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Retraction

Retracted: Improvement of English Teaching Model Based on Computer Network

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1].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.

In addition, our investigation has also shown that one or more of the following human-subject reporting requirements has not been met in this article: ethical approval by an Institutional Review Board (IRB) committee or equivalent, patient/participant consent to participate, and/or agreement to publish patient/participant details (where relevant).

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] Y. Du, "Improvement of English Teaching Model Based on Computer Network," *Journal of Sensors*, vol. 2021, Article ID 4756277, 10 pages, 2021.

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Research Article

Improvement of English Teaching Model Based on Computer Network

Yining Du

College of Foreign Languages, Xi'an University of Finance and Economics, Xi'an, 710100 Shaanxi, China

Correspondence should be addressed to Yining Du; yining_du@xaufe.edu.cn

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The increase in the number of colleges and universities has brought great pressure to college English teaching. How to improve the teaching efficiency of English mode is an urgent problem to be solved. This article mainly studies the improvement of English teaching mode based on computer image assistance. In the preexperiment test, a unified English final test paper was selected, and the scores of 40 students were entered into the computer. The experimental group chose the English teaching mode of computer-assisted teaching. The control group still used traditional teaching methods to learn. At the end of the experiment, the students in the experimental group and the control group were given a posttest of writing in their respective classrooms, and the teachers gave their scores according to the scoring standard of the college entrance examination. SPSS 17.0 software is used to analyze the students' scores, and the experimental results are obtained by comparing the changes of students' scores before and after the test. In groups, tasks are done together, but it also helps students develop a correct sense of collective responsibility and fair play. Students can evaluate team members from the aspects of activity enthusiasm and learning participation. Students' self-assessment can be evaluated objectively by observing their preclass learning level, chapter task completion, class attendance, group cooperation participation, and so on. In terms of learning motivation, the average value of students' online learning initiative consciousness (3.04) and the average value of learning interest (3.05) are slightly higher than 3. The results show that computer image-assisted teaching can maximize the use of classrooms to improve students' opportunities to use language and fully reflect students' role as the main body of practice in English learning.

1. Introduction

The network is changing the teaching methods of teachers. Nowadays, teachers can teach for thousands of students by themselves. By using the interactivity of the network, teachers and students can interact in time, so as to achieve the similar effect with small class teaching. At the same time, people can enjoy high-quality online courses at home. As long as there is a computer, anyone can receive university education anywhere. When multimedia and Internet are used in English teaching, first of all, students can learn autonomously and individually according to their own interests, needs, tasks, and cognitive styles, thus breaking through the space-time limitation of traditional teaching mode and constructing an unlimited open teaching space.

China's English teaching has been highly valued by schools and families. From primary school to university, English always occupies the position of the core curriculum, but the effect of English teaching is not satisfactory. By using computer-assisted instruction in the first mock exam, we can explore whether this mode can change students' attitude towards learning English and improve their motivation and motivation to participate in the classroom. On this basis, we can improve students' English level and put forward practical teaching suggestions for current English teaching.

Computer image-assisted teaching has greatly promoted the improvement of English teaching mode. Gamage believes that although GTM is a traditional teaching model, it has been widely used in second language teaching, especially in higher education. Although there is no conclusive evidence that GTM was originally built on a specific theoretical framework, its main translation and memory technologies still play a vital role in the process of second language teaching. His research was part of an action research

conducted at the Buddhist and Pali University in Sri Lanka, and 60 students were purposefully selected as samples. The essential research adopts a pretest and posttest experimental research design. He used a paired-sample t-test to compare the difference between the mean values: a significant p value ($p < 0.005$) indicates the effectiveness of GTM in teaching applications. Although his research can be effectively integrated into current teaching practice, its accuracy is insufficient [1]. Moudden focuses on the integration of games in foreign language teaching, aiming to explore the impact of the use of games in the classroom on the process of foreign language learning, students' cognition of game use, students' game skills, students' participation in games, the impact of learning English, and their attitude. The subject of the questionnaire survey was a group of foreign students studying at the University of Letters and Humanities at the University of Meknes More Ismail, Morocco. The sample included 50 male and female participants. Although his research can improve teachers' understanding of the importance of game integration in foreign language teaching, his experimental process is incomplete [2]. Sidash et al.'s research is dedicated to scientifically demonstrating the formation of educational awareness of university educators in the process of English teaching and determining the level of formation of their educational awareness. His research reveals the organizational and methodological conditions for the formation of educational awareness of educators in the process of college English teaching. He defined the effectiveness and optimization criteria (content and activity, motivation and value, and evaluation and reflection) of the formation of educational awareness. Although his research is relatively comprehensive, it lacks innovation [3]. The main purpose of Sharma and Khanal's research is to explore the effectiveness of the teaching methods of English rhetoric. They selected 31 figures of speech as research objects. They adopted a pretest and posttest control group research design to study 120 third-year undergraduate students from five campuses in Makawanpur District, Nepal. They used lecture teaching method and discussion teaching method, respectively, for 35 days of teaching. The SPSS 20th edition paired-sample t -test was used to compare the total scores of the pretest and posttest of each group. Although their research methods are relatively complete, there is a lack of discussion of experimental results [4].

