

Retraction

Retracted: Practical Research on College English Teaching Mode Reform Based on Computer Multimedia

Security and Communication Networks

Received 8 August 2023; Accepted 8 August 2023; Published 9 August 2023

Copyright © 2023 Security and Communication Networks. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

This article has been retracted by Hindawi following an investigation undertaken by the publisher [1].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] Z. Yang, "Practical Research on College English Teaching Mode Reform Based on Computer Multimedia," *Security and Communication Networks*, vol. 2022, Article ID 7110400, 9 pages, 2022.

Research Article

Practical Research on College English Teaching Mode Reform Based on Computer Multimedia

Zhao Yang 

Institute of Foreign Languages, Hunan University of Humanities, Science and Technology, Loudi 417000, Hunan, China

Correspondence should be addressed to Zhao Yang; drm@bbc.edu.cn

Received 5 July 2022; Revised 15 August 2022; Accepted 29 August 2022; Published 10 September 2022

Academic Editor: Rabie Ramadan

Copyright © 2022 Zhao Yang. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

The fastest development of technologies encourages computer multimedia-oriented education. Nowadays, information technologies create human basic abilities. College English teaching mode reform based on computer multimedia is the aim of the paper. Generally, computer multimedia technologies oriented college English education merging pictures, videos, audio, vocabulary, and animation. We described the development of multimedia in English teaching mode, applications of college English teaching, a novel model of foreign language teaching in the classroom and a computer, computerized English language teaching method TPACK design, and the latest architecture of college English language teaching based on computers in this paper. We are discussing face-to-face teaching, language lab autonomous learning room, network teaching area in multimedia, and network teaching circumstances in this paper. This paper evaluated wireless communication's range, challenges facing college English teaching, comparative analysis of attitude, comparative analysis of curriculum, and comparative analysis of technology. We express that, from the year 2000 to the present, the technologies in wireless communications with computer multimedia are developing in the range of wireless communication.

1. Introduction

The English major is comprised of three aspects, language learning theory, the technology of foreign language teaching, and the theory of foreign language teaching. These aspects have to be agreed out fairly, in that time be completely developing. The present college course is one of the fundamental courses of the University [1]. The eagerness in English learning is undoubtedly linked with the advantages English could provide to its learners. On a national level, English is considered as playing an important role in national advancement and modernization. On an individual level, English is considered a passport for career development and flourishing personal advancement [2]. More English talents are required for society along with the advancement of the economy, technology, science, and cultural exchange. So the necessity for college English teaching is put forward. All universities should reform college English Teaching, according to the particular situation of University and college English teaching [3].

The teaching of English plays a vital role in college education by enhancing the level of students' English. Also, it is a crucial basis for the pupil to integrate into the development trend of the globe. Still, there are various issues in college English teaching, and the effect of teaching is not clear. The reform of college English is essential for making teaching conform to the advancement of the new education atmosphere and also for making the teaching practice more connected with modern education's standards [4]. The advancement in computer and global technology pave the way for the revolution and enhancement of college English teaching. Application skills and English knowledge, intercultural communication and learning strategies are the main contents utilized by the College English teaching, and the guidance of linguistic and foreign language teaching theory is being used. Also, it is concerned with a system of teaching that holds various teaching methods. To unite the methods of traditional classroom teaching and modern teaching, the enhanced teaching model must be used. Reforming the traditional teaching model is the

keystone of the college English model reforming. The network teaching model is comprised of plenty of operational and practical importance to college English teaching, and the coordination of students and teachers is essential to the effective use of the model [5].

The computer multimedia technology-based college English classrooms combine images, words, animation, video, and audio. The core of teaching is broken by the intuitive and vivid computer multimedia technology factors, and it has the human-computer interaction which is not in traditional teaching. Utilizing a task-focused teaching method under multimedia conditions is recommended to develop college English multimedia teaching and to improve the language consciousness and capability of students [6]. The college English teaching reform in private universities and colleges is a big responsibility for educators. In private universities and colleges, there is still a long way to go in the college English teaching reform [7]. An essential subject in fundamental teaching is college English teaching. A key role is played by college English teaching in enhancing the basic knowledge and quality of English of students [8]. The limitations in the present college English teaching can be overcome by the utilization of multimedia computer technology [9]. With the advancement of technology and science, computer multimedia has been utilized broadly in all phases, particularly in English teaching. The mixture of English teaching and computer multimedia makes the English class teaching interesting. The multimedia-assisted English teaching could encourage pupils' eagerness of learning English and improves the atmosphere of English class. Also, it could improve students' listening and speaking ability and encourages students' eagerness for communication. The distinct teaching features, and the teaching atmosphere of computer multimedia, assisted English teaching has been accepted by the greater part of students and teachers for the improvement of students' ability in learning English [10]. Thus, this paper explores the college English teaching mode reform based on computer multimedia. The major contribution of the paper is expressed in the following:

- (i) The newness of the paper is English teaching mode with multimedia and modifications of the conventional teaching design to the latest method.
- (ii) This paper described the Information Communication Technology of English language teachers and wireless communication in multimedia.

