Abstract. With the development of science and technology, the big data era has come into our lives. The big data era has had a certain impact on all walks of life, especially on the education of colleges and universities. Compared with the traditional education mode, the big data era has brought new opportunities and challenges to the education mode of colleges and universities, which requires educators to change the education mode, pay attention to the individualized development of students, and actively explore the applied undergraduate education mode suitable for the big data era.

Keywords: Big Data, Applied Undergraduate, Teaching Mode.

1. Introduction

In the big data era, the network platform provides a new teaching mode for English teaching in applied undergraduate colleges and universities. Teaching activities rely on the network platform to carry out. Network platform brings a lot of convenient conditions to students in after-class autonomous learning and in classroom learning, to teachers in classroom teaching and after-class guidance. Under the background of the big data era, the university educators should use the network resources to serve the teaching, use the big data to master the students' learning situation; let students make better use of the network resources, help the students to formulate the individualized learning plan, let students carry out individualized learning, pay more attention to the overall development of the individual students; the university educators should conform to the development of the times and actively explore the teaching mode under the background of the big data era.

2. Policy Support and Theory Basis

2.1 Policy Support

Outline of the National Medium- and Long-Term Education Reform and Development Programme (2010-2020) clearly states "To promote the modernization of educational content, teaching methods and methods. To integrate existing resources, construct advanced, efficient and practical digital education infrastructure. Students are encouraged to use information to learn actively and autonomously, enhance their ability to use information technology to analyze and solve problems. To meet the diverse learning and development needs of the individual." [1]

2.2 Constructivist Learning Theory

Constructivist learning theory was first proposed by the Swiss psychologist Piaget in the 1960s, and widely used in modern education and teaching. Through many studies by linguists and psychologists, it has become a perfect theory system. Constructivism is the research result in the field of psychology and education, and it is a very influential learning theory in the world. Constructivism theory advocates the student-centered teaching mode, attaches importance to the students’ self construction of knowledge, advocates the active exploration and discovery of students in teaching, this mode is helpful to stimulate students' motivation and interest, and improve their learning ability; meanwhile teachers should play the role of guiding and assisting students' learning in learning process, teachers should play the role of supporters, promoters, participants and guides in the teaching process. This mode is helpful to guide teachers to renew teaching ideas and enrich theoretical knowledge, which changes the traditional teacher-centered learning style, cultivates
students' learning strategies and skills, makes students more confident and finds effective learning methods.

2.3 Humanistic Learning Theory

The humanistic learning theory is a kind of educational thought that prevailed in the West in the 1960s and 1970s, especially in the United States. Its main representatives are American psychologists and educators, Abraham H. Maslow and Carl Ransom Rogers. Humanistic learning theory pays attention to learners' cognitive structure, emphasizes learners' emotion in teaching, emphasizes the development of personality and creativity, advocates student-centered class, let students choose and discover themselves. Rogers emphasizes that teaching should develop students' personality, fully mobilize students' intrinsic motivation of learning, and cultivate people with initiative, originality and creativity. The person cultivated by education should be the person with full development of personality. This kind of person has the initiative and the responsibility, has the flexibility to adapt to the change ability. According to the humanistic learning theory, the individualized education for students is particularly important. To advocate humanized curriculum and pay attention to the teaching method of interpersonal relationship, teachers should change from "controller" to "promoter", respect students and share learning feelings with students.

3. Study Characteristics of Applied Undergraduate Students

Students in applied colleges and universities have both the characteristics of ordinary college students and their own characteristics, such as they are active in thinking, easy to accept new things and new ideas; they're willing to express themselves through various activities or opportunities; but their learning enthusiasm is not high, learning willpower is not firm, and lack of certain autonomous learning ability. This learning ability will play an important role in students' learning and work, so teachers should cultivate students' autonomous learning ability, and let students know that autonomous learning ability is of great significance in the improvement of their academic performance, the promotion of practical ability and the development of their future.

4. Exploration of Teaching Mode in Big Data Era

4.1 Advantages of Learning through the Internet

With the arrival of the big data era, the Internet has further deepened into various industries and fields, playing a more and more important role in social development, and the impact on the education industry is particularly prominent.

Through the data of the Internet, teachers can quickly and accurately know the students' learning process. According to students' achievement, teachers can help students adjust their learning content flexibly, so that students can keep up with the normal teaching progress and learning content.

