

English Education Reform in the Era of Big Data

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Abstract: With the improvement of society, the era of big data has become the mainstream of development. People's life cannot be separated from information and data, and more importantly, it is inseparable from the convenience brought to us by the data era. At the same time, the era of big data has also brought about major changes to English education. The change of English education from traditional teaching mode to intelligent teaching is all attributed to the development and progress of science and technology. The research purpose of this paper is to study the English education reform in the era of big data. This paper introduces the necessity and feasibility of English education reform, which is the only way, both in terms of study, life and work. The traditional education mode is no longer applicable to the modern education life, but brings inconvenience. The new education mode takes students as the theme, and uses the data information such as multimedia technology or digital education to rebuild the English education mode. The results show the efficiency of it is increased by 23% in experiment. The current situation on the reform of English education, and the methods and approaches for artistic ability training carry out analysis, discussion and summary to enrich the academic research results.

1. Introduction

In English teaching, it is not only necessary to see the language itself [1-2]. Moreover, we must see the social factors related to language teaching: external factors such as educational policies, policies, teachers, school and family environment, regional economic and cultural foundations, and even the learners' personality, age, cognitive style, and learning Internal factors such as psychology [3-4]. By linking language with these factors to determine teaching goals, design teaching procedures, select teaching methods, arrange teaching content, etc., in order to better complete English teaching tasks [5-6].

English is an important language among human communication tools. Cairney J believes that language emerges with the emergence of society and develops with the development of society [7]. Language and society are interdependent and closely related [8-9]. It is necessary to study language, understand the function of language and the law of development, and cannot be separated from the people who use the language [10-11]. Cannot be separated from society, Cai J Y feels that human individuals use language to learn social culture, master various knowledge, accumulate life experience, guide their own behavior, participate in social life, adjust social relations, and create social wealth [12]. The innovation is that based on the era of big data, a relatively effective strategy is proposed for this education, including significant progress in student conditions,

academic performance, and classroom teaching. In order to promote the reform of the education, this part proposes measures in terms of personnel training, education methods and teachers, aiming at the problems in the reform.

2. English Education in the Environment of Big Data

2.1 English Education Environment

The reform of college English education focuses on improving their English ability. It is also the standard of talent training in universities, so as to deal with the employment problem in the future. In the reform, teachers should learn new ideas, new educational ideas, adopt new methods and so on. Students should learn individual study and teamwork to improve their comprehensive English level and improve their comprehensive English knowledge. Teachers should develop the ability to fully use the language in universities. According to the needs of society and the job market, cultivate more English talents. The status quo and analysis of comprehensive English application ability of college students refers to the comprehensive English ability and comprehensive English ability of English learners.

Under the requirements of the data age, English teaching is no longer simply a teacher teaching students to learn, but a combination of learning and application, promoting students' practice, combining learning and application, and integrating knowledge and practice. Allow students to consciously participate in learning, to achieve independent learning, so as to improve their learning ability. Big data technology can make it easier for students to enter the learning atmosphere and integrate into the learning environment. At the same time, due to the convenience of multimedia teaching, teaching is more efficient, so students' attention and comprehensive learning ability have also been greatly improved. An autoregressive AR(P) model for English classroom education refers to time series and has the following form.

$$X_t = \sum_{i=1}^p a_i x_{t-i} + \varepsilon_t \quad (1)$$

Among them ε_t is the learning influence factor, which can be expressed as:

$$X_t = \sum_{j=0}^q \theta_j \varepsilon_{t-j} \quad (2)$$

The autoregressive moving average ARMA (p, q) model of English classroom teaching is a combination of the following forms:

$$\alpha(L) X_t = \theta(L) \varepsilon_t \quad (3)$$

2.2 English Education Reform

In order to cope with future employment and work, the focus of reform is to improve the comprehensive quality and ability of students. In the teaching process, from the aspects of study, life, work, etc., in order to comprehensively improve the learning level of students, teachers learn new ideas, new educational concepts, and new methods. Students consciously participate in learning, realize independent learning, and improve their learning ability. Big data technology can make it easier for students to enter the learning atmosphere and integrate into the learning environment. Schools provide educational platforms and promote reforms. The comprehensive

ability to use English is mainly manifested in two aspects, first is the language communication ability, and second is the cross-cultural communication ability. After nearly ten years of English learning, the learning of college English can be said to be the continuation of the English learning state in the middle and high school era. : Most of the training and development of listening skills, "Dumb English and Deaf English" has not been changed; English classes have become dispensable; English learning is based on the motivation and goals of English test. This has led to the comprehensive use of English of many college graduates, and even the two-minute personal introduction in English has become difficult.

