



An Analysis of Sino-Foreign Cooperation in Chinese Higher Education

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Abstract. In recent years, Sino-foreign cooperative education is rapidly emerging in many Chinese universities and more and more students are considering studying in this type of institution. This is because they directly bring in quality foreign teaching resources and provide students with an international learning environment. However, this form of institution is still an emerging experiment in China and many issues are emerging, such as management, the integration of teaching objectives and the choice of co-operative majors. All of these need to be actively addressed in order to facilitate the long-term development of the new way of teaching. This paper analyses the advantages and problems of the current situation of Sino-foreign cooperative education, and provides some insights for its development.

Keywords: Critical Responsive Pedagogy (CRP) · Powerful knowledge · Sino-foreign cooperative education

1 Introduction

Since the 21st century, Chinese higher education has gradually become more open, with an increasing number of Sino-foreign co-operative programmes and diversified cooperative majors. There are also Sino-foreign cooperation institutions with independent legal personalities, such as University of Nottingham Ningbo China, which has the authority to operate a wholly autonomous and non-interfering university [1]. Unfortunately, due to the rapid development over the last decade, various challenges have progressively emerged in the construction of Sino-foreign cooperative institutions, such as the difficulty in opening specialties and the lack of necessary instructional expertise among teachers [2]. These situations that are not conducive to improving the quality of education must be addressed seriously in order to effectively utilize foreign high-quality educational resources and support the long-term development of cooperation.

This paper will reflect on the long development of Sino-foreign cooperative education, use the teaching-learning case of this new school form as the research object, and review the reasons for the successful development of these emerging higher education institutions and other measures to improve development quality. Two theories will be utilized to analyze the concerns presented in the paper, guiding researchers to apply appropriate and accurate approaches to improve the existing situation of Sino-foreign

cooperative education. They are Powerful Knowledge and Critical Responsive Pedagogy (CRP). Powerful knowledge refers to specialized knowledge of a specific subject that differs from personal everyday experience-based subject knowledge [3]. Sino-foreign cooperative schools have exhibited a strong understanding of cooperative majors and curriculum design. CRP is a precise conceptual model for aiding learning and teaching, which allows students to sense considerable concerns and teachers to maintain rigour and efficiency [4].

2 Discussions

2.1 Social Justice

Powerful knowledge and CRP provide theoretical contributions and guidance for Sino-foreign cooperative education to promote and ensure social justice [5].

According to the sociology of education, knowledge-based formal education should provide expertise, since when expertise contributes to a specific sector of society, it becomes powerful knowledge in the educational system [6]. The majority of Sino-foreign cooperative courses are in science and research, with the goal of maximizing the use of foreign high academic resources to enable more students trained in greater fields of study and have more chance to participate in important skill training courses [1]. As a result, Sino-foreign cooperative institutions prioritize powerful knowledge as a new curriculum principle and try to promote social justice in Chinese present educational context as envisioned by powerful knowledge theorists [7]. The reasons behind this type of knowledge supplied by Sino-foreign cooperative institutions can be examined from two perspectives: epistemology and politics. For epistemology, on the one hand, the professional courses such as computer science, medicine, and information systems chosen by Sino-foreign cooperative universities are dependable and unarguable skilled guidelines [8]. On the other hand, students who grasp this kinds of expertise access strong social groups to participate in or manage projects via qualification examinations [8]. For politics, in the past, only a few scientific researchers from national institutions were entitled to obtain exchanges and learning opportunities from strong scientific education resources abroad [9]. Therefore, the opening of a huge number of powerful knowledge subjects by Sino-foreign cooperative institutions provides Chinese learners with more chances of high-quality education [9]. People expect that by expanding the subjects of powerful knowledge, science will no longer be limited to patents for a few special institutions, and that research on powerful information will be released from these institutions and expanded to other institutions, and form a societal distribution [10].

As a leading teaching style in teacher education, critical responsive pedagogy (CRP) efficiently provides teachers with empirical and theoretical advice [11]. Empathy has been discovered in practise to be an important model for achieving CRP, instructing teaching staff in two essential tasks in the teaching and learning process: first, empathy assists teachers in making highly qualified decisions in response to CRP in their preparation for teaching and learning, so that they can better examine the curriculum and teaching from students' perspectives; second, empathy assists lecturers in examining their true attitudes when they treat students [12].

The learners that participate in Sino-foreign cooperative education come from a wide range of backgrounds. For instance, in its first intake of 295 students in 2013, New York University Shanghai (NYU Shanghai), a model of Sino-US cooperation run by East China Normal University and New York University, had 145 overseas students from various contexts, and the diversity of student groups was growing with the gradual development of Sino-foreign cooperative education [1]. Because teachers in the empathy model consider their students' cultural backgrounds, preferences, and interests when constructing teaching and curriculum, and adapt their actions and responses based on these factors, empathy is a crucial factor in improving teaching and learning and interaction in intercultural and inter-racial classrooms [11]. However, in the case of Sino-foreign collaborative institutions, teachers who educate a variety of learners are not fully capable of creating an inclusive learning environment guided by empathy. It's still a challenge for them.

