

Retraction

Retracted: Teaching Mode of Augmented Reality College English Listening and Speaking Supported by Wearable Technology

Wireless Communications and Mobile Computing

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Wireless Communications and Mobile Computing has retracted the article titled “Teaching Mode of Augmented Reality College English Listening and Speaking Supported by Wearable Technology” [1] due to concerns that the peer review process has been compromised.

Following an investigation conducted by the Hindawi Research Integrity team [2], significant concerns were identified with the peer reviewers assigned to this article; the investigation has concluded that the peer review process was compromised. We therefore can no longer trust the peer review process and the article is being retracted with the agreement of the chief editor.

The author does not agree with the retraction.

References

- [1] X. Ma, “Teaching Mode of Augmented Reality College English Listening and Speaking Supported by Wearable Technology,” *Wireless Communications and Mobile Computing*, vol. 2022, Article ID 2181512, 10 pages, 2022.
- [2] L. Ferguson, “Advancing Research Integrity Collaboratively and with Vigour,” 2022, <https://www.hindawi.com/post/advancing-research-integrity-collaboratively-and-vigour/>.

Research Article

Teaching Mode of Augmented Reality College English Listening and Speaking Supported by Wearable Technology

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With the development of modern technology, wearable technology has become more and more popular in the actual college English listening and speaking teaching mode. Wearable devices, as the name suggests, are smart electronic products that can be worn on the human body, such as smart glasses, smart watches, smart rings and smart clothing. Smart watches and ordinary electronic products are very different from wearable devices. Wearable devices give us a more intelligent and technological experience. Wearable technology has brought new changes and challenges to the realistic college English listening and speaking teaching mode. Wearable technology has become a hot topic and frontier in the field of science and technology. It has been widely used in education, medical, and industrial fields. It provides unprecedented convenience for people to learn, work, and live. Augmented reality technology is a kind of technology that skillfully integrates virtual information with the real world. After the simulation of computer-generated text, images, 3D models, music, video, and other virtual information, it is applied to the real world, and the two kinds of information complement each other, thus realizing the “enhancement” of the real world. This paper gives a brief overview of the definition of wearable technology, the classification, and main features of wearable technology and combines it with college English listening and speaking teaching mode to improve the classroom learning effect. Through the questionnaire survey, we know that wearable technology is a teacher’s teaching, and students’ learning provides great convenience. Wearable technology greatly enhances the learning and listening fun of students.

1. Introduction

In the past, we utilized a variety of certificates to evaluate the level of English. Now, we must not only have certificates but also whether we can communicate with foreigners in English. In the past, listening and speaking English [1–3] were actually used less. Teaching was mainly based on reading and writing in English, and listening and speaking were not taken seriously. Listening now and saying that you cannot meet the requirements may not be practical. This has prompted English teaching to shift from the ability to value examinations to the ability to apply English in practice. English teaching mistaking knowledge for English skills, over-valuing test scores in the learning process, in addition to the lack of systematic and high quality services for students training institutions all have spoken language causing this structure. Therefore, the quality of students learning

English is to read the results of the exam. In the past, the proportion of listening in the examination was not very high, and the spoken language was often not tested. The students lacked the motivation to learn spoken and listening. The oral and listening foundations before high school were not good. After entering college, students were generally not interested in speaking and listening courses. In addition, the study tasks of professional courses are relatively heavy, and most of the students’ oral English and listening are mainly in the classroom. The foundation is better, and the students who take the initiative to speak will get exercise, and the level will definitely improve. The gap has gradually widened over time, which is not conducive to the improvement of students’ overall oral and listening skills. With the advent of the twenty-first century, the deepening of reform and opening up, and China’s accession to the WTO [4], the society needs more and more foreign language talents

who have strong listening and speaking skills. These require us to improve the original listening and speaking teaching mode, activate the classroom atmosphere, enhance the interactivity of classroom teaching, and strengthen students' listening and speaking skills. Thus, the students' opportunities for language practice are increased, and the ability to communicate in language is developed: to meet the new needs of the times. A teaching model is a theory of designing and organizing instruction developed in the practice of teaching, and this teaching theory is expressed in the form of a parsimonious.

In recent years, information technology such as big data [5–7] and “Internet +” has developed rapidly. Various types of technology products are changing people's lifestyles. With the advancement of new sensor technologies [8–10] and Internet technologies [11, 12], wearable devices have gradually become the new darling of the technology industry. The definition of wearable technology [13–17] has evolved and enriched with the development of disciplines. Tom Lgoe defines wearable technology as a physical computing technology embedded in clothing and accessories, with a focus on communication and communication between users and devices. This is a real-time exchange of information, where users and devices are senders of information and the recipient. One of the inventors of wearable technology, Professor Steve Mann, further points out that wearable technology is user-controlled, with “user personal space” for operational and interactive continuity. This concept shows that wearable technology breaks the traditional way of interaction between people and computers. People are no longer limited to the form of mouse-click interaction, but operate in a more natural form to achieve human-machine integration. The MIT Media Lab sees wearable technology as a combination of multimedia technology [18–20], wireless communication technology, and computer technology, embedding these technologies into people's clothing and accessories, and thus creating a variety of interactions.