Under the traditional teaching model, the knowledge of English is unreasonable, and the comprehensive ability of English can not meet the needs of the society. American linguist Saar proposed that language cannot exist without culture, because it does not require the improvement of college students' cultural literacy. This is not only a requirement of the times for college students, but also in line with the direction of our foreign language talent training. Because language itself is a part of culture, it plays an important role in the learning and dissemination of culture. The ability to use English of university students is the top priority of English teaching research. Such as the input of English knowledge, how to improve the ability to use English language, how to autonomous learning and individualized learning ability of college students.

3. Education Reform under Big Data

3.1 Status Quo of English Teaching

The study of English teaching theory, the innovative educational status that keeps pace with the times, and the exploration of personalized teaching plans can effectively improve the effectiveness of English education reform and promote the subject teaching reform. The assessment content of English Skills Competition is a direct reflection of social needs. Cultivating high-quality English suitable for the modernization of our country is suitable for the different professional characteristics of students. The organic combination of basic English courses and professional English development is generally adopted, which significantly enhances students' understanding and ability of English. The holding of English skills competitions greatly increases the competitiveness of students. The extensive development of English skills competitions promotes the updating of teaching concepts in vocational colleges. English teachers need to guide students to master the basic knowledge and basic skills of English, adapt to the development requirements of the information age, have the ability to explore independently and independently, improve their innovative consciousness and critical spirit, in order to effectively solve the difficulties encountered in real life.

At the same time, the optimization of the curriculum has also put forward higher requirements for the professional competence of English teachers in vocational colleges. Reform is also a huge challenge for teachers. In order to optimize teaching and improve teaching quality, teachers should continuously improve their self-teaching ability, learn professional knowledge, and change teaching concepts. At the same time, the school enriches teaching resources and creates a scientific and modern educational environment. Provide a good environment and platform for students and teachers to promote reform.

3.2 English Education Reform

Using the historical documentation method, interview method and questionnaire survey method. In this study, students in preschool education in two adult universities across the province were surveyed. The specific results are shown in Table 1.

Table 1: Functional syllabuses

Function	Identifying	Enquiring
Agreeing	Suggesting	Greeting
Offering	advising	Warning
Notion	Time	Existence
Direction	Ownership	Cause

4. Classroom Teaching Analysis under Big Data

4.1 Process of English Education Reform and Development

These cities have a relatively high level of development, good infrastructure, and soft environments such as talents, funds, and management systems have basically reached the level of developed countries in the world. In these cities, the popularization and use of English is relatively high, and the educational environment and conditions for English are relatively good. In the vast central and western regions of my country, the overall level of development is still relatively backward, and funds, technology, and talents are relatively lacking. Therefore, in terms of English education, the problem is that the overall level is not high and the software environment is not in place. Under such circumstances, if a unified national English teaching plan is still formulated, it will inevitably make this plan difficult to reconcile in different regions. The specific results are shown in Figure 1. The nine-year compulsory education schools generally have a higher level of education than ordinary middle schools, and the progress of foreign language teaching can be reasonably arranged to achieve the "through-train" in foreign language teaching in elementary schools, middle schools and even universities, and avoid duplication. Waste, so that teaching resources are more reasonable allocation, and because repetitive teaching is avoided, there is more sufficient time for various intensive training of foreign languages.

