An Introduction to Intercultural Communication
Teaching of English in Colleges and Universities in the Era of Big Data

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Abstract: This paper focuses on the teaching of English intercultural communication in colleges and universities in the era of big data, and analyses the challenges faced by the imbalance of educational resources, the training needs of teachers, and the acceptance level of students. In order to solve these problems, countermeasures such as establishing a platform for sharing educational resources, carrying out professional training programmes and designing interesting teaching contents are proposed. The aim is to promote the intercultural communication teaching of English in colleges and universities to adapt to the requirements of the big data era and to cultivate international talents with intercultural thinking skills.

Keywords: Big Data Era, College English, Intercultural Communication Teaching, Educational Resources

1. Introduction

In the new era, under the background of globalisation and informatisation, English teaching in colleges and universities is urgently facing the challenge of cultivating new types of talents with cross-cultural thinking skills. The rise of the big data era provides an opportunity for English communication teaching in colleges and universities, which requires an in-depth discussion on how to better meet the needs of students' different professional backgrounds with the help of advanced technologies and theoretical frameworks, in order to cultivate international talents who can adapt to the challenges of the future workplace.

2. Theoretical foundations of teaching intercultural communication

2.1. Conceptual Analysis of Intercultural Communication

Cultural Cognition Theory is the cornerstone of this field, emphasising the need for learners to have a deep understanding of their own and others' cultural backgrounds. In practice, this means that students not only learn to express themselves in language, but also to understand and respect the values, beliefs, behaviours and social norms of the other culture through cultural awareness skills. For example, in English language teaching, learners not only need to master English grammar and vocabulary, but also need to understand the cultural differences of English-speaking countries, such as etiquette and values. Through in-depth understanding of the background of different cultures, learners can better understand and respect others and avoid cultural misunderstanding in communication. Intercultural communication teaching needs to cultivate students' cultural awareness through real-life examples and role-playing. In this way, learners are able to apply language knowledge in a simulated cultural environment, while understanding and respecting the rules of communication of different cultures, thus improving the effectiveness of intercultural communication.

2.2. Theoretical framework for teaching intercultural communication

Based on the theory of cultural cognition, the teaching objectives not only include the improvement of language skills, but also focus on learners' deep understanding of different cultures. For example, learners need to gain a deep understanding of the contexts and backgrounds of the target cultures through case studies and field trips to develop cultural cognitive skills. Social identity theory
emphasises learners' social identity and identification in cross-cultural situations. In teaching, learners need to be guided to think about the social group they are in and understand their role in cultural communication. Through group discussions and collaborative projects, learners can establish a sense of common identity and promote harmonious intercultural communication. With the help of big data analysis, the dynamic changes of the target culture can be more accurately grasped, providing practical case support for teaching. For example, by analysing language use and cultural expressions on social media, teachers can adjust the teaching content in time to make it more in line with the actual needs of learners.

2.3. The Impact of the Big Data Era on Intercultural Communication Theory

The rise of the big data era has injected new vigour into intercultural communication theory and provided more precise and practical support for teaching. Big data technology provides a broader and deeper information base for cultural cognition theory. By analysing big data, more detailed information about the commonalities and differences between different cultures can be obtained, thus guiding learners' cultural cognition more accurately. The use of big data can be reflected in the selection of teaching content and case analysis. By analysing social media, international news and other sources of big data, teachers can better understand the actual context of the target culture and choose cases that are more relevant and close to the actual needs of the learners for teaching. For example, by introducing real cross-cultural communication challenges in teaching, learners can analyse big data to solve these challenges and improve their practical coping skills [1].

3. The Practice of Teaching English Intercultural Communication in Colleges and Universities in the Context of Big Data Era

3.1. Redefinition of teaching objectives

3.1.1. Developing students' intercultural critical thinking skills

In the era of big data, traditional language skills training is no longer sufficient. Teaching objectives need to place more emphasis on students' cross-cultural discursive ability in English, i.e. the ability to think deeply and respond effectively when faced with different cultural situations. The cultivation of this ability is not just a matter of rote memorisation of cultural knowledge, but also requires students to develop an understanding of the deeper logic behind the culture through the analysis of big data and actual case studies. In order to achieve this goal, teachers can design challenging intercultural communication tasks to guide students to analyse and solve problems using intercultural thinking. For example, by presenting communication differences in different cultures through big data analysis, students are asked to propose solutions through critical analysis, thus improving their cross-cultural thinking.

By emphasising the cultivation of cross-cultural thinking skills in teaching, students will not only be able to better adapt to different cultural environments, but also be able to apply what they have learnt more flexibly in practical applications and improve their ability to solve practical problems. This not only meets the requirements of talents in the era of big data, but also promotes the cultivation of students' lifelong learning and ability to adapt to future changes. The redefinition of this teaching goal focuses not only on students' ability to express themselves at the language level, but also on their ability to think and respond in cross-cultural situations. Through the introduction of real cases and big data analysis, teachers can better stimulate students' interest in learning, improve their practical application ability, and make intercultural communication teaching more in line with the needs of the new era.