CRP's teaching style is characterized by a strong dedication to social justice [13]. Teachers' CRP should be prioritized by Sino-foreign cooperative institutions so that teachers can use empathy to communicate with a variety of student groups. This enables learners to perceive that their race and ethnic identity are acknowledged by their professors and the inclusive learning environment, resulting in positive recognition of their cultural prides and traditional backgrounds. This helps to promote social fairness and ensures that this new schooling model improves teaching and learning efficiency and leads to long-term growth.

2.2 Teaching Styles

Both powerful knowledge and CRP use their theoretical perspectives in directing and refining Sino-foreign cooperative education teaching and learning methodologies, but their focus and goals are distinct. CRP stresses the inclusive mindset and beliefs of teachers when facing with diverse audiences, whereas powerful knowledge research focuses on specific teaching and curriculum design strategies.

Valuable information was produced from research-based undergraduate curriculum, which altered perceptions about the curriculum and prompted critical reflection on dominant teaching and learning notions [3]. The study of structuring knowledge systems in many abstract and sophisticated ways is viewed as the process of learning of mastering powerful knowledge. The entire procedure appears to be in line with the course objectives, but the course team must innovate some teaching content in order to effectively integrate the powerful knowledge theory in the teaching-learning activities [14]. Students must grasp the structural principles of subject knowledge, thus each educational institution must retain the structural principles of theory when producing and implementing powerful knowledge [15].

All courses are aimed at resolving the world's challenges that people are confronted with. Students must first acquire the generation principle of the discipline, which is a process of epistemic access, in order to grasp subject-specific information and build the structure based on the principle of powerful knowledge to better serve society [3]. To begin with, students in the "powerful knowledge" programme engage as researchers and are supposed to start planning their research training from the start of their university degree [3]. Some Sino-foreign cooperative universities already use this teaching method,

which requires students to identify original research topics early in their studies, design experimental plans, research schedules, and conduct studies based on their questions, as well as engage in relevant practical works. Through a series of practical research work, students will summarize important data for analysis and evaluation, which will be utilized to compose the final research report. The entire process relies on students' particular learning styles, and teachers must provide tailored curriculum assistance based on their knowledge of each student [3]. Since most majors are professional with powerful knowledge features, Sino-foreign cooperative institutions should motivate learners to do research and training and fully exploit the teaching method of powerful knowledge. Generally, learning epistemology is a process that enables students to gain new topic knowledge or to improve their sense of presence and engagement in the area of academic research [16].

In order to transition from new students with no prior experience to specialists in the field of powerful knowledge, students must explore, strengthen their research abilities, and accumulate adequate theoretical information and facts [17]. Because professional courses in powerful knowledge cannot simply be a statement of essential points regarding substantive content, which would prevent students from exercising their thoughts and reduce the effectiveness of the curriculum, a high-level course layout is necessary in this case [18]. Therefore, Sino-foreign cooperative institutions need systematically classify and rank knowledge types in accordance with the subject's concept and organizational structure [17]. The secret to organizing curriculum methodically is to adhere to the notion of course development [19]. For instance, when designing courses for engineering sciences or medicine in Sino-foreign cooperation programmes, each theme should be arranged in accordance with the profound principle to allow for deeper vertical study; in economics, the rules of material sequencing should be adhered to allow for the horizontal expansion of arguments, statements, and thinking about principles [18].

2.3 Complementary Teaching

In the context of Sino-foreign cooperative universities, powerful knowledge and CRP are complementary. The CRP gives teachers a technique to encourage students to better acquire abilities and respond to classroom knowledge, because under the effect of powerful knowledge, institutions offer some complicated developing and scientific research majors [20]. The goal of establishing Sino-foreign cooperative education is to break through the traditional and solitary academic subject, as the ordinary academic pursuit would be no longer able to satisfy the needs of enhancing the academic performance of the students or the needs of modernization of China. At the moment, higher education in China is in a step of popularization [21]. Sino-foreign cooperative education is based on the leading concept of powerful knowledge when choosing cooperative disciplines, with the purpose of developing extrovertive, compound, and practical talents who can promote national and socio-economic improvement. It is clear that the employment market in China requires more expert talents [22]. Table 1 lists the majors that provided by Sino-foreign cooperative universities in 2016 [20].

