result in the total data traffic exceeding the maximum load of the network bandwidth, and then, the network congestion will occur. For bandwidth tube, the basic purpose of the rational and traffic control strategy is to ensure the efficient utilization of network resources while maintaining an acceptable level of service for specific services. The measurement of the bandwidth usage of network links is the basis of bandwidth management and traffic control. Link capacity refers to the maximum capacity that the network can provide for data transmission, and link capacity is usually determined. In the data link layer of the network, the data is normally sent and received at a constant rate, which depends on the characteristics of the transmission medium and the transceiver hardware and calculates the link capacity at the network layer. Need to consider the impact of additional overhead such as packet encapsulation in layer 2, specifically. Assuming the nominal transmission rate of a link at the data link layer, the transmission n time for a network layer packet of length $Li3$ is

$$\Delta L3 = \frac{LL3 + HL2}{CL2}. \quad (1)$$

Where the additional protocol overhead of encapsulating

data packets into layer 2 data frames, the link capacity at the network layer ($\wedge 3$) can be obtained as follows:

$$CL3 = \frac{LL3}{\Delta L3} = CL2 \cdot \frac{1}{1 + HL2/LL3}. \quad (2)$$

As you can see, the ratio of link capacity is related, so we select a lower $Li3$ value to increase the \wedge .

3.3.1. The Average Available Bandwidth at Intervals Can Be Expressed.

$$\bar{A}(t, t + \tau) = \frac{1}{\tau} \cdot \int_t^{t+\tau} A(\chi) d\chi. \quad (3)$$

The OpenFlow protocol provides the statistical function of sending and receiving port data, which can be used to measure the use of network bandwidth. First, the controller sends the statistics request message to the OpenFlow switch with the time period τ , and then, the OpenFlow switch sends the counter value of the report port of the statistics reply message to the controller; by this method, the controller can get the average load of the link z over the time period $(f, t+\tau)$ from the following formula:

$$\bar{\mu}i(t, t + \tau) = \frac{Ni(t + \tau) - Ni(t)}{\tau}. \quad (4)$$

In OpenFlow networks, link capacity is usually known and specific values can be obtained by querying device information. After obtaining the average load within $+fZ(I+\tau)$, you can calculate the average available bandwidth of link I over the software defined network $(Z, I+T)$:

$$\bar{A}i(t, t + \tau) = CL3 - \bar{\mu}2(t, t + \tau). \quad (5)$$

The available bandwidth of the network link can be

obtained by 33.5-inch mode, thus providing the reference for the management of QoS [3] in the aspect of network bandwidth resources.

3.4. Current Situation of Multimedia Development in China. With the continuous evolution of multimedia and Internet technology, the number of multimedia users, the number of multimedia applications, and the network traffic occupied by multimedia services are increasing with each passing day. At home, the 39th China Internet Development Statistics report by China Internet Network Information Center (CNNIC) and the China Internet Information Center show that by the end of 2016, the number of Internet video users in China had increased by 40.64 million. It has reached 545 million (as shown in chart 1. 1), an increase of 8.1% over the same period last year. The usage rate of network video users has risen to 74.5%, the number of mobile phone network video users has reached nearly 500 million, an increase of 23.4% over the same period last year, and the utilization rate of mobile phone network video has increased to 71.9%. In addition, the number of live webcast users has increased to 47.1% of the total number of Internet users, up 19.32 million, 1% from mid-2016. Globally, according to a white paper issued by Cisco, the global IP traffic will reach 2.3ZB/year by 2020, and IP video traffic will account for 82% of the total Internet user traffic. There will be millions of minutes of video content per second over the Internet, video surveillance, virtual reality, Internet television, and VOD, and other multimedia applications will grow dramatically. It can be seen that multimedia service has become one of the most important services in the network. Size and usage of Internet Video/Mobile Network Video users from December 2014 to December 2016 are shown in Figure 5.

