

# Research on Reconstruction of College English Writing Teaching Model in the Age of Big Data

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**Abstract:** The arrival of the era of big data has brought certain impacts on the traditional college English teaching model. It has put forward more stringent requirements for the training of English talent models and methods. Of course, this also provides a new reform for the reform of college English writing teaching. Therefore, in the process of college English writing teaching, it is necessary to follow the development trend of big data, follow the trend of the times, constantly change its own teaching mode, actively explore the ideas and models of college English writing reform, and conform to the needs of the development of the times, reconstruct the college English writing classroom teaching mode, and strive to cultivate a composite application-oriented English talent that meets the development needs of the current era.

## 1. Introduction

With the advent of the era of big data, college English teaching has also produced a new model of big data-driven teaching. How to use big data to provide support for learners and promote the development of English learning is an important topic worthy of further exploration. Combining several important application characteristics of big data, this paper discusses and analyzes the new modes and new methods of college English teaching which are conducive to big data analysis. It is hoped that this will improve the current teaching strategies and teaching activities to meet the individualized learning needs of students.

## 2. The Characteristics of Big Data

The concept of "big data" is no stranger to us. The big data definition given on Wikipedia is that the amount of data is so large that it cannot be acquired, managed, processed, and organized through current mainstream software tools. Help companies manage their decisions and achieve more positive information. International Data Corporation (IDC) believes that big data is a data set that conforms to 4V characteristics, namely massive data volume, fast data flow and dynamic data system (Velocity), and diverse data types (Variety). The US Department of Education released the "Enhancing Teaching and Learning Through Education Data Mining and Learning Analytics" report in October 2012. The content includes the following five aspects: personalized learning. Interpretation; educational data mining and learning analysis and interpretation; introduction to big data applications in adaptive learning systems; US educational data mining and learning analysis application case introduction; US big data education application challenges and implementation recommendations. It is pointed out that "big data" has three characteristics: large amount of data, diverse data and fast data generation.

Big data innovation is moving from data to big data, from analysis and mining to discovery and prediction. With the application of various cloud platforms, big data is also attracting more and more attention. Flipping classrooms, MOOCs, and micro-courses can be said to be the first wave of big data change education.

## 3. The Application of Big Data in Education

Big data in the field of education has broad and narrow sense. The broad education data refers to

all behavioral data derived from teachers and students in daily educational activities. It has hierarchical, temporal and contextual characteristics. Education big data refers to learner behavior data, which mainly comes from student management system, online learning platform and course management platform. The US Department of Education's "Promoting Teaching and Learning through Educational Data Mining and Learning Analysis" pointed out that educational data has some unique characteristics compared with data in other fields. To sum up, the education data is hierarchical. There are keystroke level, answer level, session level, student level, classroom level, teacher level, and school level. The data resides in these different layers. By mastering the data at different levels, you can provide corresponding data reports for people at different levels to help them better understand "Where they are, what they know, what they can do to improve", to help more scientific decision making.

The application process of big data in education can also be summarized as three steps:

The first step is the acquisition of data (including data collation and storage). In theory, the future of smart classrooms can record student behavior from a variety of sensors. One example is the intelligent chair cushion studied by a professor in Taiwan. When the student sits on the mat, he automatically records his pressure distribution to analyze whether he is focused or not. Also in research, related to pattern recognition, capture the learning state of each child through the analysis of the implementation of cameras and sensors. You can also use the electronic textbooks, electronic question bank, etc. to open up the two parts of the exam and practice, and combine the examination, study, and practice to get the data. Future applications can also get data from wearable devices.

The second step is the analysis of the data. This is the scope of learning analytics. It requires a detailed analysis of the duration of stay, the degree of repetition, and a difficult point of learning. It also requires semantic analysis, machine learning, etc. and the support of learning psychology behind it.

The third step is the presentation of the data. The most important topic presented is "adaptive learning." In fact, this is related to the study of analytics, that is to say, the analysis of the areas where students need to strengthen, and the supporting parts of the examination, study and training will be automatically strengthened. Test, the TOEFL test is also adaptive adjustment to some extent. Learning, which involves the evaluation of students' comprehensive quality, is a comprehensive result.

The application of big data in education has prompted the emergence of flipping classrooms, MOOCs and micro-courses, and has also begun to change the traditional education model. In the flipping classroom, students can make their own learning progress according to their individual circumstances. The teacher can understand the problems encountered by students in the learning according to the data of the students. Traditional classes no longer explain new lessons, but become places where students do homework, explain problems, or do experiments. The emergence of MOOC is the sublimation of the sublimation classroom. The rise of MOOC has enabled the rapid development of the "video re-education" learning model to higher education, and has progressed to the extent that it can be earned by elective MOOCs to gain credit and enter the right track. The micro-course is a response to the flipping classroom and is an indispensable resource for students to learn independently. The micro-course is a micro-curriculum for teaching video condensed essence. The accumulation of micro-curriculum practice will lead to the formation of micro-curricular groups. The application of micro-curricular groups will form new application data, which will be beneficial to big data analysis and mining, discovery and prediction.

