Research on the Reduction of College English Class Hours under Education Informatization

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Abstract

Higher education is undergoing profound changes with the development of digitalized educational resources, networked teaching support and diversified learning methods. It brings unprecedented opportunities and challenges to education and teaching. The reform of College English informatization teaching has had a positive and far-reaching impact on the foreign language teaching ecosystem in China, but in the process of building a new foreign language informatization teaching ecosystem, the structure, function and elemental forms of the traditional foreign language teaching ecosystem have changed and need to be newly integrated. In the process of integration, the original ecological balance of the foreign language teaching system is disrupted, leading to many dysfunctions. This study focuses on how to use big data processing and computing technology to promote the development and transformation of foreign language teaching paradigm, how to truly realize "Informative Foreign Language Teaching", and how to reconstruct a new ecology of foreign language teaching.

Keywords

Education Informatization; Reduction of Class Hours; Foreign Language Teaching Paradigm.

1. Introduction

In the 21st century, information and communication technologies have had a profound impact on people's education and learning concepts, and Information-based education has become the typical paradigm of modern education. The 21st century is also regarded as the age of ecology. In response to the many problems of imbalance and chaos in the post-modern information society, experts and scholars have begun to examine educational issues using the ecological view of connection, balance, and dynamics of biology. The reform of foreign language informatization education in China in recent years has made a lot of achievements, and at the same time has revealed many problems and shortcomings. In order to explore in depth the many problems of people, events, environment and benefits in the foreign language informatics education system, more and more teachers and researchers have begun to use the ecological philosophical view to analyze the problems and explore countermeasures. However, in general, these studies focus on the theoretical discussion of educational ecology and the macro level of ecological education research, i.e., educational ecology is simply understood as the creation of teaching and learning environment, and there is not enough research on the micro level of ecological education. At present, the reform of foreign language teaching in China has shifted to the stage of deep integration of "Internet + foreign language teaching". The "Internet + foreign language teaching" will certainly bring new changes to the education ecology. Along with the extensive and deep application of education information technology in teaching, the reduction of college English credits and class hours have become a common trend in the curriculum reform of universities nationwide.

The reduction of classroom hours has had a positive impact on teaching and learning as well as a number of negative effects, such as a reduction in interpersonal interaction between teachers and students, and a lack of emotional belonging. Classroom teaching content is reduced, students' basic classroom language skills training is reduced, and the learning effect is waning; teachers' information technology literacy cannot keep up with the requirements of information technology teaching; teachers' supervision of students' learning is inadequate, etc. Therefore, this study focuses on how to use the concept of educational ecology to solve the problem of teaching imbalance caused by the reduction of class time, and to build a new ecology of "Internet + College English teaching", so as to change and surpass the original teaching ecology.

2. Theoretical Foundations

The theoretical basis of this research is educational ecology. Educational ecology is a science that uses ecological principles and methods to study educational phenomena and explore the laws of education. Ecology is the science of the relationship between an organism and its surroundings. According to the concept of ecology, the factors in an ecosystem are organically connected and interacted with each other, and have the functions of energy conversion, material cycle metabolism and information transfer. As natural ecology, education is an ecosystem of multiple factors that are organically connected, and ecological factors either promote or inhibit the development of education. As an emerging interdisciplinary discipline, educational ecology draws on the research methods of both education and ecology to study the interrelationships between various ecological factors and education in ecological environments (e.g., natural, social, and normative environments). The focus of educational ecology is on the harmonious symbiosis between the environment and living creatures in the educational process, so educational ecology provides a macro theoretical basis for the construction of an ecological college English classroom teaching model.

3. Three Major Imbalances in the Ecological Structure in Classroom Arising from the Reduction of Class Time

In the process of informatization of foreign language education and the deep integration of "Internet + foreign language teaching", it is necessary to reform the unreasonable and unbalanced teaching ecosystem resulting from the reduction of College English class time and create a new ecology of College English teaching.