3.5. The General Situation of the Use of the Mobile Internet among University Students. With the development of digital technology, new media has become an indispensable part of college students' life. According to the survey of Chinese teenagers, Figure 5 shows that "College students in most of the use of Internet applications are high, among which the use of search engines and network news reached 92.3% and 85.4% respectively." The utilization rate of network music and video was 88.8% and 78.9% respectively, and that of instant messaging and email was 95.1% and 82.7%, respectively. The usage rate of online shopping, online payment, and online banking was 58.6%, 58.6%, and 4%, respectively. It can be seen that new media has become an important channel for college students to obtain information, exchange ideas, and express their personal will. At present, the proportion of college students using mobile phone Internet access reached 97.6%. Figure 5 shows that 68.8% of the students said they used their mobile phones to surf the Internet every day, and 27.6% of the students used their mobile phones more than four times a day or more. Most of the time college students use their cell phones to surf the Internet every day is within 15 minutes. Figure 5 is the main application direction of student's mobile phone.

4. Research on Ideological and Political Education of College Students in the Environment of Mobile Internet

In recent years, with the development of wireless network technology, mobile Internet has become an important part of college students' study and life. With its unique characteristics of portability, immediacy, privacy, interactivity, compulsion, and fragmentation of time utilization, the mobile Internet has brought unprecedented new opportunities for the development of ideological and political education in colleges and universities. But at the same time, it also brings great challenges to the ideological and political education in colleges and universities. Frequency map of using mobile phone for college students is shown in Figure 6.

4.1. Mobile Internet Brings New Opportunities to Ideological and Political Education of College Students. Most students can quickly obtain a large amount of information through mobile phone, network, wireless terminal, and so on and organize and filter the information to their advantage. This plays an important role in college students' self-management, overall development, and liberation of personality freedom. Through such communication platforms as QQ, E-Mail, Faction, Weibo, and WeChat, college students are more relaxed and free in interpersonal communication, which provides a channel for students who are unwilling and not good at interpersonal communication in peacetime to express themselves and communicate with others and makes easy for them to get a sense of accomplishment and satisfaction. The way of thinking of the college students under the new media environment great changes has also taken place in learning methods. Students can search all kinds of learning resources, watch courses online, and turn passive learning into active learning according to their own interests. At the same time, a large number of college students choose to purchase and pay online, becoming the main customer group of online business applications. New media has deeply penetrated into all aspects of college life and has had a great impact on their way of life, way of thinking, mode of behavior, and value orientation. Figure 6 is the main application direction of student's mobile phone.

The traditional educational carrier in classroom includes TV, fixed computer, and print media. Because of its own physical restrictions, even in the classroom, it is very difficult to be fully shared by the students, and not to mention, it is impossible to be enjoyed by students anytime and anywhere after class. Through the mobile Internet network connection, each mobile phone becomes a small personal computer. Students can not only access the Internet through a mobile phone terminal, but also obtain massive amounts of information immediately. Moreover, it can download and store the most valuable information through the mobile memory card, and the mobile Internet can fully realize the sharing of resources between students and teachers. Figures 7 and 8 show, currently, the locations where college students use mobile phones to surf the Internet are mainly in the study rooms (32%), classrooms (31%), dormitories (29%), libraries (11%), and other public places (5%), which cannot be

