Retraction

Retraction: Analysis of English Teaching Mode in Big Data Environment Based on Hadoop Cloud Platform (J. Phys.: Conf. Ser. 1992 022165)

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The authors of the article have been given opportunity to present evidence that they were the original and genuine creators of the work, however at the time of publication of this notice, IOP Publishing has not received any response. IOP Publishing has analysed the article and agrees there are enough indicators to cause serious doubts over the legitimacy of the work and agree this article should be retracted. The authors are encouraged to contact IOP Publishing Limited if they have any comments on this retraction.

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Analysis of English Teaching Mode in Big Data Environment Based on Hadoop Cloud Platform

Linfei Zhang1,*

1Nanyang Institute of Technology, Henan, Nanyang, China, 473000

*Corresponding author e-mail: 389861296@nyist.edu.cn

Abstract. With the continuous deepening of the application of big data technology, the education field is also paying attention to the impact of big data. "Internet +" education has become a hot topic in the current education field. This article relies on the big data Hadoop cloud platform technology through integration lines Online and offline resources and a variety of teaching techniques and methods are used to analyze the business English teaching model, and use the mixed teaching model to promote the development from extensive to standardization, aiming to enhance the richness, interaction and effectiveness of business English teaching.

Keywords: Big Data, Business English, Curriculum System

1. Introduction

With the deepening of the application of big data technology, the education field is also paying more attention to the impact of big data. "Internet +" education has become a hot direction in the current education field [1-3]. Big data technology usually has core characteristics, such as large data volume, fast data generation speed, diverse data types, and many hidden values [4, 5]. Through big data technology, hidden information such as academic conditions, teaching resources, and teaching methods can be completed, thereby improving teaching efficiency and teaching quality. In addition, teachers can also draw on and quote online domestic and foreign excellent educational resources, which are introduced into traditional teaching Text, video, audio, and MOOC resources can greatly enhance the "richness" of the course, and at the same time put forward higher requirements for teachers [6].

The current business English teaching curriculum system courses often have problems such as unclear training orientation, relatively low teaching quality, lack of distinctive characteristics, similar training models and English majors, and insufficient practical training, which reduces the quality of student training. Therefore, in order to solve this problem, it is necessary to change the teaching concept. This article relies on the big data Hadoop cloud platform technology to analyze the business English teaching mode by integrating online and offline resources and a variety of teaching technologies and methods, aiming to improve classroom efficiency.
2. The current situation and predicaments of college English teaching

2.1. Deeply influenced by traditional teaching methods
At present, college English teaching still follows the traditional teaching model, adopting classroom teaching and co-class teaching. At the same time, it is affected by the fourth and sixth test and other assessment methods. Most teachers and students are more inclined to choose indoctrination teaching. Time and energy to improve test efficiency. Under this circumstance, teachers have become the absolute main body of English teaching, and students have become pure knowledge and skills indoctrinators. The facts show that the traditional teaching mode can no longer adapt to the development of the times, and is limited by the influence of the traditional teaching mode, and the students' English learning has not achieved the expected results.

2.2. Insufficient differences
As mentioned in the previous article, the teaching target of college English is students with different professional backgrounds, but the individual differences of the taught students have not been fully valued by teachers. At present, most of the teachers who teach college English prepare lessons in accordance with the requirements of teaching and research, teach lessons and formulate exam content in accordance with the syllabus. In this case, the individual differences of the students to be taught are ignored, and the students cannot get the teaching suitable for their own development, which ultimately leads to poor teaching effectiveness.

2.3. Simple assessment method
At present, whether it is the English four or six test or the final test of colleges and universities, the method of written test paper evaluation is uniformly adopted. However, English is a language study, and limiting the content of the assessment to the scope of the written test is not conducive to the development of students. And from the perspective of teachers' teaching, the learning feedback obtained by this simple assessment method is too rough, teachers cannot know their true teaching level, and they cannot make good judgments on the advantages and disadvantages of teaching, and it is naturally difficult. Make targeted improvements and improvements.

2.4. Lack of practicality
The assessment standards play a decisive role in teaching to a large extent. Affected by the pressure of the test, most teachers regard the content involved in the fourth and sixth grades as the main content of college English teaching. The teaching activities mainly focus on vocabulary, grammar, listening, and exercises. They pay too much attention to the utilitarian nature of English learning and ignore English. As the value of language, affected by this, the phenomenon of high scores and low ability in English learning generally appears.

