

## Research Article

# Teaching Improvement Strategies of University English Audiovisual or Speaking Course under the Background of Hadoop

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Under the background of “Internet plus,” the social application and penetration of cloud computing and big data have produced far-reaching impacts in many aspects in the field of education. Taking college English audio-visual teaching at present. However, there are still many problems in classroom teaching practice. Focusing on college English listening and speaking teaching, this study explores the teaching strategies of college English listening and speaking to improve college pupils’ comprehensive listening and speaking ability. With the rapid development of information technology, relying on information technology and using modern technologies such as multimedia to conduct three-dimensional audio-visual teaching can effectively improve the efficiency of audio-visual classrooms by 16%. Based on the background of Internet plus, this study tries to reconstruct the evaluation model of college English audio-visual courses by using multivariate and multidimensional evaluation models and combining quantitative and qualitative evaluation to improve the teaching quality and effect of college English audio-visual course.

## 1. Introduction

Over the years, in the teaching management system, the emergence of information-based teaching management systems has provided great convenience for university teaching management, improved the operating efficiency of university management, and reduced the cost of running a school. At present, information teaching management systems are basically equipped to varying degrees. These basically include functional modules, such as curriculum management for pupils and teachers, and performance management [1]. With the help of big data technology, we can establish a dynamic learning management system for each pupil, pay attention to each pupil’s dynamics in real time, and implement precise teaching, which lays a solid foundation and guarantees college English teaching reform [2]. As higher education is related to the future of pupils, there is a long way to go to improve the comprehensive application ability of college English in the situation of global economic integration and the real-time updating of social employment demand [3].

The traditional English audio-visual teaching mode is a learning mode in which teachers use players, tape recorders, or other equipment and play them in class, or pupils record them through the teacher’s explanation [4]. In this mode, the learning content is only reading or writing, or the teaching mode is boring, which inhibits pupils’ interest in learning or makes the whole learning process of audio-visual-oral lack of individuality, resulting in low-classroom efficiency [5]. Single teaching materials or fixed teaching methods make it difficult to teach pupils in accordance with their aptitude, resulting in pupils with a poor foundation, declining English scores, or reluctance to communicate orally, which leads to the general weakness of college pupils’ English listening or speaking ability [6]. At present, the teaching methods or forms of University English audio-visual-oral courses are relatively simple, or the traditional multimedia (such as computers, stereos, and projectors) is mainly used for teaching. The teaching form is mainly that teachers explain or read new words, or play audio or video. Pupils practice the test questions according to the played audio or video. After checking the listening answers, the teachers repeat the video

or audio several times or briefly explain the important knowledge points or difficulties in the materials. Finally, pupils practice related oral dialogue.

Improving English learning achievements for other language learners in Internet plus's time is docking with "Internet plus." Faced with massive learning resources, their learning methods have undergone tremendous changes, from the traditional mode to electronic learning, mobile learning, ubiquitous learning, intelligent learning, or deep learning [7]. These new learning methods provide a solid platform or foundation for human information exchange or innovation or development. In this context, clarify the teaching objectives, collect, or organize network resources. Teachers start with the content of teaching materials, analyze all kinds of resources needed for teaching with the guidance of teaching objectives, or then collect or collate them through the Internet in a targeted manner so that the network resources can actually meet the teaching needs or do not deviate from the teaching materials [8]. The Internet is rich in resources, including a large number of high-quality teaching resources, which can be effectively used in college English teaching as long as they are reasonably developed or utilized. Under the background of "Internet plus," teachers adopt the teaching goal as the guidance, collect or sort out online teaching, use online resources to establish a special teaching database, or build a networked teaching environment for college English teaching so that pupils can enjoy the learning benefits brought by the Internet. "Internet plus" education promoted the birth of new teaching methods, such as microclass, flipped classroom, multimedia teaching, and online teaching, all of which have advantages that traditional teaching methods do not have [9]. In college English teaching, teachers can integrate the above teaching methods, enrich English teaching forms, or construct a new form of English teaching with these teaching methods. By changing the innovation of weak links in the past and relying on the advantages of the era of information technology or big data, we can enrich the content or mode of English teaching evaluation, so as to build a scientific, diversified, and efficient evaluation index system.

- (1) This study adopts the path of University English audio-visual or speaking precision teaching under the background of Hadoop, or the effectiveness evaluation model of University English audio-visual or speaking precision teaching under the background of Hadoop
- (2) This study aims to optimize the course content, clarify the teaching objectives, create a good language learning environment, enrich teaching methods, or adopt diversified modern teaching modes

Section 3 describes the significance of the integration of information technology into University English teaching. This section mainly looks at the current external developing environment or the influence of various technological developments on University English. Section 4 is the method of teaching evaluation, which states that English teaching should pay more attention to the evaluation of innovation or

practice, break through the previous mastery of the original knowledge, or strengthen the proportion of self-dialectic or self-evaluation. Section 5 is about the future direction of University English teaching.

## 2. Related Work

The development of information technology has pushed us into the era of Hadoop. Under the background of Hadoop, a large amount of English teaching data or resources can be collected or utilized, which provides resources or technical support for the development of individualized University English teaching or can well solve the problem that current University English teaching lacks pertinence or effectiveness. Pupils' learning methods or states are also different under different forms of teaching organization [10].