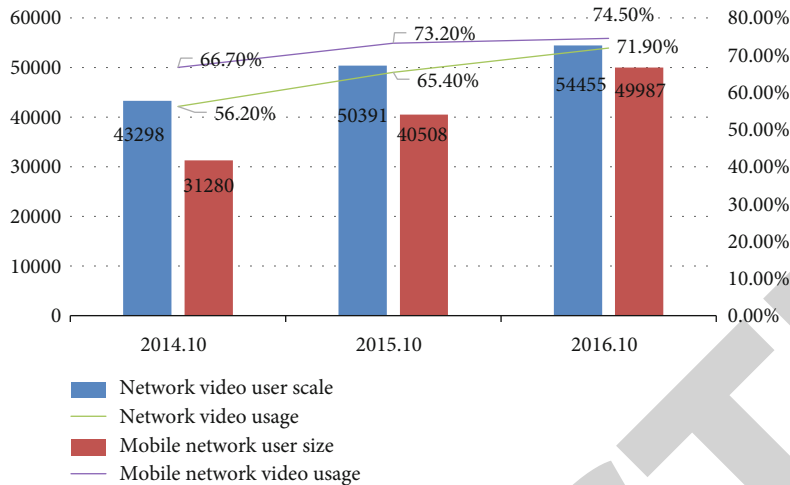


FIGURE 5: Size and usage of Internet Video/Mobile Network Video users from December 2014 to December 2016.

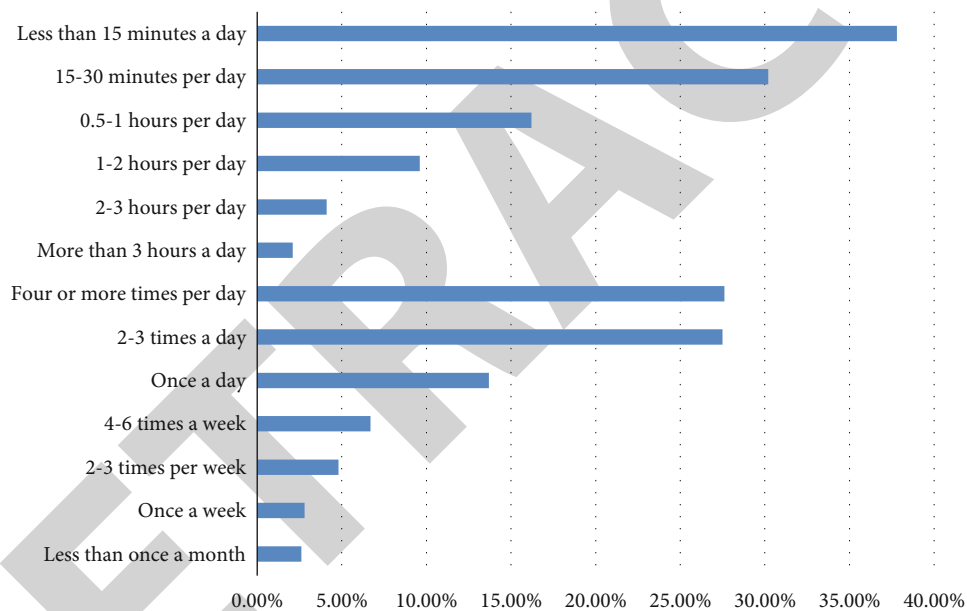


FIGURE 6: Frequency map of using mobile phone for college students.

covered by traditional networks. Especially in traffic (78.5%), waiting (68.9%), bedtime or early morning (42.3%), these are previously difficult to use the fragmentation of time. As a result of the integration of mobile communication and traditional Internet, mobile Internet not only has the flexibility and mobility of mobile communication, but also makes full use of the openness and interactivity of traditional Internet, so that the network and users can start. Finally, it can expand the time and space of ideological and political education in colleges and universities without limitation of time and space. The main application directions of students using mobile phone to surf the internet are shown in Figure 7. Spatial distribution of students using mobile Internet is shown in Figure 8. Time distribution of students' use of mobile Internet is shown in Figure 9.

4.2. Challenges Faced by Ideological and Political Education of College Students in Mobile Internet Environment. At the same time, new media is also a double-edged sword for university students and their huge social benefits. Internet technology has brought new opportunities for ideological and political education. At the same time, new Internet technology also has many limitations. For example, in the process of Internet technology teaching, filling-in teaching is difficult for learners to accept and teaching tools are limited.