Through the Internet, students can access the newest and the most advanced learning content anytime and anywhere, students can choose their favorite learning form, like image or animation or other forms, according to their preferences, to arouse their learning interests, so that learning becomes interesting. Learning via the internet, students can communicate with teachers and students at any time, solve their problems quickly and easily.

4.2 Integration of Network Resources

In the big data era, the network provides students with rich, fast information resources. These diverse resources, such as sounds, images, animations, texts, provide students with direct feelings. All kinds of excellent educational resources on the internet can make students have a deep understanding of what they have learned. For example, via Mooc and Micro-course, students can see the courses of the most famous colleges and teachers at home and abroad. These courses will greatly enrich their learning.
The learning resources obtained through the network can consolidate, deepen and extend the students' knowledge in class. Various learning forms can arouse students' interests in learning. The rich learning contents can expand students' horizons. All these can promote students to explore, discover and learn independently.

4.3 Cultivate Students' Autonomous Learning Ability

Online courses have their own advantages. E.g. the course can be played repeatedly. Unlike classroom learning, students can play the course over and over again until they understand it. It is very convenient. Without the limitation of time and space, students can study anytime and anywhere.

Some courses have many interactive links during watching or at the end of the course. For example, through exercises, Students can know about their studies, or whether they understand the course; through discussion, students can communicate with each other and their teacher, participate in the study; through homework, students have an overall grasp of what they have learned. These will urge students to watch and learn the content of the course carefully. While students are finishing the course, their autonomous learning ability is being cultivated.

4.4 Supervised Autonomous Learning

With the wide application of network technology and multimedia teaching in English teaching, many colleges and universities begin to integrate the network into English teaching, and use the network to provide convenient conditions for teachers' teaching and students' autonomous learning after class. The network provides students with a large number of resources. In terms of form, the resources are diverse, such as pictures, sounds, videos, interactions and so on. The network provides students with up-to-date learning resource. So the network is more likely to attract students' attention and make students interested.

But students' autonomous learning is not equal to unsupervised, completely free self-study. Some students indulge in the network after class and lack the ability of self-management, which also reflects the importance of supervising students' learning. In addition, on one hand, the network provides students with learning resources, on the other hand, there is something unsuitable for students. So teachers should educate students to stay away from bad websites and bad contents. Teachers should monitor students' learning content and learning progress throughout the whole course. Teachers should help students to set clear learning goals, formulate reasonable learning plans, and choose suitable learning contents. At the same time, the cultivation of college students' autonomous learning ability should be run through the whole process of teaching, through all aspects of teaching.

4.5 The Necessity of Individualized Education

Individual difference exists objectively. Learning is a kind of individual behavior, then, difference must be existed. Due to the influence of students' innate factors, acquired growth environment, interests and hobbies, students' learning ability and study habits will be different. The same teachers, the same teaching materials, the same teaching process, students will have different learning outcomes. Teachers can adopt scientific and reasonable methods to stimulate students' interests in learning and let students participate in learning and activities according to their individualized differences. Individualized teaching is based on the full respect for students' differences, according to the students' learning basis, learning ability, personality and hobbies to adopt different teaching means, in order to maximize the potential of students, to maximize the value of self-learning. Therefore, it is necessary to teach students according to their individual differences.

Individualized teaching can develop the potential of individual learning according to the individual differences of each student, so that students can explore the learning methods suitable for themselves, thus promoting the development of the individual. Personalized education can optimize students' cognition, interests, abilities, characters and values, and complete students' personality;
individualized education can make students develop their professional knowledge and thinking style in an all-round way, and make the students' knowledge more comprehensive; individualized education can make students more prominent in interest, hobbies, psychological characteristics and learning ability, so that students can develop their personal expertise, profit advantage and success in their study, life and future work.

5. Conclusion

Through the establishment of a new teaching mode under the background of the big data era, teachers can use flexible and diverse teaching forms to carry out highly targeted personalized teaching, arouse students' enthusiasm, initiative and creativity, increase students' participation in the class and improve the quality of classroom teaching; students can stimulate their inner potential, enhance their self-confidence and sense of responsibility, effectively enhance their own learning ability, cultivate their own independent learning, explore knowledge and their ability to think independently, and promote their own knowledge, ability and quality coordinated development. The educators in colleges and universities should keep pace with the times, apply advanced technology to education and teaching, and actively explore new teaching models in order to improve teaching quality, teaching effectiveness and serve teaching.

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