Table 1. Distribution of Disciplines in Sino-foreign Cooperative Education Programs at the Undergraduate Level and the Postgraduate Level

| Subjects | Number | % |
|-------------|--------|------|
| Engineering | 398 | 36.7 |
| Management | 286 | 26.4 |
| Economics | 99 | 9.1 |
| Arts | 83 | 7.6 |
| Medicine | 52 | 4.8 |
| Science | 43 | 4.0 |
| Literature | 42 | 4.0 |
| Education | 38 | 3.5 |
| Agriculture | 21 | 1.9 |
| Law | 21 | 1.9 |
| History | 1 | 0.1 |

As shown, there are a total of 398 engineering departments, giving engineering the most abundant field of study. Engineering, management, and economics have the most openings, while history in the humanities and social sciences has the fewest openings—just one [20]. Chinese policy has recently placed a strong emphasis on fostering partnerships in the fields of science, engineering, and medicine, which include physiotherapy, emergency management, artificial limbs, orthopaedics, ecology, marine engineering, boat building, atmospheric science, and high-end equipment manufacturing. Sino-foreign cooperative education will inspire these areas to maintain and promote present partnerships in the upcoming years [20]. According to powerful knowledge, natural scientific design is crucial while conducting research: fundamental ideas should have a high level of precision, intellectual information ought to be impartial and strict, each subject should be evaluated according to specific guidelines and rigid limitations, and the existing fields of study ought to be highly specific [22]. In the current research-intensive higher education context, in which a setup that holds powerful knowledge as a reforming path is better to accept and apply, and the commitment to concentrate on disciplines with a powerful knowledge characteristic in Sino-foreign cooperative universities is also important [7]. Furthermore, there are still difficulties in putting the idea of powerful knowledge into practise through choosing topics. The fact that learners have trouble comprehending the abstract ideas that served as the foundation for these courses is a significant issue with the teaching of powerful knowledge. In addition to regular and methodical study, achieving this professionalization necessitates highly competent teachers, and this advice should be transformed into an engaging and appealing methodology [3].

The CRP offers an effective solution for enhancing learning results in the area of powerful knowledge, namely, perspective-taking. Since adopting a fresh outlook can assist teachers in treating students with varied needs and traits in diverse ways, resulting

in outcomes that are more favourable to higher education [23]. To ensure that the needs of all students are best met, perspective-taking strives to improve the accuracy of decision-making in teaching practise [11]. In order to raise student achievement and the standard of classroom interaction, teachers employ a number of instructional approaches and skills. This is the practise of perspective-taking in the class [24]. There are two different approaches to perspective-taking: image self (IS) and image other (IO). The distinction between them is whether one thinks and acts from the view of the self or the targeting person [25]. IO is the best choice for the educators of Sino-foreign cooperative institutions. The reason is that educators who view IS as a perspective-taking model focus their recommendations on what students have or have not accomplished, they will attribute learner struggles and poor performance in studying powerful knowledge to the students themselves [26]. This solution disregards the institutional, structural, cultural, and ideological challenges that students face [11]. It does not consider from learners' perspectives, and does not consider the effects of the social context, hostile teaching methods, and cultural variations in learning preferences, and is thus unwanted [27]. Many teachers in Sino-foreign cooperative institutions still employ the egocentric, self-centred approach of IS, which finally doesn't really benefit academic achievement and significantly lowers the possibility of CRP actions in the class [11]. However, IO attaches importance to the exterior social and cultural aspects that affect student accomplishment, and instructors who use IO will first consider their own errors in academic contact with students and the causes of students' failing [26]. Instead of condemning learners or avoiding their obligations to remove barriers that stand in the way of learners' academic achievement, this sort of teachers try to create a path that is most advantageous to students and help students achieve exceptional learning outcomes in the teaching process. The ability of the teachers at Sino-foreign cooperative institutions to accurately comprehend their students has a direct impact on their ability of becoming good teachers. As only an accurate comprehension of the skills and cultural backgrounds of different learners can result in suitable and helpful answers to the requirements of students with regard to their academic results [11].

3 Conclusion

The rapid expansion of Sino-foreign cooperative institutions, which are becoming more popular among students, is explored in this article. In order for Sino-foreign cooperative education to effectively start a new level of high-quality and seamless progress, the study also identifies the issues that they still face and provide some solutions. The two ideas employed in this research are powerful knowledge and critical responsive pedagogy (CRP). The growth of Sino-foreign cooperative education is consistent with, distinct from, and enhanced by such two theories. Most students find it challenging to learn and progress in the powerful knowledge in Sino-foreign cooperative institutions. However, the CRP's emphasis on perspective-taking enables teachers in Sino-foreign cooperative institutions to generate better decision-making and raise grades of the students.

Authors' Contributions. The author Kexin Feng designs the study and writes the paper.

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