2. Related Works

Tan [11] expressed that China's education department is publishing educational information 2.0, which is to execute an action plan. Integrate information technology to get innovative in teaching. FiF smart learning (FiF-SL) is introduced by Leshan Normal University. iFLYTEK Co., Ltd improved the intelligent learning platform. To improve oral and broad English ability, FiF smart teaching platform presented the perfect role in a positive manner that was presented by this research.

Shu [6] expressed that this article utilizes English translation for the use of multimedia-oriented teaching. To improve students' curiosity, online translation software, online English translation, and multimedia sources are utilized. The application of multimedia-oriented teaching sources creates actual English learning circumstances. It concentrates to make strong college English translation training. Through this, pupils realized English translation and grammatical knowledge. This article said college English multimedia classroom has to improve learning with the awareness of language and capabilities.

Chen [12] expanded from music teaching data and cross-border relations optimizing (CBRO) relationships. The features of computer multimedia music teaching analysis were achieved from the relationship among computer multimedia, and the music teaching classrooms, and the improvement of computer multimedia techniques. In basic music teaching, computer technologies use was investigated, by analytics the optimization of music teaching techniques. Also, in music teaching, the positive effect of computer technology was expressed.

Li [13] expressed that instructors' use of multimedia, growth, and the use of media sources were considered in this article. The proposed way to resolve these issues by utilizing the latest technologies of information merged with conventional teaching techniques (CTT) is expressed. The major importance positioned on the technique is to connect the latest information technologies into the teaching model. The outcome of the paper is the plentiful teaching content strength by the latest teaching which means that the English classroom person is bringing a brand new empire.

Zhiyong et al., [14] investigated the College English Language Teaching Reform, English Foreign Language lecturer views, and CELTR's improving the EFL lecturer's teaching practice, affecting the effects and implementations of CELTR. In China's Nanyang city, from the newly enhanced university, ninety-two English Foreign Language lecturers participated in this research. Overall, the outcomes indicate that the English Foreign Language lecturer had a moderate stage of understanding and knowledge about College English Language Teaching Reform and that the teaching practice of lecturers has been satisfactorily improved due to the implementation of College English Language Teaching Reform.

Kanellopoulou et al., [15] expressed that this paper is based on the theoretical basis of dual-code and multimedia learning principles for creating a highly successful digital tool utilizing movies and scripts. Bilingual coding is providing indirect access from a particular language to another, and various kinds of subtitles are explored for their effectiveness. At last, this paper looks into a few latest alternative audiovisual apparatuses which actively engaged learners in an active manner with subtitles and movies, framed towards vocabularies learning.

Al-Ajmi and Aljazzaf, [16] expressed that this article came to recognize the aspects influencing the usage of multimedia technology in English language teaching in Kuwait. To investigate this proposed design, questionnaires and empirical data are gathered. There are seven factors to

using multimedia for learning the English language. The factors are motivating, facilitating, behaviors, community, effective factors, and teaching. Also, the outcome of the paper is that the lecturers have a positive concept of technology. But need more support and supplements.

Zhang and Lin [17] developed the author of this dissertation takes the university-oriented ESP course, International Textile Business English as a case study, and uses the key concept of the four schools of structuralism as a lead to streamlining the teaching process. In China, there is no permanent teaching content or structure to follow. Most instructors do not have a background in textile engineering. To some extent, complete qualification is required to teach courses such as those having an engineering background. The most important thing is that the instructor without a textile engineering education background is completely incompetent to teach a course with an engineering background. But its originality expressed that language letters. It has to follow language teaching and learning rules without a doubt. Next, the teacher has to be ready to learn. And through learning, the teacher has to take an effort to share.

3. Proposed Methodology

Computer multimedia technology utilizes a computer to deal with the information of graphics, text, pictures, animation, video, and sound to start logical relationships and communication among computers and human beings. Computer multimedia teaching indicated the teaching procedure of selecting correct designs and utilizing the latest teaching media based on the teaching object and the student's qualities via the teaching model and merging along with conventional instruction designs. Computer multimedia teaching denoted the teaching procedure of selecting appropriate designs and utilizing the most recent teaching media based on the teaching object and the student's characteristics via the teaching model and combining them with traditional instruction designs with a large amount of media details to structure a realistic teaching procedure. Excellent teaching outcomes will be acquired. Computer multimedia instruction designs graphics, animation, audio, other media signal, and text combined into a single thing with a sequence of bendable communication among computers and human beings which is based on the application of the utilization. And communication is clear and amicably, with ignoring capability. But, this highly developed teaching design cannot perform out that is the correct performance with correct utilization. The computer multimedia teaching method developed the instinct of teaching and inspired the learning eagerness of the pupils, and computer multimedia teaching expands the teaching time of the lecturers, and these are considered the advantage of computer multimedia teaching. There are some methods to develop computer multimedia teaching. They know instruction schedules exactly, create good computer multimedia course content, and along with conventional teaching, colleges should increase the investment in computer multimedia teaching [18]. Figure 1 expresses the development of computer multimedia in English teaching mode.

