On the Influencing Factors of Global Competence of College Students in China
Jiang Dong¹, Adiza A. Musah²

Abstract
In today's society, cultivating students' "global competence", that is, cultivating innovative talents with more international competitiveness and cross-cultural leadership, has become an important goal of national talent training. The present research focus on the cultivation of global competence of international talents, while there is few research on the influencing factors of global competence. The paper explores the impact of number of foreign teachers, English compulsory course credits, English elective course credits, and professional bilingual course credits on the cultivation of students’ global competence in China’s local universities. It is important to find the influencing factors to help select appropriate training modes, so as to improve college students’ global competence.

Keywords: global competence; number of foreign teachers; English compulsory course credits; English elective course credits; professional bilingual course credits.

1. Introduction
The international division of labor and cooperation brought about by globalization requires more human capital with the ability of international exchange and cooperation, and these changes have put forward new requirements for higher education - to realize the internationalization of higher education.

The National Medium and Long-term Education Reform and Development Program (2010-2020) promulgated in July 2010 proposes to "cultivate a large number of internationalized high-quality talents who are capable of competing in the challenges of globalization, have an international vision, and are familiar with the rules of international exchanges to participate in the competition of globalization". A brand new assessment, Global Competence, was added to the 2018 Program for International Student Assessment (PISA) test. The intention is to test students from around the world for their intellectual understanding of global and intercultural topics, their ability to live with groups in diverse contexts, and the respectful and inclusive attitudes and values necessary for intercultural interactions (Xu Xing, 2016).

China has also responded positively to the requirements of globalization and internationalization of human resources arising from the trend of globalization. We should “cultivate a large number of internationalized talents with an international outlook, a good understanding of international rules, and the ability to participate in international affairs and international competition.” This is the first time that China has explicitly stated the requirements for education for international understanding in the form of a national

¹ Graduate School of Management, Postgraduate Centre, Management and Science University
² Graduate School of Management, Postgraduate Centre, Management and Science University
policy document at the highest level, advocating education reform to make all students globally competent.

In this context, the cultivation of students' "Global Competence", that is to say, the cultivation of high-level and high-quality talents with more global competitiveness and cross-cultural leadership has become an important goal in the cultivation of talents in many countries, and for our country, in the process of exchanges and interactions with other countries of the world, how to adhere to the cultural self-consciousness and self-confidence in face of the cultural output of the dominant regions, and how to gather a more powerful spirit of synergy, is also a theoretical and practical subject worthy of consideration and attention.

This article mainly starts from the perspective of undergraduate training in colleges and universities, focusing on the problems and reasons that Chinese universities have in the cultivation of undergraduates’ global competence, and draws on the advanced student training experience of universities in developed countries for these problems, and puts forward countermeasures and suggestions. It will provide some practical references for promoting the cultivation of global competent talents in Chinese universities. The topic selection angle of the thesis has a certain pertinence and novelty. It mainly uses the method of multiple linear regression, which is a comprehensive and systematic review of the cultivation of the international quality of undergraduates in ordinary universities in China.

2. Literature Review

2.1 Global Competence Elements and Models Study

The concept of "global competence" is developed on the basis of earlier concepts such as "international competence/literacy", "attitude/awareness of global citizenship", and "cross-cultural competence". According to the report "Teach for Global Competency" released by the United States in 1998, global competence means having basic international knowledge and being sensitive to cultural exchanges. It called for more efforts to train students for "global competence." Hunter, defined global competency as: actively and respectfully understanding the cultural norms and expectations of others while maintaining an open mind, In addition, the acquired knowledge can be used to effectively conduct interpersonal interaction and learning in a cross-cultural environment (Hunter, White, & Godbey 2006), which means global competency is a learning field with three-dimensions, including global knowledge, global skills and global attitudes.

According to the definition of the concept of global competence, scholars at home and abroad have divided the components of global competence, so as to build a framework of the elements of global competence. Lambert, a foreign language policy scholar in the United States, has constructed a global competency framework consisting of five elements with the goal of internationalizing education: knowledge, empathy, identity, foreign language skills, and task performance (Lambert, 1993). For the first time, his concept uses education as the entry point for the four aspects of global competence: cognitive, linguistic, affective, and action arguments throughout his educational goals. In 2004, William D. Hunter (2004) constructed a more complete and detailed framework of indicators system on global competencies, covering 3 dimensions: knowledge and understanding, skills and experiences, and attitudes and values.