3.1.2. Fostering international talent

Teachers can develop students' oral and written communication skills in an English-speaking environment by simulating real-life scenarios such as international meetings and business negotiations. The simulation of such real-life scenarios aims to enable students to better understand and adapt to the contexts and norms of international communication. Through group projects and international co-operative research, students are able to experience the challenges of teamwork in different cultures and learn to respond flexibly to develop practical skills in teamwork. In the era of big data, by analysing the data of multinational enterprises, the pedagogues are able to better grasp the requirements of the international market and help the students to have a more comprehensive understanding of
international business etiquette, negotiation skills and other practical application knowledge. For example, by analysing the communicative styles of successful international enterprises, pedagogues can guide students to better understand the business cultures of different countries and regions and improve their international literacy. By cultivating international talents, students not only improve their English proficiency, but also exercise their cultural sensitivity and problem-solving ability in international communication. The achievement of this goal not only meets the demand for talents in the era of big data, but also enables students to better adapt to the diversified and globalised social environment in the future.

3.2. Adaptation of teaching content

3.2.1. Individualised intercultural communication teaching in relation to students’ different specialisations

To meet the needs of students of different majors, teachers can customise different course modules to reflect the application of English teaching in intercultural communication. For example, for students in the School of Economics and Management, intercultural communication content that emphasises business negotiation and international market development can be set up; for students in the School of Civil Engineering, practical applications such as project management and teamwork can be focused on. By introducing real-life examples, instructors are better able to demonstrate the challenges of intercultural communication in different areas of specialisation. For example, civil engineering students may face cross-cultural team management in international co-operation projects, and through such cases, students can better understand and cope with the challenges in practical work. By analysing big data, the pedagogues can understand the pain points and needs of different professions in international communication and provide more specific and practical support for the teaching content. For example, by analysing the records of international conferences in related industries, the pedagogues can learn about the success stories and failures of intercultural communication in different professional contexts, helping students to better understand and avoid similar problems.

3.2.2. Integrating Big Data Resources for Case Study Teaching

By analysing data such as official documents, employee communication records, and exchanges on social media from international companies, pedagogues can extract authentic and representative cases. These cases can cover success and failure experiences in different industries and cultures, providing students with more three-dimensional learning materials. By analysing big data, it is possible to better understand the communication patterns and values in different cultures. For example, the analysis of linguistic big data can reveal the preferences of different cultures for polite phrases, metaphorical expressions, etc., so that students can have a deeper understanding of the importance of context in cross-cultural communication. Such data analysis can not only be presented in the case, but also be shown to students intuitively through visualisation. In the case teaching, the pedagogue can design a series of questions to guide students to think deeply. These questions can involve the deep reasons behind cultural differences, how to avoid or solve similar problems in practice, and so on. By analysing real cases and combining the support of big data, students can better understand the application of theoretical knowledge in practice and improve their ability to solve practical problems [2].

3.3. Innovations in teaching methods

3.3.1. Use of science and technology to promote intercultural communication

Through tools such as videoconferencing and online social platforms, students can communicate in real time with learning partners from different cultural backgrounds. This kind of communication can simulate real cross-cultural communication scenarios, allowing students to experience more intuitively the challenges of communication in different contexts and improve their actual communication skills. Through virtual reality, students can experience various cultural scenes in an immersive way and feel the real cultural atmosphere. For example, students can experience the lifestyles and festivals of different countries through VR, so as to gain a deeper understanding of the characteristics of different cultures. Teachers can design virtual cross-cultural situations, allowing students to engage in actual communication in the virtual environment. By simulating international business negotiations, cultural exchanges and other scenarios, students are able to accumulate practical experience in the virtual reality and improve their ability to cope in real scenarios. By analysing students' performance in the virtual reality through big data, teachers can understand students' learning status in time, adjust teaching strategies and better meet students' individual needs.
3.3.2. Interdisciplinary Collaboration to Promote the Teaching of Intercultural Communication

Interdisciplinary co-operation can bring in expertise from related fields such as cultural studies and sociology. By working together with experts in these disciplines, pedagogues can provide students with a more in-depth interpretation of cultural contexts. For example, in a literature course, students can learn about the values of different cultures through literary works; in a sociology course, students can gain an in-depth understanding of social structures and behavioural norms in different cultures. Using interdisciplinary collaboration, richer and more practical intercultural communication tasks can be designed. In co-operation with professional teachers from other disciplines, projects and research tasks are designed so that students can improve their language skills in practical interdisciplinary co-operation. For example, in cooperation with the School of Economics and Management, students can practice intercultural communication in a simulated international business environment to better integrate into professional practice.