3.1. Applications of College English Teaching. College English teaching is considered the most difficult of English teaching. Nevertheless, these circumstances express chances to execute daring reforms. Many pupils, and lecturers, are concerned with the practical investigation and theoretical research of teaching reforms. In the new teaching model, the effect of the reforms contains some features and trends. The most indicated and leading thing is the constructivism teaching concept. It stresses English's instrumental nature and emphasizes language's meaning is more than language's form. Humans considered English as the shortest view of the subject. But, the reality is English is considered essential communication equipment, which is utilized to develop the pupil's language in a very good manner and which will recover the English communication equipment. To accomplish this target, the English language application is considered the center. People have to provide full effect to achieve unity of teaching targets from sentence teaching to cultural beauty's transmission and content teaching. English is considered a tool language so pupils have the capability to communicate. After learning, they have to do work [19].

3.2. English Teaching Mode with Multimedia. In recent years, China's foreign language standards have been too poor when compared globally; they are long-term and contain some errors, suggesting that dump english has a good relationship with traditional english teaching. Generally, English-teaching classes focus on the teachings such as grammar, finding the answer, and vocabulary. But, this way of teaching declines the learners' ability. With the growth of technologies in the twenty-first century, the English teaching mode has begun as the latest method which is relevant to classrooms and computers, which was expressed in Figure 2. When utilizing classroom and computer-oriented English teaching models, colleges get more advantages from the latest information technologies. It is very important to establish the solo teaching model, in which the instructor is the central focus, through the use of computer multimedia. English learning and teaching will not be restricted to place and time which is directed towards learning by self and personalizing. Teaching model changing is not considered a change that change has to be in philosophical teaching, which is a great change. It executes the changes from teacher-centered, easiest teaching, and learning language knowledge to a new learning model which is related to student-centered. Languages change learning by self-skills and language realistic that has to be expressed that the latest teaching model execution is a world-shattering transformation of the conventional English teaching model.

Figure 3 expresses the computerized English language teaching method has taken shape. When discussing the connection between English language teaching and the computer, the think of computer-assisted language learning is very usual. Computer skill is considered an important thing. But, with the great growth of computer science, we have to understand the position of computers in the English language. The pupil can have a lot of microcomputers.



FIGURE 1: Development of computer multimedia in English teaching mode.

Anyone can get learning sources anywhere from networks. Also, they can gain more knowledge based on their requirements.

3.3. Multimedia and Network Teaching Circumstance

(i) Multimedia classroom with face-to-face teaching

In the English hypothetical knowledge class, face-to-face interaction has to be improved, because of the aspects of the English subject. But boring grammar, and hypothetical knowledge class, is like a difficult part for all the pupils every time. To overcome these issues, these classes have to be assembled in computer multimedia classrooms. Through the utilization of computer multimedia equipment, teachers can help with lecturing, and they can change the difficult part into an eye-catching part. Also, they will develop the quality of lecturing.

(ii) English interactive lecturing with language lab

In foreign language teaching, language skills are the most significant especially like speak and listening. While comparing conventional classrooms, they cannot provide the perfect language practice and circumstances. So, nowadays, English speaking and listening are provided in language labs. Pupils, and

lecturers, can realize the easiest communication, role-play, and discussion through pronunciation design, which improves practice and ability results.

(iii) Networks based on autonomous learning with autonomous learning room

Improving and teaching language utilization skills is considered a long-term process. But pupils' practice time in the computer multimedia classroom is being too decreased. This realism demanded that pupils will get good favorable language learning circumstances. According to the local area network and the campus network, they framed the English network autonomous learning method. They will see foreign language network sources through the campus network.

(iv) Online learning with network teaching area

Nowadays, on university campuses, lecturers, and pupils, face-to-face interaction is decreased. Colleges are making campus networks in college English teaching platform which creates English teaching skill that is more bendable and unlimited. Lecturers, and pupils, will be organizing dissimilar networks of teaching actions in the area including online class appointments, online FAQs, online classes, discussions on online, online examinations, and a lot [20].