Tan thinks that pupils' application or exploration of mobile application assistant software or platform is insufficient; it is inefficient for pupils to rely on information equipment to learn in class or to interact with teachers; and teachers' ability to control mobile-assisted language teaching or the evaluation strategy of pupils' comprehensive ability of seeing, hearing, or speaking in the intelligent classroom is immature enough [11]. Wang believed that, under the influence of traditional exam-oriented education, there has been long-term cultivation of listening or speaking, rereading, writing, or translating abilities in University English teaching [12]. Zhang L believed that the class hours of University English audio-visual or speaking courses are small or the class capacity is large, so if teachers want to complete the relevant teaching tasks within the limited class hours, pupils will naturally have fewer opportunities to participate in listening or speaking practice [13]. Li believes that it can stimulate pupils' motivation or interest in language learning, change their learning concepts, or encourage pupils to truly realize the importance of audio-visual courses from the bottom of their hearts, so as to actively learn or actively cooperate with related teaching activities [14]. Long believed that the establishment of a diversified evaluation system of University English audio-visual-oral courses is mainly to further test the learning effects of pupils or the teaching achievements of teachers. A perfect evaluation system of University English audio-visual or oral courses can help English teachers find or solve the problems in the teaching process of audio-visual or oral courses in time to realize the mutual learning between teaching and learning [15]. Othman et al. believed that the quietly coming of the era of Hadoop has had a strong impact on University English education for cultivating applied or innovative foreign language talents [16]. At present, in University English teaching, the teaching content depends heavily on textbooks. Teachers rely on English textbooks to carry out various teaching activities, or the teaching emphasis is also placed on the explanation of various vocabulary, grammar, sentence patterns, or articles in textbooks. As a result, pupils' knowledge of content is limited to some extent, or the cultivation of comprehensive English quality is not balanced

enough. In particular, different college pupils have different majors or future developed goals, or expect richer or more targeted teaching contents to meet their individualized needs. Therefore, it is essential to use data technology or resources to select individualized teaching content [17].

In the past, most of the teachers in English teaching only taught step-by-step mechanically, or the teaching organization form was often unchanged, so pupils' interest in learning was not high, or individualized teaching was difficult to realize. Therefore, according to the scientific application of Hadoop or other analytical tools, teachers should make an overall analysis of pupils' situations or adopt a personalized teaching organization form to effectively incorporate pupils of different levels into the teaching organization system, so as to improve the teaching quality or pertinence. It is necessary to combine the advantages of Hadoop technology in English teaching or explore effective countermeasures to implement personalized teaching.

### 3. Integration of Hadoop or University English Teaching

*3.1. Analysis of the Significance of the Integration of Information Technology or University English Teaching.* In the current external development environment, with the development or popularization of various technologies, English plays an increasingly important role in various fields, such as economic activities, cultural exchanges, education or teaching, and people's daily work or life. As an educator, it is necessary to combine the developed trends of the times, establish talent training objectives, take applied talents as the training core, or adjust teaching content or teaching methods. Let pupils' attitude towards English learning change from the inefficient way of memorizing words or grammar in the past or gradually take English application as the learning goal so that pupils can not only master the theoretical content of English words or grammar but also strengthen their language application ability, improve their confidence in the language expression, or speak fluent or standard English [18].

The functional advantages of using technology assist teaching or improve the efficiency or quality of classroom teaching. In the era of Hadoop, the development of information technology is accelerating, but the combination of information technology or English teaching activities is still relatively short, which also causes many teachers to apply information technology to English teaching, but the actual teaching effect or quality has not reached the ideal state. Because of this phenomenon, educators realize that the method for integrating information technology with English teaching still lacks systematicness. Therefore, if we want to make better use of information technology to improve the English teaching effect, we must find the key to the integration of the two, that is, how to introduce information technology in a timely or appropriate way in actual teaching, or what is the method of introduction or the interaction between teachers and pupils. All these problems require teachers' comprehensive planning or detailed thinking to formulate an efficient teaching plan suitable for pupils' development. If teachers lack awareness of the integration of

information technology or English teaching or still carry out English subject teaching according to traditional teaching methods, they will not be able to assist teachers in effectively completing their teaching tasks or objectives. However, the integration of modern information technology or English teaching can provide services for building efficient classrooms. Learn English through the Internet. Compared with the past book learning methods, not only the learning content is enriched but also the learning channels are exposed. Pupils can use software to learn words, take online open classes or overcome difficult or important knowledge with the help of microclasses; thus, the learning efficiency is significantly improved. Moreover, the diversification of online learning also brings more novelty to pupils, which is conducive to mobilizing pupils' learning initiative, enabling them to learn English more actively, thus achieving higher learning efficiency, as shown in Figure 1.

*3.2. University English Audio-Visual-Speaking Teaching Combined with Hadoop Technology.* Affected by long-term quality education, both teachers and pupils regard learning English as a task or learning English as just to pass the exam. Moreover, most of the exams are written, lacking the test of oral learning, or the proportion of listening is mostly less than 20% [19]. With the advent of the Internet era, the demo for English listening or speaking professionals has increased dramatically. Traditional English teaching has trained many experts in reading or composition, which cannot meet modern needs. Besides, universities can introduce new teaching modes such as the Internet in time, resulting in poor teaching effects of University English listening, speaking, or listening. With the emergence of rapid development of corpus technology or the establishment of large-scale corpora, it is possible to acquire knowledge from corpora, followed by some statistical methods based on corpora. The main methods are the boundary statistical method, the example-based method, and the mutual information method. The example-based method is also called the memory-based method or similarity-based learning method, which is a guided machine learning method based on classification. It stores a large number of example sets according to specific tasks, or each example is associated with a feature vector, or it also corresponds to a certain class, that is, the solution formula as shown in the following:

$$\triangleright(X, Y) = \sum_{I=1}^N O(xi, yi). \quad (1)$$

Choose a feature that appears many times to correspond to multiple classes, that is, when its solution is ambiguous, as the result.  $X$  or  $y$  are characteristic vectors to be compared, or  $I$  of these two vectors are publicized as follows:

$$Y(xi, ti) = 0 > if (xi = ti). \quad (2)$$

If there is more chance that they appear together than they do at room, then the higher the mutual information value is, the greater the possibility of or forming a phrase, or the lower the mutual information value, the greater the