The direct manifestation of the development of wearable technology is the innovation of wearable devices. The earliest wearables appeared in the 1960s as a shoe-type wearer designed by Edward Thorp, a mathematics professor at the Massachusetts Institute of Technology. In the late 1980s, Steve Roberts assembled a bicycle called “Winnebiko II.” He installed a computer and a chord keyboard on the bike so that the user could compose while riding. In the 1990s, Steve Mann embedded a wireless camera into a headset that had a camera function that could send video images in real time [21, 22]. These images are processed by the background workstation and passed to the base station for subsequent augmented reality experiments. In 1997, MIT, Carnegie Mellon University, and Georgia Institute of Technology co-organized the first IEEE international symposium on wearable computers (ISWC), which was held annually since its inception has been held for 14 sessions. Since then, wearable computing [23–25] has begun to receive extensive attention from academia and industry and has gradually demonstrated important research value and application potential in many fields such as industry, medical, military, education, and entertainment. While VR headsets are produced by many manufacturers for computers, consoles, and mobile devices,

headsets are a product of wearable technology. Google Glass, launched by Google Inc., is an augmented reality smart phone that functions like a smart phone. The United States and the European Union have invested heavily in basic research on wearable computing. The National Science Foundation has also continued to fund a number of research projects in wearable computing in special projects such as human-centered computing. In addition, research institutes such as engineering colleges and science and technology institutes in universities in the United States, Russia, France, the United Kingdom, Japan, and South Korea have specialized laboratories or research groups that focus on the research of wearable computing technology. In 2001, Caudell believed that wearable technology refers to the mobile technology that is mobile, full-featured, and easy to operate. It can realize information interaction anytime and anywhere. In November 2013, the China Wearable Computer Promotion Alliance was established in Chengdu, and a corresponding meeting was held to discuss the development of China's wearable technology. On August 31, 2014, the director of the MIT Human Dynamics Laboratory, a pioneer in wearable devices, Alex Pentland, one of the world's seven leading big data experts, spoke on the third issue of Baidu “the BIG talk.” The future of wearable devices is to measure interactions with others. Pentland proposes possible future wearable scenes: (1) Workers can utilize their wearable technology to free their hands to work; (2) the government tracks the daily lives of residents and understands public data such as group behavior and health status; (3) doctors can understand the health of patients through wearable devices and avoid delays in treatment; and (4) in addition to health data such as heart rate, blood pressure, and blood lipids, the human nervous system is measured by a wearable device to understand whether the person's spirit is concentrated or even mentally active. In April 2015, the “2015 OFweek China Wearable Devices Summit Forum” focused on the core of the wearable industry under the Internet of Things 2.0 era, focusing on core technologies, cloud computing and cloud services, software and algorithms, industrial design, industrial capital, and other hotspots. The topic is to discuss the construction of the wearable ecosystem with the Internet technology (IT) industry. “In May 2016, according to International Data Corporation (IDC) global quarter wearable device tracking data, the total number of top wearable device manufacturers reached 19.7 million units, Compared with last year, it increased by 67.2%.” In the twenty-first century, wearable technology has been widely utilized all over the world. High-tech products such as smart watches and smart bracelets have been continuously developed and become the necessary electronic intelligent products for the current manpower. Wearable technology is at the forefront of current technology applications, and major IT giants are scrambling to develop wearable devices to capture the market. It is widely used in various industries. In recent years, wearable technology has gradually emerged in the field of education. It can realize functions such as interaction and information processing, which will bring great convenience to teaching.

In summary, we have learned that wearable technology has made great progress, and we can see that wearable technology has become relatively mature. The college English listening and speaking teaching mode combines wearable

technology and multimedia technology into one. The wearable technology reflects the high integration of human-computer interaction [26, 27]. Human-computer interaction refers to the process of exchanging information between a human and computer in a certain interactive manner by experimenting with a certain conversational language to accomplish a defined task. For wearable technology, the paper provides a detailed introduction to wearable technology in the second part.

2. Proposed Method

Wearable technology is a technology that studies how to integrate technology functions into people's daily personal belongings and intelligently design and develop wearable devices that meet user requirements and requirements. With its core technology and its own characteristics, wearable technology has a very broad application prospect.

2.1. Wearable Technology. In the 1960s, the Massachusetts Institute of Technology introduced the innovative technology of wearable technology. The wearable technology action process, also known as the human-computer interaction (HCI) (as shown in Figure 1), is a technique for studying people, computers, and their interactions. It has the advantages of portability, simple operation, low load, long working hours, and wireless data transmission. Wearable smart devices are so attractive because they can get rid of traditional PCs and smartphones. Wearable smart devices have custom new mobile network portals, and their data have exclusive personalized characteristics.

