

Perspectives on Rethinking and Reforming Education

Xudong Zhu · Jiayong Li ·  
Mang Li · Qiang Liu ·  
Hugh Starkey Editors

# Education and Mobilities

Ideas, People and Technologies.  
Proceedings of the 6th BNU/UCL IOE  
International Conference in Education



 Springer

# **Perspectives on Rethinking and Reforming Education**

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# Preface

Globalisation involves movements of people and capital. Mass air travel, the media and the Internet help to create an increasing awareness of the world as a single entity and the interconnectedness of people. Education systems and institutions confront challenges raised by the increasing internationalisation of school and university populations. They also need to respond to changes in society including the challenges of xenophobia, racism and the exclusion that may lead to violent antisocial actions. Education can also play a crucial role in overcoming discriminations and promoting social justice.

Growing concerns with the above issue made us decide to use *Education and Mobilities: Ideas, People and Technologies* as the theme of the Sixth BNU-IOE International Conference in Education. This conference has been a biennial event jointly convened by Beijing Normal University and UCL Institute of Education since 2006, and it has been serving as a dynamic international forum for sharing research and good practices in education. The Sixth Conference was held during 12–13 May 2017, at Beijing Normal University, Beijing, which attracted over 170 delegates from more than 10 countries and regions from the UK, Canada, Singapore, New Zealand, Japan, Finland, Norway, Iceland, Hong Kong and Taiwan, to contribute their valuable thoughts about the theme.

This edited volume presents selected original papers presented at the Sixth BNU-IOE International Conference in Education. It is an essential guide for academics, researchers and practitioners in education from around the world who are interested in exploring the issues concerned with education and mobilities. Readers will find in this book papers and reports of research involving schools and the initial and professional development of teachers that reveal links between research, policy and practice, and also analysis of key themes in education, including public goals and policies, pedagogy, curriculum, organisation, resources and technology, and institutional effectiveness. It is highly recommendable for readers to use the book as

an elaborated introduction to the important theme of education and mobilities, or to use it as a resource for empirical and conceptual research that addresses the related issues.

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# Chapter 1

## The Effect of Educational Mode on Professional Development Program for Chinese Language Teacher in South-Asian Countries (DPCLT-SAC): A Cross-Cultural Adaptation Perspective



Lan Yu and Bei Liu

**Abstract** A majority of South-Asian students have been enrolled in China's universities to earn a degree of Teaching Chinese to Speakers of Other Languages (TCSOL) through the Confucius Institute Scholarship DPCLT-SAC. This study is the first time to analyze the effect of the special educational mode on foreign students through a cross-cultural adaptation approach based on a sample of DPCLT-SAC students who are taught either under advanced-level mode (ALM) or basic-level mode (BLM) (The standard between ALM and BLM is whether DPCLT-SAC students pass Hanyu Shuiping Kaoshi (HSK) level 5 after one year of Chinese preparatory study. Students who are above HSK level 5 will be enrolled directly to college to learn courses for the degree of TCSOL under the educational model of Chinese undergraduates which is considered as an application of special class for gifted young in TCSOL; the others will be enrolled to Chinese language institute to learn Chinese only with other foreign students). Results show that all tested students regardless differences of educational mode adapt new environment more positively, and students who are under ALM do feel more pressure than the other group, but they also earn more satisfaction from advanced knowledge and feel more confident about using the new language. This article proves that a cross-cultural adaptation approach is an accurate tool to analyze foreign students' progress of adjustment to new cultural and academic environments in China; effect of special educational mode is not the main factor for foreign student's cross-cultural adaptation and relatively limited for South-Asian students in China; and Chinese special education mode can be applied into the field of TCSOL in order to select elite candidates for academe.

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**Keywords** Educational model · DPCLT-SAC · TCSOL · Cross-cultural adaptation · Factor analysis

## 1.1 Introduction

Traditionally, international students from South-Asian countries choice China as their advanced education place because of geographical advantages, history of friendship, and trade between China and their countries. Now, special project design and policy support, such as ‘the Silk Road Economic Belt and the 21st Century Maritime Silk Road,’ becomes crucial promoting factors attempting international students from countries along ‘Belt and Road’ to study in Chinese higher education institutions. These projects and policies are an important path for cultivating international talents and providing intellectual resources.<sup>1,2</sup>

In 2015, numbers of international students from eight South-Asian countries were 43,019, which is around 10.8% of total numbers of the year. Its average annual growth rate is 21.20%—almost 4 times the growth rate of the year, which is only 5.46%.<sup>3</sup> A majority of students from South Asia have been enrolled to continue academic education and earn a degree of TCSOL in Chinese universities through the Confucius Institute Scholarship of Professional Development Program for Chinese Language Teacher in South-Asian Countries (DPCLT-SAC) with conditions that they should return their home countries to teach the Chinese language after graduations. In 2015 and 2016, 378 and 767 students are enrolled and distributed to 18 Chinese host universities, most of which are foreign language universities and normal universities.

DPCLT-SAC program plays a significant role in promoting language communication between China and South-Asian countries. It will not only increase the local supply of Chinese language teaching faculties but also adjust the market structure of local Chinese language teachers in these countries in the near future. However, these achievements coupled with great costs and potential risks for host universities and Confucius Institute (such as extra education cost for host universities, or random

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<sup>1</sup>To expand China’s cultural exchanges with the South-Asian countries, in the next five years, China will provide South Asia 10,000 scholarships, 5000 training places, 5000 youth exchange and training places, training 5000 Chinese teachers in total. *Xi Jinping delivered a speech in India on China and South-Asian countries* [EB/OL] (2014-09-20) [2017-05-27]. <http://news.sohu.com/20140920/n404478460.shtml>.

<sup>2</sup>*Vision and Actions on Jointly Building Silk Road Economic Belt and 21st Century Maritime Silk Road* has been issued by the National Development and Reform Commission, Ministry of Foreign Affairs, and Ministry of Commerce of the People’s Republic of China, with State Council authorization. It claims to promote extensive cultural and academic exchange and cooperation between countries along ‘Belt and Road’ and provide 10,000 government scholarships to the countries along the Belt and Road annually. [EB/OL] (2015-03-28) [2017-05-27]. <http://www.mofcom.gov.cn/article/resume/n/201504/20150400929655.shtml>.

<sup>3</sup>*Statistics of foreign students in China from 2010 to 2015*, International Cooperation and Communication Division, Ministry of Education, the People’s Republic of China.

default by students with Confucius Institute). Furthermore, due to the long cultivation period (usually five years or more), it is frustrated for host universities and Confucius Institute to supervise the progress of education accurately and evaluate the quality of the DPCLT-SAC program properly, respectively. To facilitate South-Asian students' academic achievement, host universities can study problems dynamically from first several around of curricula and work with sponsors of scholarship to amend policies in order to maximize universities' profit and expand the program sustainably.

Currently, Beijing Language and Culture University (BLCU) is the only university which provides two different education modes—advanced-level mode (ALM) or basic-level mode (BLM)—for South-Asian students among all Chinese host universities with DPCLT-SAC program. It is the first time for BLCU to apply an innovative teaching practice on TCSOL education. This study aims to examine the effect of this new mode on South-Asian students via their process of academic studying, and living in China.

## 1.2 Literature Review

### 1.2.1 *Acculturation Studies*

The cross-cultural adaptation theory, as a mature analytical framework and measurement tools, become a common technique for the study of culture clash, cultural adaptation, and cultural amalgamation. Especially, it is helpful to reveal complicated factors, causal relationship associated with international students' psychological adaptation, social-cultural adaptation, and academic adaptation in a new country.

A cross-cultural adaptation theory system has three core contents: definition, dimension, and adaptation strategy. Berry (1997) constructs a pattern of four acculturation strategies: integration, separation, assimilation, and marginalization, which is based on the classic definition as 'Acculturation comprehends those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original cultural patterns of either or both groups.' Redfield et al. (1936) and Unlike Oberg (1960) introduce the original meaning of the term 'culture shock' as a negative, passive reaction to unfamiliar cultural environments. Ward et al. (2005) built up a particular theoretical framework including three linked elements: effect, behavior, and cognitions by the empirical research and used the principle of cultural distance to account for the differences in the extent to which people experience and cope with 'culture shock.'

Recent studies on acculturation revolve around influencing factors, process and solving measures, showing a trend of focusing on individuals, processes, and needs. Researchers put more attentions on its practical values for professional working with acculturating groups such as international students, immigrants, and refugees. Yang and West (2008) analyze the Chinese overseas students' experiences and developmental process individually to understanding their learning, culture, and identity

in the UK and point out important factors include language barrier, interpersonal relationship, academic adaptation, and self-concept. Moores (2008) concern about facilitative factors to cultivate the positive attitude and self-adjustment capability of the individual cross-cultural transition of international students through a critical incident technique methodology and a positive psychology lens promoting personal resources. McLeod (2008) find out that cultural and ethnic differences between South Korea and the USA are the sources of many challenges that Korean students faced in the learning process besides the traditional factors as marital status, religious beliefs, experience abroad, etc.

Ye (2006) explores relationships between acculturative stress, interpersonal social support, and use of online ethnic social groups by survey data collected from Chinese international students attending college in the USA. Results suggest that students who are more satisfied with their interpersonal support networks have less perceived discrimination, perceived hatred, and negative feelings caused by change, but not less fear. Yakunina et al. (2010) present that counseling groups—a treatment modality for addressing international students' adjustment—concern acculturative stress, language difficulties, cultural misunderstandings, racial discrimination, and loss of social support. Law and Guo (2010) introduce a semester-long orientation course for first-year international students and evaluate the positive impact of this course in helping Chinese international students improve their psychological well-being and use more appropriate ways of coping with stress and expressing anger.

### ***1.2.2 Acculturation Studies About Foreign Students in China***

Different from adjustments by overseas students in the UK or USA, Chinese scholars find new features of adjustments by overseas students in China. Zhang and Gong (2006) combine with their actual experience with foreign students, describe foreign students 'cultural shock' symptoms, such as 'loneliness and helplessness caused by language communication;' 'tension and anxiety caused by living style differences;' and 'frustration and sluggish caused by slow progress in academic progress.' Chen and Chang (2008) point out that 'anxiety due to learning, and living environmental stress; confusion caused by cultural differences; discomfort and dissatisfaction by the conflict of values; and depressed by the lack of social support.'

In China, the cross-cultural adaptation phases of foreigners can be categorized into two approaches. The first approach is 'three-stage theory,' which states the adaptation process is in order with sightseeing, serious cultural shock, and basic cultural adaptation. The second is 'four-stage theory,' which is categorized based on the period of stay. It follows the beginning stage (1–6 months being in China), cultural shock stage (6–12 months), the in-depth adaptation stage (12–24 months), and cultural integration stage (more than 24 months in China).

Adaptation factors in China include external and internal factors. The external factors mainly include life change, time, social support, cultural distance, discrimination, and prejudice, etc. The internal factors mainly include cognitive style, per-

sonality, knowledge and skills, adaptation strategies, and demographic information (Chen et al. 2006; Yang 2009). In addition, Chen (2003) reveals that the inter-cultural communication of international students in China is influenced by the value, such as the pattern of society, ego, and friendship. Wen et al. (2014) find that the level of interpersonal interaction, campus support, and social distance have the greatest impact on foreign students' social and cultural adaptation.

Unlike immigrants and tourists, the behavior of learning is at the core of international students' social activity and interaction in China's host universities. It plays an important role in integrating emotions, cognition and behavior, academic activities, and interpersonal relationships. The cross-cultural issues, adaptation strategies, and adaptation processes are inextricably linked with the environment of host universities. International students' pressure is mainly due to the different learning environments, curriculum, teaching methods, teacher–student relationship, learning resource utilization, and examination evaluation of host universities. International students should adjust their psychological emotions to adapt to the learning and living environment of the host universities, acquire the new social lifestyle and learn the social and cultural knowledge and communication skills, and also enhance the understanding between self and the group in order to achieve the desired academic goals in the foreseeable time. Therefore, different cultural identities between international students and other groups, and the theoretical framework of international students' cross-cultural adaptation in higher education context should be precisely analyzed by scholars. Zhu (2011) states that international students' cross-cultural adaptation involves three dimensions—psychological adjustment, adaptation to the different social and cultural environment, and academic adaptation. These three dimensions, respectively, reflect the dynamic process and result of psychological adjustment at the individual level, mutual adjustment among individuals, and cultural integration with the host country and host universities.

Chinese scholars also paid special attention to academic factors, such as academic expectations, curriculum, teaching methods, teaching materials, assessment, and evaluation, which affect foreign students studying in China. Yang (2005) survey finds that students in China had much more expectations of language and social interaction than of academic achievement. Wu (2007) states that international students those major in Chinese language and other professional learning generally feel that teaching materials are more difficult and not satisfied with the curriculum. Xie and Liu (2009) point out the higher proportion in Asian students choose 'very dissatisfied' or 'dissatisfied' in the test method than in the teaching methods and the course content.

### ***1.2.3 Education Model for TCSOL and Applications of Special Mode for Gifted Students in TCSOL by BLCU***

Generally, there are two approaches applied for TCSOL—trainings in local institutions of a nation and learning in China's institutions. Wang (2017) states the former model is superficial and learning courses may be stagnated at the level of meanings of vocabulary, while the latter is profound and persistent because it focuses on the cultural power behind the language. Jiang and Li (2012) indicates that a variety of training programs and methods in institutions outside of China is out of the actual needs of overseas, lacking qualified curriculum design, and under inaccurate management.

Even in China, old education models for short-term Chinese learning and teacher training in universities are also far behind current requirements for the high level of Chinese teachers in either number or quality. Researchers realize and develop specialized programs (such as training objectives, students' structure, curriculum, faculties, teaching materials and plan, academic performance, and other issues) for different countries or regions, respectively. These researches include France (Wang 2010), Russia (Zhao 2011), Malaysia (Wang 2012), Thailand (Zheng 2012), India (Yuan 2016), etc. Zhang (2016) argues that colleges and universities in Southeast of China have important regional strategic status in cultivating students from South-Asian and Southeast-Asian countries in Chinese and Chinese culture.

Different from universities in Southeast of China which have geographical advantages, Beijing Language and Culture University (BLCU) believes that TCSOL is a more complicated program from a general program of Chinese learning for foreign students or the program of Teaching Chinese as a Second Language (TCSL)/Chinese education for Chinese students; thus, special trainings may be necessary to be applied. As the frontier of Chinese education and international education of Chinese language, BLCU has rich experience and teaching resources in TCSOL; and it is capable for BLCU to invent new teaching technique, teaching style, or even new education mode into Chinese education.

BLCU decide to adapt the education mode of a special class for the gifted young in special trainings for students of DPCLT-SAC. Special class for the gifted young, which is aimed to select gifted young students to enter the universities, was first established in 1978 at the University of Science and Technology of China (USTC).<sup>4</sup> This education mode was designed to explore the most efficient ways to nurture promising youth in science and technology, and it has made significant success (especially in academe) with kinds of criticism (Wang Nengyu 2010; Gao and Wang 2013). After School of the Gifted Young extends the enrollment criterion to students

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<sup>4</sup>School of the Gifted Young, <http://en.scgy.ustc.edu.cn/>.



of the original class who have talent in 1985, this education mode has been applied to many fields of studies (Gao and Wang 2013). To ensure the academic level of the Chinese language teacher, this mode of a special class for advanced students from DPCLT-SAC is suitable to be applied in BLCU.

### ***1.2.4 Studies on South-Asian Students' Cross-Cultural Adaptation***

As a significant number of South-Asian students are studying in China, articles about the cross-cultural adaptation problems of South-Asian students are booming. Chen and Yiliman (2016) mentioned the educational construction and characteristic of South Asia (including eight countries) presents significantly different from other regions, such as the proportion of academic education has been maintained more than 90%. China government has committed to offer more opportunities and better conditions for countries along 'the Belt and Road,' which will gradually improve the endogenous traction and the quality of higher education of Chinese universities for foreign students' education. Yun and Zhu (2017) offered the proposal to the government, colleges and universities, and social forces to be involved in foreign students' affairs as strategic planning and policy consultations, multilateral and regional higher education cooperation framework, and so on.

An and Zhang (2008) surveyed the motivation of Asian students and found that students from Southeast-Asian countries paid more attention to living comfort, facilities, and employment advantages compared with those from East Asia and West Asia. Xue et al. (2009) surveyed 78 students from India, Nepal, Pakistan, Bangladesh, and other countries using SCL-90<sup>5</sup> and EPQ<sup>6</sup> and found South-Asian students in China are prone to 'cultural shock' problem, mainly because of the language barrier and unique personality traits; however, they are easier to have homesickness, anxiety, depression, and confusion. Lu (2015) found that language barrier, discrimination and cultural background differences, and other factors made South-Asian students in China generally bear greater cross-cultural adaptation pressure. Wang et al. (2016) pointed out that the problems and difficulties in training mode, curriculum, and

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<sup>5</sup>The Symptom Checklist-90-R (SCL-90-R) is a relatively brief self-report psychometric instrument (questionnaire) published by the Clinical Assessment division of the Pearson Assessment and Information group. It is designed to evaluate a broad range of psychological problems and symptoms of psychopathology. It is also used in measuring the progress and outcome of psychiatric and psychological treatments or for research purposes. *Symptom Checklist-90-Revised*. Pearson: Clinical Psychology. Pearson Education, Inc. Archived from the original on May 13, 2016.

<sup>6</sup>Eysenck Personality Questionnaire (EPQ) is a questionnaire to assess the personality traits of a person, with the result sometimes referred to as the Eysenck's personality Inventory or (EPI). Hans Jürgen Eysenck & Sybil B. G. Eysenck (1975). *Manual of the Eysenck Personality Questionnaire*. London: Hodder and Stoughton.

faculty of MBBS<sup>7</sup> in Dali University were factors for international students' education and suggested constructing scientific and reasonable professional training mode should be a priority to push forward the education for South-Asian students. Fu et al. (2016) analyzed the issues and psychological characteristics of South-Asian students in Changsha Medical School and found that generally these students have strong group cohesion, weak sense of time, poor health consciousness, vanity and more general lying behavior, serious sense of inferiority, active consciousness, and lack of self-control, etc.

### 1.3 Theoretical Framework

As a host university of DPCLT-SAC, Beijing Language and Culture University (BLCU) enrolls South-Asian students, whom have been categorized into two groups based on their Chinese level after 1-year preparatory stage. Students, the minority group of whom passed HSK Level-5, were selected to learn advanced Chinese directly (labeled as the group under the advanced-level mode in this study) during the first year and learn TCSOL for next 3 years with Chinese students whose major is TCSL together. Meanwhile, the rest majority students (labeled as the group under the basic-level mode) would only learn the language of Chinese with other foreign students by the traditional model for 4 years.

During the routine interview with students under ALM, we found that some of them felt pressed and unhappy after 6-month language study and believed students under BLM were better than them. Furthermore, several of them decided to give up the advanced study and made a transfer back to the basic level. Such action increases anxiety among the group of ALM. Thus, we wonder whether the mode of this special class is beyond these students' ability or not, and whether this teaching mode is the main factor for their unsatisfactory or not. It is important to understand how these South-Asian students' adaptation for livings in BLCU.

We use a survey, created by Zhu (2011), to collect data of students' psychological, social-cultural, and academic actions under both education modes of ALM and BLM. And we use the method of factor analysis to analyze factors causing these actions. Our hypothesis is whether the education mode is a critical factor for students' acculturation, and whether there are significant different adaptation results between students under different modes.

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<sup>7</sup>MBBS stands for the five-year undergraduate program in clinical medicine which is offered by College of Medicine of Yangzhou University from 2006.

## 1.4 Methodology

### 1.4.1 Questionnaire Design

The questionnaire survey (Appendix 1) covers most possible basic routine activities of a foreign student in China. The survey includes four parts. Part I has nine items to collect students' basic biological information, and Part II–IV have 86 items to collect students' feeling about environment changes.

In Part I, nine items can be divided into three subsections. The first subsection includes gender, age, and nation; the second subsection includes occupation and experiences of being abroad; and the last subsection includes understands about China, the university, and self-estimated level of Chinese.

In Part II–IV, 86 items represent three dimensions: psychological adaptation (Part II), social-cultural adaptation (Part III), and academic adaptation (Part IV). These items are adjusted by Zhu (2011) according to China's society. Psychological adaptation scale consists of 20 items of self-evaluation depression designed by Zung (1965). The social and cultural adaptation scale includes 35 items (involving language, interpersonal relationships, material living environment, daily life events, the Chinese customs, values, and political understanding) based on the questionnaire of the Social Situations Questionnaire by Furnham and Bochner (1982), Social-cultural Adjustment Questionnaire by Searle and Ward (1990), and the Social-cultural Adaptation Scale by Ward and Kennedy (1999). The academic adaptation Likert scale of 19 questions is referring to the division of academic systems and social systems in higher education institutions (Tinto 1975), Gillespie's investigation (2001) of the academic experience of African students studying in China, and Dunne and Wallace's question style (2008), such as enrollment education, teacher–student communication, and academic achievement in foreign graduate students, in China.

### 1.4.2 Sampling

There are total of 56 students, one-third of 2016 enrollment from DPCLT-SAC in BLCU, responded to this survey. Excluded two invalid, there are 54 students, which 29 are under ALM and 25 are under BLM. In the tests, the sample set of full 54 records is named as 'Fullset,' the subset of 29 under ALM is named as 'Sub-Adv,' and the subset of 25 under BLM is named as 'Sub-Non.'

### 1.4.3 Statistical Methods

For Part I, we mainly use percentage to measure students' biological information. For Part II–IV, we use three extraction methods of factor analysis<sup>8</sup> in SPSS 24.0 to understand factors of adaptation (students' adjustment process stage) and the importance of each factor. Principal Component method (PC) and Principal Axis Factoring (PAF) are basic methods to extract factors which are believed can extract all possible factors and marker items with respected factor; Maximum Likelihood (ML) are treating the standardized items as multivariate normally distributed with factor analysis correlation structure, which is believed can extract minimum numbers of most reliable factors and its marker items with the respected factor. Using PC, PAF, and ML methods together it is possible for us to range out accurate factors (which represent accurate processes of culture adaptation) and related marker items.

Statistical results include KMO and Bartlett's Test (Appendix 2), component matrix, rotated component matrix, eigenvalues by total variance explained, and communalities of items by each method for each sample set. Selected marker items<sup>9</sup> by three extraction methods of factor analysis for three samples are summarized in Appendix 3. Based on the results from the full-set for all tested students, we can conclude the process of culture adaptation by SAC students in BLCU and analyze effect of different education modes on different groups of students (ALM vs. BLM and use the full-set as the benchmark).

## 1.5 Findings and Discussion

### 1.5.1 Describe DPCLT-SAC Students in BLCU

#### 1. Biological data about students

In Part I, the first three questions are basic biological information (Table 1.1) about students in samples. In gender, male students dominate the group; comparatively more female students in the advanced-level of class. In age, majority of students are young and in the twenties which means they are both physically and mentally suitable for a higher level of education; and relatively more excellent younger students are under the ALM. In nationality, Pakistan (59%), Nepal (32%), and Bangladesh (4%) are the top 3 countries provided students in 2016 program in BICU; and test samples well reflect the whole group's characteristics.

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<sup>8</sup>Extraction methods of factor analysis are ways to use items to determine how many factors there should be considered statistically and what items are associated with each factor respectively.

<sup>9</sup>Because of the limited space, we cannot provide the full results of all extraction tests. According to three extraction methods, nine sub-dimensions from three adaptation dimensions, with three sample sets, there are total (3\*9\*3) 81 groups' results. Select rules include EV-ONE rule, marker items for factors, and discarding items.

**Table 1.1** Students' biological information

	Fullset (%)	Sub-Adv (%)	Sub-Non (%)
<i>Q1: Gender</i>			
Male	67	59	76
Female	33	41	24
<i>Q2: Age</i>			
<20s	13	21	4
20s	81	76	88
30s	6	3	8
<i>Q3: Nationality</i>			
Bangladesh	6	7	4
Pakistan	26	24	28
Nepal	67	66	68
Maldives	2	3	0

**Table 1.2** Students' social experiences

	Fullset (%)	Sub-Adv (%)	Sub-Non (%)
<i>Q5: Previous occupation</i>			
Student	65	69	60
Working	30	31	28
Other	6		12
<i>Q6: Previous experience of being abroad</i>			
No	76	76	76
Yes	24	24	24

2. Social experiences about students

Using Q5 and Q6 in Part I, we can understand students' social experiences (Table 1.2) which may contribute to person's ability to adjust new environment; especially about cross-culture adaptation. In Q5, the majority of students were students before they came to China. Being a student can be a benefit for people to continue further studies. Meanwhile, working is also an indirect way to improve people's knowledge and thought, and thus, it is also easier for a person who has working experiences to continue learning than a non-working experience's person. Compared with students who are under BLM, more percentage of students under ALM were students and no non-working experience's students which means they are easier to be motivated for a higher level of study. In Q6, the majority of students do not have experiences about being aboard before which means these students may have more challenge and difficulties to adjust themselves in their first year in BLCU.

**Table 1.3** Students' cultural information

	Fullset (%)	Sub-Adv (%)	Sub-Non (%)
<i>Q7: Previous understandings about China</i>			
Well known	13	0	28
Some	24	24	24
A little	44	55	32
Not known	17	21	12
Never learned	2	0	4
<i>Q8: Previous understanding about BLCU</i>			
Well known	17	0	36
Some	17	7	28
A little	13	24	0
Not known	48	62	32
Never learned	6	7	4
<i>Q9: Self-estimated level of Chinese</i>			
Excellent	2	3	0
Good	22	17	28
Average	56	48	64
Not good	9	17	0
Bad	11	14	8

All sample sets are satisfied the t-distribution at significant level of 5% either by one-tail or two-tail test

### 3. Cultural information about students

In Part I, the last these questions<sup>10</sup> are considered to evaluate students' understandings about China and Chinese (Table 1.3). Majority of students know limited about China, the university and they believe their language level of Chinese is at an average level or worse. Comparatively students under ALM are more humble to answer questions. Such results may be because they feel they are pressured and unhappy than the other group of students.