3. The particularity of business English classroom teaching under the big data environment
Strictly speaking, the business English curriculum system is a systematic project involving language and interdisciplinary reform, covering various aspects of knowledge transfer and comprehensive ability training. First of all, teachers do not have a deep understanding of the positioning and training objectives of the business English major, and have no idea of what kind of students to train and how to train them, and have no idea what kind of knowledge, abilities and qualities students should have. Since the business English curriculum system has been basically a traditional teaching model for a long time, the overall teaching mode is relatively simple, and the professional construction is biased towards extensive development. It has been difficult to adapt to the requirements of the digital age. The urgency of its reform is self-evident.

Multimedia, Internet and virtual reality technologies constitute the core of information technology, and they provide a strong system support for foreign language teaching. In order to effectively use information resources and analysis software in the era of big data, accurately analyze students'
learning attitudes, motivations, expectations, strengths, and weaknesses. In general, the mixed teaching mode of the business English curriculum system can be divided into the following three basic types: online-led, online-offline integrated, and face-to-face workshops. Among them, the online-dominant type and the online-offline integration type are mainly defined based on the proportion of the use of network resources. Even the lecture-based face-to-face workshop teaching mode is often accompanied by mobile teaching.

![Blended teaching mode diagram]

**Figure 1.** The basic types and characteristics of business English blended teaching models in the era of big data.

As shown in Figure 1, the online-led hybrid teaching model usually focuses on online teaching. Teachers effectively screen the rich domestic and foreign online teaching resources, and choose resources that suit the overall academic level of the class and meet the requirements of different business courses. Assign tasks, supplemented by face-to-face lectures and online discussions. The online and offline integrated hybrid teaching model is highly flexible, helps break the obvious modular traces, and requires teachers to control information resources very high. In the face-to-face workshop-type teaching mode, teachers mainly face-to-face traditional lectures, and transfer background knowledge and professional knowledge through online micro-classes. These major new hybrid models help to achieve the perfect interaction between teaching and learning, and create a new hybrid teaching model suitable for the business English curriculum system. Business English classroom teaching has at least the following two particularities in the new situation.

3.1. **The teacher's personal information literacy is the guarantee of an efficient classroom**

With the prosperous development of Internet and digital media technology, it is particularly urgent and necessary to improve the information literacy of business English teachers. Because students are the main body of learning in the classroom, teachers should not only use the form of lectures to fill the classroom, but should make full use of network resources to be the organizer of the classroom and the facilitator of the students' cognitive process. Full of interactive and personalized mobile learning, teachers are required to constantly update their computer knowledge, improve their ability to update and absorb information, and develop good computer thinking inertia and computer literacy. Therefore, in the exploration of the mixed teaching mode, the form of pictures and texts, and the method of combining audio and pictures are generally used to stimulate learners' connection, memory and internalization of knowledge.

3.2. **Flexible use of scientific data thinking in teaching**

In order to cultivate innovative international talents, promote the construction of teaching business English and the reform of the curriculum system, educators are required to have big data thinking. Teachers should be good at collecting student learning data from various online systems, because these massive data reflect students' learning attitudes, academic dynamics, focus on hot spots, and thinking inertia. Teachers should first carry out systematic planning, rational deployment, and actively implement various detailed tasks in business English teaching, and then promote continuous innovation of teaching reforms. In the design of teaching mode, teachers should consider the types of
students, teaching content, how to use big data thinking to teach and learn, and what information methods to use. Specifically, there should be a reasonable classroom description, clear teaching objectives, appropriate time allocation, anticipation and subdivision of teaching steps, and consideration of how this activity and other interactive activities in the classroom can be reasonably connected and integrated.

4. Research on the mixed teaching model of business English course system supported by Hadoop cloud platform

4.1. Teaching mode driven by "output-oriented approach"

Before the implementation of blended teaching, it is necessary to conduct a research on the academic situation of each teaching class. According to the collection of performance data such as mock exams, unit tests, and mid-term tests, perform big data analysis of vocabulary, reading, translation, writing, speaking, etc. Teachers of various subjects of Business English conduct collective discussions based on the results of big data analysis, mobilize cooperation between teachers, and are committed to establishing a business English teaching resource library (courseware, audio and video materials, teaching plans, language learning websites, etc.), which is the next stage. The teaching is prepared for resources.