2.2. Classification and Main Features of Wearable Devices. The main features of wearable devices are summarized as follows:

- (1) Portable and wearable. The wearable device is compact, lightweight, portable, and simple; can be worn on the user like a dress; and can be used anytime, anywhere in daily activities
- (2) Focus on the user. The intelligentization of wearable devices is concentrated on the user-centered, all services to meet the needs of users
- (3) Intelligent interaction. The wearable device can push the cloud resources to the user while collecting the real-time data of the user and provide personalized services for the user
- (4) Free your hands. With a large number of modern sensing devices, wearable devices can transmit and exchange data through voice, image, optoelectronics, and other means. Figure 2 shows the structure of the smart wearable device
- (5) Highly integrated. In order to maximize the use of user space and prevent wearable devices from being too bloated, each wearable device is highly integrated

with a large number of micro devices due to the use of MEMS technology [28]. MEMS technology is a cutting-edge technology of the twenty-first century based on micron/nanometer technology, which refers to the design, processing, manufacturing, measurement, and control of micron/nanometer materials. It can integrate mechanical components, optical systems, drive components, and electrical control systems into a microsystem as a whole unit

- (6) Augmented reality. The wearable device can acquire virtual information data from the environment and the cloud and synthesize it into a real reality scene
- (7) Beyond the limitations of time and space. The teaching and learning activities of teachers and students have the added ability of wearable technology, which can break the limitations of time and space
- (8) Personalized task management. In order to enable learners to better manage their learning process, many wearable devices provide them with notes, calendars, emails, and other services
- (9) Diversified evaluation. Evaluating the learner's learning process and results is an important part of understanding the learning situation. With wearable technology and other advanced information technologies, learners can learn and live in a multi-faceted, real-time, and accurate trajectory. This kind of teaching and learning evaluation is also of great significance for the realization of precision teaching

2.3. Wearable Technology Assisted Teaching Mode. The auxiliary teaching mode refers to the reasonable arrangement of teaching content and practice methods. On the basis of ensuring the smooth progress of the classroom routine, it can promote a smooth way of teaching courses to establish a teaching relationship with students. It can improve the classroom atmosphere and have a positive impact on English teaching efficiency.

2.4. Wearable Device Interaction Mode. The touch-based interaction mode subverts the traditional interaction mode based on keyboard and mouse peripherals, but multi-touch also has greater limitations in the application of wearable devices. The interaction between gestures (non-touch), eye movement, gesture, and voice makes the wearable product more popular.

- (1) Voice interaction. The technical basis of voice interaction is speech recognition technology. Speech recognition technology is to enable the machine to understand the language commands and convert the speech signals into corresponding computer instructions, namely, natural language processing technology. Advantages of voice interaction are as follows: high efficiency of information transfer, freeing hands and eyes, low threshold of use, and helpful in conveying acoustic information. At present, the speech recognition technology has reached an

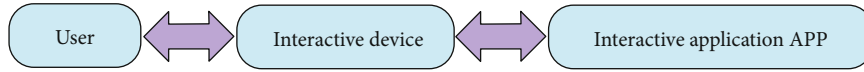


FIGURE 1: Schematic diagram of wearable technology.

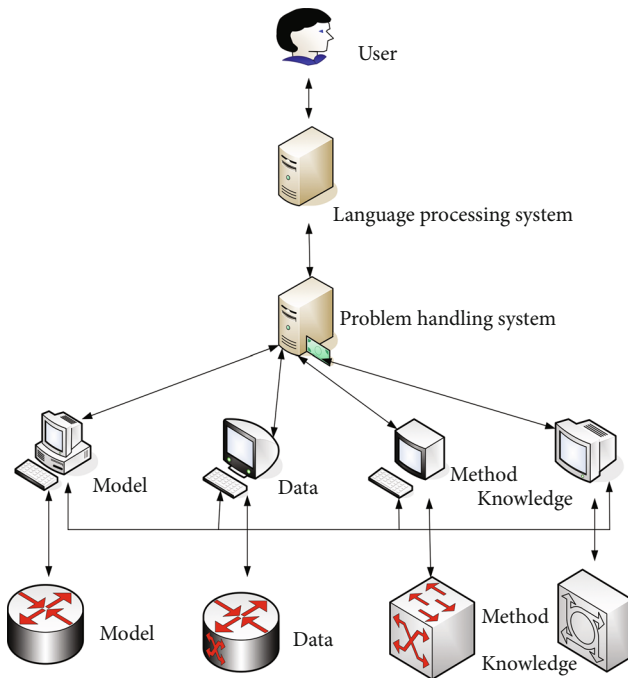


FIGURE 2: Smart support system structure.

unprecedented level with the research and development of deep learning algorithms in the field of machine learning, as well as the popularity of cloud computing and high-speed mobile networks

- (2) **Gesture interaction.** Gesture interaction is achieved by collecting the postures of different parts of the human body and utilizing computer graphics-related techniques to translate into computer instructions. In the gesture interaction device principle, the device has one or more sensors or cameras that monitor the user's movement, and when it detects movement corresponding to a command, it responds with an appropriate output. Gestures are one of the more important aspects. Gesture technology makes life easier for users, and they can interact with users without holding or clicking on devices

2.5. Educational Availability Analysis of Wearable Technology. In recent years, wearable technology has begun to be used in education. Wearable technology has added a new learning experience to people, expanding the relationship between people and technology, and prompting people to turn to explore the relationship between learners and learning experiences. The future of wearable technology in education depends on the educator's mastery of the technology's availability.