#### 1.5.2 Cross-Culture Adaptation by DPCLT-SAC Students in BLCU

Table 1.4 shows the process of cross-culture adaptation by DPCLT-SAC students in BLCU. It is clear that for each sub-dimension, there are roughly one to five levels of basic adaptations for these students. These levels fully describe how a foreign student could experience his/her cultural changes in China. The order of adaptation level is

<sup>10</sup>Q4 (length of learning Chinese in BLCU) helps to distinguish students in the DPCLT-SAC program from other non-DPCLT-SAC students.

**Table 1.4** Categorized progresses of culture adoptions

	Level 1 (L1)	Level 2 (L2)	Level 3 (L3)	Level 4 (L4)	Level (L5)
Part II: Psychological adaptation	Negative	Notice negative changes of his/her daily routine activities, but these routines may not be occurred by emotions	Notice his/her negative emotions	Depression	
	Positive	Feel confident and hopeful	Keep routines	No negative feelings	
Part III: Social-cultural adaptation	Living adaptation	Adapt limited changes to maintain basic life	Accept changes to make the life as normal	Participate with new changes to make the life better	Follow Chinese way to live
	Communication	Limited communication to maintain basic life	Ongoing communication to better the life		
	Culture understanding	Exclude outside	Isolate oneself	Open to the outside	Participate with the outside
Part IV: Academic adaptation	Motivation to study abroad	Attracted by the study program itself	Emotionally attracted by the culture or mental thoughts		
	Study attitude	Meet basic requirements of the program	Use multiple strategies to learn knowledge		
	Academic performance	Concentrate on study materials	Understand materials		
	Academic practice	Practice learning			

either decreasing or increasing subjected to the category of the sub-dimension, and it is categorized based on the extraction values of marker items by 27 tests. According to Table 1.4, we believe the survey by Zhu (2011) is appropriate for examining foreign student’s cross-culture adaptation in China.

In Part II—psychological adaptation, ‘Negative’ emotions by South-Asian students are under control. Main negative feelings are related to daily physical activities, and ‘feel confident’ takes the biggest share of positive feelings. In Part III—social-cultural adaptation, for sub-dimension ‘Living adaptation’ and ‘Culture Understanding,’ tested students show more significant different adjustment stages than adjustment stages in sub-dimension ‘Communication.’ In Part IV—academic adaptation, sub-dimension ‘Motivation to study abroad’ and ‘Study Attitude’ are a core life goal for tested students, thus show more detailed changes and progresses from students.

### 1.5.3 Education Mode Effect

From the selected item among three extraction methods in Appendix 3, we can show how different level of adjustments in Table 1.4 linked with supported question items from the survey in Appendix 1. Tables 1.5, 1.6, and 1.7 shows the important selected factors with supported question items for each test group. These tables are efficient for us to compare the adaptation differences among student of full-set, students under ALM, and students under BLM. These adaptation differences can help us to test whether the educational mode between two groups’ students is significant or not. Factors in tables are ordered based on the importance of the subject. For example, Factor 1 is more important than Factor 2, so on and so forth.

Based on Tables 1.5, 1.6 and 1.7, we found students under ALM do occur different levels of culture adaptation from students under BLM. Only for the category of ‘Academic performance’ and the category of ‘Academic practice,’ both groups and

**Table 1.5** Progresses and components matrix by extraction methods of factor analysis for Part II

	Full set	Sub-Adv	Sub-Non
<i>Part II—Psychological adaptation: negative/depression</i>			
Factor 1	L1: Q17, Q16, Q12	L1: Q17, Q19, Q22	L1: Q17, Q19
Factor 2	L2: Q13	L2: Q10, Q18	L3: Q12
Factor 3	L3: Q18, Q22	L3: Q12, Q28	L4: Q10
<i>Part II—Psychological adaptation: positive</i>			
Factor 1	L1: Q20, Q23, Q25	L1: Q20, Q23	L1: Q20, Q23, Q25, Q27
Factor 2	L2: Q11, Q27	L2: Q11, Q27	L4: Q21, Q26
Factor 3	L3: Q14	L3: Q14	L3: Q15
Factor 4	L4: Q21, Q26		L2: Q11



**Table 1.6** Progresses and components matrix by extraction methods of factor analysis for Part III

	Full set	Sub-Adv	Sub-Non
<i>Part III—Social-cultural adaptation: living adaptation</i>			
Factor 1	L1: Q32, Q56, Q58, Q59, Q44, Q33	L1: Q32, Q33, Q44, Q56, Q58, Q59	L1: Q32, Q33
Factor 2	L2: Q65, Q41, Q49	L2: Q41, Q49, Q65	L1&4: Q44, Q63
Factor 3	L3: Q36, Q53	L4: Q62, Q63	L2: Q41
Factor 4	L4: Q62, Q63	L3: Q36	L4: Q61, Q44, Q62
Factor 5		L5: Q64	L1: Q58, Q33
<i>Part III—Social-cultural adaptation: communication</i>			
Factor 1	L1: Q34, Q37, Q42, Q45, Q46	L2: Q39, Q51, Q52, Q55	L2: Q39, Q31, Q52
Factor 2	L2: Q31, Q39, Q51, Q55, Q52	L1: Q42, Q34, Q45, Q46	L1: Q37, Q46, Q45
Factor 3		L1&L2: Q37, Q45	
<i>Part III—Social-cultural adaptation: culture understanding</i>			
Factor 1	L3: Q40, Q43, Q47, Q38	L3&L4: Q40, Q43, Q47, Q48	L4: Q60, Q47, Q35
Factor 2	L4: Q60, Q47, Q48	L4: Q60, Q47, Q48	L3: Q40, Q57
Factor 3			L3: Q43, Q38

**Table 1.7** Progresses and components matrix by extraction methods of factor analysis for Part IV

	Full set	Sub-Adv	Sub-Non
<i>Part IV—Academic adaptation: motivation to study abroad</i>			
Factor 1	L1: Q68, Q72, Q73	L1: Q68, Q72, Q73	L1&2: Q71, Q75, Q69
Factor 2	L2: Q71, Q75	L2&3: Q71, Q75, Q70	L1: Q68, Q72, Q73
Factor 3	L3: Q70, Q67	L1: Q69	L3: Q67, Q70, Q72
<i>Part IV—Academic adaptation: study attitude</i>			
Factor 1	L2: Q80, Q81	L2: Q80, Q81, Q82, Q83	L2: Q80, Q81
Factor 2	L3: Q87, Q88	L3: Q87, Q88	L3: Q87, Q88
Factor 3		L1: Q77, Q90	
<i>Part IV—Academic adaptation: academic performance</i>			
Factor 1	L1: Q85, Q86, Q89	L1: Q84	L1: Q84
Factor 2	L2: Q78, Q79	L2: Q89, Q85	L2: Q89
<i>Part IV—Academic adaptation: academic practice</i>			
Factor 1	L1: Q91, Q92, Q93, Q94, Q95	L1: Q91, Q92, Q93, Q94, Q95	L1: Q91, Q92, Q93, Q94, Q95

the full set meet the same difficulties and follow the same order of culture adaptation level.

In Table 1.5 for Part II—the analysis of ‘Negative,’ statistically, students under BLM have more negative feeling of living abroad than students under ALM and the whole set of students, which is against the results from our routine interviews. Same as the analysis of ‘Positive,’ students under BLM distribute along with all levels of nonnegative feelings than students under ALM. Main factors of negative feelings from students under ALM are at a low level; while students under BLM suffer some higher level of unhappiness, but at a low percentage. In the meantime, happiness feelings of students under ALM are higher and take a bigger percentage.

Such statistical results can prove our guess that as a minority group of students under ALM, some of them mistake this education mode as discrimination and unequal treatment to them. Such misunderstandings may occur due to less communications among these students inside but not by schoolings, or not familiar with the university. From Part I, in Question 8 more students under ALM state they know less or limited information about BLCU.

In Table 1.6 for Part III—the analysis of ‘Living and Adaptation,’ students under ALM distribute more perspective living experiences than students under BLM. Living adaptation from Students under BLM are relatively at the basic level, they may not/cannot create changes for them to experience abroad life due to the limitation of language skill. In the analysis of ‘Communication,’ both groups’ students motivate adapting new changes. In the analysis of ‘Culture understanding,’ students under BLM are relatively more open than students under ALM since the L4 in Table 1.4 is a more important factor for students under BLM. Such results may be due to students under BLM are the majority, and they study Chinese with all foreign students together, while students under ALM are isolated; this may be the reason why they complained during the interview.

In Table 1.7 for Part IV—the analysis of ‘Motivation to study abroad,’ students under ALM are more attracted by the study program itself since their original Chinese level is relatively high, and therefore, they behave more rational than student under BLM who may not clearly know the program just want to have a fresh life abroad. In the analysis of ‘Study attitude,’ although both groups’ students study hard, students under ALM study more seriously because they are also keen on every single element of Chinese which is crucial for a person who plans to devote him/herself to education.

Furthermore, to understand pressures from students under ALM, it is necessary to compare Question 9—self-estimated Chinese level in Part I with Table 1.7. Answers of Question 9 show more students under ALM believe their Chinese level is limited (the distribution of their self-evaluation behaviors more like a t-distribution than the other group and all tested students) although statistics from Part IV have provided that their Chinese level is high and their studies are solid. While on the other hand, students under BLM are overconfident about their skills and abilities. Such results match behaviors by erudite versus behaviors by uneducated.

## 1.6 Conclusion and Implications

Results in Tables 1.5, 1.6, and 1.7 show statistically students under BLM have more negative feeling of living abroad than students under ALM and all tested students. This result is against the fact from routine interviews. And our hypothesis is also rejected, which means education mode is not a significant factor for students under ALM being unhappy. Such unsatisfactoriness may due to less communication among all students inside DPCLT-SAC (since students under ALM belong to a minority group), and misunderstanding (by students under ALM) this teaching style as discrimination and unequal treatments from students under BLM and other international students. It is very common that members from a minority group feel lonelier. Although results do show students under ALM feel more pressure, in the meantime they also gain more satisfactions and feel prouder about speaking more fluent Chinese.

Test results also prove that cross-cultural adaptation, particularly the degree of satisfaction of international students with local learning can reflect how they experience and feelings about the cultures of host countries and account for their learning performance and academic achievement under different educational modes. By the cross-culture adaptation method, it is clear that external differences factors such as tuition, accommodation, and service attitude and management system are more influential for South-Asian students' cross-cultural adaptation. Thus, to develop DPCLT-SAC, on the one side, Chinese host universities can improve better learning and living environment, pay more attention to the special needs of South-Asian students (such as inter-cultural education courses and competency programs for faculty and staff to better understand South-Asian students' special characteristics and needs). On the other side, Confucius Institute Headquarters (Hanban) may consider to adjust related policies timely (such as conduct special policies for SAC students) and strengthen monitoring and evaluation during the cultivating process. It is clear that multi-stakeholder engagement and co-governance mechanisms can enhance the effectiveness of DPCLT-SAC and cultivate more local high-level Chinese teachers for South-Asian countries.

And finally, applying mode of a special class for advanced students by BLCU is a bold attempt, and it makes a success in the short-run period. TCSOL is generated from learning the Chinese language, but advanced above it. It is the truth that only few talent students will become professionals to teach normal Chinese after professional trainings. To ensure and enlarge the size of this minority group, more teaching practices to nurture promising students of DPCLT-SAC are necessary and critical. Based on this study, the advanced-level mode can be applied into TCSOL, and it is worth for institutions to develop further strategies upon it continually.

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## Appendix 1

北京语言大学南亚师资班来华留学生  
跨文化适应调查问卷

### (The Cross-cultural Adaptation Survey for Foreign Students of DPCLT-SAC in BLCU)

您好!本项调查是匿名进行的,我们承诺严格遵循学术规范与保护您的个人隐私不被泄露,请放心并如实作答。非常感谢您的参与,祝您学习和生活愉快!

This survey is carried out anonymously. We promise to follow the academic norms and protect your personal privacy is not disclosed. Please assure and answer truthfully. Thank you very much for your participation and wish you a pleasant stay and study!

#### 第一部分 Part I

1. 我的性别 (Gender)\_\_\_\_\_  男 (male)  女 (female)
2. 我的年龄 (Age)\_\_\_\_\_
3. 我的国籍 (Nationality)\_\_\_\_\_
4. 我来到北京语言大学已经学习了 (How long have you studied in BLCU)?
  - 1-6 个月 (1-6 months)
  - 7-12 个月 (7-12 months)
  - 13-24 个月 (13-24 months)
  - 25-36 个月 (25-36 months)
  - 36 个月以上 (Above 36 months)
5. 我来中国之前 (What did you do before you came to China?)
  - 还是学生,在本国学习的专业是 (If you were a student, what major did you study?)\_\_\_\_\_
  - 已经有工作,从事 (If you are already working, what career do you do?)
  - 其他请注明 (Other, please specify)

6. 来中国学习前, 我是否去过其他国家 (Before you came to China, did you have been to other countries)?
- 没去过 (No)
  - 去过 (Yes)
7. 来中国学习前, 我对中国是否了解 (Before you came to China, did you understand China)?
- 非常了解 (very well understood)
  - 了解 (understood)
  - 一般了解 (general understanding)
  - 不了解 (do not understand)
  - 非常不了解 (very do not understand)
8. 来中国学习前, 我对北京语言大学是否了解 (Before you came to China, did you understand BLCU)?
- 非常了解 (very well understood)
  - 了解 (understood)
  - 一般了解 (general understanding)
  - 不了解 (do not understand)
  - 非常不了解 (very do not understand)
9. 目前我的汉语水平如何 (What is my current Chinese level)?
- 很好 (very well)
  - 好 (well)
  - 一般 (general good)
  - 不好 (is not good)
  - 很不好 (very bad)

## 第二部分 Part II

请根据近一周的感觉来进行评分。

Please read each statement and decide how much of the time the statement describes how you have been feeling during the past week.

请在相应的栏用“√”标示 Make check mark in appropriate column	1 不会这样 A little of the time	2 有时这样 Some of the time	3 经常这样 Good part of the time	4 持续这样 Most of the time
10 我感到情绪沮丧郁闷 I feel down-hearted and blue				
11 我感到早晨心情最好 Morning is when I feel the best				
12 我要哭或想哭 I have crying spells or feel like it				
13 我夜间睡眠不好 I have trouble sleeping at night				
14 我吃饭像平时一样多 I eat as much as I used to				
15 我的性功能正常 I still enjoy sex				
16 我感到体重减轻 I notice that I am losing weight				
17 我为便秘烦恼 I have trouble with constipation				
18 我的心跳比平时快 My heart beats faster than usual				

(continued)

(continued)

请在相应的栏用“√”标示 Make check mark in appropriate column	1 不会这样 A little of the time	2 有时这样 Some of the time	3 经常这样 Good part of the time	4 持续这样 Most of the time
19 我无故感到疲劳 I get tired for no reason				
20 我的头脑像往常一样清楚 My mind is as clear as it used to be				
21 我做事情像平时一样不感到困难 I find it easy to do the things I used to				
22 我坐卧不安,难以保持平静 I feel restless and can't keep still				
23 我对未来感到有希望 I feel hopeful about the future				
24 我比平时更容易激怒 I am more irritable than usual				
25 我觉得决定什么事很容易 I find it easy to make decisions				
26 我感到自己是有用的和不可缺少的 I feel that I am useful and needed				

(continued)

(continued)

请在相应的栏用“√”标示 Make check mark in appropriate column	1 不会这样 A little of the time	2 有时这样 Some of the time	3 经常这样 Good part of the time	4 持续这样 Most of the time
27 我的生活很有意义 My life is pretty full				
28 假若我死了别人会过得很好 I feel that others would be better off if I were dead				
29 我仍旧喜爱自己平时喜爱的东西 I still enjoy the things I used to do				

30. 当你有上述不良感觉时,你会向\_\_\_\_\_寻求帮助。

Having the above negative feelings, you will turn to \_\_\_\_\_.

- 家人和亲戚 your family members and relatives
- 中国朋友 your Chinese friends
- 其他外国人 other foreigners in China
- 在中国的本族人 your co-nationals
- 中国老师 your Chinese teachers
- 国际学生管理人员 the staff at the International Student Office
- 其他请注明others, please specify:\_\_\_\_\_

### 第三部分 Part III

请描述在中国经历下列事件时的困难程度。

Please indicate how much difficulty you experience in China in each of these areas.



请在相应的栏用“√”标示 Make check mark in appropriate column	1 不难 No difficulty	2 有点难 Slight difficulty	3 般 Moderate difficulty	4 很难 Great difficulty	5 最难 Extreme difficulty
31 交朋友 Making friends					
32 找到喜欢的食物 Finding food that you enjoy					
33 遵守规章制度 Following rules and regulations					
34 同有权职的人打交道 Dealing with people in authority					
35 从中国人的角度来看待文化 Taking a Chinese perspective on the culture					
36 使用交通系统 Using the transport system					
37 同政府机构打交道 Dealing with bureaucracy					
38 理解中国的价值体系 Understanding the Chinese value system					
39 让别人理解自己 Making yourself understood					
40 从中国人的观点来看待事物 Seeing things from a Chinese point of view					
41 购物 Going shopping					
42 面对不高兴的人 Dealing with someone who is unpleasant					
43 理解中国的笑话和幽默 Understanding jokes and humor					
44 住宿 Accommodation/housing arrangement					

(continued)

(continued)

请在相应的栏用“√”标示 Make check mark in appropriate column	1 不难 No difficulty	2 有点难 Slight difficulty	3 般 Moderate difficulty	4 很难 Great difficulty	5 最难 Extreme difficulty
45 参加社交活动/聚会/典礼 Going to social events/gatherings/functions					
46 面对那些盯着你看的人 Dealing with people staring at you					
47 和不同种族的人交流 Communicating with people of a different ethnic group					
48 理解种族和文化差异 Understanding ethnic or cultural differences					
49 面对不满意的服务 Dealing with unsatisfactory service					
50 像往常那样做礼拜 Worshipping in your usual way					
51 与异性打交道 Relating to members of the opposite sex					
52 与同性打交道 Relating to members of the same sex					
53 认路 Finding your way around					
54 理解中国的政治系统 Understanding the Chinese political system					
55 与别人讨论你自己 Talking about yourself with others					
56 适应气候 Dealing with the climate					
57 理解中国的 worldview Understanding the Chinese world view					

(continued)

(continued)

请在相应的栏用“√”标示 Make check mark in appropriate column	1 不难 No difficulty	2 有点难 Slight difficulty	3 般 Moderate difficulty	4 很难 Great difficulty	5 最难 Extreme difficulty
58 离开家人独立在中国生活 Living away from family members in China					
59 习惯中国的生活节奏 Getting used to the pace of life					
60 能够从两面看待跨文化问题 Being able to see two sides of an inter-cultural issue					
61 使用公共厕所 Using public toilet facilities					
62 排队 Queuing					
63 理解当地口音/方言 Understanding the local accent/language					
64 适应中国的礼仪规范 Getting used to local etiquette					
65 习惯中国的人口密度 Getting used to the population density					

66. 当遇到上述困难时, 你会向\_\_\_\_\_寻求帮助。

Running into difficulties in the above areas, you will turn to\_\_\_\_\_

- 家人和亲戚 your family members and relatives
- 中国朋友 your Chinese friends
- 其他外国人 other foreigners in China
- 在中国的本族人 your co-nationals
- 中国老师 your Chinese teachers
- 国际学生管理人员 the staff at the International Student Office
- 其他请注明 others, please specify: \_\_\_\_\_

#### 第四部分 Part IV

在下列来中国留学的因素中, 请根据你的情况标出它们的重要程度。

Please indicate the importance of each factor in motivating you to study in China.

请在相应的数字上用“√”标示 Make check mark in appropriate column	1 非常重要 Very important	2 重要 Important	3 般 Not applicable	4 不重要 Unimportant	5 非常不重要 Very unimportant
67 我获得了奖学金 I obtained a scholarship					
68 中国大学的学费低 Tuition fees are low in China					
69 考中国的大学比考我国的大学容易 It's easier to be enrolled in China than in my home country					
70 我喜爱汉语 I love the Chinese language					
71 我想通过HSK考试六级 I want to pass HSK 6					
72 我想了解中国人及他们的习俗 I want to get to know Chinese people and their customs					

(continued)

(continued)

请在相应的数字上用“√”标示 Make check mark in appropriate column	1 非常重要 Very important	2 重要 Important	3 般 Not applicable	4 不重要 Unimportant	5 非常不重要 Very unimportant
73 我所学的专业中国大学的水平比我国大学的水平高 The Chinese university outdoes the home university in my area of study					
74 学习期间我可以旅游 I can travel around during my study					
75 中国大学的学习经历对我今后工作有帮助 Studying in China improves my career chance					
76 亲戚朋友介绍我来中国大学学习 Friends and relatives advise me to study in China					

除以上因素外, 你来中国学习还有其他的原因吗?若有, 请说明:

In addition to the above factors, do you have any other reasons for studying in a China's university? If so, please specify \_\_\_\_\_

请标出下列在中国学习中的困难程度

Please indicate how much difficulty you experience during your study in each of these areas.

请在相应的 栏目“√”标 示 Make check mark in appropriate column.	1 不难 No difficulty	2 有点难 Slight difficulty	3 般 Moderate difficulty	4 很难 Great difficulty	5 最难 Extreme difficulty
77 坚持上课 Attending lessons regularly					
78 选择自己 想学习的课 程 Selecting desirable courses					
79 理解课堂 内容 Understanding what is taught by the teacher					
80 按时完成 作业 Completing assignments on time					
81 上课做笔 记 Taking notes in class					
82 上课发言 Expressing my ideas in class					
83 集中精力 学习 Concentrating when studying					

(continued)

(continued)

请在相应的 栏目“√”标 示 Make check mark in appropriate column.	1 不难 No difficulty	2 有点难 Slight difficulty	3 般 Moderate difficulty	4 很难 Great difficulty	5 最难 Extreme difficulty
84 习惯中国 老师的教学 方法 Adapting to Chinese teaching style					
85 通过考试 Functioning well in exams					
86 习惯中国 老师的评分 方式 Getting used to the forms of assessment					
87 使用图书 馆 Using the library					
88 参加课外 活动 Joining extracurricu- lar activities					
89 理解入学 教育的内容 Understanding what is com- municated in orientation					
90 遵守学校 的规章制度 Following the university's rules and regulations					

(continued)

(continued)

请在相应的 栏目“√”标 示 Make check mark in appropriate column.	1 不难 No difficulty	2 有点难 Slight difficulty	3 般 Moderate difficulty	4 很难 Great difficulty	5 最难 Extreme difficulty
91 与学校行 政人员打交 道 Dealing with the university's administra- tive staff					
92 与老师建 立和谐的关系 Establishing rapport with Chinese teachers					
93 与中国学 生交朋友 Relating to Chinese students					
94 与本国或 本民族学生 交朋友 Relating to co-nationals					
95 与非中国 的其他外国 学生交朋友 Relating to other foreign students					

96 当你遇到学习中的问题是, 你会向\_\_\_\_\_寻求帮助。

Encountering academic problems, you will turn to\_\_\_\_\_

家人和亲戚 your family members and relatives

中国朋友 your Chinese friends

其他外国人 your foreigners in China

在中国的本族人 your co-nationals

中国老师 your Chinese teachers



国际学生管理人员 the staff at the International Student Office  
 其他请注明 others, please specify: \_\_\_\_\_

## Appendix 2: KMO and Bartlett’s Test<sup>11</sup>

		Fullset	Sub-Adv	Sub-Non
<i>Part II—Psychological adaptation</i>				
Negative	Kaiser-Meyer-Olkin measure of sampling adequacy	0.597	0.531	Non
	Bartlett’s test of sphericity by sig.	0.00	0.00	Non
Positive	Kaiser-Meyer-Olkin measure of sampling adequacy	<i>0.437</i>	<i>0.329</i>	<i>0.342</i>
	Bartlett’s test of sphericity by sig.	0.00	0.006	0.002
<i>Part III—Social-cultural adaptation</i>				
Living and adaptation	Kaiser-Meyer-Olkin measure of sampling adequacy	0.789	0.676	Non
	Bartlett’s test of sphericity by sig.	0.00	0.00	Non
Communication	Kaiser-Meyer-Olkin measure of sampling adequacy	0.822	0.719	0.595
	Bartlett’s test of sphericity by sig.	0.00	0.00	0.00
Culture understanding	Kaiser-Meyer-Olkin measure of sampling adequacy	0.765	0.695	<i>0.461</i>
	Bartlett’s test of sphericity by sig.	0.00	0.00	0.011
<i>Part IV—Academic adaptation</i>				
Motivation to study abroad	Kaiser-Meyer-Olkin measure of sampling adequacy	0.717	0.547	0.679
	Bartlett’s test of sphericity by sig.	0.00	0.00	0.00
Study attitude	Kaiser-Meyer-Olkin measure of sampling adequacy	0.813	0.54	0.785
	Bartlett’s test of sphericity by sig.	0.00	0.00	0.00

(continued)

<sup>11</sup> KMO test is a summary of how small partial correlations are relative to ordinary correlations. Value above 0.8 are considered good, and less than 0.5, which is in *italic*, are considered unacceptable. Bartlett’s test of sphericity ( $p < 0.05$ ) to show standardized items is distinctly correlated and so requires at least 1 factor.