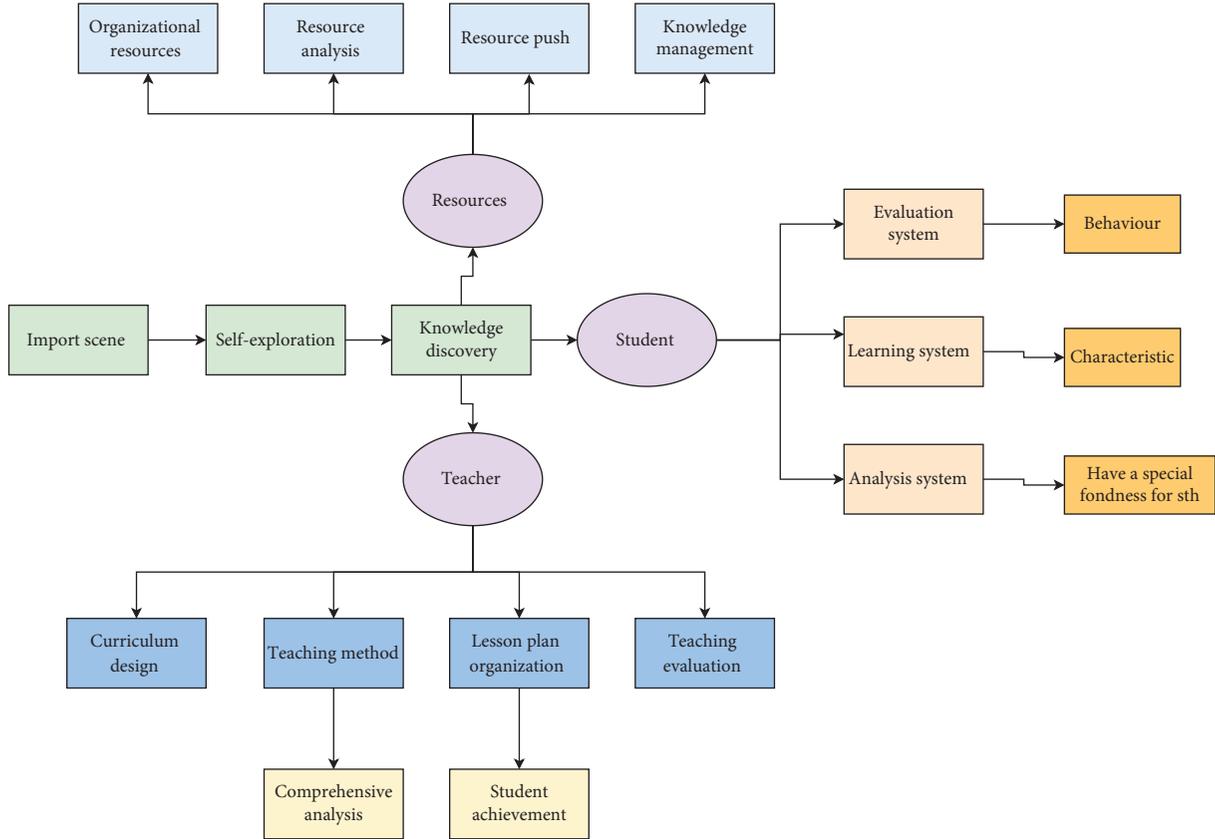


FIGURE 1: Learning efficiency analysis diagram.

possibility of a phrase boundary. Because a phrase is not necessarily composed of only two words, it is necessary to calculate the mutual information within a symbol combination. The theoretical basis of phrase boundary division based on mutual information is that, in one, the position of the phrase boundary is between a pair of markers with the smallest local generalized mutual information value. The calculation formula of generalized mutual information is as shown in the following:

$$\text{GMI } N_{I(I+J)}(X_1 \dots X_I, Y_1 \dots Y_I). \quad (3)$$

The mutual information method is a method based on boundary statistics. Mutual information is a concept in information theory, which is used to measure the interdependence between two signals in a message. Binary information is the formula of the probability of two events, such as

$$MI(X, Y) = IB \frac{P(X, Y)}{P(X) \times P(Y)}. \quad (4)$$

In this algorithm, each feature is given an information gain, or when the eigenvalue is known, the uncertainty of the class solution corresponding to the eigenvalue is reduced by the information gain:

$$H(D[f]) = \sum pibq. \quad (5)$$

The most important thing for language learning is a good communication environment. The teaching or learning of

University English audio-visual or speaking is mostly in the voice classroom. Due to poor teaching equipment, tight seats in the voice classroom, too many pupils, and less than 30% of the audio-visual or speaking classes with less than 50 pupils, it is difficult for teachers or pupils to communicate effectively, pupils' oral problems to be corrected in time, or their listening or speaking abilities to be improved. Moreover, over the years, universities have been exploring their enrollment. As a public basic course, audio-visual-speaking is hard to be effectively improved in a short time due to the huge pressure of teaching equipment or venues [20], as shown in Figure 2.