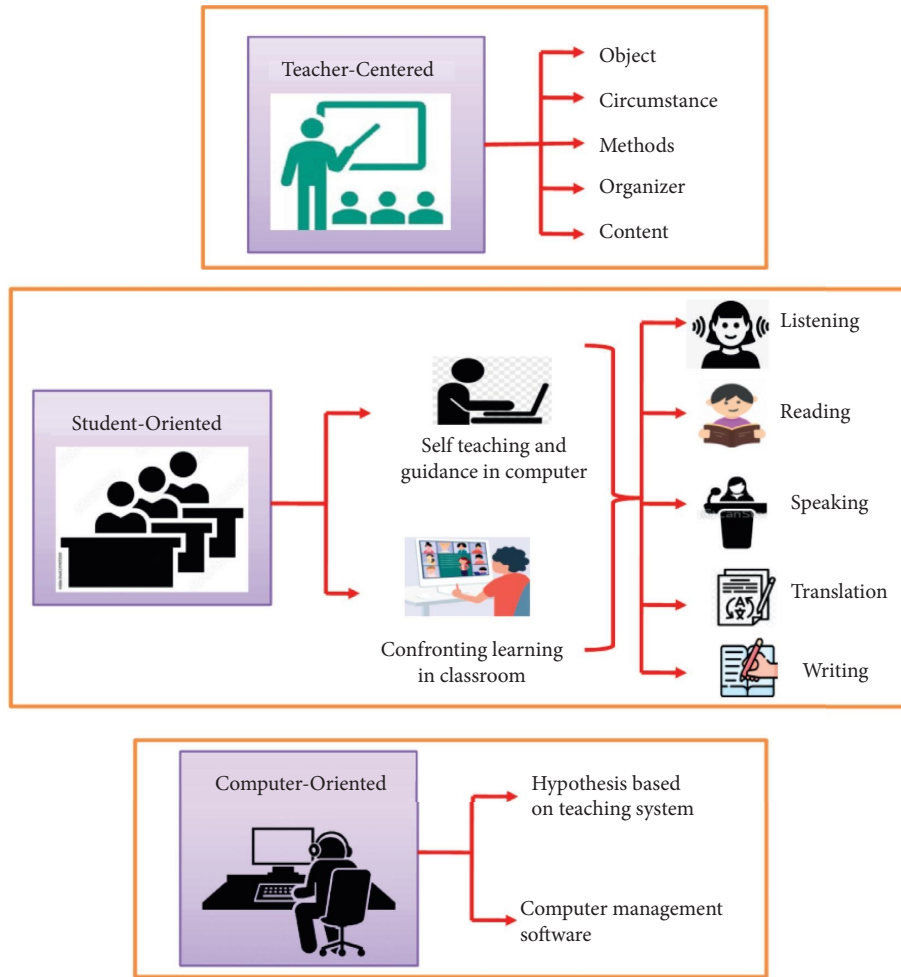


FIGURE 2: Novel model of foreign language teaching in the classroom and computer.

3.4. *Modifications of the Conventional Teaching Design to the Latest Method.* The latest computer multimedia English learning is connected with the traditional textbook and a classroom learning method. There, lecturers provide knowledge through textbooks and computer presentations. Nowadays, pupils provide attention to their self-learning. Lecturers also do not guide conventional teaching. New English teaching methods view modification as a thing that develops the student's knowledge. Therefore, computer multimedia assists modification in teaching the conventional teaching circumstances leading to a basic modification in the teaching architecture [21]. Figure 4 represents the latest architecture of college English language teaching.

3.5. *Information Communication Technology Literacy of English Language Teachers.* In most of the research, the researcher mentioned the specialty of English language learning and teaching. The function of learning activities such as connecting students and their interests enhances learning-based instruction. The advantage enhances and expands under technical advancements that are expressed devices like tablets and smartphones to English language teaching framework. Learning and teaching the English

language enables us to cross space and time limits and create extra communication and amusement [22]. The efficiency, mobility, and expediency of mobile learning contain create clearly [23]. The advantages of mobile learning have to be extensible, to the English as a Foreign Language framework. The assimilation of mobile technologies in English language learning, and teaching, helps the growth of pupils' language capabilities. Lecturers' guidance is an essential thing all the time, but more than instructors, mobile learning is the central thing to learners. Teaching with technologies will be a problematical job for a few instructors under the impact of circumstances and social causes. Thus, instructors have to learn the knowledge of teaching knowledge and technology. TPACK design helps to know the understanding ability of teachers and taking actions based on that. Schulman's actual work expressed the concept of an instructor's knowledge through his pedagogy content knowledge model, and by Kohler and Mishra, the TPACK design was improved, as the method of describing connections. Figure 5 represents teachers' knowledge of technology, content, and education. In this figure, instructor's technology knowledge, content knowledge, and pedagogy knowledge are linked and a guide to the three latest knowledge structures such as pedagogy content knowledge, technology pedagogy knowledge, and

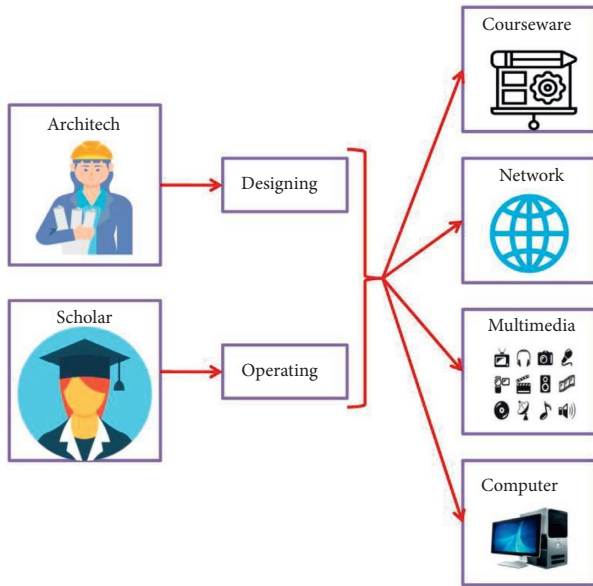


FIGURE 3: Computerized English language teaching method.