(continued)

		Fullset	Sub-Adv	Sub-Non
Academic performance	Kaiser-Meyer-Olkin measure of sampling adequacy	0.763	0.738	0.685
	Bartlett's test of sphericity by sig.	0.00	0.00	0.00
Academic practice	Kaiser-Meyer-Olkin measure of sampling adequacy	0.783	0.648	0.742
	Bartlett's test of sphericity by sig.	0.00	0.00	0.00

### Appendix 3: Selected Marker Items by PC, PAF, and ML Extraction Methods of Factor Analysis<sup>12</sup>

		PC	PAF	ML
<i>Part II—Psychological adaptation: negative/depression</i>				
Full set	Factor 1	<b>Q17, Q22, Q19, Q28, Q16, Q13, Q24, Q12, Q10, Q18</b>		<b>Q16, Q28, Q12, Q17, Q10, Q24</b>
	Factor 2	<b>−Q19, Q16, −Q13, −Q22, Q28, Q12, −Q18</b>		<b>Q17, Q19, Q13</b>
	Factor 3	<b>Q18, −Q19, Q16</b>		<b>Q22, Q18</b>
Sub-Adv	Factor 1	<b>Q22, Q13, Q19, Q17, Q10, Q24, Q18</b>		<b>Q19, Q17, Q13, Q22, Q10, Q24</b>
	Factor 2	<b>Q28, Q12, Q16, Q10, Q24, −Q19</b>		<b>Q13, Q22, Q10, Q18, Q16, Q24</b>
	Factor 3	<b>Q16, Q18, −Q17, −Q28</b>		<b>Q28, Q12, Q24</b>
Sub-Non	Factor 1	<b>Q17, Q28, Q12, Q16, Q24, Q19, Q22, Q18,</b>		
	Factor 2	<b>Q12, Q13, −Q24, −Q10, −Q16, Q19,</b>		
	Factor 3	<b>Q13, −Q22, −Q18, Q19, Q10</b>		

(continued)

<sup>12</sup>Extraction methods of factor analysis are ways to use items (survey questions) to determine how many factors there should be and which items to associate with those factors. The EV-ONE rule is the default approach in SPSS for choosing # of factors. An item is considered a marker item (or a salient) for factor F if its absolute loading is high while its absolute loadings on all the other factors F' are all low.

(continued)

		PC	PAF	ML
<i>Part II—Psychological adaptation: positive</i>				
Full set	Factor 1	<b>Q27, Q23, Q20, Q26, Q29, Q21, Q11, Q25</b>		<b>Q20, Q27, Q23, Q27, Q23, Q29</b>
	Factor 2	<b>Q15, Q21, -Q27, Q26, -Q29, -Q11, -Q14, Q25</b>		<b>Q27, Q11</b>
	Factor 3	<b>-Q11, Q14</b>		<b>Q14, Q27, Q29</b>
	Factor 4	<b>-Q25, -Q20, Q26, Q15, Q21</b>		<b>Q26, Q21, Q25, Q15</b>
Sub-Adv	Factor 1	<b>Q23, Q26, Q27, Q20, Q11, Q29, Q21</b>	<b>Q27, Q23, Q26, Q29, Q20, Q11</b>	<b>Q23, -Q20, Q26, Q21, Q27, Q25</b>
	Factor 2	<b>-Q27, -Q29, Q25, -Q14, Q21, Q15, -Q11</b>	<b>Q25, -Q14, -Q27, Q23, -Q29, Q20, Q21, -Q11,</b>	<b>Q11, Q27, Q26, -Q15, Q29</b>
	Factor 3	<b>Q14, Q15, -Q11, Q23, -Q25, Q21</b>	<b>-Q11, Q14, Q23, -Q25, Q15</b>	<b>Q14, -Q25, Q27, Q29</b>
Sub-Non	Factor 1	<b>Q27, Q29, Q20, Q14, Q23, Q25, Q26</b>		<b>Q27, Q14, Q20, Q25, Q23, Q29, Q26</b>
	Factor 2	<b>Q26, Q21, Q15, -Q14</b>		<b>Q21, Q26, Q25</b>
	Factor 3	<b>Q11, Q23, -Q25</b>		<b>Q15, Q20</b>
	Factor 4	<b>Q21, -Q15, Q20, Q11</b>		<b>-Q25, Q23, Q11</b>
<i>Part III—Social-cultural adaptation: living and adaptation</i>				
Full set	Factor 1	<b>Q59, Q65, Q56, Q53, Q32, Q63, Q33, Q64, Q58, Q44, Q50, Q62, Q49, Q41, Q61, Q36</b>	<b>Q59, Q65, Q56, Q53, Q32, Q63, Q33, Q64, Q58, Q44, Q50, Q62, Q49, Q41, Q61, Q36</b>	<b>Q59, Q58, Q32, Q56, Q50, Q64, Q44, Q33</b>
	Factor 2	<b>-Q59, Q65, Q63, -Q58, -Q50, Q62, Q49, Q41</b>	<b>-Q59, Q65, Q63, -Q58, -Q50, Q62, Q49, Q41</b>	<b>Q65, Q49, Q63, Q41, Q44, Q33, Q53</b>
	Factor 3	<b>Q61, Q36, Q62, -Q49</b>	<b>Q61, Q36, Q62, -Q49</b>	<b>Q36, Q53, Q61</b>
	Factor 4	<b>Q53, -Q44, Q50, -Q62, Q49</b>	<b>Q53, -Q44, Q50, -Q62, Q49</b>	<b>Q62, Q56, Q63, Q61</b>
Sub-Adv	Factor 1	<b>Q59, Q65, Q56, Q32, Q53, Q33, Q63, Q44, Q64, Q36, Q50, Q41, Q58, Q49, Q62, Q61</b>	<b>Q65, Q59, Q56, Q63, Q32, Q53, Q33, Q44, Q64, Q36, Q50, Q41, Q62, Q58, Q49, Q61</b>	<b>Q59, Q32, Q56, Q58, Q44, Q50, Q33, Q61, Q53, Q64</b>
	Factor 2	<b>Q65, Q49, -Q59, Q63, Q41, -Q58, -Q61</b>	<b>Q65, Q49, -Q59, Q63, -Q58, -Q61</b>	<b>Q65, Q41, Q49, Q44, Q50, Q33</b>

(continued)

(continued)

		PC	PAF	ML
	Factor 3	<b>Q36, Q62, Q61</b> , –Q44, –Q64, –Q50, –Q41	Q36, –Q50, Q62, Q61	<b>Q63, Q62</b> , Q33, Q65, Q53
	Factor 4	–Q64, Q36, Q50, –Q62, Q61	–Q64, Q36, Q50, –Q62	<b>Q36</b> , Q61, Q53
	Factor 5	–Q32, Q53, –Q33, –Q44, Q64		<b>Q64</b>
Sub-Non	Factor 1	<b>Q59, Q64, Q65, Q58, Q53, Q49, Q56, Q61, Q33, Q63, Q36, Q62, Q50</b> , Q32		
	Factor 2	<b>Q63, –Q36, Q44, –Q50</b> , –Q59, Q56, –Q33, Q62, Q41		
	Factor 3	<b>Q41, –32Q</b> , Q65, –Q49, Q36, Q62, –Q50,		
	Factor 4	<b>Q61, Q44</b> , –Q53, –Q63, Q62, Q50		
	Factor 5	Q58, –Q49, –Q61, Q33, –Q62, Q41		

*Part III—Social-cultural adaptation: communication*

Full set	Factor 1	<b>Q39, Q46, Q52, Q42, Q37, Q45, Q55, Q51, Q34</b> , Q31	<b>Q39, Q46, Q52, Q42, Q37, Q45, Q55, Q51, Q34</b> , Q31	<b>Q42, Q46, Q34, Q45, Q37</b> , Q39, Q52, Q51
	Factor 2	– <b>Q34, Q31</b> , Q39, –Q46, –Q42, –Q45, Q55	Q39, –Q42, –Q45, Q55, –Q34, Q31	<b>Q39, Q55, Q31, Q52</b> , Q37, Q51
Sub-Adv	Factor 1	<b>Q46, Q39, Q45, Q42, Q52, Q37, Q55, Q51</b> , Q34	<b>Q46, Q39, Q42, Q52, Q45, Q37, Q55, Q51</b> , Q34	<b>Q52, Q51, Q55, Q39</b> , Q46, Q31
	Factor 2	<b>Q55, Q31, –Q34</b> , Q39, –Q45, –Q42, Q52, Q51	<b>Q55, Q31, –Q34</b> , Q39, Q52, Q51	<b>Q42, Q34, Q46, Q45</b> , –Q31
	Factor 3	<b>Q37, –Q51</b> , Q52	–Q52, Q37, –Q51	<b>Q39, Q45, Q37</b> , Q55, Q46
Sub-Non	Factor 4	<b>Q31, Q34, Q37, Q39, Q42, Q45, Q46, Q51, Q52, Q55</b>		<b>Q39, Q31, Q37, Q52, Q42, Q55, Q34</b> , Q51
	Factor 5	– <b>Q39, Q46, Q45</b> , Q51		<b>Q37, Q46, Q34, Q51, Q45</b> , Q31, Q52

*Part III—Social-cultural adaptation: culture understanding*

Full set	Factor 1	<b>Q40, Q47, Q48, Q38, Q43, Q60</b>	<b>Q40, Q47, Q48, Q38, Q43, Q60</b>	<b>Q40, Q43, Q47, Q38, Q48, Q54, Q35</b>
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(continued)

(continued)

		PC	PAF	ML
	Factor 2	<b>Q57, Q35</b> , -Q47, -Q43, Q60	Q60, Q57, Q35	<b>Q60</b> , Q47, Q48, Q57, Q36
Sub-Adv	Factor 1	<b>Q40, Q48, Q47, Q43, Q38, Q60, Q54, Q35, Q57</b>	<b>Q40, Q48, Q47, Q43, Q38, Q60</b> , Q54, Q35, Q57	<b>Q40, Q43, Q47, Q48, Q38, Q54</b>
	Factor 2	<b>Q57, Q35</b> , -Q40, -Q47, Q60	-Q40, Q60, Q35, Q57	<b>Q60</b> , Q48, Q47, Q38, Q57, Q35
Sub-Non	Factor 1	<b>Q57, Q60, Q40, Q35, Q47, Q54, Q38, Q48, Q43</b>		<b>Q60, Q35, Q47</b> , Q54, Q48, Q57
	Factor 2	<b>Q48, -Q38, -Q43</b> , Q60, Q35		<b>Q40, Q57</b> , Q60, Q47, Q38
	Factor 3	<b>-Q40, Q43</b> , -Q47, Q54, Q48		<b>Q57, Q43, Q38</b> , Q54

*Part IV—Academic adaptation: motivation to study abroad*

Full set	Factor 1	<b>Q72, Q71, Q75, Q70, Q73, Q67, Q68, Q76, Q69, Q74</b>		<b>Q73, Q72, Q68</b> , Q76, Q69
	Factor 2	-Q71, Q73, -Q67, Q68, Q76, Q69, -Q74		<b>Q75, Q71</b> , Q76, Q74, Q70, Q67
	Factor 3	<b>Q69, Q74</b>		<b>Q70, Q67</b> , Q72, Q71
Sub-Adv	Factor 1	<b>Q67, Q68, Q70, Q71, Q72, Q73, Q75, Q69, Q74, Q76</b>		<b>Q73, Q72, Q76, Q68, Q75, Q71</b>
	Factor 2	<b>-Q73, Q74, -Q76</b> , Q67, -Q68, Q70		<b>Q71, Q67, Q75, Q70, Q74, Q72</b>
	Factor 3	<b>Q69, -Q71, -Q75</b>		<b>Q69</b>
Sub-Non	Factor 1	<b>Q72, Q70, Q71, Q69, Q68, Q75, Q73, Q67, Q76, Q73, Q74, Q75</b>		<b>Q71, Q75, Q70, Q69, Q72</b>
	Factor 2	<b>Q73, Q72, -Q70, -Q71, Q68, -Q75, Q76</b>		<b>Q73, Q72, Q68, Q76, Q69</b>
	Factor 3	<b>-Q67, Q76</b>		<b>Q67, Q70, Q69, Q72, Q68</b>

*Part IV—Academic adaptation: study attitude*

Full set	Factor 1	<b>Q83, Q81, Q82, Q90, Q87, Q80, Q77, Q88</b>		<b>Q80, Q83, Q81</b> , Q82, Q90, Q77
	Factor 2	<b>Q88, -Q80, Q87</b>	<b>Q88, -Q80</b>	<b>Q83, Q88, Q87</b> , Q81, Q82, Q90, Q77
Sub-Adv	Factor 1	<b>Q83, Q87, Q77, Q81, Q88, Q82, Q90, Q80</b>		<b>Q80, Q81, Q82, Q83</b>

(continued)

(continued)

		PC	PAF	ML
	Factor 2	<b>-Q88, Q80, -Q87, Q81, -Q90</b>		<b>Q87, Q88, Q81, Q83, Q82</b>
	Factor 3	<b>Q77, -Q82, Q90</b>		<b>Q77, Q90, Q83, Q87</b>
Sub-Non	Factor 1	<b>Q83, Q80, Q90, Q82, Q81, Q87, Q77, Q88</b>	<b>Q,90 Q82, Q83, Q80, Q81, Q87, Q77, Q88</b>	<b>Q,90 Q80, Q83, Q81, Q88, Q82</b>
	Factor 2	<b>Q77, -Q90, Q82, Q87, -Q88</b>	<b>Q82, -Q90, Q77</b>	<b>Q82, Q77, Q87, Q83, Q81</b>
<i>Part IV—Academic adaptation: academic performance</i>				
Full set	Factor 1	<b>Q86, Q84, Q85, Q78, Q79, Q89</b>		<b>Q86, Q84, Q85, Q89, Q79</b>
	Factor 2	<b>-Q78, Q89</b>		<b>Q84, Q78, Q86, Q79</b>
Sub-Adv	Factor 1	<b>Q84, Q86, Q85, Q79, Q78, Q89</b>	<b>Q84, Q86, Q85, Q78, Q79, Q89</b>	<b>Q78, Q84, Q86, Q85</b>
	Factor 2	<b>Q89, -Q78</b>	<b>Q89, -Q78</b>	<b>Q89, Q86, Q85, Q84, Q79</b>
Sub-Non	Factor 1	<b>Q86, Q84, Q78, Q79, Q85, Q89</b>		<b>Q86, Q84, Q79, Q85, Q78</b>
	Factor 2	<b>Q89, -Q79</b>		<b>Q89</b>
<i>Part IV—Academic adaptation: academic practice</i>				
Full set	Factor 1	<b>Q91, Q92, Q93, Q94, Q95</b>		
Sub-Adv	Factor 1	<b>Q91, Q92, Q93, Q94, Q95</b>	<b>Q92, Q93, Q94, Q95, Q91</b>	
Sub-Non	Factor 1	<b>Q91, Q92, Q93, Q94, Q95</b>	<b>Q91, Q92, Q93, Q94, Q95</b>	

Question in **bold** and **-bold** means that its loading value is greater than 0.5 or less than -0.5; question in general font means its loading value is in between 0.3 and 0.5

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# Chapter 2

## A Curriculum Designed for the Children with Pediatric Cancer in a Chinese Children's Hospital



Ningling Zhang

**Abstract** Education is a fundamental right for every child. Many international institutions, such as UNESCO, UNICEF and World Bank, suggest the adoption of inclusive education, which guarantees equal opportunities of for all the children, especially for those who have special educational needs (SEN). Children with pediatric cancer are considered as the ones having SEN, because the long-term treatment caused educational delay and absence from school. This essay shall: (1) describe current background context and rationale regarding the reliability of this curriculum design in Children's Hospital of Chongqing Medical University; (2) explain the implementation and curriculum plan based on Sect. 2.1; and (3) analyze the evaluation and potential problems of this curriculum.

### 2.1 Introduction

In recent decades, educators and educational organizations have been devoted to raise the awareness that education is a fundamental right for every child. The UNESCO Salamanca Statement (1994) states that each child should be given equal opportunity to access education. It also emphasized that 'every child has unique characteristics, interest, abilities and learning needs, and education system should be designed and educational programmes implemented to take into account the wide diversity of these characteristics and needs' (The UNESCO Salamanca Statement 1994, pp. viii–ix). Furthermore, many international institutions, such as UNESCO, UNICEF and World Bank, suggest the adoption of inclusive education, which guarantees equal opportunities of for all the children, especially for those who have special educational needs (SEN). SEN is defined for the child who requires additional education supports because of the barriers of his/her learning (UNESCO 1994). Children with pediatric cancer are considered as the ones having SEN, because the long-term treatment caused educational delay and absence from school.

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According to the explanation of the World Health Organization (WHO), pediatric cancer, which affects 50–200 per million children worldwide, refers to cancer patients between the stage of birth and 15 years old (WHO 2015). The data from the Chinese National Registration Centre of Cancer (2014) reports that 21,214 children were diagnosed as patients with pediatric cancers (new cases) in 2013. In addition, children with cancers start to live in hospitals as they oftentimes undergo a long-term in-hospital treatment. Therefore, local education system should assume the responsibility to design and provide special educational programs for these children.

As a room-rent guest, living with a British family, whose six (6)-year-old boy suffers with childhood tumors, I became aware of the educational support the hospital provided for its pediatric cancer patients. With this family's assistance, I visited a hospital school, which is located in a children's hospital in Birmingham, interviewed some of the teachers and gained valuable insight into the nature and structure of the education programmed offered.

As a means of cross-referencing, I conducted online interviews with four Chinese doctors who work in Pediatric Cancer Department (PCD) of Children's Hospital of Chongqing Medical University (CHCMU). CHCMU is one of the top three children's hospitals in China, and each interviewee confirmed that no hospital school or classroom existed for pediatric cancer patients. Understanding this, I decided to design a picture books reading (PBR) course, which is a sustainable and free curriculum for the children with cancers in CHCMU.

In order to achieve above purposes, this essay shall: (1) describe current background context and rationale regarding the reliability of this curriculum design in CHCMU; (2) explain the implementation and curriculum plan based on Sect. 2.1; and (3) analyze the evaluation and potential problems of this curriculum.

## 2.2 Background Context and Information

'China Health and Family Planning Statistical Yearbook 2008' (Chinese National Ministry of Health 2009) shows the population of children with cancers is increasing year by year. This Yearbook demonstrates that the incidence (new cases between 2003 and 2008) of Chinese children with cancers in urban area increased from 20.8 per 100 thousand to 24.7 per 100 thousand (Chinese National Ministry of Health 2009). The data from the Chinese National Registration Centre of Cancer (2011) reports that the incidence of childhood cancer raises 2.8% per year from 2000 to 2010 in China, and the growth of incidence in urban areas is much higher than in rural areas.

Chongqing, the biggest municipality in China, covers 82,400 km<sup>2</sup> with a population of 33.75 million (Chongqing Municipal People's Government 2015). As one of the most important economic centers of China, Chongqing has a high-quality health system, leading medical research techniques and abundant financial supports on public health. Therefore, hospitals in Chongqing attract large amounts of patients from local and surrounding areas. The data from Chongqing Health Information Centre

(2014) shows that in 2013, more than 4000 children (new cases) were diagnosed as patients with pediatric cancers (new cases), which counts for one-fifth of the patients of pediatric cancers (new cases) in China.

The Children's Hospital of Chongqing Medical University (CHCMU), located in the central area of Chongqing, is recognized as one of the top three pediatric hospitals in China (CHCMU 2015). Many professors worked in this hospital hold leading positions in the field of pediatric research in China. CHCMU Medical Record Statistics Department (2015) records 2485 childhood cancer inpatients visiting CHCMU in 2014. An interview with Doctor Wang, who works in the PCD of CHCMU, revealed CHCMU provides no educational service for inpatient-children. When I investigated why, each doctor interviewee spoke to the complexity to adequately provide comprehensive medical care. Though each doctor emphasized that the children needed access to education, especially the emotional and communicative learning, they could not provide it. Therefore, I decided to design this curriculum for the children with pediatric cancer in CHCMU.

## 2.3 Rationale

Parker and Rubin (1966) suggest that curriculum designers should carefully consider the rationales, including the target group, regional characteristics and learning contents.

### 2.3.1 *The Reason Why I Choose CHCMU to Practice This Curriculum*

CHCMU doctors have proclaimed that the educational rights of children in hospital were being neglected. Considering national influence CHCMU has where children health care is concerned in China, if CHCMU were to practice a successful curriculum for inpatient-children, more and more Chinese pediatric hospitals will follow. In fact, the concept of education in hospital will be widely accepted and practiced by Chinese society.

Setting up a hospital school or classroom in CHCMU is quite advantageous seeing as it would extend the comprehensive service it presently being offered with more than 1400 beds. During the interview, the doctors noted that the new hospital building could surely accommodate a hospital classroom. Furthermore, CHCMU plays an active role in the charity activities for children, such as Tomorrow Plan, Smiling Train and Leukemia Foundation. These actions of charities may encourage the administrators of CHCMU to place greater importance on promoting children's rights and thereby devote themselves to contribute to nonprofit projects. Finally, CHCMU extensively cooperates with over 20 international medical institutions in

developed countries, such as UK, Australia and Canada. The frequent collaborations could prove that the leaders and staffs in CHCMU may have an open and positive attitude toward adopting ideas and practice from other countries, such as education in hospital.

Doctor Hu highlighted that compared to other inpatient-children in CHCMU, such as those who are in Respiratory Department, Infection Department and Orthopedic Department, the children in PCD with childhood cancer are more suitable for learning together

- because PCD is one of the biggest departments in CHCMU,
- because of high percentage and regular long-term inpatients in its subordinating divisions,
- because of more than 80% inpatients between 3 and 10 years old.

This means there are sustained educational needs and educational target groups in this department. Secondly, due to no cross-transmission among the children, these children could study together. Furthermore, generally there is no intelligence deficiency and physical disability to hinder the children in this department from participating in the courses.

### ***2.3.2 The Specific Education Needs of the Children with Childhood Cancer in Hospital***

Education in hospital is not a new concept. Many developed countries, such as UK and Japan, set up hospital schools to provide educational supports, ensuring continuity of education for children when they are away from school for health reason (Taniguichi 2009; DfES 2001). In other words, education in hospital could fill the gap of academic delay, which affected by long-term treatment caused absence from school.

Furthermore, many children with cancers need to learn in hospital, because they will return to school to continue study after they are cured through the medical treatment, which means these children should learn the basic knowledge linked to school education, such as literacy and mathematics, during the medical treatment period. According to World Health Organization (2015), approximately eight out of ten paediatric cancer patients survived five years or longer after effective in-hospital treatment and frequent medical cures in developed countries. Although the clinical cure rates are lower in developing countries, many patients are still cured and return to school. Doctor Wang points out that more than 70% of inpatients (new cases) of PCD in CHCMU have been healed and returned to school in 2014. On the other hand, it is being questioned whether children whose conditions are terminal, in essence, have educational needs. Mrs. Stephanie, an interviewee, who is a hospital teacher in a children's hospital of Birmingham, suggested that educators should simply respect those children's basic rights of education and educational needs.

The current body of research indicates that children with long-term health treatment may have special educational needs (Closs 2000; Mukherjee et al. 2000; Shiu

2001). Larcombe (1995) argues that academic delay will cause underachievement when children return to classroom after the hospitalization period. Poursanidou et al. (2003) and Madan-Swain et al. (2004) mention that Children's hospitalization may result in low self-esteem, communicative difficulties, and school phobia. Therefore, it is necessary to reduce the negative effects of the in-hospital treatment period on children through education in hospital. Cadman et al. (1988) suggest clinicians to pay more attention to the social communication, emotional well-being and behaviors of children with cancers.

In addition, American Cancer Society (n. d.) lists the symptoms of childhood cancer, for example, frequent headache, weight loss and visual reduction. However, many researchers emphasize that children with cancer may have special needs of learning, 'but they may not necessarily have a disability or learning difficulties' (Watanabe 2013, pp. 25). Therefore, I should consider the special needs, such as preparing big books, flexibly designing learning duration and providing safe and interesting learning environment, and keeping a normal knowledge level like common children learned at the same ages.

### ***2.3.3 The Reason Why Picture Book Reading Is One of the Most Ideal Courses for Children with Cancer***

Picture books, which consist of interesting illustrations and simple scripts, are commonly recognized that 'as instructional materials is one of the best methods of educating young children' (Hsiao 2010, pp. 143). The Ministry of Education of China (2012) explicitly stipulate that it is important for teachers to use picture, drawing and other ways to arouse children's interests in books, reading and literacy, and cultivate children's language skills. Picture book reading (PBR) is an effective way to adapt this requirement. Furthermore, picture books have various genres. This not only improves language skills, but also accommodates the diversity of educational needs. For example, a wealth of ideas shows that the use of PBR effectively improves teaching and learning outcomes in multiple subjects, such as mathematics, nature science, literacy, history and behavior education (Casey et al. 2008; Hong 1996).

In recent decades, PBR became one of the most popular teaching activities of preschool and primary education in China (Shiu 2013). Therefore, in this case, I choose PBR as a sustainable curriculum, because I think the process of PBR could improve children's knowledge of language, science, arts and cultivate communication skills, behaviors and emotional well-being. In addition, the curriculum targets children between 3 and 10 years old. The vast majority of inpatients in this department are at this age group.

## 2.4 The Agency and Operation Mode

There are two key elements affecting the practice of education in hospital: medical guidance and educational guidance. To perform this curriculum, CHCMU, which can provide high-quality medical guidance, needs a partner who can professionally guide the implementation of an educational project.

A collaborative mode can be used to operate this project. Firstly, this curriculum needs sufficient funding which could be implemented through a nonprofit organization. Furthermore, based on the supervision of the nonprofit organization, CHCMU could implement this curriculum with the collaboration of an educational institution. CHCMU responsibilities include: providing a suitable classroom space in the hospital and managing administrative works of teachers in hospital. Besides, the educational institution could undertake the responsibilities of employing and training teachers and teacher assistants and guide teaching activities.

## 2.5 The Demonstration of This Curriculum

This curriculum aims to (1) provide a safe and enjoyable place to support children's educational needs, (2) improve children's basic understanding of science and language, aesthetic sense, and social skills through PBR and (3) make a link between the child and school life. Involvement in the program encourages children to learn in groups similar to children in kindergarten or schools.

According to the purposes, it can be seen that this curriculum will focus on creating a friendly environment and providing an interesting learning process for the children. As Halsey and Sylva (1987) point out that children are the agent of their learning, this curriculum provides a happy place to encourage children to learn with themselves, friends, older children and teachers. Therefore, this curriculum will use a process model, which combines with child-centered method.