4.2.1. College Students' Values and Behavior Are Affected. The important stage of the formation of human ideology is the adolescence, during which the thought is highly plastic. The new media provides a virtual world for college students, where they can freely express their personal will, show their

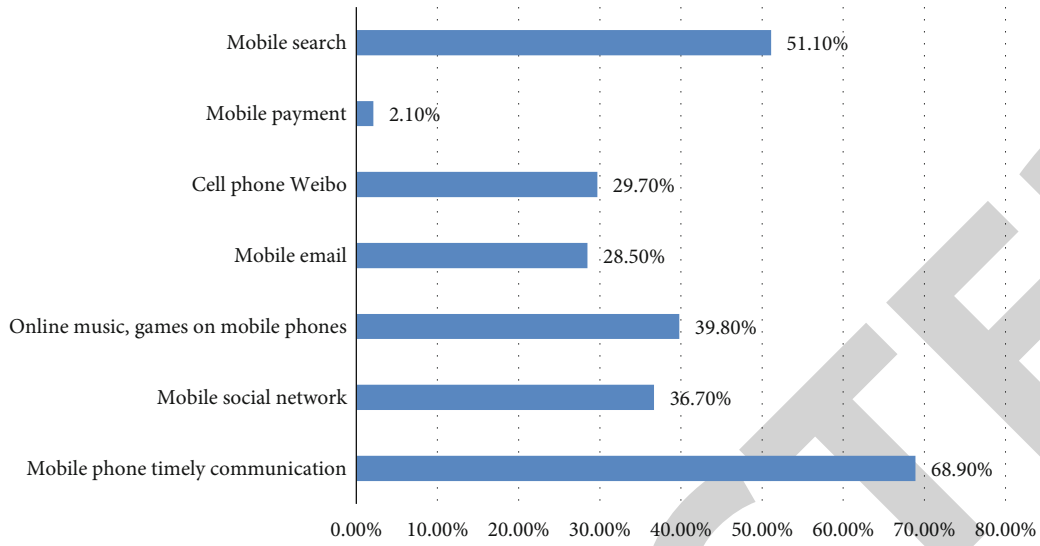


FIGURE 7: Main application directions of students using mobile phone to surf the Internet.

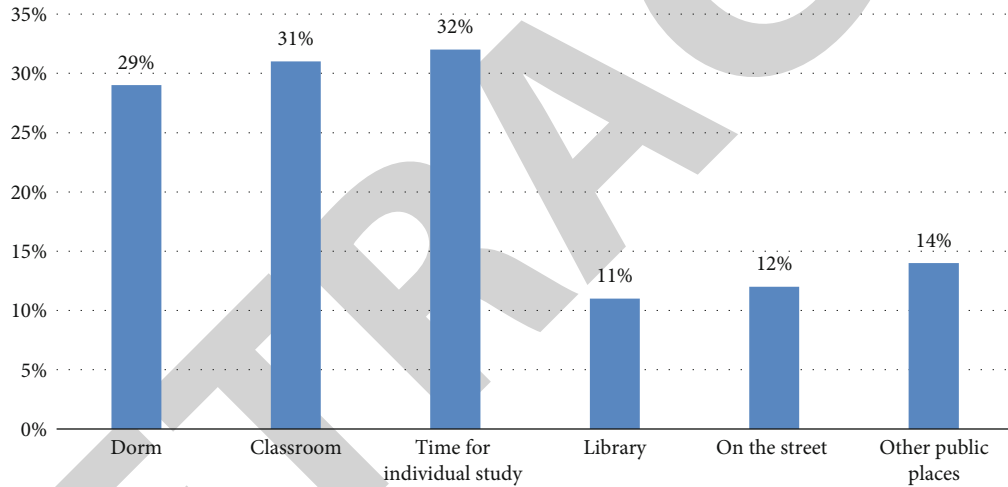


FIGURE 8: Spatial distribution of students using mobile Internet.