In 2017, OECD released the PISA Global Competency Framework, which consists of four dimensions and four cornerstones. These four dimensions and four cornerstones are not parallel, but are intrinsically hierarchical and connected. The four dimensions of global competence are: understanding local and global issues; embracing the cultures and perspectives of different groups; communicating effectively and positively across cultures; and contributing to the
development of a global workforce, effective and positive cross-cultural communication; and acting for human well-being and sustainable development (Li Yang, 2020). It can be seen that these dimensions are more focused on the cognitive and cognitive aspects of thinking, are more focused on cognitive and practical actions at the level of thinking, and they constitute the meaning of global competence. Specifically, the four cornerstones of global competence, namely knowledge, skills, attitudes, and values, constitute the basic outreach of global competence. They constitute the basic outreach of global competence.

To summarize, although there are differences in the expression of the elements of global competence, they all cover the three levels of knowledge and skills, attitude and values, and action. The construction of the relevant index system and model has laid a solid theoretical foundation for the research on global competency in China. The construction of the relevant index system and model has laid a solid theoretical foundation for the domestic research on global competence.

2.2 Global Competence Influencing Factors Study

The influential factors of global competence are the focus of academic attention. Previous studies have shown that students' global competency performance is affected by many factors, including learning environment factors and students' own factors. In terms of learning environment factors, cross-cultural contact, curriculum teaching, learning style and communication technology all play an important role in improving global competence.

Mintzberg et al. believe that the cultivation of global competence needs to be completed in a “live cross-cultural context” (Mintzberg et al., 2002). Therefore, international learning environment and overseas work experience are very valuable for the cultivation of global competence (Vance, 2005).

The research of Endicott et al. show that the depth of cross-cultural contact is more conducive to the development of an individual's global competence than the breadth of cross-cultural contact. That is, living in a region for a long time is more conducive to the improvement of an individual's cross-cultural literacy than traveling to multiple countries at a certain time (Endicott et al., 2003). In addition to overseas experience, cross-cultural teaching in schools, such as international courses (Naicker, 2022), widening the diversity of study peers (Peifer, 2021), and increasing opportunities for contact with foreigners, can help to improve students' global competence and broaden their global perspective. Teachers with an open vision and cultural literacy are more capable of teaching international courses and promoting the cultivation of students' global competence.

Lv Linhai, Gong Fang, and Jung Jongho (2013) conducted an undergraduate study of Nanjing University and Seoul National University in South Korea to comparison. In exploring the influence mechanism of globalization competence, it was found that not only personal background variables such as place of birth, family economic background factors have a significant effect on the globalization cognitive understanding and intercultural interactions of undergraduates from the two schools. Globalization, but also the globalization experience significantly affects globalization cognitive understanding and intercultural communication skills (Li Yingjie et al., 2018).

3. Research Design

3.1 Conceptual Framework

The global competency is developed based on Hunter (2006)'s global competency model. There are three sub-dimensions: global knowledge, global skill and global attitude, each sub-dimension contains five items (Hunter et al., 2006).

The conceptual framework can be seen clearly in Figure 3.1
Figure 3.1 Conceptual Framework

3.2 Descriptive statistical analysis

In order to study the problems and their reasons in the cultivation of undergraduates' global competence in Chinese local universities, we need to select indicators related to the cultivation of global competence in universities. Due to the limited data released by Chinese universities, we started from the perspective of course teaching and the course credit data from the official websites of various Chinese local universities and colleges. The final selection of global competence indicators are: the number of foreign teachers, the credits of compulsory English courses, the credits of English optional courses, the credits of bilingual courses for professional courses. The results of descriptive statistical analysis are as follows:

Table 1 Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Statistic</th>
<th>Range Statistic</th>
<th>Minimum Statistic</th>
<th>Maximum Statistic</th>
<th>Mean Statistic</th>
<th>Std. Deviation Statistic</th>
<th>Std. Error</th>
<th>Variance Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of foreign teachers</td>
<td>110</td>
<td>142.00</td>
<td>28.00</td>
<td>170.00</td>
<td>68.8273</td>
<td>2.99972</td>
<td>31.46131</td>
<td>989.814</td>
<td></td>
</tr>
<tr>
<td>Credits for compulsory English courses</td>
<td>110</td>
<td>40.00</td>
<td>7.00</td>
<td>47.00</td>
<td>18.8545</td>
<td>.83560</td>
<td>8.76381</td>
<td>76.804</td>
<td></td>
</tr>
<tr>
<td>English Elective Courses</td>
<td>110</td>
<td>32.00</td>
<td>5.00</td>
<td>37.00</td>
<td>14.4727</td>
<td>.66105</td>
<td>6.93311</td>
<td>48.068</td>
<td></td>
</tr>
<tr>
<td>Professional courses bilingual course credits</td>
<td>110</td>
<td>23.00</td>
<td>4.00</td>
<td>27.00</td>
<td>10.6909</td>
<td>.49091</td>
<td>5.14870</td>
<td>26.509</td>
<td></td>
</tr>
</tbody>
</table>
3.3 Regression hypothesis

Before carrying out the empirical analysis of the regression model, we first need to set the dependent variable and the independent variable. We make global competence as the dependent variable. Credits for English compulsory courses, English elective courses, and professional bilingual courses are the independent variables of the regression model. We explore the impact of number of foreign teachers, English compulsory course credits, English elective course credits, and professional bilingual course credits on the cultivation of students’ global competence in China’s local universities. And make the following assumptions about the regression model based on common sense:

Hypothesis 1: There is a positive correlation between the number of foreign teachers and global competence.

Hypothesis 2: There is a positive correlation between the credits of compulsory English courses and global competence.

Hypothesis 3: There is a positive correlation between the credits of English elective courses and global competence.

Hypothesis 4: There is a positive correlation between the credits of professional courses bilingual courses and global competence.

4 Empirical Analysis of Multiple Linear Regression Model

In this article, we use SPSS software to perform regression analysis based on OLS, and the results are shown in the following table:

Table 1 Values of R Square

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.986</td>
<td>.971</td>
<td>.970</td>
<td>108.26191</td>
</tr>
</tbody>
</table>

Table 2 Regression analysis

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients B</th>
<th>Std. Error</th>
<th>Standardized Coefficients Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>57.269</td>
<td>33.158</td>
<td></td>
<td>1.727</td>
<td>.087</td>
</tr>
<tr>
<td>number of foreign teachers</td>
<td>28.189</td>
<td>13.227</td>
<td>1.416</td>
<td>2.131</td>
<td>.035</td>
</tr>
<tr>
<td>credits for compulsory English courses</td>
<td>-79.846</td>
<td>52.767</td>
<td>-1.117</td>
<td>-1.513</td>
<td>.133</td>
</tr>
<tr>
<td>credits for English optional courses</td>
<td>-.500</td>
<td>2.010</td>
<td>-.006</td>
<td>-.249</td>
<td>.804</td>
</tr>
<tr>
<td>credits for bilingual courses for professional courses</td>
<td>84.027</td>
<td>37.082</td>
<td>.691</td>
<td>2.266</td>
<td>.026</td>
</tr>
</tbody>
</table>

SPSS 26.0 is used for data processing, and the regression analysis is done and shown in the above table. The goodness of fit of the model is as high as 98.6%. The number of foreign teachers and credits for bilingual courses for professional courses have all passed the T test, the F-test and P-value test of the equation are in good condition, indicating that the overall regression of the model is significant.

At the same time, from the regression model, we can see: (1) There is a significant positive correlation between the number of foreign teachers and global competence, which also verifies our hypothesis 1. (2) There is a positive correlation between the credits of compulsory English courses and global competence, which also verifies our hypothesis.
2. (3) There is a positive correlation between the credits of English elective courses and global competence which also verifies our hypothesis 3. (4) There is a positive correlation between the credits of bilingual courses in professional courses and global competence, which also verifies our hypothesis 4.

4. Conclusion

Through the investigation of Chinese universities, it is found that the problems existing in the cultivation of undergraduates' global competence in Chinese ordinary universities are mainly manifested in the shortage of teachers and low level of internationalization of English-related courses.

4.1 Shortage of Teachers

The main executors of educational activities are teachers. To train students with international qualities, the international level of the teaching team must first be improved, and high-quality international talents with global competence must be cultivated through the effective work of teachers. Only teachers with a clear awareness of internationalization, international education concepts, a strong multicultural knowledge structure and conscious internationalization behavior can ensure that the practice of international quality education can be truly carried out. However, the faculty of ordinary universities in China still has the following problems.