The innovation of this article is to use computer-assisted teaching technology to present the content to be learned to students in a multimodal way so that students can learn effectively through various senses and with more resources, which improves teachers' teaching in class. The efficiency of knowledge promotes the ability of students to absorb knowledge and greatly changes the limitations of traditional teaching models. After the integration of computer network and foreign language teaching, the teaching mode has changed and the traditional teacher-centered mode has been broken. Foreign language teaching not only emphasizes the student-centered teaching mode but also emphasizes the information-based teaching mode of using modern information technology to promote students' autonomous learning.

2. Computer Image-Assisted Teaching and English Teaching Mode

2.1. Computer Graphics-Assisted Teaching. The teaching process of English is quite different from that of other subjects, most of the teaching materials used in the current college English courses are mainly competitive English, and most of the contents are coherent dynamic technical movements. In the traditional way of college English teaching, it is mainly for college English teachers to personally demonstrate and explain the relevant skills and techniques. At the same time, this traditional teaching method also seriously limits the play of college English teachers [5, 6].

If the current advanced teaching technology is used to synthesize and decompose each technical action, it will be different. Using the combination of CAI courseware production technology and network technology can make the standardization of oral English in English teaching and the effect of unified and standardized teaching will be greatly improved [7]. If you continue to use the traditional and backward English teaching methods of college English teaching, it will be difficult to adapt to the current rapidly updated environment of knowledge and information, and it will be impossible to reconcile the valuable information and new theories in the field of English teaching in English teaching. The method is taught to students in time [8]. As an important part of the education system, college English teaching has not only the commonalities with other disciplines but also its own different characteristics. The Pearson correlation coefficient between two variables is defined as the quotient of the covariance and standard deviation between the two variables [9]:

$$\rho_{X,Y} = \frac{\operatorname{cov}(X, Y)}{\sigma_X \sigma_Y} = \frac{E[(X - \mu_X)(Y - \mu_Y)]}{\sigma_X \sigma_Y}. \quad (1)$$

Among them, μ_X represents the mean value of variable X, σ_X represents the standard deviation of variable X, μ_Y represents the mean value of variable Y, and σ_Y represents the standard deviation of variable Y [10]. Specifically, the greater the absolute value of the Pearson product-moment correlation coefficient, the better the linear correlation between the subjective scoring results and the objective prediction results. On the contrary, it shows that there is no good linear correlation between the stereo scoring results and the objective prediction results [11].

For a sample with a sample size of N, N original data X and Y are converted into grade data x and y, and the Spearman grade correlation coefficient is expressed as [12]

$$\rho = \frac{\sum_i (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum_i (x_i - \bar{x})^2 \sum_i (y_i - \bar{y})^2}}. \quad (2)$$

Among them, $\bar{x}$ represents the average value of rank data x, and $\bar{y}$ represents the average value of rank data y [13].

Based on the training sample data set to construct the corresponding regression function $f(X_k')$ of X_k', the calculation formula is as follows [14]:

$$f\left(X_k{}'\right) = \sum_{l}{}^{'=1} q w^T k\left(X_k{}', X_l{}'\right) + b,$$
$$k\left(X_k{}', X_l{}'\right) = \exp\left(-\frac{\left|X_k{}' - X_l{}'\right|^2}{\gamma^2}\right). \tag{3}$$

w^T is the transposition matrix of the weight vector, b is the offset, and $k(X_k{}', X_l{}')$ is the radial basis kernel function [15].

Test and analyze each stereo image/video in the test sample data set, and predict the corresponding objective prediction evaluation result Q [16].

$$Q_i = f(X_i) = \sum_{j=1}^{t} w^{\text{opt}} k\left(X_i, X_j\right) + b^{\text{opt}}, \tag{4}$$

where t represents the number of stereo image/video pairs contained in the test sample data, that is, (M-Q) pairs. X_i represents the combination of the i-th pair of perceptual feature vectors of the stereo image/video content of the test sample data [17].

