The Application of Big Data Technology in the Analysis of Foreign Language Teachers' Educational Concept and Teaching Ability

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Abstract: In this era of big data, various levels of science and technology have been developed, and a large number of science and technology have been widely used in people's daily production and life. Under the background of the current big data era, the development of all walks of life in China is carrying out innovation and Reform in order to meet the requirements of the times. The research on the analysis of foreign language teachers' educational philosophy and teaching ability also needs to follow the trend of the times. Compared with the past, great changes have taken place in the research methods of foreign language teachers' education philosophy and teaching ability analysis. In order to cope with this change, this paper proposes a method of integrating big data technology with foreign language teachers' education concept and teaching ability analysis, this paper analyzes the research status of foreign language teachers' education concept and teaching ability analysis, and formulates a set of new research programs for foreign language teachers' education concept and teaching ability analysis in the era of big data. Through long-term research and observation, it can be found that some analysis methods proposed in this paper have important practical significance for the application of big data technology in the analysis of foreign language teachers' educational ideas and teaching ability.

Keywords: Big Data Technology, Foreign Language Teachers, Educational Philosophy, Teaching Ability

1. Introduction
In the era of big data [1-3], the information resources on the network are very rich, showing the characteristics of diversification, interest and digitization, which are all due to the cultivation of students' interest in learning and the improvement of teaching effect. In the process of foreign language teaching, teachers can make full use of the network teaching platform, according to the needs of teaching, give students some tips website and information sources, so that students have a strong
interest, eager to explore the application of foreign language, in reality, actively absorb knowledge and information, and be able to develop rules and conclusions in the process of exploration and learning, improve the teaching effect and teaching efficiency.

Since the 1980s, China's foreign language education [4-6], especially English education, has made great progress. In addition to the rapid increase in the number of foreign language learners, the enrichment of learning materials, the concern and support of society, and the improvement of learning quality (listening, speaking, reading and writing), foreign language teachers' educational philosophy, teaching skills and teaching level have also improved. But at the same time, we also have obvious problems, such as students lack of interest in learning, teachers' teaching ideas are not advanced enough, teaching methods [7-8] and examination methods are single, standardized and unified, but lack of diversity, flexibility and flexibility, as well as the consciousness and ability of integration. Education technology and foreign language teaching are very weak. On the whole, the theoretical research of foreign language teaching in China cannot meet the needs of foreign language teaching practice in China. There is a lack of research on the main foreign language education policies and the construction of foreign language teaching theoretical system in China.

This paper studies the education concept [9-10] of foreign language teachers under the big data technology and the application methods in the analysis of teaching ability. In this era of big data, the development of everything must follow the trend of the times; otherwise it will be abandoned by the times. Compared with the past, great changes have taken place in the research methods of foreign language teachers' education concept and teaching ability analysis. In order to cope with this change, this paper puts forward a method of integrating big data technology with foreign language teachers' education concept and teaching ability analysis, and analyzes the research status of foreign language teachers' education concept and teaching ability analysis. Based on the new requirements for the analysis of foreign language teachers' educational ideas and teaching abilities, a new research scheme for the analysis of foreign language teachers' educational ideas and teaching abilities is formulated. Through long-term research and observation, it can be found that some analysis methods proposed in this paper have important practical significance for the application of big data technology in the analysis of foreign language teachers' educational ideas and teaching ability.

2. The Application of Big Data Technology in the Analysis of Foreign Language Teachers' Educational Concept and Teaching Ability

2.1 Big Data Technology

The era of big data is an important foundation to conform to the social trend. The big data teaching model can effectively combine theory with practice in college students' foreign language learning. Teachers can change the macro teaching mode, teach students big data, and then teach according to the actual situation. Generally speaking, teachers should correctly solve the problems in foreign language learning, choose the topic of foreign language problems, and then guide students to establish the teaching mode of foreign language theory. Then collect a large amount of big data knowledge, teach students, and constantly cultivate their learning initiative and the habit of independent thinking.