It can be seen from the figure that, with the continuous enrollment expansion of universities, audio-visual or speaking as a public basic course, the huge pressure of teaching equipment or venues has led to a sharp decline in the number of pupils, constructing the data resource base of University English audio-visual-oral learning. It is necessary to establish a learning platform for English audio-visual-speaking majors in universities, which is divided into four major sections: listening, speaking, reading, and writing, or each section uploads specific learning resources, which should be updated dynamically [21]. Each pupil can download the learning materials that meet their own learning situation on the platform at any time by registering an account on the mobile device side, to meet the individual learning needs of each pupil. Thirdly, assist teachers in teaching activities. Through the Hadoop technology to build

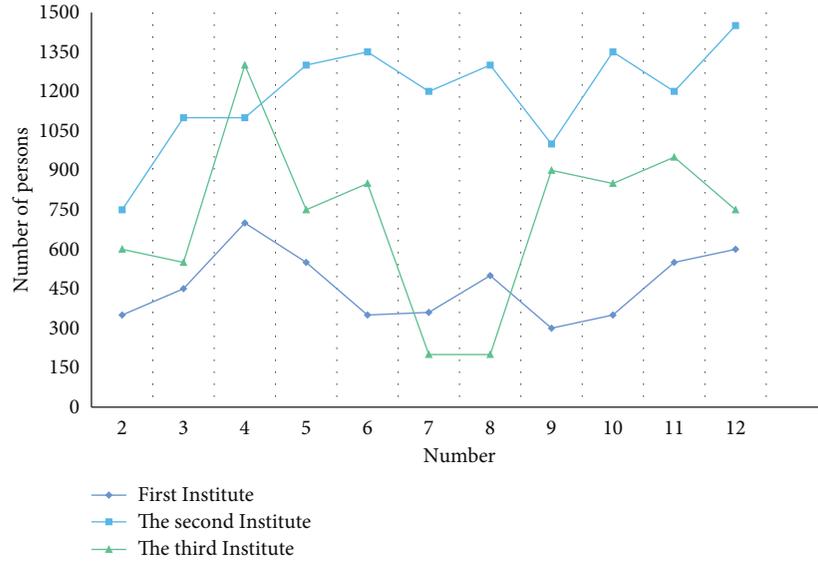


FIGURE 2: Audiovisual number of university English pupils.

a database or establish each pupil’s learning ledger, teachers can learn about each pupil’s learning status according to the data. For example, if a pupil’s reading or writing scores are high, but his listening or speaking scores are not satisfactory, the teacher will either strengthen the pupil’s listening or speaking learning for sex or urge the pupil to pay close attention to listening or speaking practice. See Table 1 for the number of pupils in college audio-visual classes.

TABLE 1: Table of number of pupils in college audition class.

Class number	Investigate colleges or universities	Proportion of (%)
Less than 30 people	16	8.56
Between 30 or 50	35	9.63
More than 50	50	11.33

#### 4. Effectiveness Evaluation Model of University English Listening, Speaking, or Listening Precision Teaching in Hadoop Context

College English audio-visual speaking is a subject with strong application or practice. Secondly, in the era of “Internet plus,” pupils become the main body of teaching, or teachers can answer questions based on individual pupils’ requirements to make the teaching evaluation more scientific, objective, or comprehensive. The teaching objectives of college English audio-visual speaking courses are only generally included in the overall teaching objectives of college English. The short-, medium- or long-term teaching objectives of listening practice or oral training are not set separately, which stimulates pupils’ motivation or interest in language learning. Change the learning concept or urge pupils to truly realize the importance of audio-visual or oral courses from the bottom of their hearts, to actively study or actively cooperate with related teaching activities. In actual teaching, the lack of a sound or reasonable listening or oral testing mechanism or the diversification of evaluation subjects in the evaluation system can help teachers or pupils carry out teaching practice to the maximum extent [22]. The evaluation mode is shown in Figure 3.

The algorithm consists of two parts: one is to put the instance in the decision tree, and the other is to extract the classification information from the tree. In the process of establishing a decision tree, the plum path between nodes

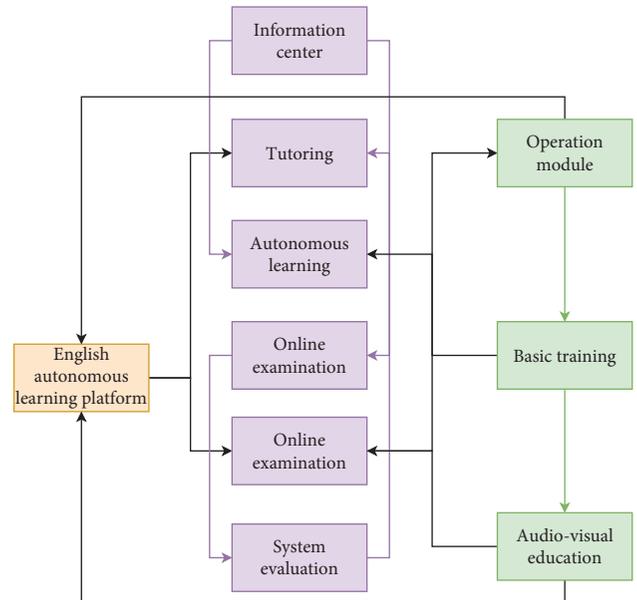


FIGURE 3: Evaluation mode.