Suppose there are two spatial scenes A and B each containing n spatial targets. At the same time, considering the similarity and relationship of the targets and also considering the importance of different spatial features to different scenarios, the expression is as follows [18]:

$$\text{SIM} = K_{\text{G}} \times \text{SIMG}(A, B) + K_{\text{R}} \times \text{SIMR}(A, B). \tag{5}$$

Among them, K_{G} is the weight of target similarity; $\text{SIMG}(A, B)$ is the target similarity of the two scenes; K_{R} is the weight of the relationship similarity; $\text{SIMR}(A, B)$ is the similarity of the relationship between the two scenes [19].

$$\begin{aligned}\text{SIMG}(A, B) &= K_{\text{S}} \times \text{SIMS}(A, B) + K_\theta \times \text{SIM}\theta(A, B) \\ &\quad + K_{\text{F}} \times \text{SIMF}(A, B),\end{aligned}$$
$$\begin{aligned}\text{SIMR}(A, B) &= K_{\text{T}} \times \text{SIMT}(A, B) + K_{\text{D}} \times \text{SIMD}(A, B) \\ &\quad + K_{\text{d}} \times \text{SIMd}(A, B).\end{aligned} \tag{6}$$

Among them, K_{S} is the weight of similar target size; $\text{SIMS}(A, B)$ is the similarity of target size in two scenes; K_θ is the weight of similar target direction [20].

From engineering considerations, digital image processing generally includes three levels: image processing, image analysis, and image understanding. Image processing is to "process" the image itself to improve its visual effect or form of expression and lay the foundation for image analysis. The output of image processing is still an image with a new face. Image enhancement, image smoothing, image sharpening, image restoration, image transformation, image coding, image calculation (arithmetic or logical operations on pixels), etc. fall into this category. Image analysis is to detect the target image in the frame and calculate various physical quantities to obtain an objective description of the image. The main content includes image segmentation, image feature (geometric shape feature, boundary description, and texture feature), and extraction. The output of image analysis is a set of data describing the characteristics and properties of the target image. Image understanding is based on image analysis, understanding the content represented by the image, analyzing the relationship between the images, and obtaining an explanation of the objective scene and then using knowledge and experience, using mathematical, physical, virtual, and reasoning methods. Harmony means establish a rigorous or vague deductive mode and associate, think, and infer by the computer, so as to realize the description, understanding and service of the objective world. Image understanding is closely related to pattern recognition, artificial intelligence, and expert systems.

The mathematical expression of gray linear transformation is

$$g(i, j) = \frac{g_b - g_a}{f_b - f_a} \times [f(i, j) - f_a] + g_a. \tag{7}$$

In the formula, f_a and f_b are the low and high gray values of the linear transformation section of the input image; g_a and g_b are the low and high gray values of the linear transformation section of the output image, respectively.

Since the digital image is in discrete form, differential operation is used instead of differential operation, which is expressed as

$$G[f(x, y)] = \left\{[f(x, y) - f(x+1, y)]^2 + [f(x, y) - f(x, y+1)]^2\right\}^{1/2}. \tag{8}$$

After the hybrid feature construction is completed, the method based on key frames can be used to perform the hybrid feature matching and calculate the camera motion-related parameters. Specifically, the degree of dispersion of each stable feature line is determined by the number of optimized feature points, the number of stable feature lines, and the length of the feature line:

$$N_{\text{temp}} = \left[\frac{N_t}{\lambda_p N_p + \lambda_1 N_1} \times \frac{N_1 \times L_i}{\sum_{m=1}^{N_1} L_m} \times N_{\max}\right],$$
$$N_i = \begin{cases} 2, & N_{\text{temp}} < 2, \\ N_{\text{temp}}, & 2 \le N_{\text{temp}} \le N_{\max}, \\ N_{\max}, & N_{\text{temp}} > N_{\max}. \end{cases} \tag{9}$$

Among them, N_i is the number of points after the ith stable characteristic line is discrete.

When performing image forward matching, assuming that the search window of the previous frame image feature $I_{k-1}(x_{k-1}, y_{k-1})$ is $w_{k-1}(x_{k-1}, y_{k-1})$, the expression for calculating the sum of squares of the feature pixel differences of the two frames using $T_{k-1}(u, v)$ as the matching template is as follows.

$$S_k(u,v) = \sum_{u,v} T_{k-1}(u,v)[I_k(x_k+u, y_k+v) - I_{k-1}(x_{k-1}+u, y_{k-1}+v)]^2. \tag{10}$$