2.2 An Analysis of Foreign Language Teachers' Educational Ideas and Teaching Abilities

Nowadays, information technology has become one of the elements of modern teaching. However, there are obvious differences in information literacy and information technology application ability of foreign language teachers. Therefore, colleges and universities can regularly organize in-service teachers to participate in information technology training. Education departments or other information technology training service companies can also regularly carry out various information technology training related to teaching and Practice for teachers and students in Colleges and universities. In addition, textbook publishers can also provide in-service teachers and students with various information technology training related to in-service teaching materials and practice. Although a small
number of teachers and students can have a lot of opportunities to participate in this kind of information technology training on a regular basis, teachers can be responsible for organizing or hosting lectures, seminars, collective lesson preparation and other forms of sharing and conveying knowledge to the foreign language teachers of the school, so as to achieve common progress.

3. Experimental Correlation Analysis

3.1 Experimental Background
The definition of foreign language teachers' teaching autonomy needs to be integrated into the construction of humanistic perspective. These constructions are the same as the above theoretical constructions, but there are also differences. The construction of humanism can be regarded as the supplement and perfection of theoretical construction. The greatest contribution of Teacher Autonomy Research at home and abroad lies in remolding teachers' role in foreign language teaching and calling for the rational return of foreign language teaching. It is undeniable that there are still many problems in the existing research on teacher autonomy. The definition of teaching autonomy should also pay attention to the understanding and feedback of foreign language teachers themselves.

3.2 Experimental Design
In the description of teaching autonomy, teachers’ pay more attention to the ability level. The main elements include reflection, innovation, creativity, critical thinking and flexible use of knowledge. Rights and technology belong to external factors and teaching performance. The view of the group of foreign language teachers is the most authentic, which provides strong evidence for the above theory and humanistic perspective of teaching autonomy. According to the survey and statistics on the key words of "teaching autonomy" of foreign language teachers in China, the statistical results are shown in Table 1.

| Teaching level | Capability level | Right level |
|----------------|------------------|-------------|
| Individualized teaching plan | Reflection, innovation, teaching creativity and creativity | Rights, discourse rights |
| Design, teaching, evaluation, monitoring | Critical thinking, critical thinking, active implementation | You can make your own arrangements |
| Self-regulation teaching | Their own ideas, self-awareness | Make your own style |
| | Flexible use of knowledge and methods | Make decisions independently |

4. Discussion

4.1 Analysis on the Application of Big Data Technology in the Analysis of Foreign Language Teachers' Educational Ideas and Teaching Ability
The language used by foreign language teachers in the classroom (teacher talk / concern talk) is more important than that used by teachers in other disciplines. Because it is not only a teaching tool, but also a kind of teaching content. Whether it is to organize teaching with language (guidance, questioning, feedback, inspection, assignment of homework) or to communicate with students, it is "input" to
students in different forms, which has different degrees of impact on students. Understanding the problem is the key to solve the problem. Based on the investigation of the teaching plan of a foreign language major internship teacher in a school, the results are shown in Figure 1.

![Figure 1. Investigation results of teaching plan problems](image)

As shown in Figure 1, "goal description problem" is consistent with the results of classroom observation. Classroom observation results show that nearly one third of the students show that the purpose of teaching is not clear, teaching activities and teaching content objectives are not consistent. The survey results are also verified in the classroom teaching process. In the classroom observation, quite a lot of interns in the classroom teaching, teaching links and links, activities and activities between the lacks of cohesion, performance is very random, the direction of the activity goal is also very unclear. "Wrong lesson preparation content", "wrong teaching plan format", "wrong understanding of teaching concept" show that normal students have certain problems in teaching design ability, such as the correct use of teaching materials, students' cognitive ability and so on.

Teaching innovation is the requirement of curriculum reform for teachers. Innovation is needed in thinking, language application and teaching activities. Action research in English teaching is an effective way to promote English teachers to become research-oriented teachers. The curriculum development of foreign language teachers' professional skills is the main investigation basis of this study. In order to understand the impact of the course on students and the problems in which aspects, this paper investigates the influence of the course on foreign language teaching ability of 2016 and 2017 foreign language major graduates in a university. Among them, I is for oral activities, II for lesson preparation skills, III for classroom micro skills, IV for evaluation skills, and V for innovation skills. The survey results are shown in Figure 2:
Figure 2. Influence of 2016 and 2017 Foreign Language Majors' foreign language teaching ability in a university