In addition, this process model requires appropriate teaching environment. As Hartley (2009, pp. 424) mentions, the environment of a child-centered method should make children 'feel secure, free and happy.' More specifically, the classroom will be decorated as a small picture book library, which consists of free reading area, teaching area and books' display area. ICT equipment and Internet will be set up in this classroom (Picture 2.1).

### 2.5.1 The Implementation of the Curriculum

Each form of teaching and learning should begin with the needs of children (Hartley 2009). In this project, the selection of picture books depends on the feedback in the previous week. Teachers will observe which book is more popular in the free reading time and ask children which book they want to read in the next week. Generally, PBR



**Picture 2.1** Picture book classroom (picture 1 and 2), photo by Lin Wang, 2011

**Table 2.1** Main structures of this curriculum (example of one week)

Date	Monday	Tuesday	Wednesday	Thursday	Friday
Categories of content	Science	Arts	Social skill	Literacy	Health
Examples	‘The Very Hungry Caterpillar’	‘The Magic Flute’	‘My Dad’s a Birdman’	‘Guess How Much I Love You’	‘When I feel angry’

can develop children’s language ability, and it also improves multiple knowledge and skills through the books’ contents. Therefore, I classify the contents into five categories (see Table 2.1; for more details, see Appendix 2.1). The five categories are based on the National Guideline for kindergarten and primary education (Ministry of Education of China 2012). In addition, during the implementation of this curriculum, more categories of picture book may be selected, such as English and religion, because of the specific needs of the children.

### 2.5.2 Teaching Method

This curriculum will be regularly implemented from Monday to Friday in each week. Generally, this curriculum will use Chinese to communicate and choose books in Chinese version, except if an English category is added. Each learning day has two sessions. Teachers will select one book or one topic to perform multiple activities (see Appendix 2.2; for more details, see Appendix 2.2). At times, a topic teaching method will be used. For example, on specialty days such as Mother’s Day and the beginning of spring, teachers will select relevant picture books and activities structured around the topic.

The Timetable of the Learning Process (Example of One Day)

Sessions	Time	Activities
Session 1	8:30-9:30 am	<b>Enjoy Reading</b> (A free reading activity in reading area)
	9: 30-10:10 am	<b>Picture Book Reading 1</b> (This resemble a lesson; a teacher guides children to observe the book and perform the contents of this book)
	10:30-11:10 am	<b>Picture Book Reading 2</b> (Using other ways to read the book again, playing video of the book narration or selecting another book to guide reading)
	14:00-14:30 pm	<b>I'm Story King</b> (An activity for the child who wants to perform; sometimes invite parents, nurses and volunteers from outside to tell stories)
Session 2	14:45-15:45 pm	<b>Extended activities</b> (Singing, dancing, science experiment, handcraft, role play or other extended activities)
	15:45-16:30 pm	<b>Enjoy Reading and giving quizzes back</b>

Otherwise, a child-centered education is taken more consideration of personalities (Bernstein 1975). This may mean it is better to have more teachers to guide activities in the classroom. Hence, there will be one teacher and two teacher assistants working with the children in each day. However, a child-centered education does not mean that there is no need of teacher. In fact, teachers will use questions to guide children to learn by themselves, which is described as ‘invisible pedagogy’ by Hartley (2009, pp. 424).

## 2.6 Curriculum Evaluation

A curriculum with process model focuses on the improvement of children, as opposed to mastery (Blenkin 1987). In addition, Bernstein (1975) emphasizes that the evaluations of a child-centered education should be more personalized, and there are multiple methods to assess the learning outcomes.

Therefore, the evaluation of this curriculum will derive from the feedback from children, parents, teachers and nurses. Using different angles of view will help us to know more about the learning process and outcomes. As mentioned previously, CAPC will evaluate the curriculum as a part of its responsibilities. Firstly, evaluators will ask teachers to keep teaching diaries, thereby tracking difficulties of teaching and improvement of children, etc. Furthermore, semi-structured interviews will be



taken with parents and nurses at the end of every month. This could help to assess whether children apply their learning in real life, for example, have they changed their attitude toward eating vegetables and how they control their emotion when they get angry. Thirdly, at the end of each month, parents will answer an open-ended questionnaire aimed to evaluate this curriculum. Finally, evaluators will randomly ask children's feeling about the teacher, learning process and the learning place. Although children cannot give professional opinion on the curriculum evaluation, whether they feel happy with the learning is the most important factor to evaluate the curriculum.

## 2.7 Potential Problems

There is no perfect curriculum. Considering the potential problems will help us to achieve better teaching and learning outcomes.

The first problem of this curriculum is that there are large differences of children's age and knowledge level, which bring difficulties in selecting the learning contents. However, based on my experience, I have found that each picture book has various contents, and different readers can find different interests. Therefore, teachers should encourage children to read the books in different ways, and set up multiple learning levels for children. Another solution is to encourage older children to play positive roles in each activity, such as helping younger children read.

The second problem relates to the categories of picture books. Due to the various ways of reading picture books, some books could be put into two or three categories. For example, 'The Very Hungry Caterpillar' could be delivered through language, math or health. Therefore, it is better for teachers to use multiple ways to guide children to read one book.

Although this curriculum has timetable for every day, because of children's health situation, children could leave classroom at any time. Therefore, teachers should realize this situation and be prepared to re-engage other children's attention. This situation, as well as a child-centered education, will be a pedagogic challenge for the teachers.

Due to our limited experience of education in hospital, other subjects' learning cannot be involved in this project. However, the project will be improved in the future. For example, children will be separated into more age groups, if we get enough funds to build more classrooms in hospital. More subjects will be involved in, and it will be based on the successful practice of this curriculum.

## Appendix 2.1

The Main Structures of this Curriculum (Example of One Week)

Date	Monday	Tuesday	Wednesday	Thursday	Friday
The categories of the picture books	Science	Arts	Social skill	Literacy	Health
Contents of the picture books	The knowledge and skills of mathematics, physics, and other natural science	The contents relate to dancing, singing, painting and other aesthetic and creative experience	Communicative skills, self-cognition, relationship with friends and family, and social adjustment	The knowledge of Chinese language, culture and history through picture book reading	Mental and physical health, behaviors, emotion
Aims	Stimulating curiosity of science learning; Applying math into practice; learning to find the questions, analyze questions and solve questions	Feeling and experiencing arts; Enriching abilities of creativity and imagination; Encouraging children to find and create aesthetics by themselves	Creating a friendly group environment; Establishing good relationship between parents and children, teacher and children, children and children; Forming the sense of safety and trust; Developing self-confidence and self-esteem	Making a free and comfortable environment; Encouraging children to communicate with adults and peers; Enriching children's vocabulary and language skills; Cultivating interests and habit of reading	Developing fine life behaviors and basic living skills; Learning to express emotion in a pleasant way; Cultivating healthy dietary habit; Trying to do appropriate physical exercises
Examples	'The Very Hungry Caterpillar'	'The Magic Flute'	'My Dad's a Birdman'	'Guess How Much I Love You'	'When I feel angry'

## Appendix 2.2

### The Timetable of the Learning Process (Example of One Day)

<b>Sessions</b>	<b>Time</b>	<b>Activities</b>
Session 1	<b>8:30-9:30 am</b>	<b>Enjoy Reading</b> (A free reading activity in reading area)
	Preparation: 1. Today's recommendation book list and display these books in the reading area 2. Today's funny quizzes relate to the books the children learned before (if children give back the quiz at the end of Session 2, they will get little gifts, such as a star, which means he/she is the reading star of this day) PS: The classroom will open at 8:30 am. Children could go into the reading area at any time of the free reading activity.	
	<b>9: 30-10:10 am</b>	<b>Picture Book Reading 1</b> (This resemble a lesson; a teacher guides children to observe the book and perform the contents of this book)
	Preparation: 1. According to the feedback from last week and select one book relate to today's category 2. PowerPoint slides or videos 3. Story resources, props, background music and other learning materials	
	<b>10:30-11:10 am</b>	<b>Picture Book Reading 2</b> (Using other ways to read the book again, playing video of the book narration or selecting another book to guide reading)
	Preparation: The same with Picture Book Reading 1. Explanation: children like read one story repeatedly. According to the observation in Picture Book Reading 1, teachers decide whether change another book or read the book again	
Session 2	<b>14:00-14:30 pm</b>	<b>I'm Story King</b> (An activity for the child who wants to perform; sometimes invite parents, nurses and volunteers from outside to tell stories)
	Preparation: 1. A small performance stage and slides. 2. Little gifts for the performers. 3. Encouragement, smile and claps	
	<b>14:45-15:45 pm</b>	<b>Extended activities</b> (Singing, dancing, science experiment, handcraft, role play or other extended activities)
	Preparation: Activity resources, props, background music and other learning materials	
	<b>15:45-16:30 pm</b>	<b>Enjoy Reading and giving quizzes back</b>
	Explanation: Enjoy Reading not means children always read by them selves. Teachers and older children will guide them to appreciate books, for example the story on the cover, the relevant stories on other book.	

## Curriculum Design (10 Sessions)

1. The picture books, which I selected in the reading activities, are based on children’s selection in the past week.
2. Generally, the activities, which are titled ‘**Enjoy Reading**’ in each day, have similar process of learning. Therefore, I only explain the process of ‘**Enjoy Reading**’ in the table of Monday, as well as the activities titled ‘**I’m Story King.**’
3. Words followed by ‘☞’ means there is a resource showed in the appendices.

Monday:

SESSION 1	<b>Objectives</b>	
	* Cultivating good habit of reading * Learning to share books and feelings with other children	* Encouraging children to find questions and answer questions * Arousing imagination and interests of science
	<b>Activities and the process</b>	<b>Teachers’ question which guide children to learn by themselves</b>
	<b>Enjoy Reading</b>	Using questions to arouse children’s interests of reading, encourage children to find question and answer the question
	* Welcome every child and introduce today’s recommend books * Encourage older children to guide reading * Encourage children to answer the quiz, which relates to the book children read in last week	
	<b>Picture Book Reading 1: Can Dogs Fly? ☞</b>	Using questions to guide children carefully appreciate books, describe details of pictures, find questions and answers, and tell the story
	* Find a partner, sit next to her/him * Show different wings on the slides; guess the animal. * Discuss and summarize the features of these flying animals in pairs * Tell the children there is a dog named Fido, who wants to fly. Ask children to give ideas help Fido to fly. * Discuss with partner, and present solutions * Show a big aircraft model (made by paper); ask children can Fido use this to fly. * Guide children to observe the aircraft model; ask questions, such as ‘where is the wing?’ * Give books to each group, introduce the feature of Pop-up picture book ☞ * Read the book, look the components on the left pages, discuss the effects of each component * Find the components on the aircraft models	
	<b>Picture Book Reading 2: Help Fido fly</b>	
	* Watch a cartoon video about how can an airplane fly ☞. * Show another big aircraft model, ask children can this aircraft fly; encourage children to describe their opinion. * Read the book, understand the logic of the story * Try to make an ending for this book * Give the pictures of the machines, ask children to order the machine, then logically re-tell the story	
	<b>Objectives</b>	
* Encouraging children to perform * Improve children’s manipulative ability	* Developing language skills * Cultivating imagination and interests of science	
<b>Activities and the process</b>	<b>Teachers’ question which guide children to learn by themselves</b>	
<b>I’m Story King</b>	Listening and smiling Do not break the performance	
* Children performance one by one (in this activity, children cloud choose any story to perform)		
<b>Extended activities</b>	Using questions to guide children express their ideas	
* Children can choose papers, pens, scissors and glue to design and make aircraft * Children also can choose assembly paper models to make aircraft		
<b>Enjoy Reading and giving quizzes back</b>	Using questions to know children’s feeling and encouraging them to come tomorrow	
* Recommend other books about ‘fly’ and the books about tomorrow’s topic * Assess the children’s listening abilities and engagement in the story * Give gift to children who finish the quiz		
Resources	Recommend books; PowerPoint slides; video; two big aircraft models (made by paper); materials using to make aircraft models ☞	

Tuesday:

		<b>Objectives</b>		
SESSION 3	* Feeling the rhythm and music	* Logically telling story		
	* Learn to feel the story and emotion from the music	* Arousing imagination and interests of music		
	<b>Activities and the process</b>		<b>Teachers' question which guide children to learn by themselves</b>	
	<b>Enjoy Reading</b>		Use questions to guide children carefully appreciate books, describe details of pictures, feel the music, and tell the story	
	The same with Day 1			
	<b>Picture Book Reading 1: The Magic Flute</b> ☹️			
	* Play music, talk about what do you feel from the music			
	* Quickly show the pictures of the big book, guess the story			
	* Play music, teacher perform the story			
	* Play music again, children follow the music to do different movements			
* Read the book, tell the story or ask questions to each other				
<b>Picture Book Reading 2: Mozart and The Opera</b>				
* Watch the cartoon video of the introduction of Mozart ☹️; have basic knowledge of opera and the work of Musician				
* Show pictures of the book on slides, teacher present the story				
* Give five pictures to each group; ask children to order the pictures on the table				
* Ask children use the pictures on the table to re-tell the story				
<b>Objectives</b>				
SESSION 4	* Encouraging children to perform	* Feeling the music		
	* Understanding more about classical music			
	<b>Activities and the process</b>		<b>Teachers' question which guide children to learn by themselves</b>	
	<b>I'm Story King</b>		Using questions to guide children know different musical instruments, feeling the rhythm	
	The same with Day 1			
	<b>Extended activities</b>			
	* Play online music games: My First Classical Music ☹️			
	* Feel different music and explore the musical instruments through playing the game			
	* Do movements along the music			
	<b>Enjoy Reading and giving quizzes back</b>			
The same with Day 1				
Resources Recommend books; big picture book; music; PowerPoint slides; Game App; Some musical instruments				

Wednesday :

		<b>Objectives</b>	
SESSION 5	* Understanding the contents of the book and share with other children	* Try to express own feeling	
	* Improving good relationship between parents and children	* Arousing imagination	
	<b>Activities and the process</b>		<b>Teachers' question which guide children to learn by themselves</b>
	<b>Enjoy Reading</b>		Use questions to guide children carefully appreciate books, describe details of pictures, structure the story, express their feeling
	The same with Day 1		
	<b>Picture Book Reading 1: My dad</b> ☹️		
	* Find a partner, sit next to her/him		
	* Quickly show the pictures of the book on the slides; guess the story		
	* Tell the story in pairs.		
	* Show the big book; discuss the cover, back cover, title page and book jacket.		
* Teacher start to tell the story of this book from the cover			
* Children make a new story to introduce his/her dad			
<b>Picture Book Reading 2: Share Reading</b>			
* Show children some books, such as 'My dad's birdman', 'My dad is Johnny', 'Dad and me', and 'Walk with dad'.			
* Each group (2-3 children) choose one book to read and tell the story to each other			
* Every group decide one child to tell the story to other groups			
* Talk about your feeling of the story you heart			
* Exchange the books and read again			
<b>Objectives</b>			
SESSION 6	* Improve children's drawing ability	* Express love through drawing and expression	
	* Cultivating imagination		
	<b>Activities and the process</b>		<b>Teachers' question which guide children to learn by themselves</b>
	<b>I'm Story King</b>		Using questions to guide children to draw and express their ideas
	Invite one or two children's father to perform stories		
	<b>Extended activities</b>		
	* Provide papers, color pens to children		
	* Children draw pictures of his/her dad		
	* Explain their ideas of the pictures (encourage older children write sentences on the picture)		
	* Ask children to tell the story and show the picture to parents when they go back to sickroom		
<b>Enjoy Reading and giving quizzes back</b>			
The same with Day 1			
Resources Recommend books; PowerPoint slides; video; big book; materials of drawing			

Thursday:

SESSION 7	<b>Objectives</b>	
	* Imitating the sentences in the book and developing literacy skills	* Creating thinking map to express ideas
	* Understanding the factors of good friendship	
	<b>Activities and the process</b>	
	<b>Enjoy Reading</b>	
	The same with Day 1	
	<b>Picture Book Reading 1: I Have Friendship 'To Let' %</b>	
* Find a partner, sit next to her/him		Teachers' question which guide children to learn by themselves  Use questions to remember the structures of sentences in the story, to understand relationship between friends, to guide them creating thinking maps
* Quickly show the pictures of the book on the slides; guess the story, and talk to your partner		
* Show the slides and teacher narrate the story		
* Children summarize the games in the story in pairs		
* Play the games with partner; and imitate the sentences in the story when playing games		
<b>Picture Book Reading 2: Thinking Map</b>		
* Watch the cartoon video of this story		
* Give papers and pens to each group, tell them how to create thinking maps		
* Discuss the most important factors of a good friendship; show ideas in the thinking map		
* Group presentation: explain the map and give examples		

SESSION 8	<b>Objectives</b>	
	* Improving children's communicative skills	* learn to use different gestures, voices, rhythms to perform
	* Cultivating imagination	* Cultivating good habit of reading
	<b>Activities and the process</b>	
	<b>I'm Story King</b>	
	The same with Day 1	
	<b>Extended activities</b>	
* Find partners and sit together; teacher re-tell the story I Have Friendship 'To Let'		Teachers' question which guide children to learn by themselves  Using questions to guide children imitate the sentences in the story, to choose roles, to use props, and to practice using different gestures and voices to perform
* Teachers guide children to choose roles		
* Provide props for each group		
* Role play		
<b>Enjoy Reading and giving quizzes back</b>		
The same with Day 1		
Resources		
Recommend books; PowerPoint slides; video; materials of role play; papers and pens		

Friday:

SESSION 9	<b>Objectives</b>	
	* Understanding the contents of the book	* Try to expressing own feeling
	* Improving the ability to recognize different emotions	*
	<b>Activities and the process</b>	
	<b>Enjoy Reading</b>	
	The same with Day 1	
	<b>Picture Book Reading 1: When I Feel Angry %</b>	
* Show some cards of different facial expressions, discuss the emotions		Teachers' question which guide children to learn by themselves  Use questions to guide children to tell the story, discuss with group members, find more interesting information from the pictures, ask the children for examples
* Explain that it is normal to feel angry sometimes		
* Ask the children whether they have ever felt angry, describe where, with who, and what happened.		
* Discuss in pairs: when my friend feel angry, what can I do; summarize solutions		
* Group discuss: what can we do to feel better when we feel angry		
* Read the book again, talk about some new ideas		
<b>Picture Book Reading 2: The Weather Report of Yamada's family %</b>		
* Watch slide, guess the story, and then read the story in groups		
* Use weather cards to repeat the story		
* Discuss the relationship between the weather and Yamada's feeling		
* Use weather cards or draw other weather cards to present the weather report of your family		
* Present in groups		

		Objectives		
SESSION 10	* Improving children's communicative skills		* Learn to cope with different emotions	
	* Understanding it is normal to have negative emotion (angry, annoyed, sad) sometimes			
	Activities and the process		Teachers' question which guide children to learn by themselves	
	I'm Story King		Use questions to guide children enjoy the game, contribute to the game, act out their feeling	
	The same with Day 1			
	Extended activities			
	* Sit in a circle, and prepare to play a game			
* Each child picks a situation card; loudly read the card (ask older children to help younger children read)				
* Feel in the situation, and act out the feeling				
* Other children try to work out what feeling the child is expressing				
* Group discuss: positive solutions to feel better in the situation				
* Turn to the next child, continue the game until the last one				
* Guide children to summarize all the solutions				
Enjoy Reading and giving quizzes back				
The same with Day 1				
Resources	Recommend books; PowerPoint slides; weather cards; situation cards; papers and color pens			

## Appendix 2.3

### Picture books

Chatterton, M. (1995) **Can dogs fly?** New York: Dial Books for Young Readers

Gatti, A., Malone, P. and Mozart, W. (1997) **The magic flute.** Beijing: Beijing Science and Technology Press

Browne, A. (2007) **My dad.** Zhengzhou: Hebei Education

Fang, S. and Hao, Luo. (2013) **I Have Friendship 'To Let'.** Urumchi: Xinjiang Youth Press

Spelman, C. and Cote, N. (2000) **When I feel angry.** Beijing: Publishing House of Electronics Industry

Hasegawa, Y (2014) **The Weather Report of Yamada's family.** Zhengzhou: Hebei Education

### Pop-up picture book

Chatterton, M. (1995) **Can dogs fly?** New York: Dial Books for Young Readers

### Online resources

A cartoon video about how can an airplane fly

<http://baidu.hz.letv.com/watch/04882981267105754176.html?page=videoMultiNeed>

A cartoon video of the introduction of Mozart

<http://www.bukade.com/cartoon/shaonianmozhat/>

Game App: My First Classical Music App HD

<https://itunes.apple.com/cn/app/my-first-classical-music-app/id470865535?mt=8>

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# Chapter 3

## The Role of Assistive Technologies in the Learning of Visually Impaired Young People at a Rural Tanzanian Secondary School



**Alison Morrison**

**Abstract** This paper introduces the reader to global- and WHO regional-scale comparisons of visual impairment data. It then identifies the context of my research in a rural village in Tanzania. Its qualitative methodology is briefly outlined (Shank in *Qualitative research: A personal skills approach*. Pearson, NJ, 2006). Initial research findings from my analysis of interview data are reported, set in the context of “assistive technology” (AT). For the purposes of this paper, AT is defined as “any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customised, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities” (Smith et al. in *Assistive technology for students with visual impairments*, position paper of the division on visual impairments, council for exceptional children. Council for Exceptional Children, Arlington, VA 2011, p2). Criteria which I have isolated to encourage supply of AT appropriate in a Tanzanian setting are promoted so that scarce financial and AT resources are put to the most efficient use. Recommendations are presented to promote the learning of the current cohort of VI young people and those likely to follow them in the next ten years and to enhance their integration into a rapidly changing Tanzanian society. I challenge educationalists, NGOs, policymakers and potential donors to consider practical measures which could and should aid the aspirational motto at this VI unit to become a reality—**Disability is not Inability**.

A WHO Regional Committee for Africa (2007, p. 1) definition is used: “Visual impairment refers to low vision and blindness which correspond to partial or total loss of sight as measured by a standard scale”.<sup>1</sup>

If just the two major causes of visual impairment were considered priorities and control measures were implemented consistently across the world, by providing refractive services and offering cataract surgery to the people in need, two thirds of the visually impaired people

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<sup>1</sup>International Statistical Classification of Diseases (ICD-10), volume 1, H54, pp. 456–457.

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could recover good sight ... Provision of effective and accessible eye care services is key for effectively controlling visual impairment including blindness. (Oleg Chestnov, in WHO 2013, p. 1)

Blindness is one of the main public health problems in Africa, yet 75% of the underlying causes are preventable (WHO 2007, p. 3).

### 3.1 Introduction to Global- and WHO Regional-Scale Comparisons of Visual Impairment

Visual impairment (VI) compromises the life chances of young people throughout the world. The WHO's Universal Eye Health Action Plan (2013, p. 1) claimed that in 2010 globally there were 285 million VI people, of which 39 million were blind, 13.7% of the global total being blind.<sup>2</sup> That Action Plan further claimed that 80% of all causes are either preventable or curable.

WHO's Regional Committee for Africa's estimates from 2007 were that the number of people with visual impairment in sub-Saharan Africa was 27 million, of whom 6.8 million are blind, 25% of the sub-Saharan African total being blind, a significantly higher percentage than the global proportion cited by WHO for 2010; "Blindness is one of the main public health problems in Africa, even though 75% of the underlying causes are preventable" (Ibid, p. 9).

Another WHO publication (2012) refers to prevalence of visual impairment in its "African Region". Nineteen surveys, from twelve countries, classified as low income or lower middle income were available for inclusion in their African model; three Tanzanian studies from 2007 informed WHO's African Region content. None included the age cohort 15–49 years, which would capture the age range of the students at my case study VI unit (Endnotes TA1,<sup>3</sup> TA2<sup>4</sup> and TA3<sup>5</sup>).

### 3.2 WHO African Region/China Comparison

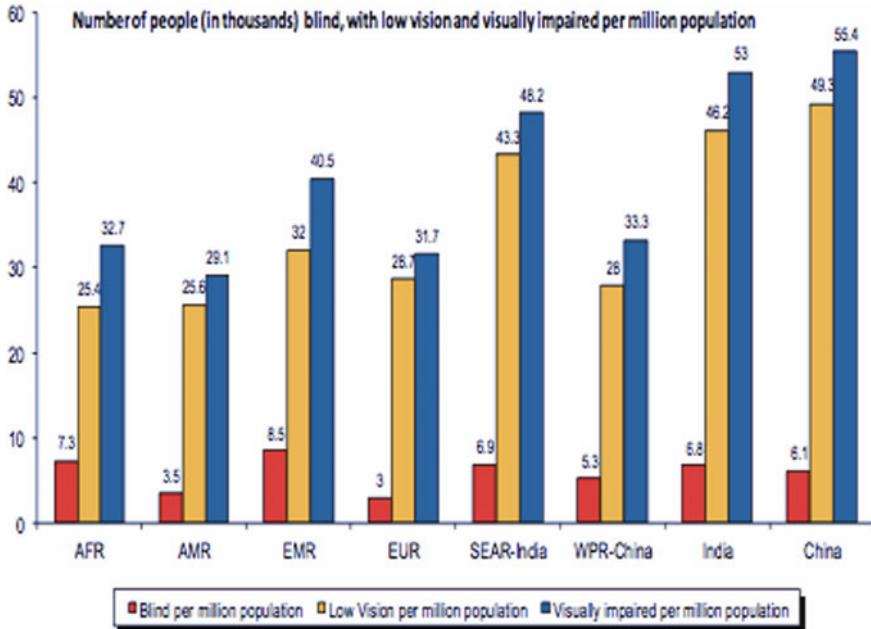
Figure 3.1 from WHO's 2012 report shows that the African Region's blindness data is the second highest of WHO's eight regions (AFR, the first set of bars), at 7.3 thousand per million. In contrast, China has only the fifth highest statistic for blindness, yet China's visually impaired statistic is the highest.

<sup>2</sup>A 2007 WHO Regional Office for Africa publication gave the Global statistics for Visual Impairment as 161 million, of which 37 million were blind. This implies that while global VI statistics have increased by over 120 million, blindness had only risen by 2 million.