After traversing the image feature in the current frame image matching search window, the smallest $S_k(u,v)$ is obtained. When the value is less than a certain threshold, the image feature corresponding to the value is used as the candidate matching feature. At the same time, calculate the sum of squared pixel differences $S_{k-1}(u,v)$ with $T_k(u,v)$ as the matching template:

$$S_{k-1}(u,v) = \sum_{u,v} T_k(u,v)\left[I'_{k-1}\left(x'_{k-1}+u, y'_{k-1}+v\right) - I_k(x_k+u, y_k+v)\right]^2. \tag{11}$$

The actual structure of the computer network is shown in Figure 1. Computer network technology is a combination of computer processing technology and communication technology. Therefore, from a traditional point of view, the basic structure of a computer network can be divided into two parts: data processing and data communication according to logical functions; that is, it can be divided into two parts: resource subnet and communication subnet. The communication subnet provides network communication functions and completes communication tasks such as data transmission, exchange, control, and transformation among hosts on the entire network, responsible for the data transmission, forwarding and communication processing of the entire network.

2.2. English Teaching Mode. Unremittingly carrying out the evaluation of English teaching quality in higher vocational colleges, on the one hand, can ensure that the leadership of the college and the teaching management department fully understand the English teaching situation and provide new ideas for the school's English reform and innovative development. On the other hand, the positive interaction between teachers and students relies on a good teaching atmosphere. Teachers' continuous innovation of teaching content, teaching methods, teaching attitudes, and active cooperation with students are the prerequisites for the successful completion of the teaching process, and teachers continue to improve in practice. Teaching ability is a necessary guarantee for students to improve their English level in practice. Teaching and learning complement each other and promote each other to achieve the common progress of teachers and students [21, 22].

Constructive English teaching mode requires higher vocational teachers to change traditional teaching concepts and grasp the goals of higher vocational English teaching. In English dialogue and communication, teachers communicate and interact with students as equals. They do not impose their opinions, thoughts, and feelings on students, but allow students to truly express their opinions, thoughts, and feelings, so as to obtain progress and construction knowledge structure [23, 24]. For example, in oral English teaching activities, teachers can design corresponding questions around the theme and provide some relevant knowledge information to minimize the correction of language errors so that students can express fluently and freely. Only in this way can English teachers understand the students' real ideas, organize classroom activities smoothly, and control the learning progress [25, 26]. Computer-aided English teaching mode emphasizes that students are the main body of the learning process and the active builder of knowledge, so it is conducive to students' active exploration, active discovery, and the cultivation of students' foreign language application ability. However, this kind of teaching mode overemphasizes students' learning and often ignores the role of teachers, the emotional communication between teachers and students, and the role of emotional factors in the learning process.

The English teaching mode under the network environment is shown in Figure 2. In the part of personalized courseware generation, personalized courseware is automatically generated from students' personalized database, learning strategy database, knowledge object database, and educational resources distributed on the Internet or generated with the participation of teachers or indirectly generated by students and stored in the personalized courseware database. This is a learner-centered learning environment. When a learner enters the learning system, the personalized information collection module and the evaluation tracker first collect the students' personalized information through some strategies and then form a new learning record according to the learners' learning needs, the learners' previous learning situation (from the student database), and their learning process. Then, the course controller will present the relevant learning content to the learner from the personalized courseware library according to the new learning records and add the new learning situation to the student library. The course controller will also add a class of representative personalized courseware formed in the process of students' learning to the personalized courseware library.

3. Improvement Experiment of English Teaching Mode

3.1. Subjects. This experiment randomly selected 40 sophomore students, including 10 boys and 30 girls. Divide them into two groups evenly and record them as the experimental group and the control group, with 20 students in each group. Their English proficiency is almost the same, and there is no significant difference.

3.2. Computer Network Teaching Environment. The database server and page server under the three-tier architecture run on the same computer at the same time. During the development process, the client browser is used for testing. The hardware environment of the system development environment is as follows: (1) processor: Intel(R) Core (TM) 2duoT7300@2.0 GHz; (2) memory: 2.0 G; and (3) hard disk: 80 G.

The software environment of the system development environment is as follows: (1) operating system: Windows XP SP2; (2) development platform: MyEclipse6.5; (3)