#### **4. The Status Quo of College English Writing Teaching**

First, college English teaching lacks systematicity. With the development of higher education, the number of college students is increasing, and in university education, English as a compulsory course has an extremely important role. However, in the process of writing English textbooks at this stage, students' attention is paid more attention to, and there is a lack of attention to writing knowledge. In other words, in the process of writing college English teaching, the writing of English writing is not systematic. First of all, at the current stage of the preparation of college

English textbooks, there is a lack of systematic and perfect writing teaching content. In the textbooks, the emphasis is mainly on the interpretation of new words, English vocabulary exercises and article exercises. The content of English writing is relatively small. At the same time, in the teaching process, teachers often reduce the cultivation and teaching of students' writing ability due to the existence of objective reasons such as class hours. Although there are a certain number of writing exercises in the textbooks, the writing exercises between the units lack practicality and cannot effectively improve the students' English writing ability.

Second, college English teachers lack systematic logic in the teaching process. Although it pays more attention to English teaching in China, it does not pay much attention to English writing education, mainly through the content of teaching materials and the sporadic professors of teachers. In addition, in order to guarantee the English final exam and the 4th and 6th grade exams, individual English teachers will improve their English writing ability through various intensive courses in a short period of time. This kind of teaching mode is too one-sided and cannot comprehensively improve students' comprehensive quality ability. First of all, in the process of modifying English composition, English teachers mainly based on the rhetorical forms and grammar of English sentences, and did not comprehensively evaluate the theme of the composition and the meaning of the students. Secondly, for English grammar and sentence structure too much attention, there is a general lack of substantive content in the composition; Finally, in the process of English teaching, college English teachers did not adopt a step-by-step teaching method, and there is no comprehensive synthesis based on students in the teaching process. The ability to teach in accordance with their aptitude leads to different levels of English writing skills.

Third, in the process of cultivating college English writing ability, students lack the ability to learn independently. At this stage, there is a "weird circle" in college English education. In the university study, the English ability of most students shows a downward trend. The main reason is that students lack the ability to learn independently. In English education, teachers pay special attention to English education. In the process of teaching, students will be supervised by various methods to make students develop a good study habit, but in the process of college English teaching, for English schools. Without strict requirements, the students gradually became sloppy, which led to the lack of material in the English writing process and the lack of recognition of the importance of English writing. At the same time, because of the relatively low proportion of English writing in the English test, students also lack interest in English writing.

Fourth, the teaching content is relatively simple. At this stage, the college English textbooks we use are mainly models of English reading and writing and English audio-visual writing. In the process of textbook writing, there is a lack of diversity, pertinence and scientificity. In the process of training English writing course, the writing part of the teaching material is mainly used as the main content. The teacher supplements the content according to his own experience in the teaching process, lacks systematic skills explanation, and the teaching content is relatively simple. In the process of separating English reading and writing, students rely on the vocabulary and sentence patterns provided by teachers in the process of writing, and lack their own feelings in the process of writing.

## **5. The Reconstruction of College English Writing Teaching Mode in the Era of Big Data**

First, integrate teaching content and integrate big data resources. In the era of big data, teachers can rely on big data to train students a new type of literacy in the teaching process, and effectively combine big data with English writing ability. In the process of English writing teaching, use network resources for text. Input and article layout; Students can use a variety of search engines on the network to collect, find and analyze information, and use various social software such as Weibo and email to communicate and express articles.

Second, multimedia teaching is based on traditional teaching models. It is to improve the quality of teaching through multimedia teaching methods on the basis of existing English teaching. This teaching mode can effectively improve students' English writing ability and provide some help for university teachers to carry out English writing teaching. In the era of big data, various data-based

multimedia teaching methods have long been applied in English teaching. English teaching has gradually changed into a computer teaching mode. In the teaching process, teachers have already understood the multimedia teaching mode in college English education. Important, but for the shortcomings in the multimedia teaching model, we must pay enough attention. In the process of writing English, we must develop strengths and avoid weaknesses, improve students' English writing ability through flexible distribution, fully utilize the advantages of traditional teaching and multimedia teaching mode, and improve teaching quality.

In the process of teaching, the teaching method of “speaking, reading, writing, reading and writing” in English is used to carry out comprehensive teaching. Through the comprehensive practice of English listening, oral English, English reading and English writing, the students' English writing ability is improved. These four English elements complement each other in the teaching process, and further improve students' English writing in the process of continuous improvement of comprehensive ability.

Fourth, based on the background of the big data era, build a new evaluation system. In the era of big data, people have already changed the way of acquiring and transmitting knowledge. Electronic media has gradually replaced traditional paper-based communication methods. People use electronic media to obtain, share and disseminate information. Therefore, in the process of cultivating English writing ability in college English teaching, teachers can carry out diversified evaluation through the network, improve students' enthusiasm and initiative in the process of English writing and learning, and expand students' thinking ability. The evaluation of English teaching in the context of big data is an evaluation mode combined with the network platform. This model breaks the traditional teaching evaluation mode. Teachers can make full use of time debris to improve their writing ability in the teaching process. The problem is corrected in time to improve the writing ability of English.

## **6. Conclusion**

The arrival of the era of big data has brought certain impacts on the traditional college English teaching model. It has put forward more stringent requirements for the training of English talent models and methods. Of course, this also provides a new reform for the reform of college English writing teaching. Therefore, in the process of college English writing teaching, it is necessary to follow the development trend of big data, follow the trend of the times, constantly change its own teaching mode, actively explore the ideas and models of college English writing reform, and conform to the needs of the development of the times. Reconstruct the college English writing classroom teaching mode, and strive to cultivate a composite application-oriented English talent that meets the development needs of the current era.

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