<sup>3</sup>TA1 Rapid assessment of cataract surgical services in Kyela, United Republic of Tanzania 2007; unpublished report from P. Huguet.

<sup>4</sup>TA2 Habiyakire C, Kabona G, Courtright P, et al. (2010) Rapid assessment of avoidable blindness and cataract surgical services in Kilimanjaro region Tanzania. *Ophthalmic Epidemiology*. 2010; **17**: 90–94.

<sup>5</sup>TA3 Kikira S. (2007) Rapid Assessment of avoidable blindness in Zanzibar. Submitted for M.Sc. Community Eye Health at the London School of Hygiene and Tropical Medicine. London 2007.



**Fig. 3.1** Multiple bar chart showing WHO Visual Impairment estimated data for 6 WHO regions (AFR, African Region; AMR, Americas Region; EMR, Eastern Mediterranean Region; EUR, European Region; SEAR-India, South East Asian Region-India, and WPR-China, Western Pacific Region. Estimates for South East Asian Region were derived for India and for the other countries in the Region separately. Estimates for China were derived separately from the other countries in WPR; data from rural areas were combined with “recent surveys in urban settings” (2012, p. 5.) and India and China (Thousands per million population) WHO (2012, p. 3), reproduced by kind permission of the author

China’s low vision statistic is almost twice as high as that of WHO’s African Region (49.3 thousand, compared to 25.4 thousand/million population); its visual impairment statistics are also significantly higher than those for the African Region (55.4 thousand, compared to 32.7 thousand/million population). This paper should be of interest to a Chinese audience, since the nation experiences low vision levels which are almost twice those in Africa, and faces significant VI challenges.

Several limitations were acknowledged by the WHO (2012) report’s authors, notably that its data could be limited in representation of countries and ages in particular. Most of its surveys, for example, considered rapid assessments carried out on those aged 50 or over. Other limitations applied to its Eastern Mediterranean Region data and missing or outdated data from high-income countries. The net result of these limitations is that the authors warned, “The combined effect of these uncertainties is possibly an over or under estimate of visual impairment and blindness of approximately 20%” (Ibid, p. 4). Similarly, they warned that attributing causes to blindness and visual impairment is problematic, particularly when those working in the field enjoy only “limited diagnostic capacity”. That being said, several strengths were

<b>Ages (in years)</b>	<b>Population (millions)</b>	<b>Blind (millions)</b>	<b>Low Vision (millions)</b>	<b>Visually Impaired (millions)</b>
<b>0-14</b>	<b>1,848.50</b>	<b>1.421</b>	<b>17.518</b>	<b>18.939</b>
<b>15-49</b>	<b>3548.2</b>	<b>5.784</b>	<b>74.463</b>	<b>80.248</b>
<b>50 and older</b>	<b>1,340.80</b>	<b>32.16</b>	<b>154.043</b>	<b>186.203</b>
<b>all ages</b>	<b>6,737.50</b>	<b>39.365 (0.58)</b>	<b>246.024 (3.65)</b>	<b>285.389 (4.24)</b>

**Fig. 3.2** Global estimate of the number of people visually impaired by age, 2010; WHO (2012, p. 5), reproduced by kind permission of the author. For “all ages”: in parentheses the corresponding prevalence (%)

claimed for the statistics, since new data was able to replace previously extrapolated data. Analysis for the age group represented in my case study is shown in Fig. 3.2, in the third row of the table.

For the 15–49 age cohort represented by the VI research participants in my case study, the following global prevalence can be calculated: blind, 5.784 millions/3548.2 millions, a percentage of 0.16; low vision, 74.463 millions/3548.2 millions, a percentage of 2.10; and visual impairment, 80.248 millions/3548.2 millions, a percentage of 2.26 (Table 3.1).

It would be very useful to be able to know Tanzania’s data at a range of scales for blindness, low vision and visual impairment. Comparative national data by age for Tanzania is not currently available to this researcher.<sup>6</sup>

Access to studies in the Dodoma region, or Chamwino District, where the case study is located, would be very helpful. I have not been able to acquire this sort of data. WHO’s researchers have also confronted this situation, “Lack of reliable epidemiological data is a basic problem in Africa” (WHO 2007, p. 3). I can report on the epidemiological data for a sample of my student research informants; see Table 3.2 and Fig. 3.3.

<sup>6</sup>The three surveys informing the 2012 WHO report were carried out in very different parts of the country from where my case study is located. TA1 was focused on Kyela, TA2 on the Kilimanjaro region and TA3 on Zanzibar. The first and second examined cataract surgical services, the final one focused on avoidable blindness. Kyela is a town and a district, one of eight located in Mbeya region. Zanzibar is a small island region in the Indian Ocean, attracting large numbers of international tourists at its coastal holiday destinations and generating income from these visitors which can promote the development of local health services. The logistics of providing health services there are far easier to implement there than in the Chamwino district of Dodoma region.

**Table 3.1** Principal global and developing countries' causes of VI and blindness (%) Leonard 2019)

Cause	Global cause of VI	Developing countries avoidable main causes of VI	Global cause of blindness
Uncorrected refractive errors	43		3
Cataracts	33	50	51
Glaucoma	2	12	8
AMD <sup>a</sup>	1		5
Diabetic retinopathy	1	5	1
Trachoma	1	4	3
Childhood blindness		4 <sup>b</sup>	4
Corneal opacities	1	5	4
Undetermined	18		21
Onchocerciasis		0.8	
Other causes, including low vision and refractive errors		14	

*Sources*

Global data: WHO (2012, p. 6), Fig. 2a, b

Developing countries and African data, WHO Regional Committee for Africa (2007, pp. 1–2)

<sup>a</sup>Age related macular degeneration

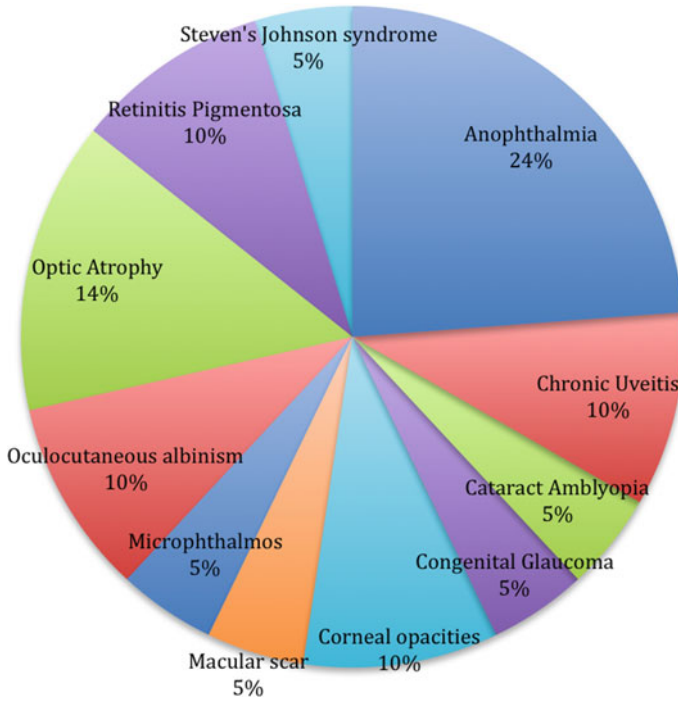
<sup>b</sup>Due to vitamin A deficiency, measles and neonatal conjunctivitis

**Table 3.2** Case study: causes of young people's visual impairment and blindness (Leonard 2019)

Cause	Incidence at DCTMSS VI unit/sample size 21 <sup>a</sup>
Uncorrected refractive errors	1 (4.8)
Congenital Glaucoma	1 (4.8)
Childhood blindness	2 (9.5)
Corneal opacities	7 (33.3)
Other causes, including low vision and refractive errors	10 (47.6)

In parenthesis the corresponding prevalence (%)

<sup>a</sup>Diagnoses of VI causes were available for 22 of the unit's students in March 2017; one of whom is not technically VI. 27 VI students took part in the study as research informants



**Fig. 3.3** Case study: detailed causes of young people's visual impairment and blindness (Leonard 2019; see Appendix for further medical explanation of their sight problems)

### 3.3 Context of Case Study

My small-scale piece of research commenced in May 2016. The data collection, heavily reliant on semi-structured interviews, was largely concluded by December 2016. It explores how the assistive technologies available in the VI unit at a rural secondary school contribute to the learning of these students. The unit's specialist SEND teachers, who are Tanzanian Government employees, claim that recent successes by VI students in their national examinations are attributable to the role of assistive technologies, particularly access to textbooks in Braille. Technology is in short supply.

A primary aim of this research is to assess the validity of these teachers' assertions. My research also hopes to identify how those providing inclusive education can address VI students' barriers to learning. Little is known about "the effectiveness of specific devices on learning" (Smith and Kelly 2014, p. 3). Chinese financial assistance has previously helped to equip this unit (Malugu 2017); a UK NGO funds these VI students' boarding fees, while the Tanzanian Office of the Deputy Prime Minister (TAMISEMI) pays the three specialist teachers' salaries.

My case study, the VI unit at Mvumi village's Diocese of Central Tanganyika's (DCT) Secondary School, is located in a relatively remote rural setting, an hour's drive and 36 km. distant from Tanzania's capital city, Dodoma. The semi-arid landscape is a major constraint on agricultural productivity; literacy levels are low; most livelihoods rely on subsistence agriculture. Mvumi village enjoys the provision of an eye clinic at DCT's Mvumi Hospital, including the services of eye surgeons able to operate on cataracts and provide refractive services. Outreach eye clinics in Chamwino District are run by Mvumi's Eye Clinic staff. The hospital reports a declining incidence of trachoma among the eye clinic's patients in recent years. The possibility of further reducing the socio-economic association of blindness and poverty is one which both health care and education must address (Mariotti and Prüss 1999).

All the VI students whose education at this secondary school is funded by the Mvumi School Trust NGO receive free health care, including attendance at Mvumi Hospital's eye clinic. Diagnosis of the young people's VI is shown in Table 3.2 and Fig. 3.3. The hospital provides medical services for a fee for those with sight problems. The home villages from which the unit's students are drawn are far less well served by medical services.

WHO's 2007 report identified the main causes of VI in Africa. Cataract is the main cause, and between 3 and 4 million cataract cases are not operated upon. Only a small proportion of patients undergo surgery. Thylefors (2004) noted that annually only 200 cases per million African inhabitants undergo surgery, contrasted with between 3000 and 5000 in developed countries. Cataracts can be operated on at DCT's Mvumi Hospital's eye clinic.

Ethnicity is a risk factor for Glaucoma; "the black race at greater risk" (WHO 2007, p. 2). Outcomes from treatment are only modest and require expensive eye clinic services. The incidence of Glaucoma in my case study sample was only one (See Table 3.2 and Fig. 3.3).

Three factors promoting trachoma are all found in the localities from which students educated in my case study are drawn: lack of hygiene, poverty and difficulty of access to water. Trachoma's complications can lead to blindness.<sup>7</sup> Mariotti and Prüss (1999, pp. 25, 29) note that "A number of relatively simple measures can be taken to interrupt the pathways of transmission". They recommend "Hygiene education should promote informed decision-making and empowerment of communities". I am not aware of any hygiene education taking place at my case study school, or if Mariotti and Prüss's advice is implemented: "Teachers should be encouraged to devote time in class to information on health, hygiene behaviour, the environment and specific measures to prevent transmission of trachoma and improve hygiene practices" (Ibid, p. 30). There were no incidences of trachoma-related VI in my case study sample.

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<sup>7</sup>Tanzania is one of 19 endemic countries in which the **SAFE** strategy can reduce the incidence of trachoma, meaning **S**urgery, **A**ntibiotics, **F**acial cleanliness and **E**nvironmental change (Solomon et al. 2015).



The African Programme for Onchocerciasis Control (APOC) aims to eliminate the disease in the 19 African countries<sup>8</sup> where it is endemic, and not yet successfully controlled, this includes Tanzania. Ten of eleven West African nations had successfully achieved this before the Onchocerciasis Control Programme (OCP) ended in 2002. Again there were no incidences of onchocerciasis in my case study sample.

In addition to the causes of visual impairment cited in WHO reports (2007, 2012, 2013), albinism is another cause affecting students in my case study and Buigiri's Primary School for the Blind from which the school draws almost all its VI students. Challenges faced in Tanzanian society by albinos are particularly stark. Albino young people and adults may experience persecution (BBC 2015). As shown in Table 3.2 and Fig. 3.3, at present two students' VI is associated with albinism. Other social justice issues confront the school's VI students on leaving school which their sighted peers do not face, or face at a much reduced scale. These include lack of employability, dependence on family and friends and lack of independence and a failure of Tanzanian society to embrace them fully as adults.

At DCT's Buigiri Primary School for the Blind, the current incidence of albinism is higher than at the secondary school (Jonathan 2017). If a 2017 Tanzanian National Education Policy Change is fully implemented, allocating those with albinism to boarding schools alongside those who are blind, the VI unit may have higher incidences of albinism in the future.

### 3.4 Methodology

Following the successful application of a mixed method case study approach in my doctoral studies, I replicated a similar approach to this research (Pollard 2008). VI Students in Forms 1–6 took part; Table 3.3 gives information about the age ranges of these respondents. A sampling strategy for students was not required; all twenty-seven whose education was funded by the NGO participated. The head teacher, as gatekeeper, and individuals' informed consent was obtained.

The main research tool I used was a semi-structured interview, carried out with VI students and their SEND teachers. Other data was obtained from DCT, head teachers at Mvumi and Buigiri, the National Examination Council of Tanzania (NECTA), personal communication with members of the UK's VI forum and a commissioned photograph record.

One of the unit's SEND teachers assisted me to create an audit of the unit's AT available in April 2016 (See Table 3.4).

English is a third or fourth language for most Mvumi students. To interview students from two year groups, Forms 1 and 2, two focus groups were carried out. A VI Form 5 student interpreted for Form 1 students. A Form 2 VI student with excellent English performed this role for his peers in Form 2.

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<sup>8</sup>Algeria, Burkina Faso, Chad, Ethiopia, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Mali, Malawi, Mauritania, Mozambique, Niger, Nigeria, Senegal, Tanzania, Togo and Zambia.

**Table 3.3** Age of VI unit's student respondents, 2016 (Leonard 2019)

Form	Expected age upon entry	VI students' age range (y)	No and age	No and age	No and age	No and age	Total No.	VI Average age years (y)
1	13	15–17	2:15y	1:16y	2:17y		5	16
2	14	16–19	1:16y	3:17y	2:19y		6	17.5
3	15	16–19	1:16y	4:19y			5	18
4	16	17–21	1:17y	1:19y	2:20y	1:21y	5	20.6 (21)
5	17	19–20	1:19y	2:20y			3	19.7 (20)
6	18	21–24	1:21y	1:23y	1:24y		3	22.7(23)

Expected Form 1 to Form 6 age range: 13–18 years (y)

VI Form 1 to Form 6 age range: 15–24 years (y)

A Form 6 blind student piloted my semi-structured interview format in April 2016. He is currently following an undergraduate course in SEND. I personally transcribed all the interviews and then used NVivo software to analyse the transcripts thematically. This paper draws on answers from only four questions posed (See Table 3.5). All relate to the available AT and students' learning.

The unit's three special educational needs and disabilities (SEND) teachers also took part in semi-structured interviews. Two interviews were carried out with the unit's Head of Department; the second in March 2017, after he returned from a two-week visit to schools and educational and commercial establishments associated with VI and AT in the UK (Leonard 2019).

I was keen to establish perceptions of the usefulness of that AT, while also identifying young people's "wish lists" for other such technology and equipment. To quantify the equipment's perceived usefulness, a Likert scale was devised. Responses obtained in focus groups were hopefully not unduly influenced by their fellows in these groups, since respondents showed me their numerical assessments, rather than stating them aloud.

### 3.4.1 Author's Comments on Table 3.5<sup>9</sup>

The first question was designed to enable quantitative data to be derived from the qualitative responses of the specialist teachers and the twenty-seven students who informed my data collection.

<sup>9</sup>Restrictions on word length of this paper mean that only a small selection of respondents' answers about how students utilise specific AT can be included.

**Table 3.4** Audit of AT at VI unit, April 2016 (Leonard 2019)

1	Audio books	Text books produced by UK volunteers, to support students' learning in O level Geography and Language (from Tanzanian approved titles)
		Commercial audio books of English literature—numerous titles, as audio cassettes
2	Cassette recorder	Now becoming obsolete, due to new technology, such as Mp3 and digital recording
3	CCTV-low vision	Never in working order
4	Computers	Two desktop computers primarily for staff use, to create materials in Braille, using the embosser
5	Embossers	One, able to print on both sides of braille paper constantly in use. Another, able to print on one side, is not used—it is too costly in terms of paper requirements
6	Headphones	Used by students, to listen to audio materials on a computer, when free for use by students
7	iPod	One
8	Mp3 voice recorder	Sufficient number purchased for each class to have one for daily use
		This equipment had been lost or stolen from the unit or students' dormitories
9	Music keyboard	One
10	Perkins Braille	Sufficient numbers for each totally blind student to have their own machine for personal use
11	Printer	
12	Scanner to braille	For use once teachers have edited text books to then be embossed as Braille books
13	Spiral binding machine	Equipment to allow collation of books and students' braille notes
14	Tape to MP3 player	
15	Thermoform	Not in use due to lack of specialist paper
16	Uninterrupted power supply (UPS)	Frequent power outages would damage the unit's AT equipment from power surges without this

**Table 3.5** Questions posed in semi-structured interviews—focused on AT provision (Leonard 2019)

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<p>1. Specialist Technology and Equipment which <b>you</b> have used here at school: The VI unit has some specialist equipment; each item may be very expensive and the other materials which are needed (such as specialist paper: Braille and embossing paper) may be in short supply, or difficult to obtain in UR Tanzania Please explain how you have made use of the equipment. For each piece of equipment then award a score between 1 and 5. You can award 1, 2, 3, 4 or 5 for each item <i>Likert scoring system</i> 1 = really, really useful; 3 = neither helpful nor unhelpful; 5 = not useful or helpful</p>
<p>2. Technology and Equipment which <b>your teachers</b> have used here at school: If the government was able to buy all the specialist technology or equipment which you think could help to improve your learning what equipment would you ask them to purchase and why? For example: Software which can read out text that you have just typed onto a word processor (as demonstrated to you by Mr Morrison) or an App to read pdfs—to convert text to speech</p>
<p>3. If only one extra piece of equipment or technology could be provided which would you choose and why...</p>
<p>4. Personal learning needs—beyond the VI unit If you could personally have the use of equipment to aid your learning outside this unit (in your home, for example) what portable equipment (you can carry it easily) or technology would you choose to buy and why</p>

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I now regard specialist paper as AT, since without it several of the pieces of AT equipment are in effect redundant and the learning of the unit's students is severely impacted. Paper might not at first sight appear to be AT, but without it several other essential pieces of equipment cannot function; it increases, maintains or improves the functional capabilities of the students in the VI unit (Smith et al. 2011). Braille paper is actually quite “technical”, and the others even more so.

Having piloted this question the unit received several donations of AT. To enable respondents to comment on the usefulness of this additional AT, a subquestion was added, without identifying any of the extra equipment by name. This strategy was used to avoid leading questions; I was keen to ascertain how and if any of this new AT was in use and its role in promoting students' learning (See Table 3.11).

The second question was posed to enable respondents to refer to AT which was not accessible to them at the school, but which they might have previously used at Buigiri, or they were familiar with. For example, the feeder primary school had offered students opportunities to gain computing expertise on equipment which was not available at the VI unit. The “Mr Morrison” referred to have demonstrated the capabilities of Apple software at the VI unit, which performed a similar function to the Audio Reader software students were familiar with from Buigiri (he was also the photographer I had commissioned).

The third question was posed since the unit should receive a significant government payment in the year 2016–2017 towards the replacement of AT. \$37,500 should be paid for “the replacement of Braille equipment and other equipment” (DCT and MoEVT (2008) Memorandum of Understanding, (MOU) p. 2). The MOU parties, DCT and Tanzania's Ministry of Education and Vocational Training (MoEVT), had

agreed to affirm the school “To order the required capital equipment”, noting “This equipment is essential to enable the blind pupils to advance their studies” (op cit.). The cost of such AT provision is known to be high; both parties further agreed to ensure that the school would also have sufficient resources to accomplish its teaching role in respect of these SEND pupils. Instead, the unit relies heavily on the small UK-based educational NGO for resources, including essential supplies of specialist paper. Any AT funds should be allocated to best promote students’ learning. Students are well-placed to suggest equipment which they believe aids their academic performance and learning more generally; Smith and Kelly (2014, p. 3) found there is little known about “the effectiveness of specific devices on learning”.

The final question drawn on in this paper, relating to students’ personal learning needs, was asked since students’ learning is not restricted to term time, nor the physical confines of the school’s VI unit, while at the secondary school all VI students live in boarding accommodation. Daily time-tabled “preparation time” which students should utilise to support their learning in the classroom or laboratory could be aided by portable AT, if such equipment could be kept safe and its security could be assured. This question recognises that individuals have different learning needs and that considerable variety exists within the VI student body at the unit.

## 3.5 Initial Research Findings

### 3.5.1 *Perceived Usefulness of the Unit’s AT: Question 1 Responses*

My analysis of student respondents’ answers to Question 1 in Table 3.5 enables the identification of the available AT viewed as most helpful; Tables 3.6, 3.8 and 3.9. Students ranked the unit’s equipment in terms of perceived usefulness to their learning. I analysed their responses by stage of education. In all these tables, the lowest scores represent AT perceived to be of greatest benefit to learning.

In most Tanzanian secondary schools, students complete their schooling having sat their Form 4 national examinations. Mvumi allows students who meet the school’s entry requirements to embark on A-level studies, in Forms 5 and 6, in a limited range of subject combinations approved by Tanzania’s MoEVT. The educational NGO funding VI students’ education, with the approval of the school’s head teacher, may relax entry requirements for VI students, in recognition of the known challenges they encounter in these national examinations.

Table 3.6 presents students’ views from Forms 3–6.<sup>10</sup> It shows that there is agreement in terms of the ranking given to AT considered central to their learning. The embosser, used by their SEND teachers to create Braille textbooks and to print other materials necessary for their learning (examination papers, teachers’ notes, students’

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<sup>10</sup>Until 2017 only those who passed Form 2 national examinations were readmitted to Form 3.

**Table 3.6** Forms 3–6 students' scores for the usefulness of the unit's AT (Leonard 2019)

AT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
TM501	2	1	1	4	1	2	1	3	3	2	3	2	2	1	1	2
HA502	2	1	3	1	1	1	1	1	5	1	1	1	1	2	2	1
EM503	1	3	1	1	1	3	3	1	3	1	1	1	1	3	3	1
HH601	3	4	4	1	1	3	3	3	3	1	1	1	3	3	1	1
HH6012	1	3	3	1	1	1	1	1	3	1	1	1	3	3	1	1
LM602	3	2	5	5	1	5	5	1	5	1	1	1	1	1	5	5
SL603	1	2	5	2	1	1	5	1	5	1	2	1	1	5	5	1
Mean A level score	1.86	2.29	3.14	2.14	1.00	2.29	2.71	1.57	3.86	1.14	1.43	1.14	1.71	2.57	2.57	1.71
AK401	2	2	1	5	1	2	3	4	1	2	1	1	1	3	1	2
SJ402	3	2	5	5	1	1	1	1	5	1	1	3	1	1	4	5
VG403	1	n/a	3	3	2	1	1	1	3	1	1	1	3	4	2	1
ES404	2	3	2	3	2	4	3	2	4	2	2	3	2	3	3	3
WS301	1	n/a	n/a	n/a	1	3	2	3	2	4	2	1	1	n/a	5	2
BV303	1	1	5	1	1	2	1	1	1	1	5	1	1	1	1	1
MN304	1	n/a	2	1	2	1	2	1	1	1	2	2	1	2	2	1
NM305	2	1	5	3	1	1	1	1	1	1	1	1	1	1	1	1
Mean: F3 and F4 score	1.63	1.8	3.29	3.00	1.38	1.88	1.75	1.75	2.25	1.63	1.88	1.63	1.38	2.14	2.38	2.00

**Table 3.7** AT equipment at the unit, April 2016, applicable to Tables 3.6, 3.8 and 3.9 inclusive (Leonard 2019)

No	AT	No	AT	No	AT	No	AT
1	Audio books	5	Embosser	9	Music keyboard	13	Spiral binder
2	Cassette recorder	6	Headphones	10	Perkins Braille	14	Tape to Mp3
3	CC TV	7	iPod	11	Printer	15	Thermoform
4	Computers	8	Mp3	12	Scanner to braille	16	UPS

notes from their Perkins Braille, diagrams, etc.) is recognised as essential. A-level students gave this AT a score of 1, while Form 3 (F3) and Form 4 (F4) gave a score of 1.38. F3 and F4 gave the same score of 1.38 to the spiral binding machine. A-level students gave their next lowest scores to two pieces of equipment, 1.14: Perkins Braille and the scanner to Braille.

The responses from the focus groups (Tables 3.8 and 3.9) also revealed consensus, but students awarded the essential scores to two different pieces of AT; their lowest scores were identical, at 1.0, for the Mp3 voice recorders and printers. The F1 Focus group also tied these two pieces of equipment with the scanner and spiral binding machines. A DCT project at Buigiri Primary School for the blind had equipped that school with a comprehensive set of Braille textbooks. Educational benefits to students' learning there, in terms of access to Braille textbooks, are something which their older Mvumi peers would not miss to the same extent. At Mvumi, it is a combination of AT, items 11–13 (Table 3.7), which enables the SEND teachers to create Braille textbooks; these are in short supply (See Table 3.12). Not all disciplines enjoy this facility. Translation from text to Braille for secondary school textbooks is an ongoing task.

There was universal agreement among students that the CCTV for low vision was the least helpful to students' learning. Perhaps this is not surprising, in the light of these students' sight conditions. Most are "totally blind". This equipment had never been in working order since it was donated by Buigiri. Should a similar ranking exercise be carried out in 2017, a very different score for the CCTV might be obtained, since the 2017 cohort of Form 1 students includes low vision students.