represents an instance, or all nodes contain a test item. Based on the default classification value of a certain feature or a classification identifier representing that point, the order of the feature of the instance to be tested in the tree is determined, which is fixed in advance. According to the vertebra, the most important feature to determine its

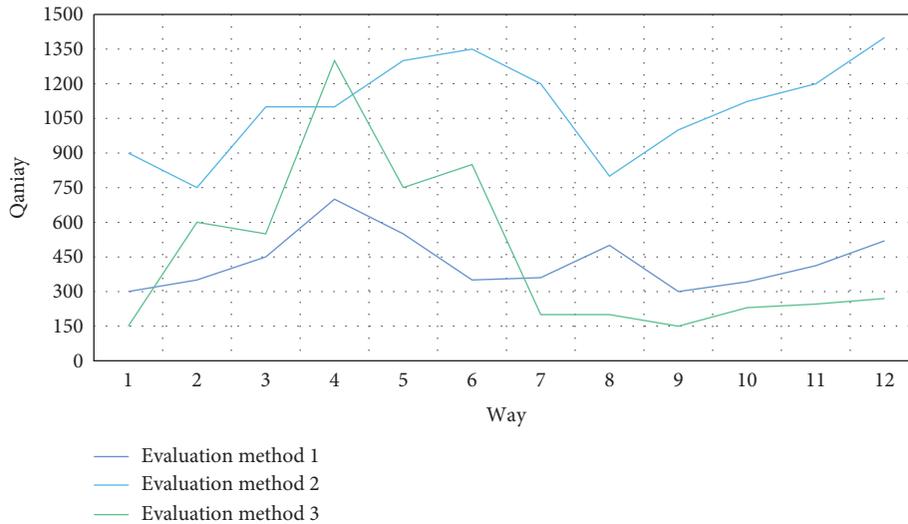


FIGURE 4: Number of diversification evaluation methods.

classification is placed on the first level. The default classification information corresponding to each characteristic value was calculated in advance. In the search process, compare the feature value of the sentence to be marked with the features of the layers in the tree. For example, when you go to the leaf node, take the classification value corresponding to the leaf node; otherwise, take the default value. The algorithm prunes the tree by information gain, so the time complexity is obviously reduced:

$$C(X) = \text{EXP} \left[ \sum UX - Y \right]. \quad (6)$$

English teaching should pay attention to the evaluation of pupils or practice, break through the previous mastery of the original knowledge, or strengthen the proportion of self-dialectic or self-evaluation. Through the implementation of diversified evaluation methods, pupils can better reflect on their autonomy, or their interest or subjective initiative will be greatly enhanced. Teachers should further increase the proportion of guiding evaluation or make effective use of constructivism theory so that different levels or types of cultures can rub against each other to produce due effects, or lay a solid foundation for the quality of training applied English talents. The teaching evaluation should also highlight objectivity, accuracy, or scientificity, promote pupils' cognitive level in coordination, or focus on changing pupils into the main position of evaluation so that pupils can really improve the effect of precision teaching through a sound evaluation mechanism, as shown in Figure 4.

The seven attributes of the English teaching comprehensive ability evaluation system are intelligence cultivation, personality-oriented teaching, motivation or attitude, social environment, learning environment, natural environment, or capital investment. The evaluation of teachers' teaching quality is an important aspect to evaluate the teaching effect in colleges or universities, an important basis for the evaluation of teachers' professional titles or a major component of teaching management in colleges or universities. At present, the evaluation methods of teaching quality are

mainly based on statistics or simple calculations; that is, statistics, a collection of pupils' evaluations or achievements, or weighted calculation of teachers' scores as the evaluation index of their teaching quality [23]. However, this method is not scientific or authoritative, and a large amount of data collected in the teaching process has not been fully mined. A more scientific method is to fully mine all kinds of data through the method of association rules or get valuable information as the evaluation basis of teachers' teaching quality. At present, all or most of them contain functional modules such as pupil management, teacher management, course management, or achievement management [24, 25] (Figure 5).

You can also use the decision tree method for data mining. Because the research goal is the passing situation of CET-6, you can take "CET-6 passing situation" as the category attribute of the sample set, with two values, "passing" and "failing." Run the decision tree algorithm program, and finally, you can get a decision tree formula such as

$$h(t) = h(h.t), h(2) \cdot 3. \quad (7)$$

The constraint parameter index analysis of English teaching ability evaluation analysis was constructed or the quantitative recursive analysis method was adopted to analyze the Hadoop information model of English teaching ability evaluation. In order to improve the quantitative evaluation ability of the English teaching level, an English teaching ability evaluation method based on Hadoop fuzzy K-means clustering or information fusion was proposed, which transformed the problem of English teaching ability evaluation into the problem of solving the objective function of K-means clustering as the least square estimation. The least-square problem is to find the consistent estimate of the resource constraint vector  $\beta$  of the English teaching ability assessment so that  $Y - X\beta$  can be minimized, where  $F$  norm is the norm of European generation. The entropy characteristic formula of English teaching ability constraint characteristic information is