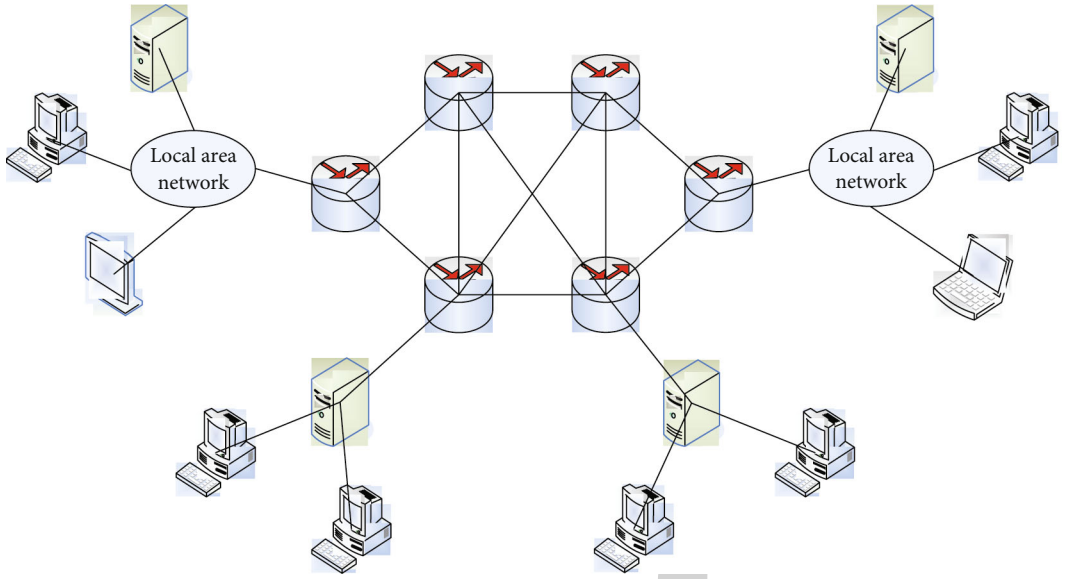

Figure 1: The actual structure of a computer network.

database: SQL Server 2000; (4) web server: apache-tomcat-6.0.35; and (5) other design tools that assist the system to complete: Rational Rose, Dreamweaver 8, Microsoft Visio 2003, Photoshop CS4, etc.

3.3. Teaching Experiment. In the preexperiment test, a unified English final test paper was selected, and the scores of 40 students were entered into the computer. After that, they will be taught in different ways in groups. The experimental group chose the English teaching mode of computer network-assisted teaching. In the teaching process, the QQ class group commonly used by students was selected as the teaching platform for online communication and learning. QQ can be used in mobile phones and computer tablet light devices and can be used by teachers to transmit instructional videos, documents, pictures, PPT, etc. conveniently. Students can download videos and other files in the group for self-learning before class. Teachers and students can communicate on course learning in the QQ group. The timeliness of QQ facilitates the communication and effectively solves the student's self-learning platform before class. The control group still used traditional teaching methods to learn. After the experiment, the students in the experimental group and the control group were tested after writing in their respective classrooms, and the teachers gave their scores based on the college entrance examination scoring standards. Use SPSS 17.0 software to analyze the students' scores, and compare the changes of the students' pretest and posttest scores to get the experimental results.

3.4. Interview. Among the students surveyed, 5-10 students were randomly selected for interviews. Before and after questionnaire surveys and student interviews with teachers and students, interviews were conducted with 1-2 teachers in each school on the use of multimedia in English teaching. The main content of the interviews between students and teachers is carried out around the open questions in the questionnaire.

3.5. Teaching Evaluation. In order to achieve objective evaluation as far as possible, teachers pay attention observing students' state in each class and give objective evaluation through students' submission of homework, test scores of chapters, participation in group activities, and so on. Therefore, in this stage of teaching activities, teachers' timely and corresponding encouragement is very important for students, which will mobilize students' learning initiative to a certain extent. The development of group cooperative learning helps students learn to help each other and have win-win cooperation. In groups, tasks are done together, but it also helps students develop a correct sense of collective responsibility and fair play. Students can evaluate team members from the aspects of activity enthusiasm and learning participation. Students' self-assessment can be evaluated objectively by observing their preclass learning level, chapter task completion, class attendance, group cooperation participation, and so on.

4. Results and Discussion

Table 1 shows the overall views of students on the learning resources of the computer network teaching platform. From the average point of view, the average number of network platform resources is 2.88, and its average value is less than 3, which means that students think that the number of online network resources is too small. This shows that students think that online learning content is difficult; the average value of online platform resources for student learning is 3.29, in which the average value is greater than 3, which shows that students think that the use of network platform resources is better for learning.