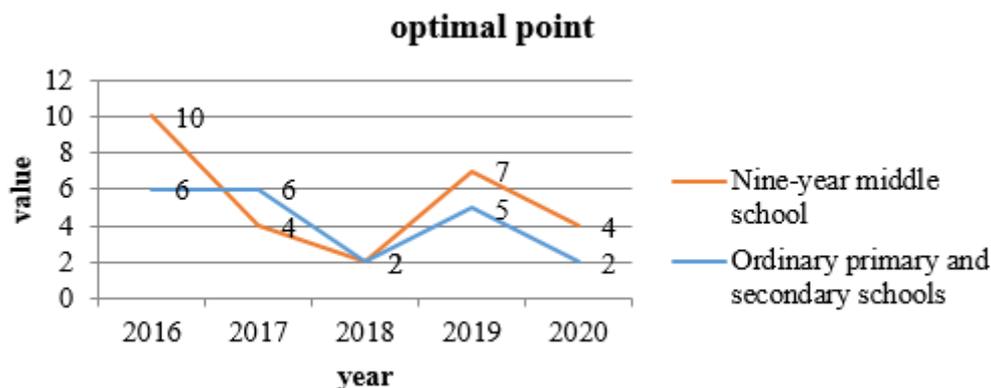


Figure 1: Interviewed students' participation in artistic ability training

4.2 Status Quo of English Classroom Teaching

Extend English subject teaching from deep classroom teaching to extracurricular teaching, build a major, stabilize its experienced English competition guidance team, implement phenomenon observation and competition teaching and research, so as to give full play to the guiding role of teachers, teach students in accordance with their aptitude, and guide the perfect guidance plan, improve students' level of participation. For example, for students with weak English foundation and lack of actual competition experience, the main task of the teacher is to guide

students to initially understand the rules of English skills competitions at all levels, consolidate the basic knowledge and basic skills of the subject, deepen the perceptual cognition of high-level competitions, establish a sound evaluation system, and promote the English skills competition. The normalized development of teaching in vocational colleges needs to improve the effectiveness evaluation mechanism of English skill competitions, establish a sound English subject teaching evaluation system, and lay a solid foundation for the realization of the teaching goal of "promoting learning by competition and promoting teaching by competition". The specific results are shown in Table 2.

Table 2: Survey results

Election	Number of people	percentage
course structure	16	33%
Course content	10	20.8%
teaching method	25	46.2%

The content of English learning is no longer limited to simply mastering the proficiency of English knowledge and skills, but also increases the ability of language understanding. Expression ability, translation ability, cultural knowledge, application strategies and other elements have a certain degree of comprehensiveness, complexity and innovation, reflecting the trend and direction of the development of English education in our country: Based on such objective conditions, English teachers in vocational colleges should be strong chemical sentiment analysis and teaching sentiment analysis, pay attention to the fit and match between the content of the competition and the students' English skills, improve students' complete and professional pre-match guidance and post-match guidance. The specific process is as follows: First, teachers should clarify the professional direction, difficulty and theme content of English skill competitions at all levels based on the English teaching goals; second, implement the full guidance for students to participate in the competition, and pay attention to the students' thought dynamics and psychology in real time. Change, strictly control all links and steps of the competition, implement tactical guidance and psychological counseling to avoid the risk of students' abnormality in the actual competition. The specific results are shown in Figure 2. It can be seen from the figure that more than 50% of teachers are very concerned about English education reform, and a small number of teachers do not pay attention to English education reform.

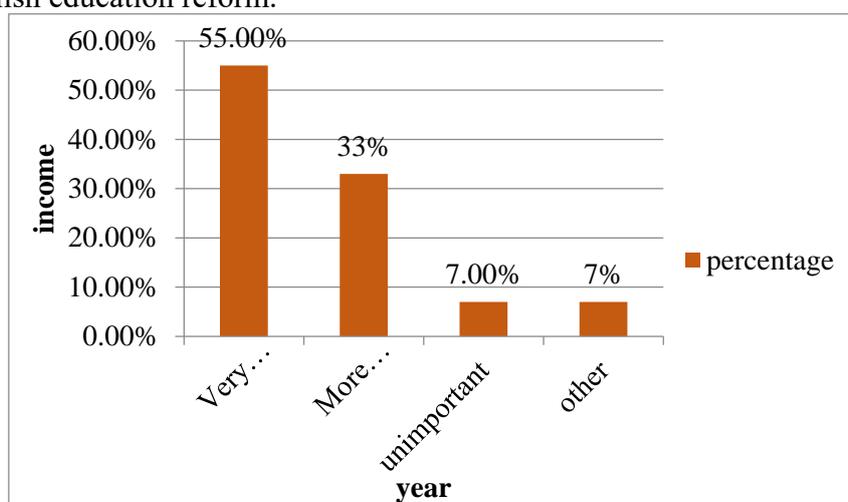


Figure 2: Questionnaire

5. Conclusions

Although it is based on research on the reform of English education in the era of big data, there are still many weaknesses. The reform of the English education system requires reforms not only to have science, but also to have a strong scientific base and strength. Based on the research on reforming the English education system in the era of big data, there are still many contents that are worthy of deep research. There are also several steps in the analysis of the reform of the English education system due to space and personal power, which will not be repeated. In addition, the actual material effects of experiments related to educational reform can be compared with traditional models from a theoretical and simulation level.

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