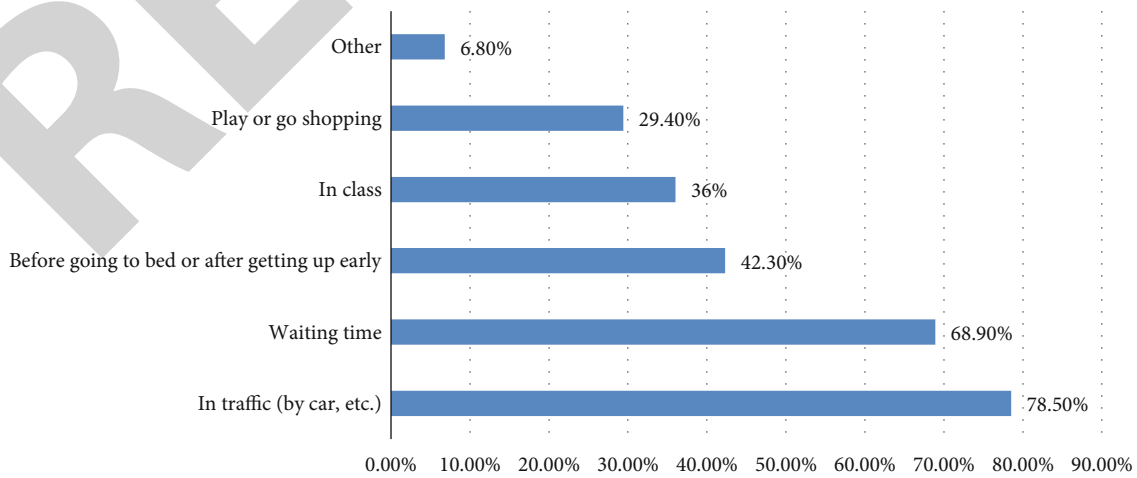


FIGURE 9: Time distribution of students' use of mobile Internet.

talents, and better convey their feelings. This coincides with college students' psychology of advocating individuality, equality, and seeking independence. The "accessibility" of the new media has fully aroused the enthusiasm and initiative of college students, who yearn for freedom, independence, and the realization of their own value and are willing to express their views and opinions. The complexity of network information is greatly reduced. It reduces the students' ability to discern information. Figure 9 shows the messages published on the current mobile Internet in which only 7.7% of the students said they could fully identify the truth and falsehood, while 47.3% said they are rarely able to identify the authenticity of information. Students' ability to identify the authenticity of mobile Internet information is shown in Figure 10.

In recent years, with the continuous development of wireless network technology, the mobile Internet has more and more illegal elements that spread colorLove, violence, and other harmful information as an important channel. The Ministry of Public Security, the Ministry of Culture, and other relevant departments aim at mobile phone websites. Machine short message dissemination of spam pornographic information is to carry out a number of rectification activities. Figure 10 shows that at present, only 19.10% college students say they never often receive violence, crime, pornography, etc., when they use their cell phones to surf the Internet. For negative content of the information, most college students have more or less received related bad information. How often students receive negative messages using the mobile Internet is shown in Figure 11.

At present, the popularity of smart phones for criminals to spread a variety of yellow, violent crime, and other bad information of the dynamic picture is more convenient. As soon as some mobile phone websites are opened, they will pop out all kinds of provocative subtitles and dynamic pictures, such as sexy eyebrow and bloody fights, which have a great negative impact on the growth of college students' physical and mental health. Some students cannot resist the temptation or even change from the receiver of bad information to a disseminator.

4.2.2. Traditional Ways of Ideological and Political Education Are Challenged. In the 3G era, the rapid development of mobile Internet technology has profoundly changed people's way of life, mode of production, mode of thinking, and mode of information dissemination. By mobile Internet, this information revolution's influence is more comprehensive and profound. At present, the use of mobile phones to surf the Internet has gradually become an important means of communication and communication between ideological and political educators and college students in colleges and universities and has not only brought about a comprehensive impact on the lives of educators and students. It also puts forward new challenges to the traditional ways and methods of ideological and political education.