Figure 3 shows the statistical results of the pretest and posttests of the degree to which different models are

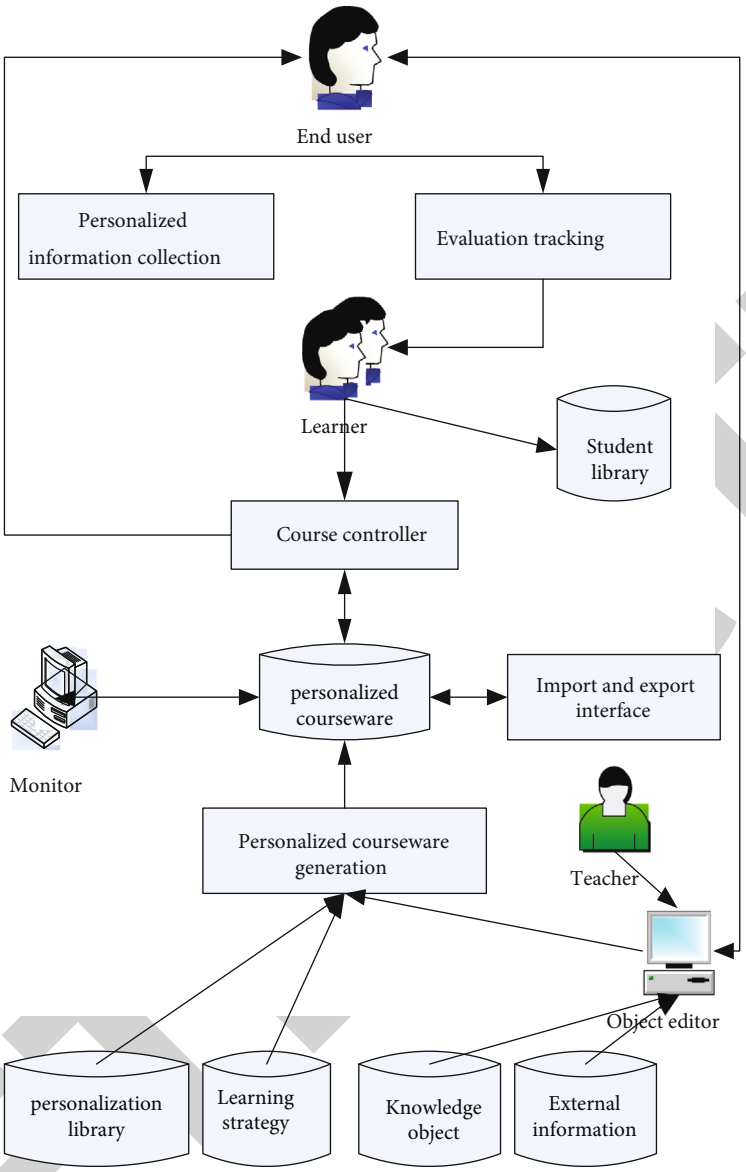

Figure 2: English teaching mode under the network environment.

Table 1: Students' overall views on the learning resources of the computer network teaching platform.

Variable	Mean value	Standard deviation
The number of network platform resources	2.88	0.684
The difficulty of network platform resources	3.26	0.616
The attraction of network platform resources	3.18	0.861
The effect of network platform resources	3.29	0.803

beneficial to improving the ability of autonomous learning. Under the traditional teaching mode of teaching by teachers, 25% of the students think it is helpful to improve the self-learning ability, and nearly half of the students feel average about improving the self-learning ability. According to the questionnaire data and interview, results show that offline classroom teacher-student interaction is good, and the effect of teacher-student interaction is good. At the same time, the interview shows three problems in the classroom: teachers have a single way of asking questions; the requirements of teachers' tasks are not clear enough; and the offline class hours are less, and the connection degree with online autonomous learning is not enough.

Table 2 shows the comparison results of pretest and posttest English learning interests between the control group and the experimental group. It can be seen from the results of the pretest English learning interest that the results of the t-test can be seen, $t = 0.457$, $p = 0.927 > \alpha = 0.05$, so it can be considered that there is no significant difference between the two means, that is, the difference in the current learning interest of students in the control class and the experimental class can be ignored. And the average value is

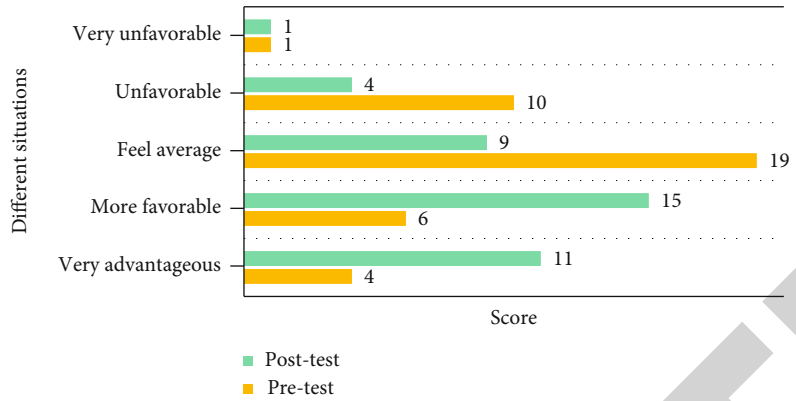

Figure 3: Pre- and posttest statistical results of the degree to which different models are beneficial to improving the ability of independent learning.

