Construction of Ecology Environment for University English Education in the Big Data Environment

Zhao Keyan

Liaoning Finance Vocational College, Shenyang City, Liaoning Province, 110122, China

Abstract: The widespread use of big data has become one of the main factors affecting English education and breaking the balance between traditional English teaching ecosystem in universities. Improving the quality of university English requires the use of big data technology and the use of more advanced data collection technologies. Based on the principle of ecological education, a large-scale data extraction and analysis method is used to analyze the interdependence of various factors in learning English in universities, so as to establish an education system that adapts to balanced management.

1. Introduction

Ecology of education is a comprehensive discipline, which permeates and applies in pedagogy, and from which, the ecological principle is created. Nowadays, the university English courses clearly put forward three requirements, namely, international teaching concept, regular multimedia information application and ecological teaching construction. Guarantee the education quality, promote the harmony between human and environment in the process of education and teaching, and express the idea of sustainable development in English learning.

It is of great significance for improving the quality of English education to build the ecological environment of university English in universities and realize the ecological balance of English education. The main purpose of studying the relationship between individual behavior and English learning is to balance various factors of university English education. The traditional way of teaching and learning in university English education has been changed by the development and application of information technology. Building an internet-based education ecosystem that enriches all the educational factors, which restrict and depend on each other and the organic whole of that system is in constant balance and constant change. The ecological environment of university English has already been broken by the application of big data technology. Building the ecological environment of university English education under the background of big data to promote the rebalance becomes the research direction of contemporary university English education.

2. Collection and Collation of Environment Data and Other Data of University English

The core of university English ecological environment research is to analyze the interaction mechanism of various English education factors and the collection and collation of relevant data are the prerequisite elements. Based on the big data model, the data collection of classroom environment, extracurricular environment and practice environment is the main content of data collection and collation, and then is the systematic collation. It is important to use internet data, various learning systems and multimedia data. For university English education, the environment data has two categories, respectively is the classroom teaching environment data including teachers, classroom teaching content, teaching methods, outside environment data including extracurricular self-study, English communication via the Internet and other Medias, reading and writing of science and technology English etc. For the Internet, all kinds of English learning materials, data, audio and video can be easily searched, which is of great help to English learning.

3. Exploration and Analysis of the Correlation of University English Education

3. 1 Collection of University English Environment Data, Adoption of Big Data Correlation

In order to collect university English environment data, the big data correlation analysis method is adopted to explore the correlation between teachers and students, educational methods and results, educational content and results, background data and results, extracurricular practice and goals, and off-campus classroom and goals etc.

3. 2 Relationship between Teachers and Students

The basic participating entities of education are teachers and students, which influence and interact with each other to form an ecological education classroom. With the development and utilization of Internet technology, the traditional teacher-student relationship has already changed with the use of big data technology. In the past, the teacher was the leader and played a guiding role in the classroom. The teacher was the authority and represented the academic truth. If the students questioned, it would be difficult for the teacher to accept, so it would kill the students' courage to explore the truth. Students are the receivers of knowledge. Their subjective consciousness is weak in class, and they are used to accepting the views of teachers, which led to that they lack the consciousness of independent thinking and discrimination. However, with the rapid development of Internet information technology, the Internet platform provides a large number of high-quality educational resources, which continuously enriches students' study and life. The amount of knowledge on the Internet is much more than what teachers have learned, and the Internet also provides students with a convenient way to acquire knowledge, breaks various learning limitations in space and time and expands the breadth of learning, that is a brand new learning mode. Although students can acquire Internet knowledge anytime and anywhere, lack the ability connecting various knowledge, which often makes the knowledge difficult to digest. Therefore, the superiority of ecological education can only be demonstrated in the context of big data by cultivating students' awareness of independently analyzing the correlation between knowledge to form knowledge network in their minds.

In this era of big data, the Internet is being used more frequently, which is changing the relationship between teachers and students. Teachers are not only the initiator of knowledge, but also the creator of fragmented knowledge association, even the guide of life direction, therefore, teachers need to constantly stimulate students' enthusiasm to stimulate students' interest in learning, guide students to acquire and discriminate valuable knowledge selectively, and train students' systematic thinking, apart from that, teachers should also pay attention to the guidance of learning methods while imparting knowledge, finally, change the past relationship between initiator and receiver to the new relationship of mutual learning and cooperation.