The survey shows that 27.10% of the college students are not very interested in the ideological and political education curriculum, and only 11.20% of the students think that the current ideological and political education methods are very

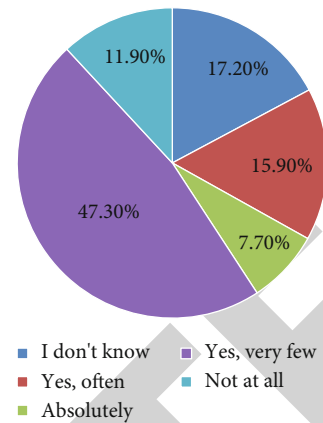


FIGURE 10: Students' ability to identify the authenticity of mobile Internet information.

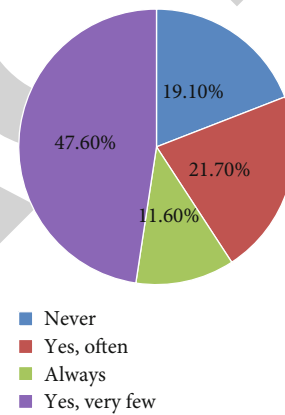


FIGURE 11: How often students receive negative messages using the mobile Internet.

rich. In the traditional ideological and political education classroom, educators enjoy absolute information advantages and high prestige, and condescending indoctrination education is the main way of education for educators. Moreover, the teaching method is single, the interaction of ideological and political education is not strong, the classroom atmosphere is dull, and the initiative of students to participate in the discussion is not high, with the change of information technology, the interactivity, immediacy, and openness of mobile Internet. The traditional ways and methods of ideological and political education are faced with severe challenges. Degree of interest of students in current ideological and political education is shown in Figure 12.

4.3. Analysis of the Reasons for the Challenges Faced by Ideological and Political Education in the Mobile Internet Environment

- (1) Colleges and universities pay less attention to the construction of mobile Internet platform: at present, most colleges and universities in the use of mobile Internet to carry out ideological education work

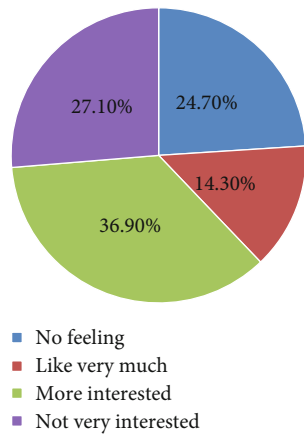


FIGURE 12: Degree of interest of students in current ideological and political education.

often do not accurately grasp the mobile Internet information dissemination mode and technical characteristics. The lack of comprehensive, scientific, and systematic planning for the use of the mobile Internet for ideological and political education and the failure to fully integrate the various forces have led to insufficient efforts and unclear planning in the use of the mobile Internet to carry out educational work at present. The target is unknown. The use of mobile Internet to carry out ideological and political education work cannot do without certain funds and technical investment, only sufficient capital investment and technical design. Only when the support is provided, can it be operated normally and effectively. At present, an important reason for the low effect of ideological education in colleges and universities using mobile Internet is the lack of funds and technical investment

- (2) The ability of educational subjects to use mobile Internet is generally on the low side: mobile Internet brings a new space and environment to ideological and political education in colleges and universities. At the same time, it puts forward a higher demand for the cultivation of talents in the subject of ideological and political education in colleges and universities. If the main body of education wants to use mobile internet to carry out ideological and political education, he must constantly improve his own network knowledge, with a large number of firm political stand, solid professional foundation, deep theoretical foundation, and strong business ability. The main body of ideological and political education which can master and apply the knowledge and skills of mobile interconnection is an important basic condition for the effective development of ideological and political education in the mobile internet. However, at present, the majority of ideological and political education personnel are building, which lags behind the development of mobile Internet. As shown in Figure 12, more and more college students