In order to ensure efficient language output in business English classrooms, it is recommended that the entire teaching process of each specific subject of the business English curriculum system use "Production-oriented approach" (POA) for teaching guidance and monitoring. Output hypothesis and interactive hypothesis, the core concept of the teaching process of inquiry-driven-facilitated-evaluation teaching process is learning-centered, learning-use integration, holistic education. Teachers should make this teaching method consistent in the construction of the business English curriculum system, especially paying attention to the "output-oriented method" to be improved in practice to make it conform to the school's characteristics, so as to grasp the main aspects of classroom teaching contradictions.

Through language input, schema input, meaning input, etc., it provides a high-quality knowledge input for teaching and makes students' language output more efficient. Although sometimes a complex process of repetition, circulation, and progression occurs in language output, cultural acquisition, vocal imitation, and cross-cultural communication are driven from the source, making the purpose of learning more clear. The leading role of the teacher is to grasp the language form and content as a whole, which can better reflect the teaching content and teaching goals. This model will provide methodological and strategic support and innovation for the effective development of business English classes. The mixed teaching model POA drives teaching, focusing on the importance of output, practice focusing on guidance, and emphasizing the cultivation of thinking, critical spirit and oral communication skills.

Although POA emphasizes the dominant position of teachers in POA, it does not mean to deny the dominant position of students in the learning process. Blended teaching ensures that students can carry out fruitful English output practice on the basis of obtaining input. In order to maximize the learning effect in this process, the leading role and professional leading role of business English teachers in the blended classroom should be highlighted. In the process of the transformation of business English teaching mode, teachers should take output orientation as the line, take effective communication as the purpose, and select online teaching materials with fresh language, so as to promote the rapid improvement of students' cross-cultural business communication ability.

In addition, teachers should ensure that the three elements of teaching (Engage, Study, and Activate) are in place to ensure that the content of the class is humane and instrumental; otherwise, if the coordination of these three elements is not in place, it will deviate from the original intention of the hybrid teaching reform. The effect is minimal. The "output-oriented approach"-driven teaching model can just balance these three elements, making the classroom predictability, operability, and controllability significantly enhanced.
4.2. Mobile network-driven teaching mode

Teachers are now encouraged to use socialized cloud services to enrich teaching content and strategies. They believe that cloud service platforms can be used to build micro-courses for teacher training, and to build a cloud environment for teachers' peers to help each other, so that teachers can learn "cloud technology" and use "cloud technology", to achieve professional growth in the "cloud service" environment.

Teachers of various subjects in the business English curriculum system communicate with students in English learning through various channels such as WeChat groups, QQ groups, English learning websites, and English APPs. If conditions permit, it is recommended that the teaching process learn from the software of authoritative publishing houses. Generally these devices are equipped with digital courses, portable learning APP, etc. This is a special three-dimensional teaching that incorporates digital technology. Mobile devices support functions such as answering questions, notes, highlighting, and searching, making learning convenient and efficient. The rich media in the mobile network supports the presentation of rich multimedia content such as video, audio, animation, and pictures, and also makes learning three-dimensional, intuitive, lively and vivid.

In the mobile network-driven teaching mode, on the one hand, teachers should match classroom teaching with the learning resources of mobile devices to activate the internal driving force of students' English learning. On the other hand, students must play their own subjective role, think carefully, and better absorb language knowledge in a diverse language environment. Although this model emphasizes the use of mobile networks to improve students' learning initiative, the teaching process must also follow the basic hybrid teaching process.

As shown in Table 1, in the pre-class preparation stage, the teacher guides students to conduct pre-class preparation by watching explanatory videos, marking difficult points, and learning word cards. In the process of face-to-face instruction, teachers can publish discussion questions and fully expand supplementary resources through the teacher terminal of mobile devices at any time, which makes the interaction between teachers and students more convenient, and students' classroom participation and activity are higher.