As a new generation of mobile devices, wearable technology products not only have the commonality that mobile devices can provide to users, but also have their own personality. The characteristics of wearable technology products are as follows: It is smaller in size and easier to fit; it can free hands and change the way of interaction; it has accurate and rich sensors; it has a strong ability to interfere; it has open interoperability; and it can break through the device gap.

There are currently few studies on the educational availability of wearable devices relative to other mobile devices. Bower and Sturman conducted an online survey of 66 experts in education technology around the world in an attempt to categorize the availability of wearable technologies. Therefore, we summarize the educational availability of mobile devices and wearable technologies in the above literature, combined with the latest features of wearable products, and propose 16 availability of wearable technology in the field of education (see Figure 3).

2.6. Overview of University English Listening and Speaking. Due to the development of economic globalization and the advancement of science and technology, worldwide communication is becoming increasingly popular. China, as the largest developing country in the world, plays a pivotal role in the international community. We need to communicate when we export our culture, which requires communication between both sides, and this is the important reason why we learn foreign languages. The most important of the four items is "listening" and "speaking," which are the prerequisites for communication between the two sides. In English with capital letters, we pay special attention to these two modules and do not focus on the transmission of knowledge and the pursuit of grades. We start with listening and speaking in class, create a foreign language environment for students, and cultivate students' motivation and interest in class. Students are actively encouraged to participate in classroom activities, to speak up and express themselves.

2.7. Augmented Reality Technology. At present, the main calibration technical solutions used in the AR system are all based on the plane calibration object, so the plane calibration is calculated. The homography matrix of the target and the target in the video is the key to realize the calibration algorithm.

$$a = \frac{a'}{o}, b = \frac{b'}{o}. \quad (1)$$

Formula (1) represents the relationship between homogeneous coordinates and Euclidean coordinates. When o is