technology content knowledge. These three types of knowledge connections create TPACK. This is considered the central theme of TPACK. The word TPACK categorizes through teaching, technology knowledge, and the teaching of content knowledge. The concept of TPACK attracts the researcher's attention. But, there is a little explanation for its relevance in particular subjects like language learning as well as teaching. Informative and communicative technologies on literacy of universities and English language instructors was rarely investigated as a structure of TPACK in the COVID-19 platform of secondary English language teaching or foreign language learning [24].

3.6. Wireless Communication in Multimedia. Multimedia is a structure of computer science, which indicates two or three media mixtures. Multimedia is considered the media's unity [10]. Wireless broadcast technologies and computer multimedia technologies are considered the latest trend, with the fastest growth in information technologies. The fame of the Internet has hurried the consolidation of these dual technologies. Also, the fastest growth of mobile connections has expressed a better command for wireless remote transmission. The wireless remote transmission will send pictures, video, and audio. Velocity, several service channels, and media support are the features of wireless transmission data. According to the transmission velocity, it is not lower than conventional data transmission design. Also, it will be explained other businesses. While comparing the conventional data with other transmission methods, distant wireless communication contains broad application chances. With the arrival of the 5G, that will be capable to present utilizers with effective transmission velocity and great quality multimedia service. One of the main wireless networks technology is considered Bluetooth technology. This allows for different communicative devices and home gadgets to link wirelessly. Due to the frequency hopping technologies, its

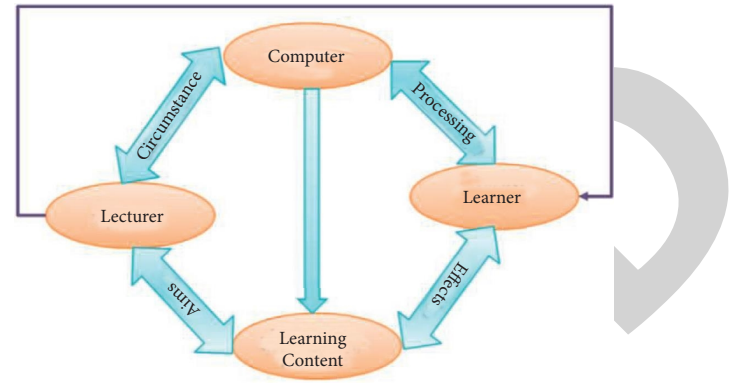


FIGURE 4: Latest architecture of college English language teaching based on computers.

battery life will be available for some days. The scale of Bluetooth is not well. Also, it accepts some gadgets only. One of the most comfortable technologies is considered as wifi technology. While comparing other technologies, it is being too faster. And its benefits are noticeable. But, its battery life is not to believe. It may fail within one hour, and it will not meet up humans' needs for less power low amount and consumption. According to UWB, wireless USB technology was created, which is dissimilar from Bluetooth and wifi, which is the class of noncarriers communications. The factors of wireless USB technology are extensive battery life and the low amount, which is accurately fitting for long-distance transmissions. It also needs scalability and safety. One of the trustworthy technologies is considered ZigBee technology. But, transmission remoteness is too short, and transmission rates are too slow. So, it is not apt to the remoteness transmissions. NFC technology is the change in radiofrequency recognition technologies and interconnected technologies. 13.56 MHz is considered the operating frequency. While comparing various communication technologies which are dependable transmissions remoteness is shorter, its permanence and velocity are improved than infrared [25]. Overall, wireless communication technologies support multimedia in various ways.

4. Results and Discussion

This section analyzes the wireless communication's range, challenges facing college English teaching, comparative analysis of attitude, comparative analysis of curriculum, and comparative analysis of technology. Figure 6 presents the range of wireless communication in computer multimedia from 2000 to 2020. This graph expresses the years and the percentage of wireless communication's range. The results are in 2000 (63%), 2004 (69%), 2008 (76%), 2012 (88%), 2016 (90%), 2021 (95%). From 2000 to the present, wireless communications with computer multimedia technologies have advanced. While comparing it in 2000, wireless communication performance is improving. This result supports to find the growth of the technologies.