3. 3 Relationship of Teaching Method, Teaching Content and Teaching Result

The characteristics of big data in changing university English teaching model are mainly manifested in two aspects, firstly, under the background of big data, there is one rich English learning database, which makes English learning more convenient and learning content more abundant. Secondly, traditional education mode and Internet technology mode coexist. According to the actual learning needs of students, good learning materials and learning methods can be obtained through Internet technology. Based on the above, learning materials and plans can be customized for different learning objectives to create personalized learning methods.

3. 4 Relationship between Extracurricular Practice, Second Classroom and Teaching Effect

The second classroom teaching and extracurricular practice is one of the main ways to improve the English learning effect. Due to the different situation of each student, extracurricular practice activities should be diversified, so as to carry out extracurricular practice and the second classroom, which is the necessary premise to improve English learning ability. The extracurricular practice and the second classroom are classified and customized according to the way learners receiving knowledge and thinking habits. Using big data technology, analyze the effect of the second

classroom and extracurricular practice, and then recommend appropriate second classroom and extracurricular practice for learners. The big data itself perfectly combines the second classroom and extracurricular practice, realizing result of teaching effect being first.

4. Harmonious Ecological Environment of Education and Efficient University English Teaching Mode

4. 1 Environment of Learning Resources Obtaining

In the context of big data, the construction of learning resource learning environment dominates the foreign language teaching ecosystem. With the development of the Internet, foreign language teaching has already broken the time and space limit besides, through cross-network and cross-system integration, a large number of English teaching resources can effectively utilize big data technology to integrate learning resources to achieve convenient and fast learning.

4. 2 In-Class Ecological Environment

The basic ecological environment for teaching activities is university English classroom, which is dynamic, systematic, balanced and harmonious. The ecological view of university English teaching is one complete ecosystem, which is one important part of the ecosystem with computer, Internet and big data in it. In this ecosystem, teachers and students should make good use of computers and use big data technology to greatly improve the traditional English learning mode, furthermore, make differentiated learning mode according to the actual needs of learners. In terms of stimulating subjective initiative, modern classroom teaching can provide rich learning resources and have more flexible discussion methods.

4. 3 After-Class Ecological Environment

On the basis of the correlation between in-class education and after-class education of big data, university English learning can build a diversified learning environment with the help of social network, and recognize the environment in learning. With the help of Internet, big data, artificial intelligence etc. technologies, the learning classroom will be built into a digital, networked, intelligent, interactive and four-dimensional classroom.

4. 4 Ecological Environment of Practice

The traditional classroom learning model has the phenomenon of ignoring extracurricular application and emphasizing classroom learning. Teachers do not build enough English communication environment outside the classroom, but blindly pay attention to the teaching of textbook knowledge and then leads to that students cannot get a comprehensive development and the correlation between English learning and application environment is ignored. For that situation, it requires a new understanding of the educational ecosystem, which should be open and systematically comprehensible, so as to achieve the information-sharing aim and achieve the energy exchange between various factors within the system and between external and internal systems.

5. Conclusion

Under the background of big-data Internet, an open, healthy and harmonious ecosystem of university English education must be built to improve the quality of university English education. The balance of factors in the traditional university English education ecosystem has been broken by the application and development of big data, with the big data technology as the technical support. At the same time of constructing the ecological environment of harmonious university English, a huge English learning database forms, besides, a balanced, comprehensive and rational university education environment can be built by using big data technology. It is of great guiding significance in improving the quality of university English education to construct an open ecosystem of university English education in which all education factors restrict each other, depend on each other and rebalance each other, and to explore a university English education model and method that

combines in-out classroom and practice in the context of big data.

References

[1] Gaohan, Zhou Mingxing. The Historical Evolution and Subject Orientation of Education Ecology. Journal of Hunan Agricultural University (Social Science Edition), no. 1, pp. 134-135, 2017.

[2] Chenxue. Study of the Construction of Ecological Environment for University English Classroom--Taking the English Teaching and Learning in Southeast University as the Example. Master's Thesis of Southeast University, no. 5, pp. 88-99, 2015.

[3] Liu Junlin. Design of Flipped Classroom for University English in the View of Education Ecology. College English (Academic Edition), no. 1, pp. 67-68, 2017.

[4] Cai Yanbin. First Exploration of the Practice Methods for Big-data and Human-oriented Landscape Ecology Teaching Reform. New Curriculum Research (Publication in Midmonth), no. 2, pp. 234-236, 2017.