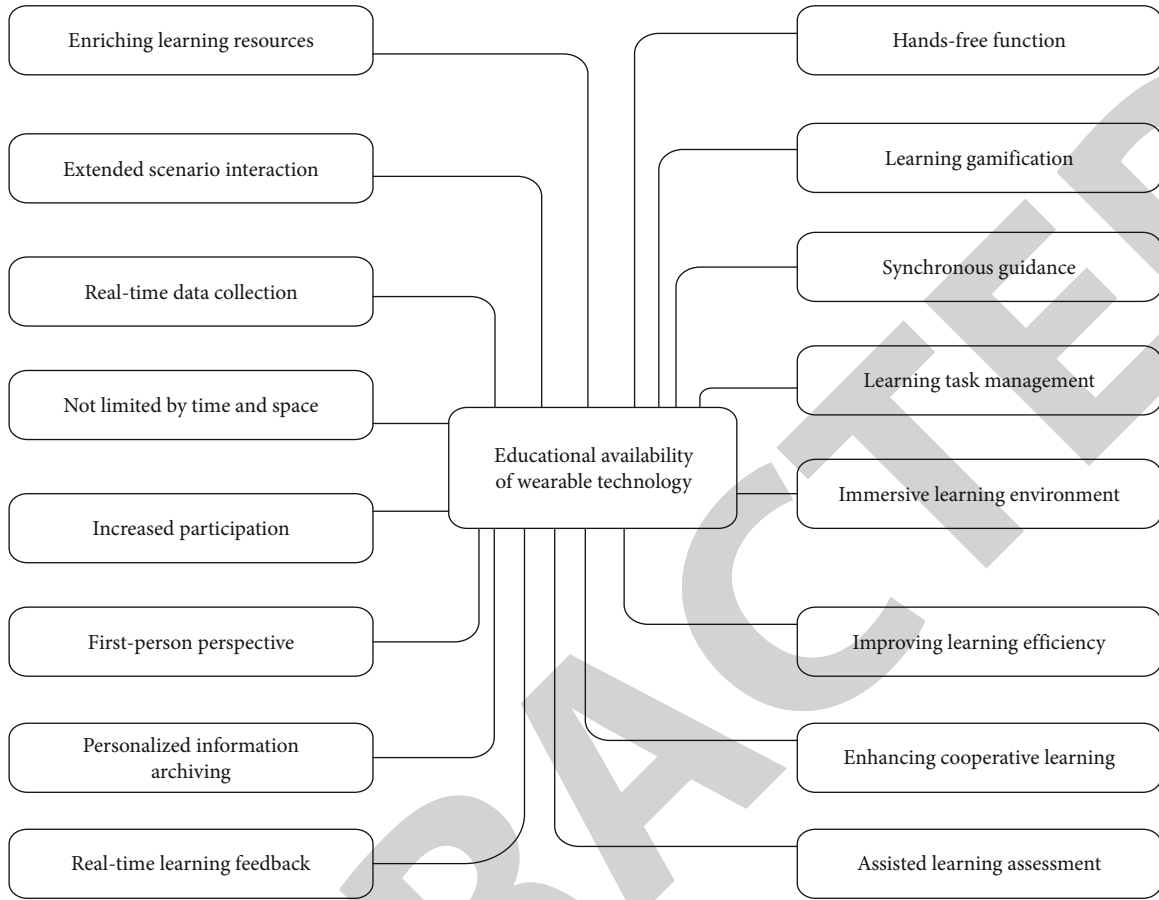


FIGURE 3: Education availability framework for wearable technology.

zero, it means that the point is infinitely far away, and Euclidean coordinates cannot be used at this time.

$$a = \frac{a'}{o}, b = \frac{b'}{o}, c = \frac{c'}{o}. \quad (2)$$

Formula (2) represents the coordinates of the target in the three-dimensional space.

$$g(a) = Qa. \quad (3)$$

Assuming that the correspondence between the coordinates of points in two two-dimensional spaces is a homography transformation, then any point in the two-dimensional space can be represented by Formula (3).

$$Y = \begin{bmatrix} g_{11} & g_{12} & g_{13} \\ g_{21} & g_{22} & g_{23} \\ g_{31} & g_{32} & g_{33} \end{bmatrix}. \quad (4)$$

Equation (4) represents a homography matrix.

$$\begin{bmatrix} a'_1 \\ a'_2 \\ a'_3 \end{bmatrix} = \begin{bmatrix} g_{11} & g_{12} & g_{13} \\ g_{21} & g_{22} & g_{23} \\ g_{31} & g_{32} & g_{33} \end{bmatrix} * \begin{bmatrix} a_1 \\ a_2 \\ a_3 \end{bmatrix}. \quad (5)$$

The points on the same plane can be represented by the two-dimensional coordinates of the plane, and the homography between different two-dimensional spaces the relationship is shown in Formula (5).

$$a' = \frac{g_{11}a + g_{12}b + g_{13}}{g_{31}a + g_{32}b + g_{33}}, \quad (6)$$

$$b' = \frac{g_{21}a + g_{22}b + g_{23}}{g_{31}a + g_{32}b + g_{33}}. \quad (7)$$

We can get Formulas (6) and (7) by expanding the coordinates of Formula (5).

$$Q(c, d) = \sum p(a, b) [T(a + c, b + d) - T(a, b)]^3. \quad (8)$$

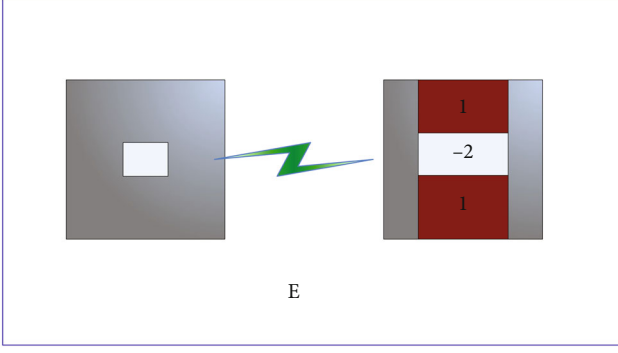


FIGURE 4: Second order partial derivatives of Gaussian filtered images.

TABLE 1: Distribution of experimental subjects.

Group	Options	Number of people	Proportion (%)
Grade	Senior	92	35.2
	Sophomore	91	34.7
	Junior	80	30.1
Gender	Female	124	47
	Male	139	53

Equation (8) represents the brightness of the target object in the image, where

$$T(a + c, b + d) = T(a, b) + T_a c + T_b d. \quad (9)$$

By substituting Formula (9) into Formula (8), we can get

$$Q(c, d) = [d, c] \begin{bmatrix} T_a^3 T_a T_b \\ T_a T_b T_b^3 \end{bmatrix} \begin{bmatrix} d \\ c \end{bmatrix}. \quad (10)$$

When the displacement change is small, we can simplify the expression:

$$Q(c, d) \cong [d, c] Y \begin{bmatrix} d \\ c \end{bmatrix}. \quad (11)$$

Formula (11) represents the range of the matrix. In actual use, we can solve the value by derivation:

$$Y = \sum_{(c,d)} p(c, d) \begin{bmatrix} T_a^3 T_a T_b \\ T_a T_b T_b^3 \end{bmatrix}. \quad (12)$$

The scale-space theory refers to the fact that when a machine vision system is used to analyze an unknown scene, the computer cannot predict the scale of the object in the image, so it needs to consider the description of the image at multiple scales at the same time to obtain the best scale of the object. The scale space theory is to perform scale

TABLE 2: Group statistics.