A prerequisite for the use of several of these pieces of equipment, as stated earlier, is the paper needed—including specialist Braille paper for the Thermoform, paper for the embosser and Perkins Braille, and "print and swell" paper for the creation of 3D tactile teaching aids.

The same AT ranking activity was carried out by the unit's specialist teachers; their responses are shown in Table 3.10.

Ernest Mbilu (EM) did not award any score for the CCTV for low vision; he argued that since it had never worked, it was in effect redundant. Teacher IO gave two sets of scores; the first row, IO1, he based on the learning needs of the students at the unit in 2016, the second row, IO2, he based on its potential usefulness, dependent

**Table 3.8** Form 1 focus group (F1FG) scores for the usefulness of the unit's AT (Leonard 2019)

AT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
F1 FOCUS																
EK101	1	5	5	1	1	4	2	1	2	2	1	1	1	2	1	2
LP102	1	1	5	5	1	2	3	1	5	1	1	1	1	1	1	4
KR103	2	3	1	1	5	4	1	1	1	2	1	1	1	1	2	1
NM104	1	1	5	1	1	1	1	1	3	1	1	1	1	1	1	3
LC105	1	1	5	1	1	2	2	1	5	1	1	1	1	2	1	2
Mean F1FG	1.20	2.20	4.20	1.80	1.80	2.60	1.80	1.00	3.20	1.40	1.00	1.00	1.00	1.40	1.20	2.40



**Table 3.9** Form 2 focus group (F2FG) scores for the usefulness of the unit's AT (Leonard 2019)

AT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
ML201	1	5	5	1	1	4	2	1	2	2	1	1	1	2	1	2
EC202	1	1	5	5	1	2	3	1	5	1	1	1	1	1	1	4
FM203	1	3	1	1	5	4	2	1	1	2	1	1	1	1	2	1
MM204	2	1	5	1	1	1	1	1	3	1	1	1	1	1	1	3
GC205	1	1	5	1	1	2	2	1	5	1	1	1	1	2	1	2
TT206	1	2	1	1	1	1	1	1	2	2	1	2	2	2	2	2
Mean F2FG	1.17	2.17	3.67	1.67	1.67	2.33	1.83	1.00	3.00	1.50	1.00	1.17	1.17	1.50	1.33	2.33

A score of 1 represented essential AT; 5 that the equipment did not help students' learning

**Table 3.10** SEND teachers' scores for the usefulness of the unit's AT (Leonard 2019)

AT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
IO1	4	5	4	1	1	3	2	2	2	1	1	1	1	5	3	1
IO2	3	2	1	1	1	2	2	1	3	1	1	1	1	4	3	1
EM	4	4	n/a	1	1	2	2	2	3	1	1	2	2	4	2	2
FM	2	3	1	1	1	1	2	1	2	1	1	1	1	2	1	2
Mean	3.25	3.50	2.00	1.00	1.00	2.00	2.00	1.50	2.50	1.00	1.00	1.25	1.25	3.75	2.25	1.50

1 represented essential AT, 5 that the AT did not help students' learning

**Table 3.11** New AT deemed useful to students' learning (Leonard 2019)

New AT	Comment
Hand-held lenses	Those with low vision, or severe visual impairment, rather than totally blind students, referred to this
Talking calculators	A totally blind student in the FIFG, who now studies Maths, referred to this Subsequently the screen was broken
Word master	This AT is a talking dictionary Several students, across the range of classes, referred to how useful it is for them to be able to look up the meaning of words. There is no Braille dictionary available for their use
Maths manipulatives, including protractors	Only Form 1 studied Maths in 2016 The usefulness of this AT equipment was mentioned by students in the FIFG It is likely to be of wider use as future cohorts of F1s also study Maths and Sciences moving up through the school

upon the particular problems learners faced. The three teachers' perceptions of their unit's AT usefulness gave joint lowest scores of 1.00 to the computers, the embossers, Perkins Braille and their printer (See also Table 3.12).

Of the new AT, which included some equipment known beforehand to not be in working order, items which students chose to discuss are shown in Table 3.11.

While it could be argued that perhaps only the teachers' perceptions should be considered, since they have an overview of the learning outcomes and needs of the students who have attended the unit, I maintain that it was legitimate to ask students. "Student voice" is highly regarded at the school and within the VI unit.

### 3.5.2 AT "Wish Lists": Question 2–4 Responses

What is instructive, in terms of how AT is perceived, is to also consider the equipment which students and their SEND teachers' wish could aid students' learning (The Guardian Reporter 2018). These views should be considered by TAMISEMI, as the Tanzanian Government's agency with SEND responsibility, particularly since there is a need to "future-proof" students' learning.

Subquestions posed of students and the specialist teachers were

- (i) What portable equipment best aids students' independent learning?
- (ii) What AT equipment should the Tanzanian Government supply to the unit, and why?
- (iii) If able to request only one piece of AT from the government, what would be prioritised for students' learning (See Table 3.5, questions 2–4)?

A variety of responses was obtained; only a small selection can be included below (Table 3.12). Notable consensus arose; students and teachers<sup>11</sup> requested more paper, more books in Braille, computers and in particular voice/Mp3 recorders. The paucity of government paper supplies received at the unit emerges as a real challenge to the learning of the students (Medcalf 2015).

The allocation of AT must promote the learning of the unit's students. "Future-proofing" must be implemented so that the young people educated at the VI unit are able to approach an equality of access to the education provided for their sighted peers at the school.

### 3.6 Recommendations: AT Provision

To aid those sourcing the unit's AT, the following guidance should be followed. These criteria are apt whether the supplier is DCT, TAMISEMI or MoEVT, from the Global South, or DFID from the Global North:

1. To be easily serviced and/or repairable locally;
2. Affordably maintained;
3. Supportable by consumables, whose supplies can be sourced locally and are affordable within budgetary constraints;
4. Equal or improve upon the existing solution (Leonard 2014, p. 242).

I would now add a fifth:

5. Technology considered obsolete in the Global North should remain there. To improve upon the existing solution, training in the use, repair and maintenance of new technology should be supplied with any equipment and the likely costs of its application should be known at the outset.

If these are applied, then embossers which print only on one side of a piece of paper would be rejected. My criteria would veto AT which cannot be easily serviced or repaired locally, such as a non-working CCTV for low vision.

A traditional Perkins Brailler would be preferred over modern digital Braille displays:

If they are able to learn Braille, then this should be not only encouraged but is absolutely essential. Literacy and numeracy are not options, they are the building blocks for future learning, employment and for life. What technology is then used are by-products. So it may be stand-alone braille equipment, computers, mobile 'phones, etc. (Firman 2016)

Roger Firman, a blind trustee of the NGO Mvumi School Trust, advised "Acquiring anything other than the traditional a model will prove fruitless unless people in the country have the necessary skills and equipment to service either of the two

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<sup>11</sup>T suffix indicates teachers' responses. Students' views are given from the Form 2 Focus Group (F2FG) and students in Forms 3–5 (F3, F4, F5 and F6).

**Table 3.12** Respondents' answers to questions 2–4 (Leonard 2019)

F2FG—Books, yes. Books are important because they are helpful for my revision. Another thing is papers; paper for the embosser. It helps to translate materials from other teachers. Another thing is about Braille papers: Perkins Braille papers, in order to write notes and many other things
NM3—I'd like to ask about, to provide our books and also to find the computers, for us that can be easily useful for us
HH6—A portable, silent Perkins: could allow VI students to take notes in real time, rather than needing to remember things for later, when writing up notes
If buying equipment: I would ask for computers, for use by VI students—so that the digital age is not passed by... all materials can be kept together (such as notes, voice recordings and other things) would need to be adapted for use by blind/VI—simplified...
For instance, in other countries, there are special computers for the VI students. In Tanzania there are very few and some of the people, very few people, have access of it. So, I can advise to buy these special computers. Because by having it, it may advance to go together with finding materials with Internet, keeping their materials together with those computers
ES4—Braille text books... It helps me to study, it would help me to simplify my studies. I study very hard, if I get enough books, for Braille. Also, that I will study very hard. Also, Perkins Braille and voice recorders for recording others. I would use that voice recorder to record more notes, to listen there
FMT—So, more Perkins Braille... And more books, tactile books. The Government, they are not providing this, the tactile books for the VI students; just for the lower form, I mean entrants from Standard 7. The further things? Is computers; for the VI students it helps us in making different things; typing the notes and transforming them to the braille dots
...And more books in braille. Yah
To choose one? To be bought by the government? Text books. The text books. Why text books? ...For the text books, it is a problem to them, to the VI students. They like to get a reference book which they can use to have more material, which can help them to find different materials to their learning. So, a text book is best, to be bought by the government
EMT—I would ask the government to stress on books, that is number one. But number two, is about the teaching aids, because I know, because I have seen, in other countries, whereby these units like this, you will find models. You will find a lot of 3D pictures... So, the teaching aids is also the great thing that can help their learning
The other thing I would say are computers... I mean the computers with programmes that are friendly to the VI. I know there are accessories that can help them to interact well with the computer
IOT—So, that also that voice recorder and microphones: I think they are essential for our students, only because they will make them to be independent. Because, for example, VI students: if he or she, if he will have his or her own voice recorder in the classroom, sometimes he can, he or she can get a chance to review again about the lesson. So, I think it is good. I think now we need these devices which we can play these Mp3, I mean these voice, audios. Because as you know that our students, if they will not read the material in Braille form, it will help them if they will listen. So, now, we don't have these listening devices. OK? We don't have these Mp3 maybe; players and other things

(continued)

**Table 3.12** (continued)

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EM5M—Mp3 voice recorder: also they are very helpful. Sometimes in the classes, when others are taking notes, when teachers are teaching, are taking summaries from writing, the Mp3 voice recorders are very helpful for us, because they are another way of taking notes. Because after the period we may go to the class, I may go to the and I start listening to what I recorded, when the teacher was teaching and then I just write it down. So, it helps me in taking summaries

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NM3—I shall choose a voice recorder because it can help me to record all subjects ...So, when I shall be at the home, it can be easy for me to listen, because I shall be recording during I was in the school. I shall record our teachers...and also I shall record different discussions with my friends, but when I shall be at my home during the holiday I can help me to read through this voice recorder

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more recent models and that is unlikely to be the situation” (Firman 2017). He also commented that for the future, students should use Unified English Braille. Until low-cost electronic Braille displays (at \$300, Orme 2016) become affordable in the Global South, these may be inappropriate. It is to be hoped that such technology will become affordable in the not too distant future.

Donations of non-working equipment should be discouraged, unless advanced approval in Mvumi has been given. Perkins Brailler, for example, can be cannibalised for spare parts.

Voice/Mp3 recorders would be acceptable; computers with text-to-speech technology would qualify, if personnel at the school are able to update the software needed and fix machines when problems arise. AT to create 3D tactile teaching aids would be appropriate, for which the necessary “print and swell” paper supplies are essential.

Provision of specialist paper must be guaranteed, and not fall on the beneficence of small donors unable to carry that burden. Requisition of Braille and other specialist paper for the VI unit (including Brailon and “print and swell” paper) should remain a government responsibility. If the Tanzanian education agencies (be it MoEVT or TAMISEMI) are not willing or able to fund required supplies, another government department should be charged with acquiring reliable paper supplies. Perhaps, this could include international donor countries to the United Republic of Tanzania, through their development aid programmes.

The keen desire of well-wishers to offer assistance may need to be tempered to meet my criteria. In some instances, supporters should purchase new equipment, rather than shipping redundant AT from UK.

AT providers wherever they are located should acknowledge their ethical responsibilities to avoid paternalistic relationships with the unit. Solidarity, to work towards improving the life chances of the school’s VI students, should replace paternalism (Andreotti 2011).

These recommendations are designed to ensure that the unit’s young people can access their curriculum, conquering disadvantages brought by sight problems, to reduce the effects of their disabilities, allowing them to achieve their full potential. The inclusive education provided must adequately equip VI students for the globalised economy which they will enter on graduation. Haynes and Turkenburg (2017,

p. 8) wrote in the context of disabled and impaired UK teachers: “Staff members with disabilities and/or impairments can be invaluable role models to learners”. I concur, knowing that at Buigiri several staff are totally blind; “Disability is not Inability”. Like my pilot study respondent, several Mvumi students aspire to SEND teaching careers.

## **Appendix: Causes of Students’ Visual Impairment, Including Blindness**

Anophthalmia—no eye.

Could have started as corneal scars.

Eye damage to the eye globes could have been so severe that the eye is missing/the cornea melts...

OR—could have been congenital

Or it can be caused by a tumour, retinoblastoma

Anophthalmia and corneal opacities—would both be number 8 (WHO’s classification) In Tanzania, particularly in a School for the Blind/Visual impairment—should not experience any refractive errors, since health care is available. Most don’t develop until age of more than 7. Some children, rarely, experience this in early infancy.

Cataract Amblyopia—had cataracts removed but at too late an age for the student to develop good vision, or they were removed without adequate corrective of the resultant refractive error, at a time for the critical development of the links between the brain and the eye in early childhood.

Amblyopia—means child doesn’t see, in the absence of any obvious physical abnormality—sometimes known as lazy eye.

In Tanzania the referral process for treatment and need for payment for medical treatment may mean that young people’s sight problems persist and are not corrected, even if diagnosis has been made. Corrections must be made by age of 5 or 6. Attempts to correct at an older age are less successful.

Chronic Uveitis

Inflammation of coloured parts of the eye (Iris), can develop over a lengthy period (chronic) which may damage the nerve... ultimately depriving the sufferer of sight.

Congenital Glaucoma

Is quite unusual, eye doesn’t drain aqueous fluid, leading to a build up of pressure and enlargement of the eye. (Normally below age of 4) which will also often lead to refractive error, which might be correctable if eye isn’t too severely damaged.

Corneal scars—suggests damage to the cornea has occurred, often related to Vitamin A deficiency. If the scars are in both eyes that is particularly likely. Measles in childhood can cause a deficiency in Vitamin A—the body’s response in trying to

heal the skin after measles, if Vitamin A is absent, then the body cannot use its stored Vitamin A in the liver, so the healing process cannot occur and the cornea is scarred. Other causes can create the scars... but if both eyes are affected it is likely to be associated with this particular circumstances.

Vaccination against measles—is more widely used in African nations than 20–30 years ago, so the incidence of this particular set of circumstances has fallen...

Glaucoma and cataracts—are likely to be found in adults; similarly AMD—is almost in adults.

Macular scars however are not only found in adults. This scarring can be: Hereditary but is usually in adolescents. For the student noted DOB is not yet known.

Microphthalmos—causes uncorrected refractive error.

- very small eye
- Can be caused if mother has rubella in pregnancy
- Strong lens is then needed to correct the problem.

Without glasses to correct sight problems vision would be affected and lead on to uncorrected refractive error.

A diagnosis of uncorrected refractive error should not be expected at VI unit, since at Buigiri their sight problems should have been corrected.

#### Nystagmus

Is technically not VI, but experiences jerky eye movements. The sufferer can be trained to minimise the effects, by controlling the direction that is looked in.

#### Optic Atrophy

Can be associated with toxicity—can be caused by Meningitis or TB Meningitis, can also be inflammatory. In some cases those affected may not be able to see at all.

Oculocutaneous Albinism—is not uncommon in Tanzania. This type of Albinism results in a problem in light's entering the iris, dazzling the individual. The nerves in the macular are less numerous than in others not affected by Albinism.

#### Retinitis Pigmentosa

Hereditary, leads to degeneration of photo receptors in the retina. If severe, can be found leading to blindness in children. Others in family may have the same problem. Untreatable.

#### Steven's Johnson syndrome

Cornea becomes opaque, leading to Symbblepharon and Corneal opacities. Eyelids stick together, tear glands don't function and cornea become opaque.

#### Other:

Difficulty of dealing with—new diagnoses, if previously diagnosed as VI, and later that diagnosis is queried. If taught braille, for example, in a primary school they might need to then later learn how to read normally, with assistance... perhaps more allowances by society are made for this labeling?



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# Chapter 4

## Research on Teachers' Teaching Behavior in the Classroom of Modern Apprenticeship in Higher Vocational Colleges



Chenglin Zhu

**Abstract** Modern apprenticeship is a combination of the traditional apprenticeship and modern school education. It is also a vocational education system implemented by enterprises and schools. In the Western countries, where vocational education is highly developed, modern apprenticeship has been widely carried out through the push of national strategy. In China, the Ministry of Education issued the policy—"Pilot Implementation of Modern Apprenticeship" in August 2014, which is the mark that modern apprenticeship is launched at the national level in the country. On August 5, 2015, the Ministry of Education announced the country's first modern apprenticeship pilot units, which include 100 higher vocational colleges. With modern apprenticeship system in higher vocational colleges in our country gradually deepened, the trend of developing modern apprenticeship is irreversible, and teachers' teaching in higher vocational colleges must also face new challenges. Based on this background, what changes do have taken place in higher vocational college teachers' teaching behavior in the classroom of modern apprenticeship in China? What is their typical teaching behavior in the classroom? Under the perspective of local practice in higher vocational colleges, the characteristic of teachers' teaching behavior in modern apprenticeship classroom is worthy of paying attention to and researching. This research adopts qualitative research methods through the national first batch of the pilot modern apprenticeship system in higher vocational colleges by the related teachers tracking survey, and it has been found that in modern apprenticeship classroom teacher's teaching behavior consults of three major categories which are the presenting behavior, dialogue behavior, and evaluation behavior. Meanwhile, each category contains four kinds of teaching behavior. To be specific, presenting behavior includes telling, graphic, demonstration, and teaching others by one's own example. Dialogue behavior includes question, answer, report, and supplementary answer. Evaluation behavior includes guidance, contrast, application, and production. It reflected the internal consistency of teacher's teaching behavior between modern apprenticeship classroom and other types of education classroom and also reflects special teacher's teaching behavior in modern apprenticeship classroom. At the same

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time, this study on the current classroom teaching in higher vocational colleges is interested to: introduce the real project, evaluate students' academic with enterprise standard, and manifesting the authority of teachers' technical skills.

**Keywords** Teachers' teaching behavior · Modern apprenticeship · Higher vocational college

In recent years, modern apprenticeship has been highly valued in the field of vocational education. In Western countries where vocational education is highly developed, Germany in 1969 promulgated the "Vocational Education Law" established a modern dual system, a typical modern apprenticeship. Subsequently, many Western countries began to study and follow the German dual system. The national strategy to promote modern apprenticeship in Western countries has been widely carried out. According to the 2012 report, among the 27 EU member states, 24 countries carried out a modern apprenticeship at the level of secondary education, and 14 countries have carried out a modern apprenticeship in higher education (Guan and Shi 2014).

In China, the national strategies, which promote the local school actively, explore and practice the different forms of modern apprenticeship. In October 2011, the modern apprenticeship practice exchange seminar was held in Xinyu. The Ministry of Education requires development in modern apprenticeship pilot work. In May 2014, the State Council issued "The Decision of Accelerate the Development of Modern Vocational Education," which forwards to carry out cooperation of recruitment, joint training of the modern apprenticeship pilot, improve the support policy, and to promote the school-enterprise integration education. In August 2014, the Ministry of Education issued "Modern Apprenticeship Pilot Work Opinion," and proposed that the establishment of modern apprenticeship is the occupation education initiative to serve the requirements of economic and social development and to promote the strategic choice of the construction of modern occupation education system. On August 5, 2015, the general office of the Ministry of Education announced the first batch of modern apprenticeship pilot units. A total of 100 vocational colleges were selected in total. With the gradual deepening of modern apprenticeship in Chinese higher vocational colleges, the trend of developing modern apprenticeship has been irreversible, and teachers teaching in higher vocational colleges must face new challenges. Based on this background, in the classroom of modern apprentice in higher vocational colleges, what changes have occurred in the teaching behavior of teachers? What are their typical classroom teaching behaviors like? These issues are worthy of attention and research. Therefore, the study focuses on teachers' teaching behavior in the classroom of the first modern apprenticeship pilot vocational colleges, as well as the characteristics of teaching behavior in modern apprenticeship classroom in the perspective of local practice.

## 4.1 A Review of the Research on Modern Apprenticeship and Teaching Behavior

Modern apprenticeship is a combination of traditional apprenticeship training and modern school education. It is also the combination of the vocational education system of enterprise and school cooperation. Only by school education unilaterally, it has been difficult to cultivate the technical skills of personnel of high quality, combined, through the work and the study phase combination of school and enterprise, to promote the development of students' comprehensive occupation ability (Rauner and Smith 2010), to the school-enterprise cooperation as the main characteristics of the modern apprenticeship system have become a common trend to improve the development of international occupation education system.

Germany and Switzerland established the first modern apprenticeship system, namely the dual system of occupation education. Denmark, Austria, and other countries manage the enterprise and school in accordance with the unified law and have formed good coordination and service system at the national and local levels. Australian apprenticeship institutions have reached far beyond the scope of "School" and "enterprise," offering personalized education and learning in the real work as to provide opportunities for students. The USA, Britain, Canada, and other countries have also established the modern apprenticeship system. However, it is not as successful as that in the EU and Australia owing to less attention from the government and the lack of social capital and employer support (Zhao and Chen 2014). There are other studies on the modern apprenticeship in Germany, Britain and Australia, and other Western countries. Because of different national conditions, the form and degree of development in modern apprenticeship also differ greatly, but the core elements of the apprenticeship, which is based on school-enterprise cooperation, work integrated learning content to students (apprentice) culture as the core, carry out skill, in teachers' professional teaching and practice under the guidance of the enterprise master of applied talents is basically the same (Guan and Shi 2011).

Modern apprenticeship is favored in the international arena, for its accordance with the rules of teaching occupation education, including the most essential and the most simple principle—"study from doing," and with situational learning theory. What's more, modern apprenticeship builds a closer link between technical skill learning and its application. At the same time, the modern apprenticeship is also a kind of individualized teaching. According to the student's own situation, the learning plan is made to provide students with more relaxed conditions. It can be seen that the modern apprenticeship has broken the higher vocational colleges as a single dominant position can make better use of the resources from both schools and enterprises, to integrate learning with the working process.

At the teaching level, the modern apprenticeship system is usually carried out by the vocational schools and enterprises in two aspects, i.e., the teaching process and the production process. This will inevitably lead to the reform of classroom teaching in vocational colleges and the change in teachers' teaching behavior. As some researchers have put forward, higher vocational colleges need to develop a mod-

ern apprenticeship based on the combination of work and study personnel training program, reconstruct a professional curriculum system on the basis of the work process, and promote teaching methods reform (Zhang 2015). The current research on modern apprenticeship is gradually rich and clearly explains why it is needed and what it is. However, it is a slight regret that there is not enough research on modern apprenticeship teaching. It is urgent to summarize teachers' teaching behavior in the modern apprenticeship classroom theory.

Teaching behavior refers to the behavior of teachers to arouse, maintain, and promote students' learning. Classroom teaching behavior is mainly made up of the following three elements, namely the rendering behavior, focusing on the presentation of knowledge, and technical skill-based behavior, which includes telling, icons, and action demonstration; dialogue behavior, focusing on the interaction between teachers and students, which includes the questions and discussion; guide behavior, focusing on students' autonomous learning activities, which includes practice guidance, guidance, and other activities (施良方 and 崔允漷 1999; 傅道春 2001).

Analysis of teachers' teaching behavior should not be confined to the specific situation in the classroom. What affects teachers' teaching behavior is not constricted to the teaching process in the specific teaching situation, considering that students' behavior is also affected by factors outside the classroom. Therefore, the analysis of teachers' classroom teaching behavior can be carried out in two dimensions, i.e., the concept of form and operation level (张建琼 2005). Teaching behavior, an important part in the field of teaching theory, has formed a rigorous and rich theory. There is no need to repeat. Vocational education is different from other types of education.

It has crossed the broad of enterprise and college, working and study, that means it has crossed the broad of vocation and education finally (杨百梅 2010). The teacher's teaching behavior in higher vocational colleges should conform to the basic law of vocational education and embody employment as the guidance and the job as the carrier. This shows that the teaching behavior of teachers in higher vocational colleges has its own characteristics.

In conclusion, based on the existing theoretical research on teachers' teaching behavior, this study, combined with the existing research system of the modern apprenticeship exposition, suggests that the two aspects of higher vocational college teachers' teaching behavior analysis from the school classroom environment and the production situation of the analysis includes the present behavior, dialogue behavior, and instruction behavior, as shown in Fig. 4.1.

## 4.2 Research Methods

In this study, the higher vocational colleges and universities are those pilot modern apprenticeship, in the furniture design and manufacture, and because of the national first batch of modern apprenticeship pilot units by the Ministry of Education in 2015. This provides a better practical basis for this study. In addition, considerate that the problem involved in this study is focused on teachers' modern apprenticeship teach-

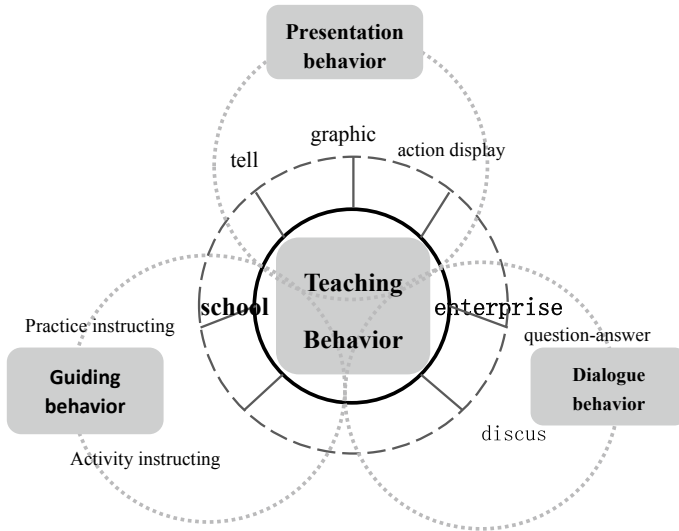


Fig. 4.1 Conceptual framework based on the literature

ing behavior, the subjects in the study in the study are restricted to full-time teachers in higher vocational colleges who have undertaken the modern apprenticeship teaching task for more than one year.