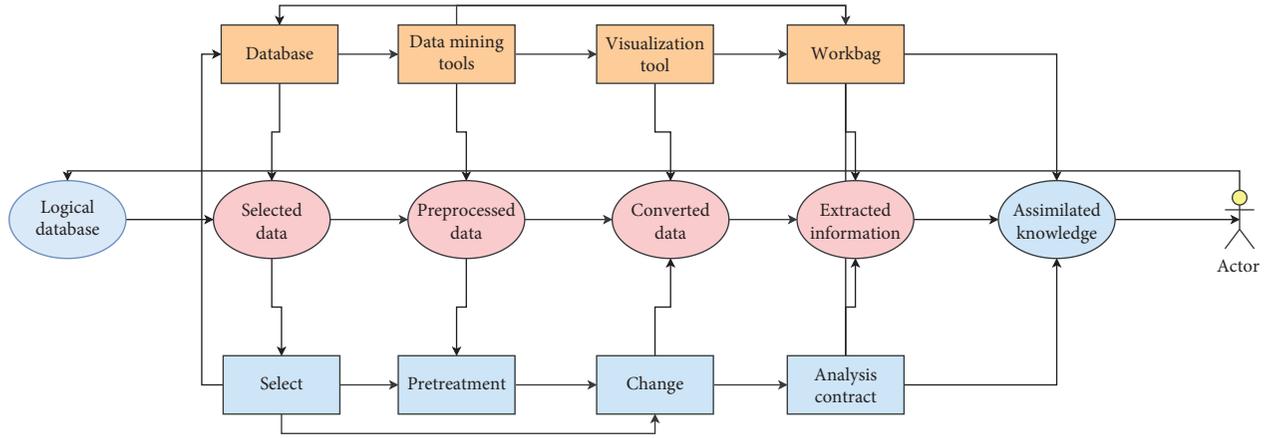


FIGURE 5: Basic management information.

$$P = 1 - \frac{1 - P}{P} = \frac{P + P - 1}{P} = \sum n = 1. \quad (8)$$

Under the background of “Internet plus,” University English teachers should combine the Internet with traditional teaching, enrich or export English teaching resources by using network resources, construct new forms of English teaching by means of microclasses, flipped classrooms, multimedia, etc., or promote communication between teachers or pupils by means of online social platforms, to create a new form of English teaching, improve the informatization or networking level of English teaching as a whole, or make English teaching better adapt to modern education. At the same time, University English teachers should keep pace with the times, constantly learn about “Internet plus” education, constantly learn new teaching ideas or methods, or improve their teaching ability to meet the needs of English teaching under “Internet plus.” With the support of an online social platform, teachers can share high-quality courseware with pupils, assign holiday homework, or guide pupils to learn after class. Pupils can receive teaching resources from teachers, you can reflect on your own learning situation with teachers at any time, or communicate with teachers online when you encounter problems you do not understand, as shown in Table 2.

We need to adopt the Hadoop information fusion method to construct the interdomain classification objective function of the distributed Hadoop information flow for English teaching ability evaluation; that is, the Hadoop clustering objective function is

$$J(U, V) = \sum 4 \sum N(d)^2. \quad (9)$$

The constraint parameter index analysis model of English teaching ability evaluation or analysis is a developed open source project, which is an enhanced language implementation based on the algorithm. The algorithm is encapsulated into a core module; then, a series of peripheral modules are added to export its functions. The rule file for the project is in a custom format. Basic semantics are defined by a language. Add feet or semantic modules. Developers can also customize their own dedicated semantic modules

TABLE 2: Learning situation.

Attribute	Confidence level			
Gender	25.2%	53.7%	60%	20
	23%	65%	50%	54
Education	23%	35%	42.5%	56
	25.6%	56%	53.2%	45
Title	26.3%	25%	20%	67
	21.4%	45%	50%	35
Teaching age	82.5%	50%	70%	90
	31.5	40%	90%	45

according to their needs. Each rule file includes a unique rule set, or the rule set includes one or more rules. Each rule includes one or more parameters. These parameters are used to judge or perform corresponding operations in the conditions of the rules. The parameters correspond to a class, which will be automatically instantiated when the working memory is created. Each rule includes one or more conditions or the last action. The formula is

$$X = x(i + n \triangleright = h) = h[z(l + n)] + \phi. \quad (10)$$

## 5. Direction of University English Audio-Visual Speaking Teaching

At present, the role of Hadoop in economic and social development or education is increasingly prominent. People can get valuable information through Hadoop analysis, which can provide guidance for the smooth development of various activities. Hadoop analysis usually involves deep data mining or analysis, not just simple statistics or calculations. Therefore, the analysis of English education data will have more advantages in terms of accuracy and intelligence. Over the years, the rapid development of artificial intelligence has also provided new technical capabilities for Hadoop analysis. The development of artificial intelligence has greatly promoted the development of computer hardware performance or software technology or provided technical support for fast or accurate processing of massive data. Therefore, future Hadoop processing cannot be