	Group	N	Mean	Student deviation	Student error mean
Score	CG	45	13.6532	1.97985	0.32652
	EG	46	13.1235	2.37539	0.39002

TABLE 3: Group statistics.

	Group	N	Mean	Student deviation	Student error mean
Score	CG	50	13.1320	1.5165	0.24352
	EG	50	14.2521	1.4856	0.23956

TABLE 4: Group statistics.

	Group	N	Mean	Student deviation	Student error mean
Score	CG	50	7.323	1.1231	0.1520
	EG	50	7.235	1.132	0.1585

TABLE 5: Group statistics.

	Group	N	Mean	Student deviation	Student error mean
Score	CG	50	7.5632	1.17100	0.19312
	EG	50	8.1235	1.05243	0.17523

transformation on the original image to obtain sequences in multiple scale spaces.

$$K(a, b, \alpha) = R(a, b, \alpha) * T(a, b), \quad (13)$$

where $R(a, b, \alpha)$ represents the Gaussian convolution kernel and different sizes of α have different smoothing effects on the image.

$$Q(a, b, \alpha) = (R(a, b, \eta\alpha) - R(a, b, \alpha)) * T(a, b). \quad (14)$$

Equation (14) represents the smoothing effect of different sizes α on the image.

$$U(f, \eta) = \begin{bmatrix} E_{ff}(f, \eta) E_{kk}(f, \eta) \\ E_{fk}(f, \eta) E_{kk}(f, \eta) \end{bmatrix}, \quad (15)$$

where $E_{ff}(f, \eta)$ represents the second order partial derivative of the Gaussian filtered image. Its image is shown in Figure 4:

Gaussian filtering is the process of weighted averaging over the whole image, where the value of each pixel point is obtained by a weighted average of its own and other pixel values in its neighborhood.

$$T(a, b) = \sum \sum T(a, b). \quad (16)$$

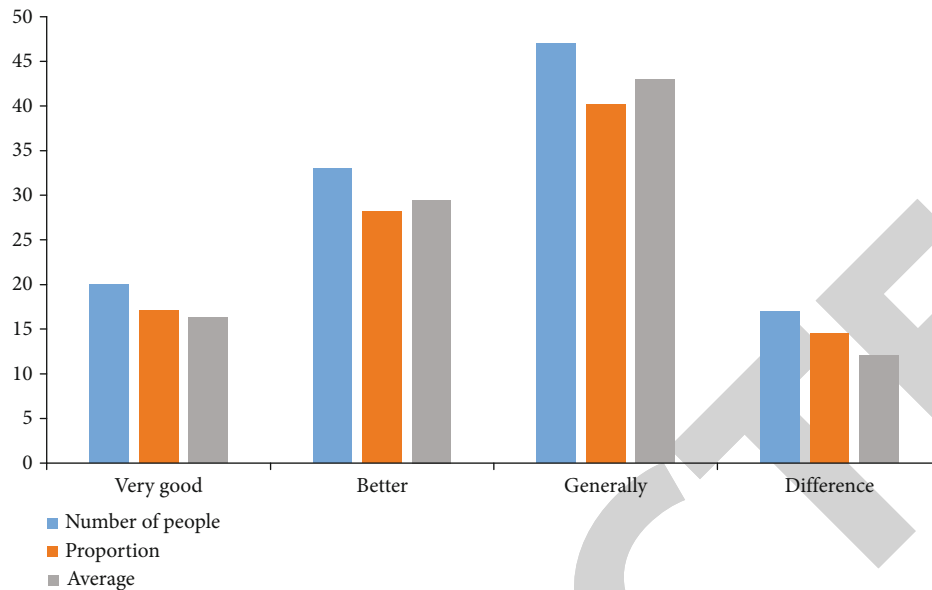


FIGURE 5: Ease of utilization survey results.

Formula (16) represents the sum of the pixel values of all points in the window. After calculating the integral map, the pixel points in the window of any size in the image can be obtained by 3 addition and subtraction operations.

3. Experiments

3.1. Inquiry Method. This study selected two classes of non-English majors in colleges and universities, 2018, to conduct an empirical study. One class is an experimental class (teachers use teacher-led, self-learning, wearable technology, college English listening, and speaking teaching mode), and one class is a control class (teachers use traditional teaching methods); the hearing test and oral test were conducted at the end of each semester of the two groups of subjects; it lasted for three semesters.

3.2. Statistical Processing. In order to verify that the college English listening and speaking teaching mode is better than the traditional teaching mode under the wearable technology, it can effectively improve the students' English level, especially the level of listening and speaking. After collecting the test scores, the data was analyzed by Spss 13.0 software.