Table 1. Basic steps diagram of mixed teaching of business English course system based on Hadoop cloud platform.

| The basic steps                  | Blended teaching interaction                                  |
|---------------------------------|---------------------------------------------------------------|
| Step1 Preparation before class  | 1) Students preview online resources before class;           |
|                                 | 2) Mark difficult points and cultivate problem awareness     |
| Step2 Teacher face-to-face instruction | 1) Teacher feedback on the preview situation;                |
|                                 | 2) Explain the textbook knowledge in detail                  |
| Step3 Class Discussion and Comments | 1) Create a real communication scene;                        |
|                                 | 2) Help students temper their thinking                       |
| Step4 Online Q&A                | 1) Feedback on the mastery of the course;                    |
|                                 | 2) Teacher-student interaction to improve students' classroom participation |
| Step5 online unit test           | Check the overall learning effect of the unit                |
| Step6 feedback test report      | Timely adjust teaching schedule and methods                  |
| Step7 Assign digital coursework | Driven by output, cultivate diverse capabilities             |

In the mobile network-driven teaching model, cultivating multiple abilities driven by language output is the top priority of teaching. For example, in addition to following the seven teaching steps as shown above, the business English teachers of our school can independently create "online E-classes" according to the characteristics of different subjects. This online classroom is a typical example of mobile web-driven teaching. Mainly with the help of the "online E classroom" network platform, it is convenient for teachers and students to search for resources, download courseware, browse courses, participate in discussions, and answer questions on the platform. By setting up exclusive functional sections of the platform, such as "preparatory study", "discussion area", "homework submission" and
"interactive link", the self-consistent, mutual integration and intercommunication of mixed course content and teaching methods are achieved.

4.3. "Project Curriculum"-driven teaching mode
Under the reform of the business English curriculum system, the comprehensive training of students' professional ability should rely on modular teaching of basic knowledge, professional knowledge, language and cultural background knowledge and professional practice. In order to highlight the practical characteristics of business English, "project courses" are often a case-based unit, combining theory with practice, and linking learning tasks with work tasks. Therefore, the process of professional training, professional practice or professional internship is generally adopted by front-line teachers and business managers to jointly develop practical training programs.

For the business English teaching evaluation object \(u^*, u^i, i \in \mathbb{N}, i \neq i^*\), let \(w^i(i^* \in \mathbb{N})\) be a random variable that obeys a certain distribution on the interval \([\min(w_{ij}, w_{i'j}), \max(w_{ij}, w_{i'j})]\), and call \(s^i(u^i > u^*)\) the superiority of \(u^i\) to \(u^*\), as shown in formula (1):

\[
s(u^i > u^*) = p\left(f(u^i) > f(u^*)\right) + 0.5p\left(f(u^i) = f(u^*)\right)
\]

(1)

Teachers of different subjects should refine the online and offline resources of their respective courses, categorize them according to knowledge dimensions and training programs to find out the weaknesses of students' practical training courses. Blended teaching positions "project courses" as the core courses for vocational job ability training, and becomes the main carrier for students to master business skills, allowing students to experience the characteristics and characteristics of future business careers to the maximum. In order to highlight the "applicability", teachers through close cooperation and contact with the front-line personnel of translation companies, after field inspections, set up "project courses" suitable for the workplace and implement the "project courses"-driven teaching model.

In addition, through the project teaching model, we focus on stimulating students' desire for English learning with real communication scenarios, combining learning tasks with work tasks, and later through professional training courses, job placement internships, school-enterprise cooperation, etc., to help students carry out extracurricular activities Professional practice. The unit design of "Project Course" should be scientific and rigorous, and guided by unit tasks, and practice activities are linked together. Only in this way can language learning be effectively driven and communication skills improved. Teachers should activate the guiding task activity design plan, inspire students to think, and cultivate their understanding, induction and speculation. The effective practice of the "project curriculum"-driven teaching model not only reflects the characteristics of the times but also meets the needs of the society, which is conducive to cultivating innovative international business talents.

5. Conclusion
Relying on the big data Hadoop technology, this paper explores four hybrid teaching modes, which greatly expands the teachers' means, introduces big data technology from the whole teaching process of pre-class, in-class, detection and feedback, in the actual teaching of business English It can be used flexibly and switched freely, without being stuck in a certain teaching mode or a certain teaching idea.

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