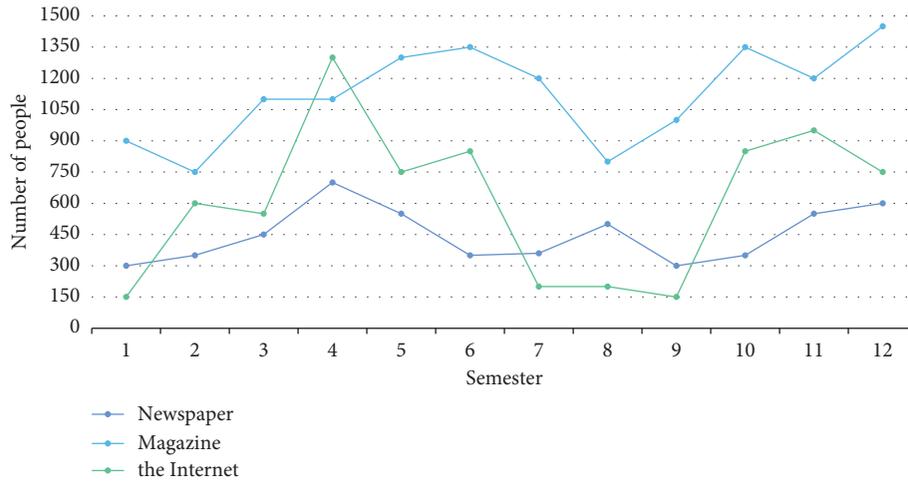


FIGURE 6: Different ways of pupils' knowledge acquisition.

separated from artificial intelligence, or the application of Hadoop in English personalized education will inevitably improve the intelligence level of personalized teaching.

The primary task of implementing individualized English teaching under the background of Hadoop is to formulate individualized teaching objectives so that teachers can perform teaching design around accurate teaching objectives. First, teachers should make use of Hadoop technology to investigate or count pupils' personal status or English learning status, such as majors, English basics, English specialties, learning ability, hobbies, and future development direction, and then, summarize or analyze the collected data or use it as the basis for setting teaching objectives to ensure that the teaching objectives are more personalized. Secondly, teachers should analyze the teaching content, formulate teaching objectives at different levels according to pupils' different situations, and express different subobjectives according to pupils' individual learning or development needs, to guide pupils to diversify their development. For example, when relying on textbooks to cultivate pupils' reading ability, the public goal is to emphasize pupils' reading or mastering the content of the text or to develop their basic reading ability. The stratified goal requires pupils to choose appropriate reading materials according to their hobbies or professional development direction, which can be selected from newspapers, magazines, the Internet, or other resources. The amount of knowledge acquired by different pupils from newspapers, magazines, or the Internet is different, as shown in Figure 6.

Whether the choice of teaching method is scientific or effective, it will greatly affect the implementation effect of various teaching activities or the smooth realization of teaching objectives. To ensure the smooth implementation of English personalized teaching, we must change the previous unified or general teaching methods or make full use of Hadoop technology to innovate the teaching method system to meet the implementation requirements of English personalized teaching. The evaluation methods of blended teaching should also refer to the teaching steps, design scientifically or rationally, or make comprehensive use of

various evaluation methods. Before class, pupils conduct autonomous learning or online learning on the online platform. Pupils' self-evaluation or peer-to-peer evaluation can be used to test their achievements in autonomous learning or online learning. Teachers can also evaluate pupils according to their learning reports on the network platform, online discussions, etc., or can combine the evaluation of pupils or pupils. In class, teachers can evaluate pupils according to their classroom performance, such as through classroom tests or questions. After class, teachers can also conduct mutual evaluations between teachers and pupils, or between pupils and pupils according to the learning situation of the pupils' online platform. In the mixed teaching mode of University English, the combination of summative evaluations or formative evaluation, teacher evaluation or pupil evaluation, and paper evaluation or time-space evaluation forms a pluralistic or three-dimensional teaching evaluation system. The number of systems is shown in Figure 7.

Mobile language learning mode refers to the introduction of the "Internet plus" concept on the basis of the traditional University English teaching mode to promote "intelligent classroom teaching." Mobile-assisted language teaching mode does not only provide classroom teaching to machines but also combine all kinds of systematic education, or teaching theories, or teaching psychological knowledge summarized by predecessors, with the idea of computer-based teaching, so that mobile-assisted devices can help teachers design more colorful classrooms to meet pupils' learning needs. This is one of the backgrounds for the development or practical exploration of a mobile-assisted language learning mode. Besides, structuralism or cognitivism also regards pupils' self-inquiry or self-learn construction as the core of subject teaching. As an important part of English classroom teaching, a successful teaching introduction can create a good start for the follow-up teaching. Therefore, teachers must pay attention to the design of teaching introduction, introduce new lessons in a lively or interesting way, or strive to stimulate pupils' interest quickly to lead out the classroom teaching content smoothly.

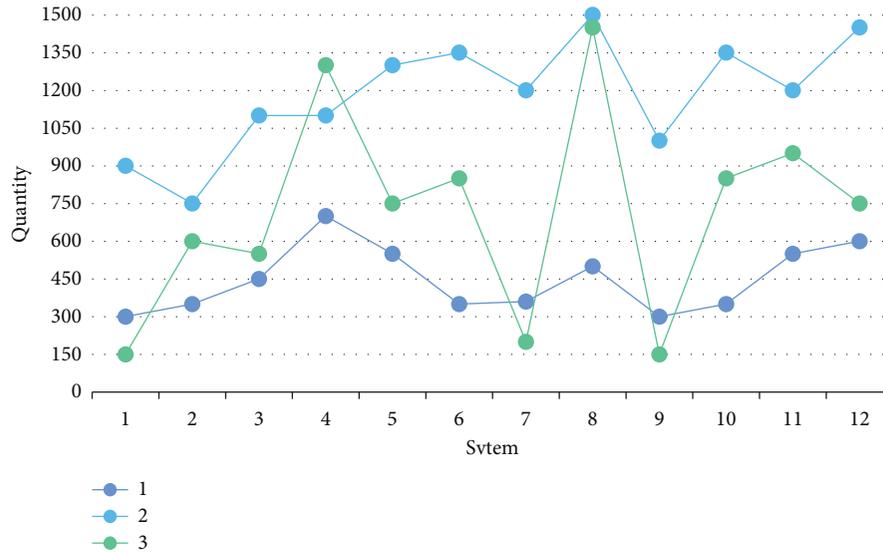


FIGURE 7: Number of systems.