4. Discussion

4.1. Hearing Level Test Results. Table 1 is the data analysis of the first semester of the control class and the experimental class. The CG represents the control class, the EG represents the experimental class, the N represents the number, the Mean represents the average value, and the Student Deviation represents the standard deviation of the students. The error mean represents the error average. It can be seen from the average score that the score of the experimental class (13.1235) is smaller than that of the control class

(13.6532), but the gap is not large. Therefore, the listening levels of the two parallel classes in the first semester are equivalent.

According to the data in Table 1, the subjects of this experiment were concentrated in the three grades of the university. There are 124 girls, accounting for 47%, and 139 boys, accounting for 53%. There are 92 students in the third grade, accounting for 35.2%; 91 students in the second grade, accounting for 34.7%; and 80 students in the first grade, accounting for 30.1%. It can be seen from the data that the distribution of the number of people in the three grades of high school is relatively uniform and the ratio of male to female is relatively reasonable. Therefore, the experimental sample is relatively scientific and representative.

Table 2 is the data analysis of the first semester of the control class and the experimental class. The CG represents the control class, the EG represents the experimental class, the N represents the number, the Mean represents the average value. Deviation represents the standard deviation of the students. The error mean represents the error average. It can be seen from the average score that the score of the experimental class (13.1235) is smaller than that of the control class (13.6532), but the gap is not large. Therefore, the listening levels of the two parallel classes in the first semester are equivalent.

Table 3 is the analysis of the listening performance of the experimental and control classes in the third semester. It can be seen from the average score that the average score of the experimental class (14.2521) is greater than the score of the control class (13.1320). It is indicated that in the third semester, the listening level of the experimental class has been significantly improved, which is higher than the performance of the control class.

4.2. Speaking Level Test Results. Table 4 is the data analysis of the oral syllabus of the control class and the experimental

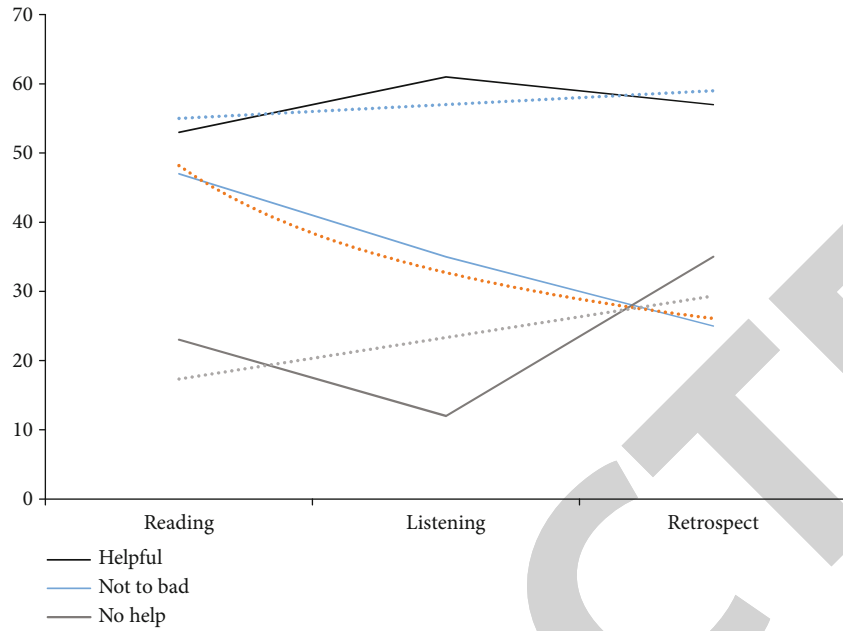


FIGURE 6: Results of the effectiveness survey.

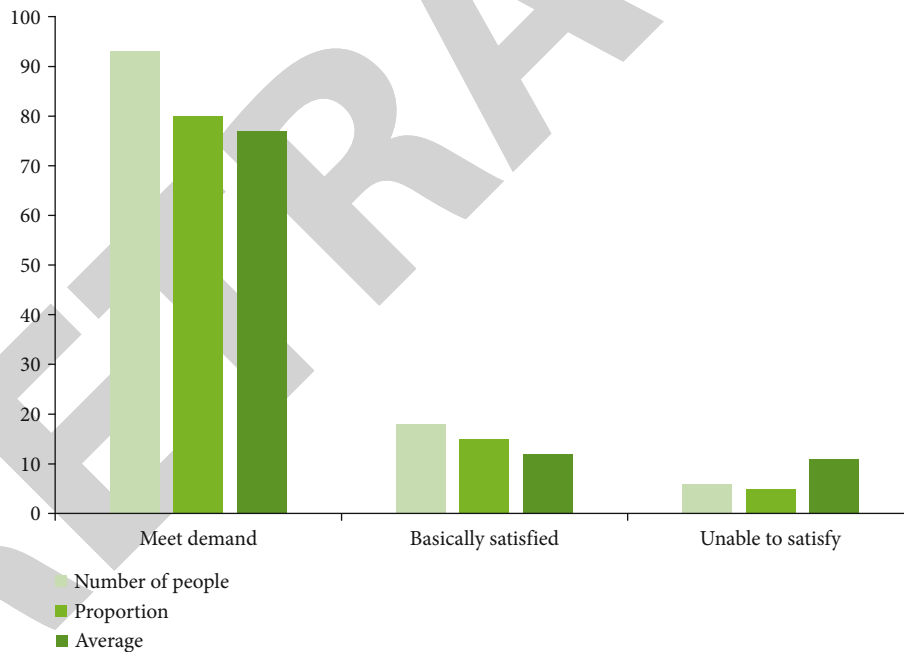


FIGURE 7: Whether the required results are met.

class. From the average score, it can be seen that the score of the experimental class (7.235) is smaller than the score of the control class (7.323), but the difference is not large. Therefore, the two parallel classes are equivalent in the first semester.