As shown in Figure 2, 25% of graduates think that teachers' oral training has a great or great impact on their language ability, which is embodied in classroom language training and oral activities. 23% of the graduates think that lesson preparation skills have a great impact on the cultivation of their teaching design ability; 21% of the interns think that the classroom micro skills have a great impact on their classroom implementation ability, which are mainly manifested in simulated classroom, simple strokes, English songs, English games, teaching attitude, introduction, display, practice skills, questioning, feedback skills and classroom management skills; Only 18% of the graduates think that the evaluation activities have a certain impact on their teaching evaluation ability; 13% of the graduates think that scientific research skills and teaching research activities have an impact on their innovation ability. This shows that pre service teaching skills training has a great impact on post service teaching ability, especially for new teachers. There are serious problems in teaching innovation ability. The reason is related to the cultivation of teachers' innovative ability before service and the cultivation of their self-innovation consciousness. Therefore, it is still necessary to analyze and study the educational concept and teaching ability of foreign language teachers.

4.2 Suggestions on the Application of Big Data Technology in the Analysis of Foreign Language Teachers' Educational Ideas and Teaching Ability

In the 21st century, with the development of social economy and culture, especially the arrival of knowledge economy and the intensification of economic globalization, the traditional foreign language teacher education model is difficult to adapt to the requirements of education modernization and quality education, and foreign language teachers in China cannot keep up with the development of the situation. Therefore, in order to deepen the reform of foreign language education and teaching in China, we must start with the development of foreign language teachers' own education and cultivate
high-quality teachers with innovative spirit and practical ability. The quality of foreign language teachers is the key to ensure the quality of foreign language education and teaching. At the same time, it is also an important factor in the success of foreign language education reform in the new era. Teacher training plays an important role in the formation of foreign language teachers’ quality. Therefore, more and more attention has been paid to the development of foreign language teacher education.

In today's English Teaching in China, most English teachers should actively promote and establish the values and concepts of reflective teaching, consciously cultivate students' good habit of reflection, find out some teaching problems that may exist in English teaching process and practice, and actively use some scientific means to carry out reflective actions. And research in our every English teaching process and practice, found some specific methods and Strategies of English teaching problems, constantly test them and guide us to apply them in practice. In this way, we apply the methods and results of each teaching reflection to our English teaching practice, guide our teaching, and make our teaching practice continuously improved and perfected in the reflective action research. Of course, our reflection should be an endless cycle, which will help us to examine our teaching practice from the perspective of critical reflection, so as to make our vast number of English teachers become action researchers of English teaching practice. As researchers, English teachers will constantly improve their professional level and teaching quality.

Foreign language scholars need to pay attention to the research of teachers' teaching autonomy. Foreign language teacher autonomy belongs to a new research field. In 2011, the National Conference on foreign language teacher education and development has listed teacher autonomy as the theme. So far, the research on teacher autonomy in foreign language learning is still insufficient. There are many researches on foreign language teachers from other aspects, but their influence on foreign language teaching in China is limited. To be sure, foreign language teachers are an important factor in foreign language teaching in China. The Enlightenment of this study is that foreign language teachers are related to teaching autonomy, and teaching autonomy is related to students' learning autonomy. Nowadays, with the continuous development of foreign language teaching, attaching importance to teachers' autonomous teaching is one of the important ways to improve the level of foreign language teaching in China.

5. Conclusions

This paper introduces the application of big data technology in the analysis of foreign language teachers' educational concept and teaching ability. In order to cope with the impact of big data era on all walks of life, the development of everything needs to be reformed and innovated in combination with the new requirements of the new era, so as to keep pace with the development of the times. Compared with the past, great changes have taken place in the research methods of foreign language teachers' education concept and teaching ability analysis. In order to cope with this change, this paper puts forward a method of integrating big data technology with foreign language teachers' education concept and teaching ability analysis, and analyzes the research status of foreign language teachers' education concept and teaching ability analysis Based on the new requirements for the analysis of foreign language teachers' educational ideas and teaching abilities, a new research scheme for the analysis of foreign language teachers' educational ideas and teaching abilities is formulated. Through long-term research and observation, it can be found that some analysis methods proposed in this paper have important practical significance for the application of big data technology in the analysis of foreign language teachers' educational ideas and teaching ability.

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