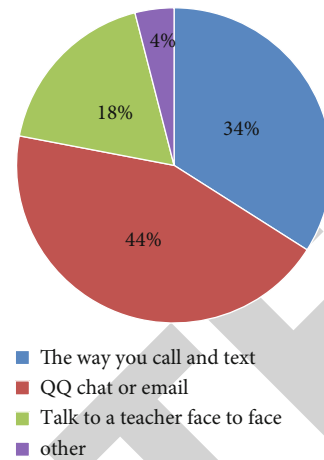


FIGURE 13: The most important communication between students and educators.

use new communication methods to communicate with educational work. The most important communication between students and educators is shown in Figure 13

- (3) The rules and regulations to ensure the effective operation of the mobile Internet are not perfect: the use of the mobile Internet to carry out ideological and political education must be based on strict and perfect rules and regulations. Mobile Internet is a new type of internet in our country. Therefore, with the increasing popularity and penetration of mobile Internet in colleges and universities, it is necessary to make relevant network rules and regulations so as to reduce the negative impact of mobile Internet on college students' education. Actively promote the effective operation of ideological and political education in colleges and universities under the new situation
- (4) The theoretical research of mobile Internet lags behind the development of mobile Internet: mobile Internet is a new foreign product of western culture in China, until 2009; when the national 3G license was issued, the mobile Internet began to develop rapidly in China. Realize the true meaning of China Mobile Network Age. As a double-edged sword, on the one hand, the mobile Internet enriches the content of college students' ideological and political education and expands the space and time of college students' ideological and political education by virtue of its advantages of openness, fictitious, instantaneity, and interactivity. On the other hand, the opening up of the mobile Internet is also the western trend of mastering the right to speak on the Internet. It opens the door to carry out ideological infiltration into our country and brings new challenges to our ideological and political education
- (5) The construction of "mobile phone platform" in ideological and political education has lagged behind: at present, most colleges and universities have

established their own mobile phone short message, mobile phone newspaper, mobile phone Fetion, mobile phone web page, and so on to actively carry out ideological and political education work. However, the current ideological and political education mobile platform construction is still in the traditional mode of work, and mobile Internet features are not obvious

4.4. Countermeasures of Ideological and Political Education for College Students under Mobile Internet Environment.

The development of mobile Internet brings unprecedented challenges and opportunities to ideological and political education of college students. On the one hand, the traditional ways and methods of ideological education, the ideological and moral quality of educators, the quality of science and culture, the ability to deal with modern information technology, and the values and behavior of college students are all facing severe challenges. On the other hand, as an advanced, revolutionary scientific, and technological force, the mobile Internet will continue to promote the globalization of knowledge economy and accelerate the development and transformation of human society. It opens up new space and creates new channels for the ideological and political education of college students. Facing the new situation, we must change the traditional concept of ideological education work in time, build a new platform for ideological and political education by using the new technology of wireless network, and strengthen the cultivation of college students' ideological education professional team. In innovating the ways and methods of ideological and political education, we should strengthen the construction of mobile internet, perfect the management system of mobile internet, strengthen the censorship of mobile internet information, and purify the network environment.

5. Conclusion

Multimedia technology has been deeply rooted in many aspects of social life and has become an important field closely related to the future of the country in the wave of information technology. The interaction of new media provides a broad communication platform for college students and broadens the communication channels between teachers and students, and the openness of multimedia greatly enriches the content and methods of ideological and political education. The anonymity and convenience of multimedia can also provide a unique perspective to understand the effects of ideological and political education in a timely and comprehensive manner and greatly improve the effectiveness of work. Give full play to the positive role of new media in the multimedia environment, strengthen the construction of campus networks, and take the initiative to occupy a new position in ideological and political education in new media. In the process of ideological and political education, we must make full use of new media to broaden our horizons, build a new platform for ideological and political education in universities, strengthen the construction of campus culture, and create a good learning environment.

Data Availability

The data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

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