Figure 7 represents the challenges facing college English teaching in computer multimedia-based. The challenges are

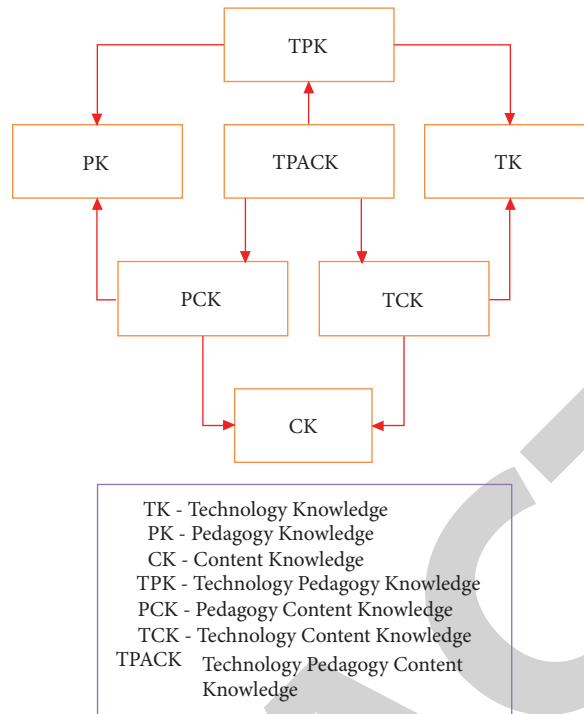


FIGURE 5: TPACK design.

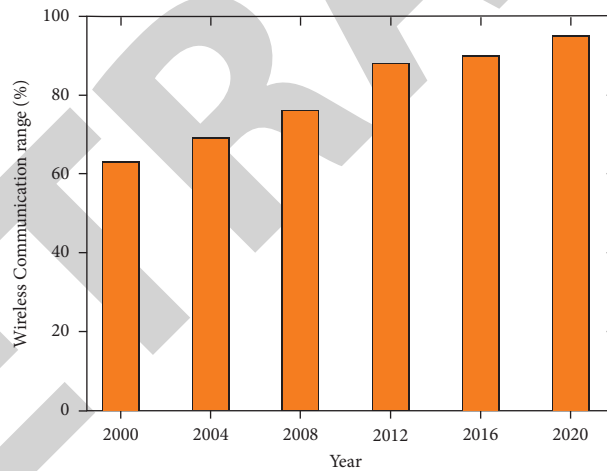


FIGURE 6: Wireless communication’s range.

utilizing various languages in the classroom, infrastructure lacking, in-person interaction lacking, and discipline lacking. This graph plotted the challenge rate and challenges facing college English teaching computer multimedia-based. The result is utilizing various languages in the classroom (75%), infrastructure lacking (85%), in-person interaction lacking (25%), and discipline lacking (65%). While comparing other challenges, infrastructure lacking (85%) is considered a very difficult challenge. In-person interaction lacking (25%) is too low.

In this section (Figure 8), the techniques such as FiF- SL, CBRO, CTT, and proposed methods are utilized for comparative analysis of attitude. The proposed method is high. Attitude

level is compared with other methods. Here, FiF-SL is 35%, CBRO is 45%, CTT is 65%, and the proposed method is 95%.

In the coming section (Figure 9), the methods such as FiF- SL, CBRO, CTT, and proposed techniques are used for comparative analysis of the curriculum. The curriculum level is greater when compared with various techniques. In this analysis, FiF-SL is 45%, CBRO is 65%, CTT is 57%, and the proposed method is 94.5%.

In the following section (Figure 10), the techniques such as FiF-SL, CBRO, CTT, and proposed techniques are applied for comparative analysis of the technology. The technology level is greater when compared with other methods. In this,

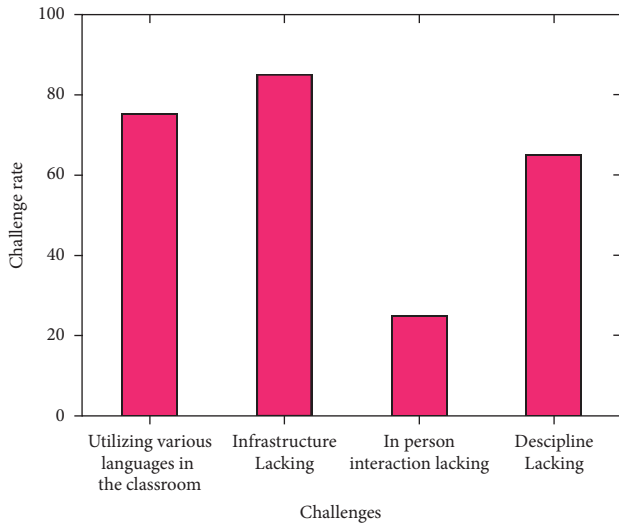


FIGURE 7: Challenges facing college English teaching.

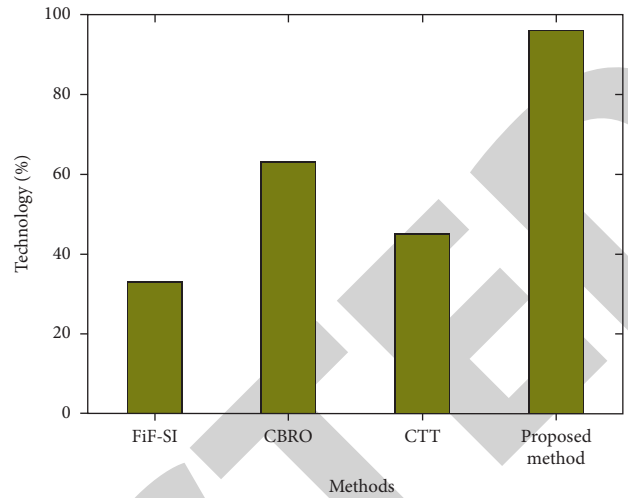


FIGURE 10: Comparative analysis of technology.