Table 5 is the analysis of the oral performance of the experimental and control classes in the third semester. It can be seen from the average score that the average score

of the experimental class (8.1235) is greater than the score of the control class (7.5632).

From the above data analysis results, it can be seen that the students in the experimental class and the students in the control class are basically at the same level. However, the progress of the students in the experimental class is much higher than that of the students in the control class. It indicated that the “teaching mode of college English

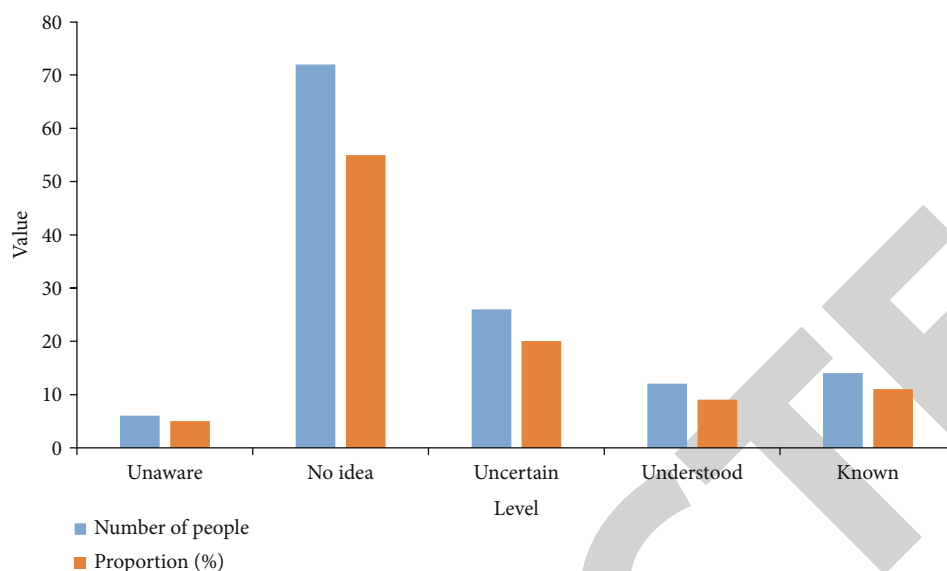


FIGURE 8: Satisfactory results.

listening and speaking under the wearable technology” constructed in this study was effective.

4.3. Analysis of Survey Results. In this article, we also conducted a questionnaire survey on two classes of non-English majors in 2018 colleges and universities. Based on the questionnaire, we know that most of the testers felt that wearable technology not only stimulated their interest in learning. At the same time, most of their testers found the wearable device very convenient to use, and only a few students found it inconvenient to use. The specific statistics are shown in Figure 5.

53% of the testers believe that wearable technology can help them read better; 61% of the testers feel that wearables can improve their English listening. At the same time, 57% of the testers affirmed that wearables inspired their review of college English listening and speaking. The specific data is shown in Figure 6.

In terms of satisfaction with utilization, 80% of the testers believe that wearable devices can meet their needs for reading and listening. 15% of the testers feel that they can basically meet the learning needs, and the remaining 5% of the testers believe that the application does not achieve reading learning. It can be seen the degree of expectation of learners on new English reading learning materials. The specific statistics are shown in Figures 7 and 8.

5. Conclusions

The use of wearable technology for English listening and speaking teaching has played down the boundaries between learning and entertainment, improved the relationship between teaching and learning, enriched the teaching themes, created vivid teaching scenarios, weakened the difficulty of learning, and thus improved the students. Therefore, wearable technology can build an independent teaching environment, and students with different interests and hobbies will form different learning communities. Profes-

sional and personalized teaching content and methods will be developed for students with the same interests and interests in the same community. Interest is the best teacher. Under this kind of teaching environment, students’ personal interests are cultivated, and their self-learning ability is continuously improved. Teachers can intuitively feel the students’ learning situation in the community learning environment based on wearable technology, so as to formulate teaching plans and change teaching contents. The intelligent community platform can also deliver learning resources in a targeted manner, which is convenient and efficient. Therefore, wearable technology can achieve open education and diverse teaching.

Data Availability

This article does not cover data research. No data were used to support this study.

Conflicts of Interest

The author(s) declare(s) that they have no conflicts of interest.

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