By cooperating with information technology, data science and other professions, pedagogues can use big data technology to collect and analyse intercultural communication data. Such data analysis can provide students with more intuitive and concrete cases of intercultural communication, stimulate students' interest in learning and improve their practical application ability. Promoting intercultural communication teaching through interdisciplinary cooperation can not only provide richer and more practical teaching content, but also help to cultivate students' comprehensive literacy. Such an innovation in teaching methodology makes students more adaptable and leadership when facing the challenges of multicultural communication in the future [3].

4. Challenges and Countermeasures of Teaching English Intercultural Communication in Colleges and Universities in the Era of Big Data

4.1. The problem of imbalance in educational resources

There is an obvious imbalance in the allocation of resources for English intercultural communication teaching in some universities, which leads to some students not being able to enjoy high-quality intercultural education. Big data technology can be used to build a cross-college platform for sharing educational resources. This will enable the sharing of high-quality teaching materials, cases and teaching designs among universities, ensuring that students from all over the world can fully benefit from the rich intercultural communication teaching resources. Through the online platform, teachers and students from different universities can participate in common course projects. Such co-operation projects can not only make full use of the professional advantages of each university, but also cover a wider area with intercultural communication education resources. For resource-poor students, an online tutoring service is established, with outstanding teachers or tutors providing remote tutoring. In this way, it is possible to compensate for the differences in resources between regions and ensure that students can receive timely support in their academic endeavours. The government and education departments can introduce policies to encourage colleges and universities to strengthen cross-college co-operation and share resources. More support should be given to schools that excel in intercultural communication teaching to encourage the sharing of high-quality educational resources. The problem of unbalanced educational resources can be gradually solved so that more students can enjoy comprehensive and quality English intercultural communication education. This is conducive to improving the equity of education as well as fostering more internationally competitive talents.

4.2. Teacher training and development needs

The era of big data requires teachers to be proficient not only in intercultural communication theory but also in relevant big data technology, and teacher training and development needs to be urgently improved. Schools can set up professional teacher training programmes that cover intercultural communication theory and big data technology. The training could include the use of online teaching tools, big data analysis methods, and so on. Such a programme can help improve teachers' comprehensive quality and make them better adapt to the teaching needs of the new era. Schools can invite experts in the field of intercultural communication and big data to conduct training. Such a training approach can introduce cutting-edge knowledge and practical experience that teachers can understand more deeply and apply to their teaching practice. By encouraging teachers to participate in international co-operation projects and work with foreign scholars and experts, teachers can gain a better understanding of international trends and improve their teaching of intercultural communication.
Schools can set up online teacher exchange platforms for teachers to share their teaching insights and experiences. Such a platform helps teachers learn from each other and form an atmosphere of common growth. Schools should advocate the concept of continuous learning for teachers and encourage them to participate in academic seminars and subject research after work to continuously improve their educational level. It can better meet the training and development needs of teachers in intercultural communication teaching, equip them with stronger theoretical literacy and practical ability, and improve the teaching quality of English intercultural communication courses.

4.3. Consideration of student acceptance

Students may have the problem of low acceptance of new teaching methods, especially the application of big data technology in intercultural communication teaching. Teachers should develop vivid and interesting teaching content, such as the introduction of real cases and cross-cultural communication games, to stimulate students' interest and curiosity. Through specific cases, students can feel the importance of cross-cultural communication more intuitively. The introduction of student participatory teaching design allows students to actively participate in the process of big data analysis and intercultural communication case formulation. Through practical operation, students can understand the theoretical knowledge more deeply and enhance their acceptance of the teaching methods. Adopt a variety of learning approaches, including online learning, group work and field practice. Provide more flexible learning methods to cater to different students' learning methods and improve their autonomy and learning initiative in learning. To a certain extent, students are encouraged to participate in teaching and learning decisions, such as choosing cross-cultural themes or interesting cases. This enables students to become more engaged in the learning process and increases their identification with the content. Collect student feedback during the teaching process to keep abreast of students' learning experiences and needs. Through continuous investigation and assessment, timely adjustments are made to the teaching content and approach to ensure that the teaching always meets students' expectations.

5. Conclusions

In the era of big data, English intercultural communication teaching in colleges and universities is facing new opportunities and challenges. Through the countermeasures proposed in the article on the imbalance of educational resources, teachers' training needs and students' acceptance, we aim to stimulate the innovation and development of English intercultural communication teaching in colleges and universities. A sharing platform should be built to improve teachers' professionalism and focus on students' needs. In this way, we can better cultivate new-age talents with international competitiveness who can adapt to the multicultural background.

References