The research methods of data collection are: interviews, interviews for the modern apprenticeship class teaching; observation method of modern apprenticeship classroom teaching observation, participation, and teaching-related activities; physical analysis, collection, and teaching-related objects, such as the use of class teachers' curriculum standards, the wall charts (from enterprise drawing); training scheme of furniture design and manufacture of professional personnel; and student works (coursework).

The methods of data analysis include: classification coding, situational approach, writing memo, dialogue with existing literature, etc.

### 4.3 Data Analysis

#### 4.3.1 *The Concept Level: Teachers' Understanding of the Teaching in Modern Apprenticeship*

##### 4.3.1.1 On the Teaching of "Dual" Understanding

Teachers can realize the difference between modern apprenticeship teaching and previous teaching. They understand the important role of enterprise resources in

teaching of the modern apprenticeship, and have self-understanding of “dual” characteristics. They also attach importance to jointly carrying out teaching activities and technical personnel of enterprises. In the teachers’ concept, are willing to see enterprises participate in the training activities, try to combine the production process with the school teaching process, and employ the enterprise product standards as the evaluation of student learning outcomes. It can be seen that the teacher’s teaching concept has changed. In their eyes, modern apprenticeship is a joint venture of the school to cultivate students in line with the needs of enterprises. As Y mentioned in the interview:

Modern apprenticeship is a kind of teaching mode that allows the students to carry out the enterprise practice project with the enterprise’s work standard. Student learning unite with enterprise practice, the standard to evaluate student learning outcomes are the same as those that enterprises employed to test their products. To do so is to ensure that students will be capable of creating greater entomic benefits in the shortest time for the enterprise as soon as they come to work.

In the viewpoint of teachers, the modern apprenticeship system is more concerned with the cooperation with enterprises than ever before. They can clearly understand that the current classroom needs to fully reflect the two aspects of school education and enterprise production. They also have concerns, like how to link teaching with production, how to enhance the enterprise production experience and new technology application experience, etc. W teacher expressed such concerns in the interview:

At the college level, modern apprenticeship pilot work has been started, in the classroom teaching level, we also need to do the corresponding reform. The pilot had great influence on the whole (professional furniture design and manufacture). single course, how to integrate enterprise elements, such as production process, technical innovation, product development, into classroom teaching. In addition, in the selection of students’ skills training project, a little more than before the simulation of the project, and now it is directly to the real production project took over. This requires us to really go into the enterprise to experience, which is the weakness in the current teaching.

In the interview, what teachers expressed about “dual” characteristics teaching is the “should be” state in teachers’ eyes and will guide the specific teaching activities, which is also an important basis for the further study on teachers’ teaching behavior.

#### **4.3.1.2 Understanding of Their Own Practice**

Cross-border characteristics of vocational education demand the quality from the higher vocational college teachers have the “double quality.” In the daily teaching practice, teachers tend to put more energy into their own professional theory, while their study of teaching theory is rather limited. Because of the urgency of classroom teaching practice, the problem must be solved immediately. They cannot stop to think, but not to find a temporary academic theory (Chen 2014). Therefore, teachers usually use “their own experience” to solve teaching problems in modern apprenticeship classrooms. Y teacher admitted in the interview:

I'm not sure whether my teaching has been inspired by modern apprenticeship theory. I major in design and production of furniture. To tell the truth, I don't know much about modern apprenticeship theory. Even what I know about it is superficial. I do not know whether there is a book or a theory, which is able to guide us how we to carry out modern apprenticeship teaching. I seldom do research on the topic, so I have little knowledge on education and teaching. In the course of teaching, I may be more inspired by the master-apprentice scene, and the product quality in the enterprise. I often bring the product certification standards into my classroom teaching process to exam the student work. Sometimes, I totally enterprise standards to assess the work of students. in accordance with the standards of the enterprise, said the line on the line, not on line. I also doubt whether what I am doing is right, so I listen to some experts' report, read some books to verify if what I do is reasonable.

It is not difficult to see that teachers emphasize the priority of self-practice in the teaching activities of modern apprenticeship. Teachers in the teaching process often need to get things done and to solve the current problems. Then, they would reflect the action. In other words, teachers accumulate their own practical experience in solving problems and then increase their teaching practical wisdom.

### ***4.3.2 The Operational Level: The Leading Teachers' Teaching Behavior Enterprise Production Activities***

#### **4.3.2.1 As the "Enterprise Project Leader"**

In the course of modern apprenticeship classroom teaching, teachers deliver a relatively independent project from the enterprise to the students. The students complete the information collection–design–implementation of the program under the guidance of teachers. The final evaluation is conducted by teachers and students. Students through the practice of the project understand and grasp the whole process as well as the basic requirements of each production. The enterprise products are the thread running through the organization of the learning content. Teachers' telling has not only the characteristics of traditional classroom teaching style but also the passion of an enterprise manager. In the modern apprenticeship classroom, students usually learn and practice first, followed with teachers' telling and teaching. In this way, it can highlight students' initiative, enthusiasm, and creativity.

My role is equivalent to the introducer and organizer of the enterprise project, the introducer of business practice standards, the transfer of theoretical knowledge, and the conductor of practice. It is somewhat similar to the project manager or project leader. My story is: the content and procedure of production projects, to take over from the enterprise first, to divide the project taken over from the enterprise into different tasks; second, to introduce each task to students, what employees do, that is what our students need to do; third, explain each link of the operation process precautions, and complete time. Although it is very simple to illustrate, the whole process needs to be done with the enterprise, and completed before class.

Teachers should decompose the project step by step to make students know what they need to do in each link, just like playing a game. Teachers should state clearly



what students need to do at each level, what conditions and strategies are needed to meet the standards and how many points they can get each time.

#### **4.3.2.2 “Physical Education” and Graphic Unity**

Chinese traditional culture contains teaching implication, like “Yuli written for the people, he seeks to reach Master,” “listen to his words and deeds,” etc. Teaching usually refers to the educator to use their own behavior or their own actions to express the meaning of education (Xu 2010). Modern apprenticeship in the classroom, teachers tend to give students a real reference from the enterprise, let the students have a reference template, a standard real reference, so as to make a replica of the reference object, which requires the students to observe, thinking, and thinking in observation. Of course, not every student can in kind reference, make their own works, this needs the teacher’s behavior model, standard demonstration, let oneself make the behavior of the student’s role as a model to imitate.

In the course of classroom teaching observation, we found that the teaching of the teacher has a gradual process. By drawing teaching as an example, the teacher first drawing standard for students, and to provide samples, let the students “difficulty,” until to qualified so far. Students do not have a relationship at first, as long as they are willing to practice, will be successful, in accordance with the requirements of the enterprise to practice. In this process, according to the students’ drawing action or result does not meet the standards of the place, teachers will personally to draw a picture, draw and display, and told the students in the drawing process, why should this drawing, this place why painting, etc. This process is more vivid than the icon, and the image of the students is often willing to accept. This process requires both observation and thinking of students, and students’ perception and action is needed, not only teachers need to understand the enterprise production activities, production work but also teachers need to be demonstrated in the process of making tacit knowledge.

#### **4.3.2.3 Academic Evaluation Based on Enterprise Production Standards**

The common methods of students’ academic evaluation in higher vocational colleges are based on the evaluation of knowledge, skill-based evaluation, and evaluation based on the ability of professional posts. How can teachers evaluate students’ study in the modern apprenticeship system? Do they still pay attention to “remember,” “will do it,” “do the right,” and so on the question, or concerned about “really do it,” “do you really,” and so on.

This study found that the teachers according to the enterprise productive task design work tasks and as the main content of the students’ academic evaluation. To determine whether students complete the task of learning a link, not to say, will do as the standard, but to “do the true” as the standard. And the “real” premise is in line

with the production requirements of enterprises, and students can be made out of the work that can be sold on the market. Therefore, such evaluation can be summarized as the academic evaluation based on enterprise production standards. It can be seen that the modern apprenticeship classroom learning evaluation into the requirements of the enterprise staff, including the company's comprehensive quality of employees, workability and work attitude, and other elements. In terms of content and process, this type of evaluation is far beyond the traditional evaluation of students' learning. Such evaluation prevents students from being satisfied with "60 points," since all the evaluation is based on the precondition whether the product can be on sale. As Y teacher said in the interview:

Serially speaking, with the apprentice, students have a full schedule. They usually work on the products even to the evening, because we are stricter with the results. Before apprenticeship, we were not that strict with the results. We let them pass when they were around the baseline. As a result, a lot of students got 60 points-the baseline. But now, it is not the case. The standard is in accordance with the enterprise's standard. However, unqualified students have the opportunity to work with other students together. That means they have more opportunities to do homework, but the work must be qualified.

During the study, the three-year (2013–2015) training program of furniture design and manufacture was collected and analyzed. It is clearly reflected in the talent training scheme that is an academic evaluation which is based on the enterprise's production standard. Take the main course "product design management" for an example. This course is guided by the graphic design group and the teachers of higher vocational colleges, which is combined with the product design procedure, working method and ISO quality management standard of the furniture. Students are organized to study the course and carry out project practice in the corresponding positions. Corporate technical supervisors and teachers jointly evaluate the results of practice. Of course, not all students can complete the task of making qualified products, which requires the evaluation of the time interval. In addition, the academic evaluation based on enterprise production standards also implements opening evaluation, the students are not satisfied with the results of their own practice, repeated practice in the limited time, improve the quality of self-works.

#### **4.3.2.4 Teachers and Students Are the Two Main Bodies of Classroom Dialogue**

In this study, the teachers interviewed have expressed the importance of dialogue in the teaching process. They created a specific atmosphere, to encourage students to participate in the dialogue through a series of teaching design. From the classroom observation, it was not the traditional teacher–student dialogue. It was the dialogue between the students, which was the main content of the classroom presentation; students are the main body of the dialogue, and teachers are the main guide of dialogue. In an interview, Mr. W said: in the process of teaching, he is the greatest pressure to the organization, mutual fire guide students. It is very important to guide

the “shell” to fall in the correct position. If the dialogue between the students is the order and the rule of the law, then the dialogue is meaningless.

There is a great relationship between the level of a class and the energy of the student’s input. In P teacher’s teaching reflection, she expressed such a kind of feelings:

In the modern apprenticeship in class teaching, we (Teaching Group) to establish the evaluation of the teaching strategies, classroom is mainly to real project students’ business tasks, they through practice, in the process of doing work experience on their own knowledge and skills of the specific requirements, and imitate the business planning report. Individual (Group) completed the reporting task in the classroom, students ask each other, make the students, let the student to ask students to answer. As a result, students have a lot of free time. In this process, I just play a guiding and complementary role, for example, last week’s course, I just made an introduction before the opening, the end made a comment, middle students’ self-acting is very smooth, I basically is a bystander; and today’s classroom, I failed, students’ questions from presupposition, and I have to guide, it seems that I still have to think a qualified guide is what kind of.

From the P teacher’s teaching reflection, we can see that she believes that the success of the classroom is the student’s dialogue is orderly, regular, “shells landed in the right place,” on the contrary, it is a failure of the classroom.

#### **4.3.2.5 The Guidance of the Teacher Runs Through the Whole Process of the Students’ Work**

The teaching activities of teachers in higher vocational colleges usually include two aspects of classroom teaching and training guidance, in the process of teaching the theory and practice of frequent alternation of professional knowledge of teachers’ teaching should not only teach students enough, ability to guide students to practice the operation. Each action should be repeated after the operation of the students to be understood, the use of. It can be said that the behavior of teachers to guide students is an important part of daily teaching. Y teachers believe that:

Students now class and class difference is not big, as long as the students have the task, homework is not completed, the student class is also a class, after school hours to do the work in the classroom. Students in the process of doing the work, will certainly encounter some problems, they always want to me for help, and compared to previous, I guide the process of students throughout the whole process of students to complete the whole work.

The guiding behaviors of teachers in the classroom teaching of modern apprenticeship compared with traditional classroom instruction behavior guide the boundaries by class time units to complete a work as a unit, by the group guidance to individual counseling, to guide the content which is more specific, some guidance into each specific practical work, guiding the strength and also because of the difference of students’ individual ability and different.

## 4.4 Discussion and Conclusion

Worthy of discussion in this study a lot because of the limited space, only to discuss two problems: first, teachers' modern apprenticeship teaching behavior framework including what factors; second, the results of the current vocational college teachers' classroom teaching.

### 4.4.1 *The Structure and Elements of the Teaching Behavior of Modern Apprenticeship Classroom Teachers*

Further classifying and analyzing data in the study of content arrangement and comparison, the encoding after the materials is classified into three categories, namely teachers' modern apprenticeship teaching behavior includes three dimensions, respectively, showing behavior, behavior, and behavior evaluation of dialogue. The present act includes introduction of enterprises mainly about, to show the enterprise product case and to the teachers' physical production demonstration and teaching mainly; dialogue behavior including around the student works report, ask and answer questions, teachers and students of questions; including evaluation behavior in the enterprise production quality of products the standard as the basis, through the works of teachers and evaluation standard of comparison of students, instructing students to complete the work, and can be used in production or application. Details are shown in Table 4.1.

Based on this, this study constructs the teachers' modern apprenticeship teaching behavior model, including schools and enterprises from two aspects of elements, a total of three categories, 12 items, as shown in Fig. 4.2.

The model above implies that three major categories of teaching behaviors coincide with the framework based on the literature (Fig. 4.1). For example, presentation behavior and dialogue behavior are both covered. Guiding behavior is just the subordinate concept of evaluating behavior. In addition, the classification of three categories of behavior in each category is not the same, as shown in Table 4.1. In short, the modern apprenticeship classroom teaching behavior is more complex with more characteristics of school-enterprise cooperation, which not only indicates the modern apprenticeship classroom teaching behavior keeps consistent with other types of classroom teaching behavior but also indicates that teaching in the modern apprenticeship has particular characteristics.

**Table 4.1** Instructional behavior framework of modern apprenticeship classroom

Behavior		Subject	Source	Mode
Presentation behavior	Tell	Teacher	Enterprise product or project	Enterprise project introduction
	Graphic	Teacher	Enterprise product or project	Enterprise product example
	Demonstration	Teacher	Teacher’s behavior	Teacher physical production
	Teaching others by one’s own example	Teacher	Teacher’s behavior	Teacher physical production
Dialogue behavior	Question	Student	Student’s works	Students on the scene to ask each other
	Answer	Student	Student’s works	Student site mutual answer
	Report	Student	Student’s works	Students scene display
	Supplementary answer	Teacher	Teacher’s behavior	Teacher supplement
Evaluation behavior	Guidance	Teacher	Teacher’s behavior	Teachers and students work together to complete the work
	Contrast	Teacher	Enterprise’s standard	Comparison of students’ works and enterprise products
	Application	Enterprise	Student’s works	Students’ works are recognized by enterprises
	Production	Enterprise	Student’s works	Student works for enterprise production

#### ***4.4.2 The Enlightens of Classroom Teaching to Higher Vocational College Teachers***

At present, the school-enterprise cooperation is facing the problems of “the school is enthusiastic, but the enterprise is not enthusiastic,” and enterprise participation in higher vocational colleges’ personnel training prizes forms over the content. There are many reasons for these problems. One of the most important reasons is that technical skills taught in vocational colleges were to be backward in production and application in the enterprise. The modern apprenticeship model can effectively shorten the gap

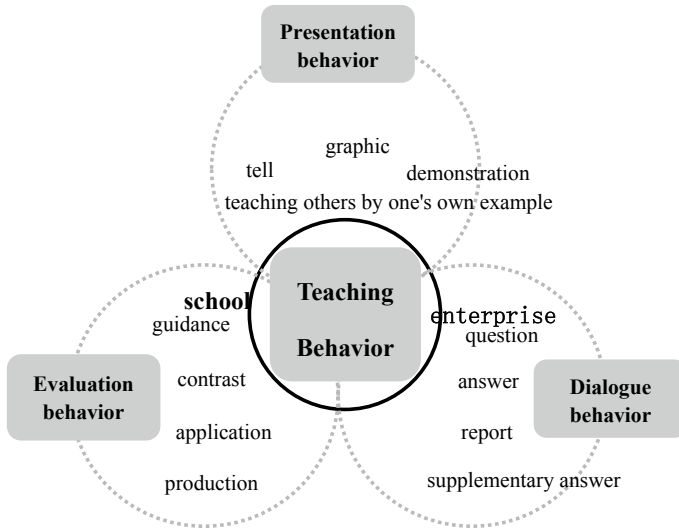


Fig. 4.2 Teaching behavior model of modern apprentice system

between the two, and the teaching behavior of the modern apprenticeship classroom has the following implications for the teaching of higher vocational colleges.

**4.4.2.1 The Introduction of Enterprise Real Projects into the Classroom**

Since the real project is introduced into the higher vocational education classroom, the technology taught in class can keep pace with the enterprise production technology, students will be able to learn in the real work situation with clearer goals and more clear tasks. That is to say, students have a clear picture of what to learn and to what extent understanding, so as to stimulate the enthusiasm of the students to learn more.

**4.4.2.2 To Evaluate the Students' Study by the Enterprise Production Standard**

Develop the evaluation system of standard, changing the past, “say,” the evaluation standard, form “really” and “useful” evaluation system, as far as possible in the enterprise production standard to evaluate students’ academic skills of students learning, the pursuit of technology to create the largest profit in the shortest time for the enterprise. At the same time, in the evaluation process, students should be given a number of evaluation opportunities, so that they can improve their work gradually.

#### 4.4.2.3 Demonstrate the Authority of Teachers' Technical Skills

In order to ensure the technical skills, students acquired are synchronized with those in the enterprise, teachers should first have corresponding technical skills even able to lead the business development, which requirements of teachers in higher vocational colleges can provide all kinds of application services for enterprises, leading the development of the regional industry, highlighting the technical skills of teachers “authority, the formation of teachers in higher vocational colleges to the hands of the oil” teacher culture (Zhang and Zhu 2015).

### 4.5 The Conclusion

The study aims to present the characteristics of the teaching behavior of teachers in higher vocational colleges in the modern apprenticeship class. We hope to reveal the significance of their teaching behavior by depicting their local practice. Because the modern apprenticeship is still in the experimental stage in our country, the research on tracking pilot unit is only 8 months, as a case study, the results are difficult to be applied to all higher vocational colleges and teachers themselves, but we believe that it is able to understand the teacher in the higher vocational colleges which are doing in the modern apprenticeship pilot in the process of work, and for the modern apprenticeship teaching and the depth of integration of production and education in higher vocational colleges under the background of classroom teaching, and provides some theoretical and practical reference.

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# Chapter 5

## Characteristics of Contemporary Education Policy Making in China: Changes and Challenges



Chengwen Hong, Yao Liu and Jing Wang

**Abstract** Many people want to understand the process of policy making for higher education in China. Some people believe it is moving toward becoming a scientific process; others consider it a mere formality; and still others think that education policy making in China is a joke. Here, we adopt the perspective of knowledge mobilization to assess the situation of education policy making in China over the past 40 years. We present the characteristics of education policy making. We outline the factors that contribute to improved policy making. Toward further improvement, we conclude with three critical suggestions.

### 5.1 Introduction

Policy making in China is more or less highly centralized. Today, provincial governments enjoy greater autonomy with respect to education; however, the central government retains the power of decision-making in financing, curriculum construction, and administration. Education policy making is in the hands of legislators of the National People's Congress and State Council (especially under the Ministry of Education). All these bodies need accurate knowledge about policies and policy proposals. Where and from whom the knowledge derives are critical questions. From answers to the following questions, we can attempt to determine the characteristics of policy making in China: Do those bodies consult different groups of people? Do those bodies listen to different types of people? By addressing these questions, we can assess whether or not policy making is a democratic and scientific process. This paper adopts the perspective of knowledge mobilization (KM) in exploring relations between education policy making and policy knowledge producers. The technique of KM is useful and pertinent; however, sometimes it is oversimplified.

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KM is a research technique originally applied by Canadian policy researchers in the late 1980s. Benjamin Levin was one of those researchers.<sup>1</sup> Levin et al. point out that good policy emerges from good policy proposals. It is very important to establish good dialogue between knowledge producers and policy makers. Acquaintance and mutual trust between the two are very important. In addition, two factors exert a great impact on the quality of policy making: (1) the quality of proposals or suggestions made by knowledge producers, such as education practitioners and researchers; (2) how well policy makers can understand the real meaning of policy proposals.

It is beneficial to examine China's education policy making from the KM perspective. The key questions are as follows: Are China's education policy makers able to access good policy knowledge? Can China's policy makers understand and trust the proposals of education practitioners and researchers? Is communication effective between policy makers and proposers? Accordingly, in this study, we address the following three questions: Who produces policy knowledge in China? In what way is such knowledge transmitted to policy makers? What or whose knowledge do policy makers trust the most?

## **5.2 Background to Development of Education Policy Making in China (1979–2018)**

Since China adopted its Open Door Policy in 1979, almost 40 years have elapsed. Education has made considerable achievements. Since that time, outlined and promulgated education policies have made a substantial contribution. It is necessary, however, to review the policy-making experience in China to examine its effectiveness. To some people, policy making is an experience; to others, it is a science. It is necessary to determine which of these viewpoints is correct. That is a matter of debate. But in this paper, we examine how knowledge producers and appliers have advanced over the past 40 years.

The past 40 years of education policy making in China can be summarized in terms of three stages. First, 1979–1992 was the start of educational reforms. That was a new era: Almost every policy constituted a new direction or adventure. Policy makers found that period very stimulating and exciting.

Second, 1993–2010 was a period of adjustment of all policies in education development. During that time, some education areas had to be enlarged, such as private education and institutional guidance. Some education projects were fully implemented, such as nine-year compulsory education for all children. Some new projects were initiated, such as Project 211 and, later, Project 985 for the quicker development of higher education. During this period, policy implementation was impeded by lack of financial resources. Accordingly, the central government cooperated closely with the World Bank and Asian Development Bank to access loans from overseas banks to supplement education resources.

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<sup>1</sup>Levin et al. (2011).

Third, the period from 2010 to the present has been one of fine-tuning education policies: Some education policies do not meet current needs; some policies are controversial or would result in conflict. Some policies require adjustment; systematic and overall adjustment of all existing laws and regulations needs to be considered and addressed. During this period, greater intelligence and wisdom have been necessary regarding law improvement. Knowledge producers and policy makers are working ever more closely.

### 5.3 Three Stages of Education Policy Making

#### *1979–1992*

It is widely known that education policies in China entered a new stage during this period. Policy makers had a great deal to accomplish; thus, they had to make wide-ranging consultations to acquire policy knowledge. First, policy makers attempted to obtain knowledge from academics, especially university professors having returned from abroad or with good skills in foreign languages. Second, the policy makers consulted eminent scientists working at foreign universities, such as Nobel Prize winners Yang Chen-Ning and Tsung-Dao Lee, when they visited Beijing. Third, the policy makers conducted their own investigations to obtain data to support the ideas of central government leaders. Although the policy makers consulted academics for policy suggestions or proposals, they relied much more on their own judgment.

The most important policy for education reform and development in the 1980s was Decision on Education System Reform by Central Committee of Communist Party of China. According to individuals closely engaged in preparing that document, the proposal for that policy came exclusively from China's top leaders. In October 1984, China's central government implemented a critical policy: Decision on Economic System Reform. The government believed that successful reform of the economy could be achieved without reform of the education system.

Hu Qili,<sup>2</sup> a party secretary of the Central Committee, was asked to undertake an investigation in four provinces. Hu spent half a month visiting in the four provinces; he organized almost 100 meetings and made many good suggestions. He submitted a report, which outlined four important policy proposals. They were as follows: (1) reform in higher education, which suggested the state government could not and should not allocate or secure jobs for every graduate; (2) greater efforts to develop vocational and technical education, satisfying the great demand for technicians; (3) universalization of nine-year compulsory education; and (4) reinforcing education reform by establishing a top group of national leaders. In May 1985, the policy about education system reform was presented. From the perspective of KM, the process was clear and direct. Government leaders proposed an idea; the government conducted an investigation as appropriate. Thus, we may conclude that this process

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<sup>2</sup>Hu (2008).

was government centered. The government produced the knowledge; it applied the knowledge, and then it made its policy. Thus, this is a top-down model.

The model of the government-centered approach is clear; however, to a small extent, other channels existed during this period. Occasionally, such channels relied on university professors who had the advantage of ability in foreign languages and education research expertise. In December 1980, China issued Decree of Degree, a basic education law addressing degree regulation. Many bylaws emerged from this decree. The people who provided the knowledge for this decree were a group of professors led by Gu Mingyuan of Beijing Normal University (BNU). They translated and introduced degree systems from developed countries. For the policy makers, most of their consultation and proposals were brand new; most of the policy proposals were adopted.

Other knowledge producers were eminent academics living overseas. Li Zhengdao is one of them. As a Nobel Prize winner, Tsung-Dao Lee was invited to Beijing to meet Deng Xiaoping, the paramount leader. He told Deng that China should create a postdoctoral system as well as the National Natural Science Foundation.<sup>3</sup> Fortunately, Deng was completely convinced by these arguments; shortly after, all the proposals became policies. Tsung-Dao Lee is respected by the Chinese for his scientific achievements and his good proposals for education development. Thus, it can be concluded that his knowledge was well mobilized: he was astutely able to share his ideas with important policy makers.

Overall, the characteristics of education policy making during this period can be described as government centered or top-down. There appear to have been multiple channels, but knowledge from the top leaders was influential. Education policy proposals were largely related to major political and economic issues. A few educationists were consulted, but that was on a small scale. The ways for soliciting educational proposals were simple and quite primitive. Nevertheless, the relations between policy makers and knowledge producers were excellent. They respected and trusted one another.

### *1993–2010*

In 1993, Outlines of Education Reform and Development, one of the most important policies of the 1990s, was issued by China's state government. Almost all the identified education goals were to be achieved by the end of the twentieth century. As a result of those outlines, a series of policies emerged. With regard to basic education, the deadline for achieving nine-year compulsory education was set as the year 2000. Nationwide, curriculum reform was initiated in the mid-1990s. With higher education policy, the main tasks were outlined in terms of readjustment, reform, and improvement. Student enrollment was greatly expanded. Private higher education was promoted.<sup>4</sup> A few universities, such as Peking University and Tsinghua University, were enforced or encouraged to become world-class institutions.