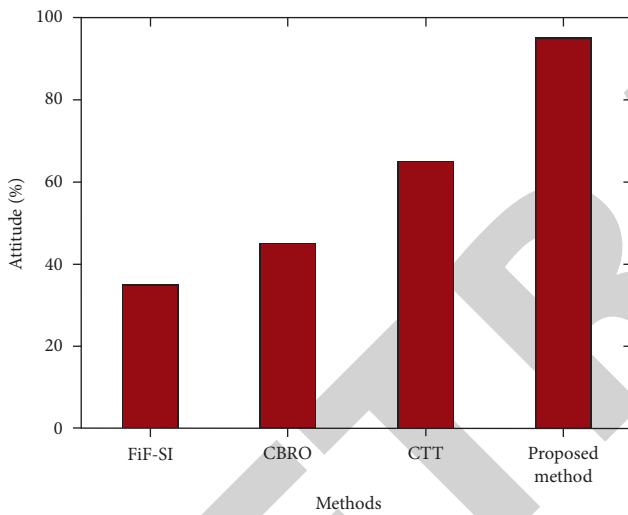


FIGURE 8: Comparative analysis of attitude.

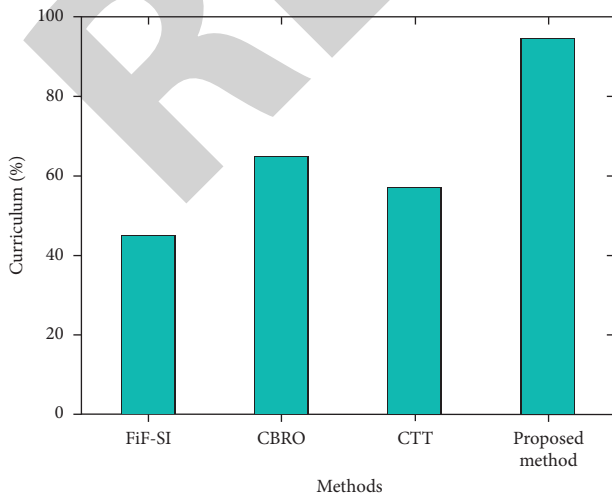


FIGURE 9: Comparative analysis of curriculum.

FiF-SL is 35%, CBRO is 45%, CTT is 65% and the proposed method is 95%.

5. Conclusion

This paper expresses the college English teaching mode reform based on computer multimedia. Here, the development of computer multimedia in English teaching mode, a novel model of foreign language teaching in the classroom and a computer, computerized English language teaching method TPACK design, and the latest architecture of college English language teaching based on computers are presented in this paper. This paper analyzes wireless communication's range, applications of college English teaching, challenges facing college English teaching, comparative analysis of attitude, comparative analysis of curriculum, and comparative analysis of technology. In the wireless communication range, we express that, from 2000 to the present, the technologies in wireless communications with multimedia have developed. Infrastructure lacking (85%) is considered a very difficult challenge in this paper. While comparing FiF-smart learning, cross-border relations optimization, and conventional teaching techniques, the proposed model is greater. And we are focusing on face-to-face teaching, language lab autonomous learning room, network teaching area in multimedia, and network teaching circumstances in this paper. Thus, computer multimedia makes a more positive influence on college English Teaching mode reform.

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 they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgments

The research was founded within the project (ND213784) entitled: “Internal Mechanism and Realization Path of Ideological and Political Education in College English in the New Era: A Project of Hunan Provincial Education and Science Foundation of “The 14th Five-Year Plan.”