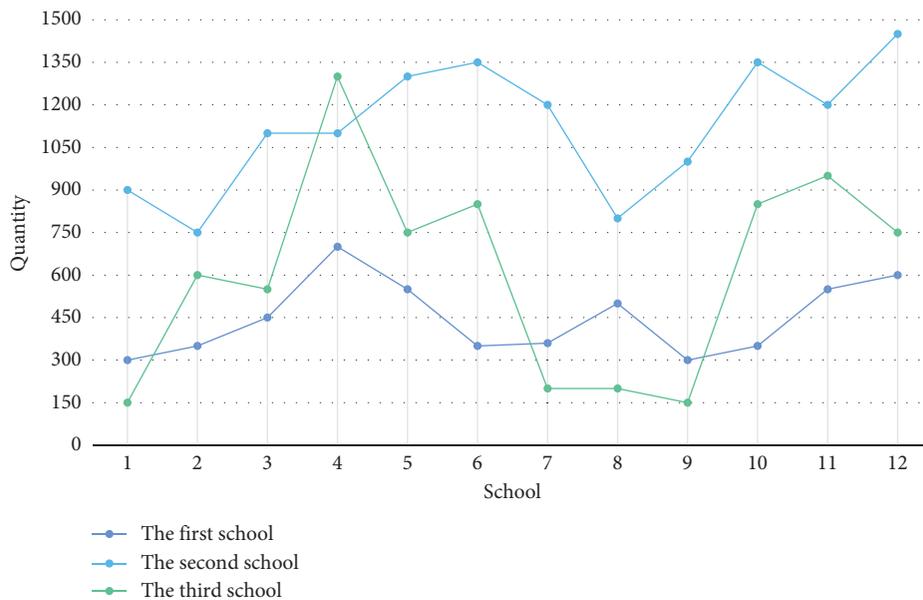


FIGURE 8: Number of pupil accounts.

The combination of multimedia or audio-visual teaching has a powerful audio-visual effect, which can stimulate pupils' senses or arouse their curiosity or interest. Therefore, in the classroom, teachers can create teaching situations through multimedia videos, ask questions in line with the curriculum through the situations, subtly lead out the new lesson content, or successfully complete the teaching introduction.

Assist teachers in teaching activities. By building a database with Hadoop technology or establishing each pupil's learning account, teachers can learn about each pupil's learning status according to the data. For example, if a pupil's reading or writing scores are high, but his listening or speaking scores are not satisfactory, the teacher will either strengthen the pupil's listening or speaking skills or urge the

pupil to pay close attention to listening or speaking skills. Through the monthly, quarterly, or annual learning track, we can clearly understand each pupil's learning situation, establish relevant modes, or find the best teaching mode, which can effectively improve the level of University English audio-visual or oral teaching. It is necessary to listen to or train students individually. The audio-visual course is highly practical, and pupils must train many times to achieve the ideal learning effect. Therefore, teachers must strengthen the training of listening or speaking ability. However, after the expansion of university enrollment, teachers have become weak and the number of professional audio-visual or speaking teachers has been insufficient, so it is difficult to consider every pupil. In the era of Hadoop, the emergence of

artificial intelligence technology can effectively improve this scenario (Figure 8).

## 6. Conclusions

University English audio-visual teaching also highlights innovation or practice. It is necessary to break through the mastery of previous knowledge or strengthen the proportion of self-dialectic or self-evaluation. University English teaching workers should actively apply convenient conditions, turn challenges into opportunities, or extract valuable things from a large amount of information for our use. Audio-visual teaching is very complicated and involves a relatively wide range. In the selection of data resources, we must select the best pupils, change the traditional teaching idea, teach accurately, or use multidimensional or multi-variable evaluation mode to realize the unified evaluation of summative or formative evaluation so that the evaluation mechanism becomes an important part of the teaching process. Only by ensuring concrete, objective, or effective evaluation can we really give full play to the advantages of audio-visual teaching in the era of Hadoop, changing thinking concepts or roles, paying close attention to pupils' real time dynamics before, during, or after class, optimizing teaching contents or methods in the intelligent classroom environment, forming a scientific system of intelligent teaching with distinctive characteristics, effectively improving the quality of University English teaching, or thus promoting the rapid development of intelligent teaching of University English in the era of Hadoop. To realize accurate teaching, we should use multivariate or multidimensional evaluation modes, combine quantitative or qualitative evaluation, reconstruct the evaluation mode of the University English audio-visual course, or rely on information technology or multimedia to improve the efficiency by 16% to improve the teaching quality or effect of University English audio-visual or oral courses or promote the improvement of pupils' comprehensive English ability.

## Data Availability

The data used to support the findings of this study are included within the article.

## Conflicts of Interest

The author declares that there are no conflicts of interest regarding this work.

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