Table 2: Comparison results of pretest and posttest English learning interests between the control group and the experimental group.

Test	Class	Average	Standard deviation	t value	Degree of freedom	p value	Mean difference
Pretest	Control class	1.13	1.78	0.457	83	0.927	0.454
	Experimental class	1.76	1.57				
Posttest	Control class	2.65	0.45	2.573	80.016	0.006	-3.658
	Experimental class	5.48	0.43				

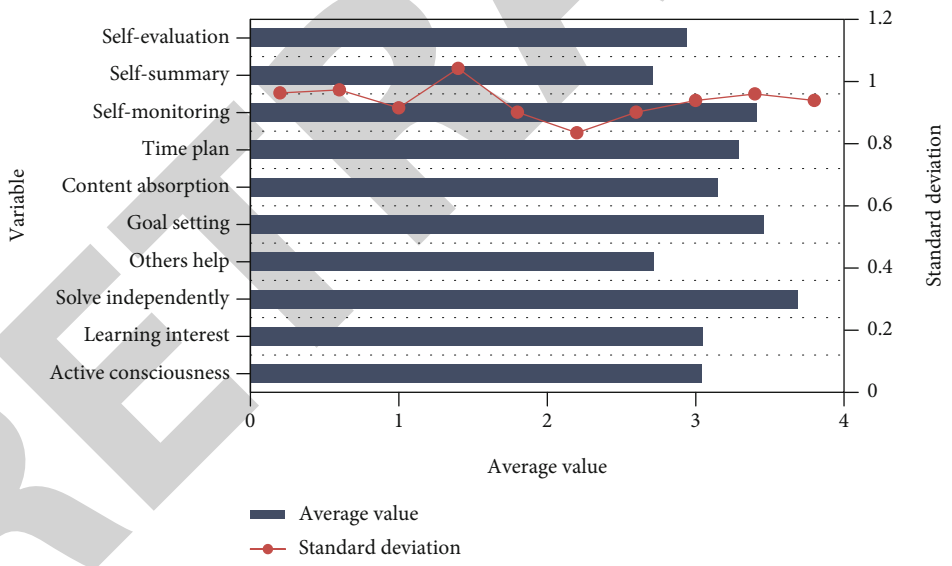

Figure 4: Description of students' online autonomous learning.

small, so it can be considered that before the experiment, the experimental class and the control class have basically the same interest in English learning as a whole, and both show low interest. The results of posttest English learning interest can be seen, $t = 2.573$, $p = 0.006 < \alpha = 0.05$, which can be considered that the two means have a significant difference.

The description of students' online autonomous learning is shown in Figure 4. In terms of learning motivation, the average of students' online learning initiative consciousness (3.04) and learning interest (3.05) is slightly higher than 3, which indicates that students' English learning motivation is general; in terms of learning methods, the average value of students choosing to solve problems independently (3.69) is greater than 3.5, while the average value of choosing to seek help from others is 2.72. This shows that in the process of online autonomous learning, most students choose to solve problems independently and seldom seek help from others; in terms of learning content, the average value of goal setting (3.46) is greater than 3, and the content absorption (3.15) is greater than 3, which indicates that many students have clear learning objectives and requirements in online autonomous learning and can fully absorb online learning

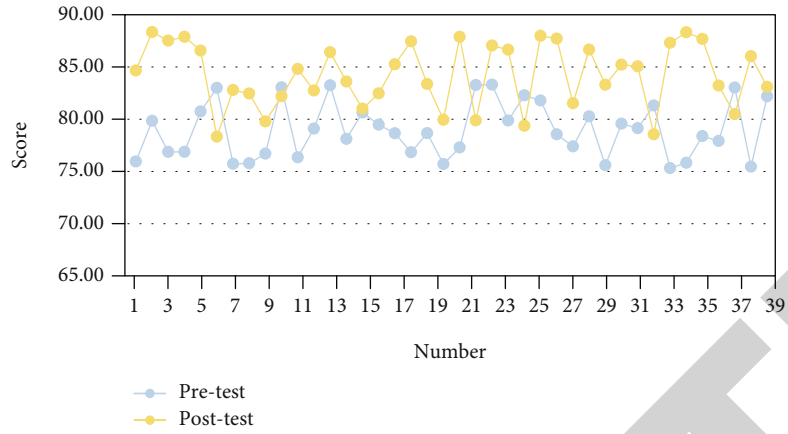

Figure 5: Comparison of the results of the test subjects before and after the test.