3.1. The Imbalance in the Ecological Structure

The imbalance in the ecological structure of the College English classroom is mainly reflected in the developmental imbalance between the teaching model, teaching materials, teaching content, teaching assessment, teaching management, and information technology.

In response to this phenomenon, we play the leading role of information technology as a leading factor to rebuild the ecological system of college English classroom under the information technology ecology and build an independent learning platform that promotes development. In the College English course, the reduction of College English class time has directly caused the reduction of audio-visual courses. It is urgent to rely on the College English independent learning platform and WeChat public platform to give full play to the leading role of information technology and drive other factors in the classroom ecology to make structural and functional adjustments, so as to repair the imbalance caused by the widespread use of information technology in the classroom ecology at the beginning of the reform.

3.2. The Imbalance in the Ecological Function in Classroom Teaching

Functional dysfunctions include the decay of the structural optimization function of classroom ecosystems, the weakening of the relational tuning function, the degradation of the evolutionary promotion function and the reduction of the ecological nurturing function, and the difficulty of the overall function of the ecosystem. For example, the reduction of class time directly leads to a functional imbalance in the college English classroom, reduced interaction between teachers and students, and a decline in students' communicative and independent learning abilities. In response to this phenomenon, one of them is to actively develop the construction of an open platform for the quality of college English online, to publish the pre-class content of self-study in the online classroom, and to ask students to improve their self-learning ability, and to change the role of teachers in teaching from mere lecturers to instructors, and more theoretical knowledge and basic knowledge should be self-taught by students;

Secondly, the software course flipped classroom design supported by the "Ketangpai APP" online platform is developed. The classroom is extended into three sessions and relies on the IT environment throughout the whole process, with the classroom content tightly linked, interactive activities adding creativity, teachers leading the classroom, students returning to the main body, and teachers and students teaching each other.

3.3. The Imbalance of the Overall Classroom Ecology of College English

In view of the imbalance in the overall classroom of college English, we build an interactive classroom ecology based on the "A+ Ketangpai APP". " A+ Ketangpai APP " relies on cloud storage and mobile terminal to realize the informatization of classroom, providing functions such as GPS online attendance, real-time private interaction, resource sharing, in-class test and grade analysis, etc., throughout the whole process of teaching and learning, and providing a convenient virtual class management service module for teaching, with comprehensive functions, simple operation and timely backstage service. It basically meets the teaching needs of the flipped classroom. Relying on " A+ Ketangpai APP ", the three ecological factors, namely teachers, students and object classrooms, form an organic and harmonious ecological community with the support of the network platform.

4. Information-based Foreign Language Teaching Reconstructs a New Ecology of Foreign Language Teaching

This study focuses on how to use big data processing and computing technology to promote the development and transformation of foreign language teaching paradigm, how to truly realize "informative foreign language teaching", and how to reconstruct a new ecology of foreign language teaching. In order to answer these two questions, the following five parts of the study were developed.

4.1. Educational Informatization Reform

It has gone through three stages of educational informatization reform in the past two decades: the beginning (1999-2004), application (2005-2009) and integration (2010-2015). Since 2016, the reform of foreign language education informatization has reached the stage of integration of subjects and information technology, i.e., the stage of deep integration of "Internet + foreign language teaching". However, there are many problems in the current College English teaching ecology, such as the imbalance between information resources and management; the imbalance between information resources and utilization; the disconnection between curriculum and actual needs; the disconnection between teaching contents and students' needs and real life; the imbalance between classroom ecological subjects and classroom ecological environment; the imbalance between in-class learning and actual language use outside of class, etc.

Therefore, it is necessary to optimize the college English teaching ecological environment as a whole from the perspective of educational ecology, so as to ultimately achieve the purpose of improving students' comprehensive English application ability and improving the quality of college English teaching.