4.1.1 Insufficient Number of Foreign Teachers

According to the needs of subject teaching, universities have hired foreign experts and teachers. However, due to the limitations of funds and school conditions, ordinary universities cannot attract high-level professional teachers from abroad, which is mainly manifested in the following aspects:

One is that the number of foreign teachers is too small, which does not meet the requirements of international teachers (Liu M., 2021). The proportion of foreign teachers in each school to the full-time teachers of the whole school is basically between 1% and 2%. Although a few universities reach 5% or 6% (Mok K. H., 2021), there is still a certain gap compared with well-known universities such as Japan and Singapore. In Peking University, Tsinghua University, Zhejiang University and some other universities, foreign teachers accounted for more than 10% of full-time teachers (Lin J., 2021). However, compared with foreign universities, there is still a huge difference. Take Monash University in Australia as an example, its international faculty accounts for more than 40% of the school's faculty.

4.1.2 Insufficient funds for hiring foreign teachers

The lack of funds is also one of the main factors restricting the development of international exchanges and cooperation between schools. This is a common problem among universities. Generally due to insufficient funding, some contracted projects cannot be implemented as planned in some colleges and universities. Although, in order to promote the cultivation of international talents, some schools have set up special funds for this purpose, and actively raise funds through various channels such as alumni donations, self-funded projects by faculties, and students and teachers self-care part of the overseas funds. But because sending teachers studying abroad with students, as well as Sino-foreign cooperation in running schools and scientific research, etc. require a lot of funding support, only through the efforts of the school itself, it is still unable to solve the problem of insufficient funds, and it is impossible to further expand the scope and scale of international exchanges and cooperation on the original basis.
4.2 Low Level of Internationalization of English-related Courses

One of the other findings of this study suggests that students’ participation in English-related courses also has a significant impact on global competence, especially in terms of internationalization perceptions and skills. Previously, scholars in China have pointed out that on-campus internationalization participation, i.e., “internationalization at school”, has a significant impact on students’ internationalization competence development, and that there is a need to pay attention to the use of on-campus resources (Wen Dongmao, 2010; Chen Changgui, 2010).

As the world landscape is ever-changing and global issues are complex, people need to be equipped with comprehensive literacy in applying critical thinking to global issues and the ability to communicate in cross-cultural contexts. Therefore, the development of global competence should not be limited to a single discipline or field, but should be systematically integrated into multiple disciplines and diverse teaching and learning activities. Teachers in domestic classrooms should enhance the awareness of interpreting issues from different cultural perspectives, design diversified practical projects, improve the connection between knowledge and theory and practical activities, and allow students to enhance the complexity of their understanding in the collision of thinking and practice.

In addition, in the curriculum of the general education courses, a special course on international themes and social issues is offered (Zhang Hongxia, 2015). It is also possible to add lectures related to internationalization knowledge and increase the proportion of bilingual courses on the existing basis, break the barriers between Chinese and Western cultures, arts and sciences disciplines, and build a more diversified and scientific curriculum system, so as to truly incorporate the concept of internationalization into the teaching activities and enhance the international atmosphere of the school.

4.3 Implications and recommendations

Enhance students' knowledge and understanding of global issues and channel interest in learning. School education should promote the comprehensive development of academic subjects and integrate global and intercultural knowledge into the teaching of various subjects, cultivate students' global vision, and stimulate students' understanding and thinking of global issues. In addition, teachers should innovate classroom teaching modes and popularize interculturalism among students by creating cultural scenarios and carrying out cultural exchanges. encourage students to make use of social media to get in touch with and learn about foreign cultures, and stimulate and guide students' interest in learning, thus improving their global competence.

Based on the roots of Chinese culture, promote the localization of global competence. China introduced the concept of global competence relatively late and has not yet formed a complete global literacy education system. At present, the development plan of the Ministry of Education has incorporated global competence into the higher education system. In order to cultivate international talents in the future, China needs to place global competence at the core of education and integrate it into the higher education system, so that students can pay attention to global issues and learn cross-cultural knowledge. In addition, China should avoid absorbing the international global competence evaluation system in its entirety without selectivity and take into account the characteristics of domestic education development to cultivate students who are not only familiar with the national conditions of China, but also with global dynamics.

References