References

- [1] L. Wang, “Research and practice of reform on college English teaching under the environment of information technology,” *Theory and Practice in Language Studies*, vol. 10, no. 4, pp. 453–458, 2020.
- [2] H. Li, “On guidelines for college English teaching and challenges for college English teachers,” *English Language Teaching*, vol. 9, no. 1, pp. 77–87, 2015.
- [3] S. Wang and X. Zeng, “Defects and reform direction of English teaching methods,” in *Proceedings of the 2018 4th International Conference on Education, Management and Information Technology (ICEMIT 2018)*, London, UK, 2018.
- [4] R. Sun, H. Zhang, J. Li, J. Zhao, and P. Dong, “Assessment-for-learning teaching mode based on interactive teaching approach in college English,” *International Journal of Emerging Technologies in Learning (ijET)*, vol. 15, no. 21, pp. 24–39, 2020.
- [5] Y. N. Zhao and C. Zhao, “Research on college English teaching model under the computer environment,” *Social Networking*, vol. 8, no. 2, pp. 104–111, 2019.
- [6] Y. Shu, “Experimental data analysis of college English teaching based on computer multimedia technology,” *Computer-Aided Design and Applications*, vol. 17, no. S2, pp. 46–56, 2020.
- [7] Y. Tong, “A study on the reform of college English teaching in China’s private colleges and universities,” in *Proceedings of the 2018 3rd International Conference on Education, Sports, Arts and Management Engineering (ICESAME 2018)*, pp. 115–119, Atlantis Press, London, UK, July 2018.
- [8] Q. Wang and X. Q. Jiang, “Empirical study on reform model of college English teaching model based on computer and big data,” in *Proceedings of the 2018 10th International Conference on Measuring Technology and Mechatronics Automation (ICMTMA)*, pp. 412–415, IEEE, Changsha, China, February 2018.
- [9] W. Fu, “The integration mechanism of multimedia computer technology and college English education,” in *Proceedings of the 2021 2nd International Conference on Computers, Information Processing and Advanced Education*, pp. 1165–1169, Ottawa, ON, Canada, May 2021.
- [10] N. Guan, J. Song, and D. Li, “On the advantages of computer multimedia-aided English teaching,” *Procedia Computer Science*, vol. 131, pp. 727–732, 2018.
- [11] X. Tan, “On reform of college English teaching based on the FiF smart learning platform,” *Journal of Language Teaching and Research*, vol. 10, no. 5, pp. 1067–1072, 2019.
- [12] Y. Chen, “Optimization of music teaching methods based on multimedia computer-aided technology,” *Computer-Aided Design and Applications*, vol. 18, pp. 47–57, 2020.
- [13] D. Li, “The integration of modern information technology and college English teaching to improve the effectiveness of English teaching,” in *Proceedings of the 2019 3rd International Conference on Education, Economics and Management Research (ICEEMR 2019)*, pp. 560–563, Atlantis Press, London, UK, January 2020.
- [14] S. Zhiyong, G. K. Sidhu, and P. Muthukrishnan, “College English language teaching reform and EFL lecturers’ teaching practice: a case study in China,” *Universal Journal of Educational Research*, vol. 8, no. 1, pp. 230–237, 2020.
- [15] C. Kanellopoulou, K. L. Kermanidis, and A. Giannakouloupolous, “The dual-coding and multimedia learning theories: film subtitles as a vocabulary teaching tool,” *Education Sciences*, vol. 9, no. 3, p. 210, 2019.
- [16] N. H. Al-Ajmi and Z. Aljazzaf, “Factors influencing the use of multimedia technologies in teaching English language in Kuwait,” *International Journal of Emerging Technologies in Learning (ijET)*, vol. 15, no. 5, pp. 212–234, 2020.
- [17] J. Zhang and H. Lin, “The new developments of constructivism theory and its reflection on college English teaching in the era of new media—A case study of international textile trade English,” *Theory and Practice in Language Studies*, vol. 8, no. 6, pp. 649–655, 2018.
- [18] W. Dai and L. Fan, “Discussion about the pros and cons and recommendations for multimedia teaching in local vocational schools,” *Physics Procedia*, vol. 33, pp. 1144–1148, 2012.
- [19] P. Gándara, J. Maxwell-Jolly, and A. Driscoll, *Listening to Teachers of English Language Learners: A Survey of California Teachers’ Challenges, Experiences, and Professional Development Needs*, University of California, California, Berkeley, 2005.
- [20] Y. Liang, T. Zheng, and M. Wang, “English audio-visual teaching mode and its teaching environment construction—henan institute of science and technology as the example,” in *Proceedings of the 2011 International Conference on Multimedia Technology*, pp. 3050–3053, IEEE, Hangzhou, China, July 2011.
- [21] H. Wenhong, “Study on college English teaching mode multimedia assisted based on computer platform,” *International journal of multimedia and ubiquitous engineering*, vol. 11, no. 7, pp. 351–360, 2016.
- [22] V. Demouy, A. Jones, Q. Kan, A. Kukulska-Hulme, and A. Eardley, “Why and how do distance learners use mobile devices for language learning?” *The EuroCALL Review*, vol. 24, no. 1, pp. 10–24, 2016.
- [23] J. Liu, S. Yu, and M. Ran, “Research on the communicative mobile English learning model,” in *Proceedings of the Fifth IEEE International Conference on Wireless, Mobile, and Ubiquitous Technology in Education (WMUTE 2008)*, pp. 60–64, IEEE, Beijing, China, March 2008.
- [24] L. X. Gao and L. J. Zhang, “Teacher learning in difficult times: examining foreign language teachers’ cognitions about online teaching to tide over COVID-19,” *Frontiers in Psychology*, vol. 11, Article ID 549653, 2020.
- [25] W. Chen and F. Wang, “Practical application of wireless communication network multimedia courseware in college basketball teaching,” *EURASIP Journal on Wireless Communications and Networking*, vol. 2021, no. 1, pp. 73–21, 2021.