4.2. Ecological Teaching Objectives in the Context of Education Informatization

Teaching objectives are the baton of classroom teaching. Ecological teaching objectives refer to the development from the traditional basic skill development to diversified objectives (knowledge and skills, emotional attitude and values). Foreign language teaching is not only to complete the teaching contents required by the syllabus, but also to cultivate students' communicative ability. The goal of diversified teaching should also be set at promoting the overall and harmonious development of human beings. This requires teachers to pay attention to their own basic knowledge and basic skills learning, as well as self-development ability cultivation while focusing on cultivating students' scientific spirit and humanistic spirit, and strive to cultivate students into a harmoniously developing person.

4.3. Ecological Teaching Content in the Context of Education Informatization

Traditional teaching content is often limited to subject knowledge, and the introduction of culture and the cultivation of cultural awareness are given short shrift. Ecological teaching content requires the use of diverse teaching materials and systematic teaching content. The second is to focus on humanities education content.

In the ecological teaching of foreign language classroom, teachers should not only teach students scientific knowledge and thinking methods, but also fully explore the humanistic knowledge and humanistic spirit contained in the teaching materials, improve students' moral level, enhance their ideological level, and form a comprehensive and correct world view, outlook on life, and values, so that they can better deal with the relationship between man and man, man and nature, and man and society, in order to meet the needs of sustainable development of society.

4.4. Ecological Teaching Methods in the Context of Education Informatization

The key to change the teaching style is to change the educational philosophy or teaching concept, break through the traditional teaching mindset, design the curriculum teaching with an open vision and beyond the concept of knowledge transfer, realize the strategic transformation from focusing on "teaching" to helping "learning", promote the construction of teaching relationships in the sense of collaborative learning, and form a deep interactive teaching culture of inquiry.

Adhere to the principle of openness, add the university component, and integrate information technology elements to achieve deep interaction. Teaching and learning activities from an educational ecological perspective are a dynamic and open process that focuses on multidimensional interactions between teachers and students, i.e., interactions between teachers and individual students, individual students and individual students, teachers and groups of students, individual students and groups of students, as well as interactions between teachers and students and texts, teachers and students and media technologies. Students acquire knowledge and skills in a harmonious and ecological interactive relationship.

4.5. Ecological Teaching Evaluation in the Context of Education Informatization

Ecologization of teaching evaluation refers to the development of a diversified evaluation system from the traditional evaluation by teachers. The evaluation system of foreign language classroom teaching should be multi-polarized (students' self-evaluation, students' mutual evaluation, teachers' evaluation of students, students' evaluation of teachers, etc.), diversified evaluation contents (students' homework, test scores, learning attitudes, class participation,

team spirit, performance ability, work presentation, etc.), and diversified evaluation strategies (students' files, questionnaires, interviews, regular tests, etc.).

5. Conclusion

Firstly, the deep integration of information technology and college English education has rebalanced the ecological problems of classroom structure arising from the compressed class time. Relying on the independent learning platform of college English and the WeChat platform, we reform the current college English teaching mode and teaching content, establish a teaching evaluation method based on formative assessment, give full play to the leading role of information technology, and drive other factors in the classroom ecology to make structural and functional adjustments, so as to repair the imbalance caused by the widespread use of information technology in the classroom ecology.

Secondly, the deep integration of information technology and college English education rebalances the ecological imbalance of classroom functions resulting from the reduction of class time. Through the construction of the open platform of the College English network, the flipped classroom supported by the "Ketangpai APP" network platform and the "College English WeChat Public Platform", the structure of the College English classroom ecosystem has been optimized, the ecological function has been restored, the relationship tuning function has been further enhanced, and the ecological nurturing function of university education has been improved, The interaction between teachers and students has been improved.

Thirdly, the deep integration of information technology and college English education rebalances the overall ecology of the college English classroom after class time reduction. Based on the "Ketangpai APP" and the construction of an interactive classroom ecological environment, we systematically analyze and deeply investigate the College English classroom ecology in the context of information technology, and finally propose strategies and measures to eliminate the imbalance of the College English classroom ecology, so that the three ecological factors, namely, teachers, students and the object classroom environment, can form an organic and harmonious ecological community under the support of the network platform.

Acknowledgments

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