Table 3: Test result statistics of experimental class and control class.

Class	*N*	Mean	Max	Minimum	Standard deviation	Standard error of the mean
Control class	36	89.97	100	80	5.833	0.972
Experimental class	36	94.22	100	84	4.811	0.802

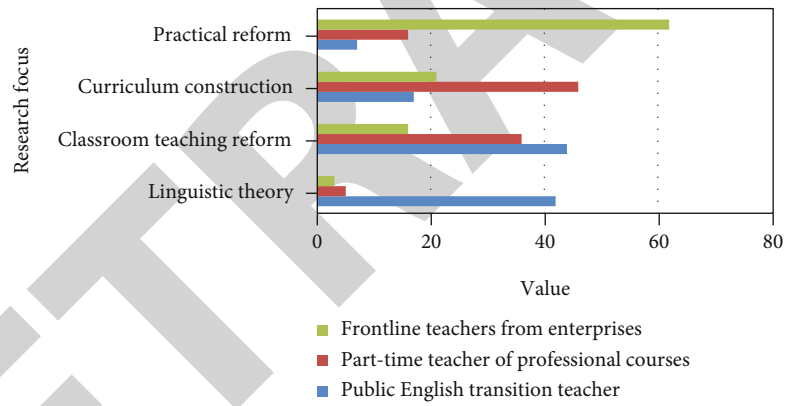

Figure 6: Distribution of scientific research focus of English teachers in different source industries.

content; in the management of learning process, the mean of student time planning (3.29) is greater than 3, and the self-monitoring average is 3.41 which is greater than 3, which shows that many students can self-monitor and reasonably plan online self-learning time; however, the situation of self-examination is not optimistic, and the mean of self-evaluation (2.71) and self-evaluation (2.94) is less than 3, which indicates that most students do not self-reflect and evaluate online self-study.

Figure 5 shows the comparison of the results of the test subjects before and after the test. It can be seen from the figure that after a period of study, the test subjects' English scores have improved. However, the English scores of the experimental class have improved more significantly. With the emergence of the gap between the English performance of the experimental class and the control class, let us clearly realize that computer-assisted teaching is more conducive to improving student performance. The gap between the overall average score and the excellent rate is constantly increasing, which means that the effect of English differential teaching under the guidance of computer network-assisted teaching on English learning performance is positive.

The test results of the two classes were analyzed by SPSS statistical software, and the results are shown in Table 3. The average score of the experimental class was 94.22, and the average score of the control class was 89.97; the highest score of the two classes was 100, but the lowest score of the experimental class was 84, which was higher than the lowest score of the control class of 80. Therefore, compared with the traditional teaching mode, the flipped classroom teaching mode based on micro lesson has better effect on promoting students' performance.

The distribution of scientific research focus of English teachers in different industries is shown in Figure 6. Professional English teachers who are transformed from public English teachers will still focus on language points in their

teaching. For scientific research, they mainly study linguistic theories and classroom teaching reforms; professional teachers are part-time teachers who teach industry English. In the process, more emphasis is placed on the explanation of professional knowledge and not much attention to language points, which has led to the problem of "focusing on professionalism and neglecting language" in many classrooms. The scientific research of these teachers is mainly about classroom teaching reform and curriculum construction; from industry English teachers on the front line of enterprises can integrate theory with practice in teaching and ingeniously integrate language knowledge and professional knowledge to teach students vividly. This part of teachers is the most popular among students.

5. Conclusions

After the integration of computer networks and foreign language education, the educational model has changed, and the traditional teacher-centered model has been broken. Foreign language education not only emphasizes the student-centered education model but also emphasizes the use of the latest information technology to promote students' independent learning of information. Taking into account the rapid changes in computer technology in the field of computer-assisted English education, teaching methods continue to introduce new knowledge, and the basic purpose of training teachers is to cultivate the ability of English teachers to learn for life. Because the content of the training is briefly explained, the teacher who receives the training can remember the content of the training. In order to enable trained teachers to continuously improve the level of lifelong education, apply the knowledge learned by trained teachers to encourage their own learning. After the integration of computer network and foreign language teaching, the structure of teaching materials has changed into three-dimensional and multimedia teaching materials. However, from the current situation, the three-dimensional form of teaching materials is reflected in the physical concept of the composition of the teaching materials, especially the network teaching content which has become a copy of the paper teaching materials, and the effective composition of the teaching materials should be that the network content is an extension of the paper textbook rather than a copy.

Data Availability

No data were used to support this study.

Conflicts of Interest

The author declares that there are no conflicts of interest regarding the publication of this article.

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