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<sup>3</sup>Ren (2006).

<sup>4</sup>Hao (2007).

During this period, the knowledge sources were large as they were in the previous period. Policy proposals came from both insiders and outsiders: insiders were researchers as well as top political leaders; outsiders included eminent Chinese scientists living overseas who conducted comparative research. At this time, proposals from researchers and comparative researchers were increasing. Proposals from top political leaders were decreasing, whereas those from educationists were growing. The reason is not completely clear, but it is evident that education reform became more diverse.

From the perspective of KM, the central government relied more on researchers: Government officials could not acquire the relevant knowledge as extensively or as quickly as professors. Some universities, such as BNU and Shanghai Institute of Intelligence, gradually developed into semi-think tanks for education reform. Institutes of higher education, such as Xiamen University and Peking University, offered education proposals to the Ministry of Education (MOE). One example of such proposals is that education should receive not less than 4% of GDP. Academics, such as Professor Wang Shanmai, promoted this proposal, and finally the National People's Congress adopted it as a regulation. Professor Gu Mingyuan made a proposal that students on teacher education courses should not be charged of tuition fees: it was quickly accepted and became a national policy in 2007. It is notable that the MOE and State Council trusted academics during this period: there was a good relationship between the two sides. However, the academics in question here were a small number of eminent professors.

At this time, China's education policy making entered a more mature stage, placing greater reliance on research findings. Further, academics showed strong aspirations to make policy proposals. There was a good balance and relationship between knowledge producers and appliers. Hao Keming made the following points in 2007: (1) China's government realized from past experience that macro-level policies carry great risk if they are conducted without thorough investigation<sup>5</sup>; (2) the greater the number of parties consulted, the better, e.g., the 1993 Outlines of Education Reform and Development mobilized many parties, including representatives from economic, scientific and social sectors, congressmen, teachers, principals, and presidents. Even, the MOE consulted famous Chinese living in the USA, such as Chang-Lin Tien, Nieh Hua Tong, and Chia-Chiao Lin. This showed that policy makers wanted to consult with representatives from different sectors.

### *2010 to the Present*

As education in China began developing in a solid and rapid manner, policy makers started accumulating expertise in education policy making—either through practice or on-job learning (e.g., taking Ph.D. courses). Since 2010, the MOE has promoted both top-down and bottom-up processes.<sup>6</sup> Data-based evidence plays a greater role in policy proposals. The use of new techniques is also encouraged to improve policy making.

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<sup>5</sup>Deng (1994).

<sup>6</sup>Zhang (2010/2018).

The characteristics of education policy making are well reflected in the making and promulgation of state planning outline for Medium and Long-Term Education Reform and Development (2010–2020). It is difficult to believe, but in that regard, 40,000 scholars and education practitioners were involved in related discussions and solicited suggestions. Special research was conducted by 2000 scholars divided into 11 groups.<sup>7</sup> Nothing similar with education has occurred in any other country. That state planning outline set targets for Chinese education development to be achieved by 2020. One important target was modernization of education. Another goal was expanding higher education enrollment by 40%: that was attained two years in advance of the 2020 target year. Overall, knowledge has become too widely mobilized. That may be because the proposals were too diverse and conflicting; it may be because the policy makers used big-data<sup>8</sup> techniques.

The Chinese government has also experimented with pre-policy to see if that can be implemented in schools. Pre-policy is policy that is subject to improvement. In 2014, the state government issued the Comprehensive Reform Plan for Gaokao Enrollment and Examination.<sup>9</sup> Two provinces were selected to undertake an experiment to determine whether the policy proposals in the reform plan were workable. In 2017, the experiment was concluded, and suggestions were made and submitted to the MOE for adjustment to the Gaokao reform plan. In 2018, 14 provinces adopted the reform. This experiment will give policy makers more time to watch and reflect on related issues. In this way, the central government hopes to achieve smoothly implemented and effective policies. Accordingly, the risks with policy making can be reduced.

Three characteristics of policy making clearly emerged. First, policy-related knowledge has increased since the time of the Open Door Policy in the late 1970s and early 1980s. The MOE has even assigned research project to overseas embassies. A fundamental change is that policy makers rely less on internal system investigators: they are depending more on universities and professors. However, policy makers still place little reliance on independent or private institutions. Second, new policy-making techniques have been applied, such as big data, simulation modeling, and skills in mixing top-down and bottom-up processes.<sup>10</sup> Top political leaders are still dominant in influencing policy making; however, the use of scientific and democratic policy making is acceptable for policy improvement. Third, relations between policy makers and knowledge producers are improving. Policy makers request professors to produce knowledge. Professors feel pride if they can contribute to a policy that can influence schools and students. Nevertheless, the MOE has its own preferences and inclinations. The MOE likes some proposals and does not like others. Thus, establishing a rationale for policy making remains a problem.

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<sup>7</sup>Gu (2010).

<sup>8</sup>Gu et al. (2016).

<sup>9</sup>Zhong (2015).

<sup>10</sup>Chen et al. (2014).

## 5.4 Contributors to Improving Education Policy Making in China

During the past 40 years, Chinese policy making has steadily improved with respect to knowledge provision and application as well as the relations between knowledge producers and users. As to why there has been steady improvement, three key reasons can be identified.

First, there is no country like China with such a strong need for policy knowledge and proposals. It is not difficult to understand how many policy proposals are needed to maintain a whole system of education that has an impact on over 200 million students. It is well known that in the 1960s and 1970s, China's education system was almost completely destroyed: that was the result of wrongdoings in the Culture Revolution during the era of Chairman Mao Zedong. Since 1979, education regulations have had to be made and promulgated. Policy makers had no choice: they had to rely on anyone who could submit good policy proposals because they lacked both policy-making expertise and time.

Second, Chinese policy makers are relatively modest and open to any source of new knowledge—especially good education practice from any country, not just developed countries. Good knowledge comes from comparative researchers, education practitioners, and foreign experts. It is clear that many policies and regulations are related to certain experts. Chinese academics and educationists obtained considerable research findings related to education theories and practice from other countries. Those findings were absorbed and transformed into pre-policies. For example, China has regularly invited dozens of presidents from world-famous universities to explore ways of improving China's famous universities. A former president of Yale University has visited Beijing regularly and offered suggestions when he met the ministers of education.<sup>11</sup> This clearly shows that China's policy makers are very open to the outside world.

Third, Chinese education policy makers have great power in mobilizing knowledge producers. This is evident in a few cases. In 2008–09, the MOE invited over 40,000 academics to take part in research, discussion, and document drafting.<sup>12</sup> That is a phenomenal scale for just a single plan—irrespective of how general or multifarious. Beyond the cost, it is remarkable how so many academics could be involved in the same project at one time. The MOE's power to mobilize experts is in accordance with China's type of government, which maintains power of centralization. Sometimes, the MOE is able to assign the same policy research project to three or four universities separately. In the end, the MOE can make use of more research to generate policies or pre-policies.

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<sup>11</sup>Lin (2006/2018).

<sup>12</sup>Yuan (2012).

## 5.5 Challenges

Education policy making in China is steadily improving; however, some people raise doubts and criticisms. First, the MOE and all policy-making bodies should encourage or be receptive to independent suggestions or proposals. If we could picture this situation as a policy “soup,” we would want the soup to contain diversified ingredients. People generally wish to hear opinions that are line with their own way of thinking. Policy makers follow the same tendency. All policy theories indicate that the more diversified the ingredients in the policy soup, the better it is. Thus far, there have been few self-supported think tanks in China; majority of think tanks obtain government support.

Second, there is a great need for knowledge brokers: their function is to improve communication between policy knowledge producers and policy makers. Since 2010, BNU has submitted hundreds of policy suggestions and proved itself to be a good knowledge broker. BNU makes use of its own academics and those from other universities to produce policy proposals. BNU also makes use of its good relations with the Central Committee of the China Democratic Progressive Party (CDP). Through the CDP and its close relationship with Chinese Communist Party, BNU informs top political leaders and policy makers of its proposals. Thus, with BNU, there are good communication among professors, practitioners, and policy makers. Nevertheless, such brokers are a few in numbers compared with the body of researchers or policy knowledge producers. How to create more brokers remains a problem.

The third problem is not restricted to China: it is the policy-making quality of the policy makers. To make better policies, policy makers should have greater expertise in finding and understanding good proposals for education development. Policy makers should be able to integrate different opinions. They even have to mediate in conflicts with different interest groups. Currently, China’s policy makers are far from perfect: they still have a long way to go.

In summary, China’s education policy making is not as good as Chinese politicians say. However, it is not as bad as critics maintain.

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# Chapter 6

## The Ecological Construction of the Basic Education Curriculum Under the Multicultural Perspective



Guangdui Li

**Abstract** The differences among nations, regions, ethnic groups or between urban and rural areas, which have been basis of cultural diversity and multiculturalism, are eliminated currently by developmentalists who are under great anxious of economic growth. The concept of multiculturalism is related to the curriculum reform closely, while the deep requirement of the curriculum reform is inheriting the cultural mission that behind the knowledge and skills of the course, exceeding the knowledge, technology and teaching mode that belonged to the curriculum diversity, constructing the curriculum ecology based on the multiculturalism and changing the problem of ‘*just only have knowledge without culture*’ in curriculum and teaching. It is necessary to enhance learner’s cultural confidence and ability of cross-cultural comprehension, critical thinking of the world-changing, independent choice and the capability of influencing the world changing. When individual-free development is achieved, it is necessary to promote world peace and sustainable development. China’s basic educational curriculum reform practice has not yet to reflect the cultural diversity attributes which behind the multicultural curriculum, and has not yet responded to the multicultural appeal of urban–rural integration and globalization. According to observing and participating experimental study of several rural schools, the author refreshes the relationships between curriculum diversity and cultural diversity and construct the basic educational curriculum ecology that reflecting and promoting the cultural diversity. Therefore, exploring the new path and new value of penetrating into the curriculum reform and launching multicultural education.

**Keywords** Urban–rural integration multiculturalism · Curriculum reform · Curriculum ecology

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## **6.1 The Background and Problems: The Abandoned Cultural Diversity and the Deficiency of Multicultural Education**

There are two backgrounds of this paper—one is urban–rural integration and globalization that in the social development field, the other one is basic educational curriculum reform that in the educational field. The lack of multicultural concept and practice in China’s basic education is proposed mainly in three aspects: firstly, in the context of international globalization and domestic urban–rural integration, the drain of culture diversity is very serious, secondly, China’s basic educational curriculum reform practice has not been related to the diverse culture, thirdly, because of the lack of multicultural education, the school has not been able to adapt to the multicultural demands of social inclusion.

### ***6.1.1 The Drain of Cultural Diversity and the Deficiency of Related Education in rapid urbanization and globalization***

With the economic globalization and urban–rural integration, all kinds of mobilities have become more frequency, which includes staff, information and factors of production. The cultural diversity that brought by the international, urban and rural, region, nationality, although there are more opportunities for communication, it is more likely to face the challenge: the pluralistic development view and diversity lifestyle was considered the backward power and impede the development by the developmentalism. The tension from lack of inclusiveness between human and nature, human and human, race, national and international relations are aggravated, and the tension from lack of inclusiveness between human and nature, human and human, race and international relations are aggravated. More than biodiversity, what should be more concerned is that cultural diversity is losing rapidly. If the industrial civilization does not be criticized, the agricultural civilization will not be released from capitalism, and the era of ecological civilization will not be unlocked. The multiculturalism is the requirement of realizing the free development of human beings and the comprehensive development of human culture that could promote world peace and development. It is much more urgent to be equally respect and tolerant to the diversity of culture than ever before.

China is a country with multi-ethnic groups, and there are many differences between rural and city. With the international communication enlarging, China is in the transition period between the urban–rural dualistic structure and the urban-rural integration. Everyone’s production and consumption life has been deeply involved in the process of globalization. Urban culture, industrial culture and consumerism occupy the core of public opinion, the ‘Nature and Humanity’ sense of worth, which expressed by many local culture and minority cultures are on the cultural margin.

The idea of protecting cultural diversity is still very weak in China while the main discourse partially emphasizes on establishing ‘Ecological Civilization’ through the environment protection and technological innovation while ignoring the value of local culture. The basic education of school was tied by the urbanization and industrialization ideology.

### ***6.1.2 China’s Basic Educational Curriculum Reform Practice Is not Related to the Multiculture***

The development of multiculture is closely linked with the curriculum reform (Deng 2011). The author considers the diversity of curriculum classification, and grading includes the following multicultural perspective:

- 6.1.2.1 The course is divided into nationality, local and school-based, otherwise, classified as compulsory courses and elective courses, all which in respect of cultural differences among nationality, region, school and learners and reflects the complementarity of multiculturalism.
- 6.1.2.2 It is the change of the curriculum classification of subject and the teaching method update from teacher-text to student-experience that reflects the transform from pre-figurative culture to post-figurative culture (Chen 2005). Essentially, the correspondent teaching contradiction is the conflict of culture. Majority natural science is inclined to the post-figurative because of the ‘Positivism’, and majority humanism is inclined to the pre-figurative culture because of the inheritance. The expression of curriculum culture is related to the curriculum creating history, also related to the teaching style, for example, the teaching style that focuses on the students, emphasizes on the experiences and activities; the teaching style that focuses on the teachers, emphasizes on the teachers and textbooks.
- 6.1.2.3 The integration of subjects and comprehensive courses and the curriculum integration, which advocates the communication and integration of the culture in different courses. Each course can express the pursuit of the true, the good and the beautiful: the natural science stresses on the ‘Positivism’, the social science impresses the humanistic care, and the arts reflect the aesthetic and self-cultivation. Secondly, they are combined with each other, mutual supplement, for instance, the history of science contains the humanistic spirit. The combination of curriculum is not just the knowledge, skills and expression integration but embodies in the multicultural system.

Because the curriculum reform has been driven by administration and utilitarianism for a long time, the industrialization and fragmentation of curriculum design coexist, the bureaucracy of curriculum implementation is prominent, and the cultural original intention of curriculum has been forgotten or not understood. Multiculturalism has not yet established a correlation with the reform of basic education curriculum. In the short term, the resistance of curriculum reform is directly related to

the faculty and evaluation of admissions. But in the long run, the curriculum reform will be lost if the curriculum reform does not touch the multiculture, without conflict connection and tolerance. The problem of incomplete curriculum implementation is manifested in many aspects. For example, only Chinese, English and mathematics courses are emphasized, while music, physical education and aesthetic education courses are neglected; art and physical education courses only focus on skills, but lack aesthetic and cultural support; science courses become recitation classes to investigate memory; activity courses are still implemented in a teacher-centered teaching mode. These phenomena show that the diversity of curriculum patterns is not equal to the diversity of curriculum culture, the curriculum is immersed in the '*just only have knowledge without culture*' dilemma for a long period, the limitation of examination and evaluation is not the fundamental factor and the deep restriction is the educators are lack of the culture knowledge and capacity.

### ***6.1.3 The Deficiency of Multicultural Education***

Kent and Lee (2011) indicates that 'The aim of multiculture education is to prepare for the children and teenager take part in the democracy in plural', contains 'Establish a effective school for all students and develop a society with much more inclusiveness', thus, multiculture education is better for the students to understand the human difference, eliminate the discrimination, stereotype and prejudice.

Basic educational curriculum reform proposed the concept of people-oriented curriculum. There is no significant change in the content of the textbook, but just sets up the curriculum standards, emphasizes on the consciousness and function of the teacher, and develops the course for the second time. The course is different from the textbook, which should be closely related to the development of human beings. Except the textbook, the content of curriculum should include significant topics about individual lives and social development and also should guide the learners to be critical about different visions and participant activities in those significant topics while cultivate the learners as a responsible citizen of modern society. However, due to the busy work and lack of teacher's training in the current normal educational curriculum, the teachers are short of reading habits, just only pay attention to the effectiveness of teaching methods, which limit their work. As a result, it is difficult for teacher to understand the analysis of social problems and the world trend. Therefore, it is very hard for them to undertake the responsibility of guiding students to understand the society. The curriculum is related to the multicultural and development issues, requiring teachers to have a wider and broader vision. Then, it is possible to have an effective course development and curriculum integration to create a high-quality dialogue with students. The dialogue between the teachers and the students, between textbook and the realistic, includes the process of erudite, questioning, critical thinking, discernment and faithful action (Manabo Sato 2004).

In fact, the teacher sets up the absolute authority on teaching materials, restrains the student's critical thinking that based on the experiences and makes the learning on

the memory, not the dialogue. For instance, the urbanization tendency of humanities and social sciences curriculum limits learners to concern about the rural farmers and local culture. Natural science courses neglect the environmental education functions, and the problem of human behaviour is isolated from the natural phenomenon and causality, such as the ecological balance of climate change is mainly caused by human activity, when the teacher teaching, they always ignore the reflection of development concept, sense of worth and lifestyle.

The new curriculum reform has proposed a three-dimensional goal of 'Knowledge and Skills', 'Process and Method', 'Emotion, Attitudes and Values'. Emotion target was described by the 'Interest', 'Enthusiasm' which can not cause the students' crisis awareness and critical thinking about the urgency of reality, and 'Process and Method' target always use the experience replace the participation. Therefore, teachers often have excuses to ignore the curriculum culture about the values and the behaviours of students. However, the question is whether the teacher has the vision and ability to achieve these curriculum goals and curriculum culture in the course of secondary development and teaching?

It is necessary to clarify that although the curriculum reform has been put forward for the general need for the universality of students and social development. The depth and breadth of the existing curriculum are obviously far from the problem of real life, and there is no response to the multicultural appeal in the process of globalization and urban-rural integration.

In short, the global economic and social development has been deeply influenced by the developmentalism, and it is not only sketch external relationship of the economic growth centre but also draw up the cultural awareness centre, which in the opposite direction of inclusiveness by the multiculturalism. The practice of curriculum reform in China has not been combined with multiculturalism and the curriculum content has failed to respond effectively to the multicultural appeal of globalization and urban-rural integration. However, on one hand, the urgency of social problem solving accompany with the empty content, on the other hand, multicultural education is the key to connect with the education and democratic society.

## **6.2 The Goal and Method: The Construction of the Multicultural Curriculum Ecology, the Development of Multicultural Education**

Behind the complete setting curriculum, teaching method changing, it reflects the value equality and expression diversity. The deep requirement of curriculum reform is to spread the culture and the spirit behind the curriculum knowledge and skill, and from the variety of curriculum, curriculum forms integration, to the curriculum cultural ecology under the multiculturalism. Multicultural education is conducive to achieving a better understanding and self-confidence of one's own culture, more tol-

erance and integration of other cultures, and promoting world peace and sustainable development.

The paper studies the curriculum design and experimental feedback from three rural schools, trying to construct the curriculum ecology based on multiculturalism and to achieve the following goals:

- Through curriculum integration and cross-grade teaching, alleviate the problem of the course fragmentation, teaching burden on small-scale schools in rural areas.
- To establish a three-class course of dialogue and connection with the integration of teachers based on the multicultural vision of the course.
- Carry out multicultural education, guide teachers and students to discuss the topic about the globalization and integration, develop their critical thinking and participate in local culture and cross-cultural exchanges.

Selecting rural small-scale schools as observation and experimental objects is based on the following reasons: Teachers have the needs of all teaching and cross-grade teaching. The teacher is unable to teach all courses according to the subject of discipline. School management is less disturbed by constitutionalism. The numbers of teachers and students are small, and it is easy to negotiate and implement. Test risk is relatively low. The experimental experience of small-scale schools in rural areas is easy to promote for the larger scale schools, on the contrary, the experience is infeasible because of the lack of promotion conditions.

### ***6.2.1 Through Curriculum Integration and Cross-Grade Teaching, Promoting All Courses Opened in Rural Small-Scale Schools***

For rural small-scale schools to carry out educational experiments, the first thing is to release the time and energy of the teachers, secondly, to improve the teacher's ability. Due to the different proportion of teachers and students in different scale schools, rural small-scale schools generally have the characteristics of fewer teachers and students, but more courses. It is difficult to open all courses if in accordance with the class teaching and subject teaching strictly.

- 6.2.1.1 The specific design of the following curriculum standards is based on the requirements of the study, in addition to the adoption of students in the next year, improve the cross-grade teaching. Teacher teaches in the same class could relieve the teacher's teaching burden, even the shortage of classroom. For example, except pinyin teaching and how to use dictionary tool, the students in grade one and grade two in primary school can be taught in the same classroom and the same course. According to the textbook spiral layout, Chinese, mathematics and other courses can also be taught in the same class and use the same course; because there are not too many differences between grade three and grade four in primary school. The teaching

of information technology and scientific experiment in grade three or above, firstly, the use of information tool and testing instruments can be break by the special teaching methods, and then information technology and experimental practice can be used as learning methods, integrate into the other related courses. The arts and sports courses can be minimized the class and grade boundaries, with community activities and special courses.

- 6.2.1.2 It is important to develop teacher's expertise, especially to be able to adjust the division of teaching according to the principle of subject knowledge. The two units describing scenery in the middle-grade Chinese curriculum of primary school can be integrated into teaching, penetrated art education, and combined the information technology with Chinese and science, such as referring, analysing, illustration, writing and etc. These can effectively solve the course fragments, ease the teacher's burden and with the purpose of teaching, make the teacher concentrate on the research and instructional design. Thus, it shows the cultural value that one-way skill teaching can not be expressed. But this kind of cross-grade teaching and curriculum integration require teachers to have the curriculum planning instructional design. The experiment proves that releasing teacher is the precondition of teaching reform, and completed curriculum is the soil of diversity curriculum and multicultural education.

### **6.2.2 *To Establish Dialogue and Connection Among 'Three-level Courses', 'Three Types of Courses', to Construct a Multicultural Curriculum Ecology***

In the course of curriculum reform, the single situation of curriculum discipline is broken, but the curriculum diversity is easy to be fragmented, and the courses are competitive more than partnership (Carse 1986). Because the educators are not clear about the cultural mission, they often pay more attention to the knowledge and skills input, failed to construct the multicultural ecological relationships among the courses.

- 6.2.2.1 'Three-level courses' promote learners to understand the cultural demands of different objects and subjects, help learners to break the narrow understanding, and then establish social community consciousness and action. 'Three-level courses' include the national curriculum, local curriculum and the school-based curriculum. It enables learners to understand culture and values difference with country, nationality and community, and form their own perspectives, opinions on social problems by cross-culture critical thinking and systematic thinking. Rural school education is not only to spread national culture and foreign culture but also to excavate and carry out local culture and ethnic minorities' culture. For example, the character



teaching in Chinese course should need to establish a national and regional and community cultural connections. The students are interested in the local culture starting with the people who lived around them, and then, they understand the national culture deeply. Through the national curriculum, teachers guide students to visit and express the people in their hometown in the composition. This kind of theme connections realizes the cross-cultural comparative education.

As a matter of fact, combination sometimes represents different levels of cultural conflict, but this conflict is actually based on a variety of cultural differences. Only through a real dialogue can we get a deeper understanding. For instance, different nationalities may have an argument about national heroes. This requires teachers to have a broader national cultural vision. Teachers need to guide students to see the problems in different angles, such as the perspective of the country and the perspective of the community and the position of the community. Therefore, in a broader view of the establishment of value consensus, the ability to identify and choose the position can be set up. But not all the conflicts in the dialogue can be resolved, such as the contradiction between economical and consumerism culture. Establishing this dialogue can develop students' critical thinking ability and enable students to make more rational and more responsible choices through cognitive conflict and contrast.

6.2.2.2 The link with subject, activities and extracurricular education courses reflects the complement of the dialogue way and the dialogue in the time and space between pre-figurative culture and post-figurative culture.

For rural primary schools, in the morning, the main course is subject course in the classroom, which occupied 60% of curriculum schedule, include the first class in the afternoon. While in the afternoon, there is a large number of activity curriculum, which occupied 40% of curriculum schedule. In addition, there are a large number of extracurricular education carried out by informal and non-formal education, including network contact, interpersonal communication and social practice. Learners have learned knowledge and theory through teachers' textbooks in class. But learners must learn from their own experience and more extensive learning to learn what is really happening and complete the learning process. This is the process of teaching and learning in different ways. Different courses reflect different cultural tendencies and cultural ways, and also need to have corresponding teaching forms. It is just a different way of teaching and cultural expression, which is mutually beneficial rather than the choice between the teacher-centred teaching and the student-centred learning. The way of teaching is the reflection of cultural expression. It is necessary for the students to develop a multicultural issue in the context of the development of the teaching material and the social practice, thus can realize the pre-figurative cultural heritage and post-figurative cultural innovation.

The following is a teaching experiment that integrates the three-level and three-type curriculum systems in a primary school: in the third grade of

a primary school, there is a group of words and oral communication and writing themes to describe the scenery of the family. The primary school Chinese teacher, in addition to teaching Chinese by textbook, also guides students to expand reading, around the landscape to collect and organize the characteristics and functions of representative scenery, and how to be a good small guide to introduce the three aspects of the home landscape to work together to look up local knowledge and share. The students visited the rural doctor, who can teach them how to identify the traditional Chinese medicine on the mountain. According to the observation and reference of the collection, the students put out *the handbook of the Huaguo Chinese herbal medicine*. In the end, more closely related issues are discussed and practiced, such as what is the advantage of the traditional Chinese herbal medicine for the local economy, society, environment and culture? Students acted as tour guides for their hometown, sell their own manual. Through the systematic teaching and learning design of three-level and three-type courses, cross-cultural learning has been practiced, community service ability and social responsibility consciousness improved, as well as the individual ability in reading, speaking and writing.

The common ideal of multicultural education and human's all-round development needs to be liberated from the concern about the superficial form of curriculum knowledge, so as to notice the cultural differences behind curriculum diversity, and give full play to the social value of cross-cultural education and curriculum ecological construction. Definitely, this kind of course construction is one of them, not the only one.

6.2.3 Multicultural education guides teachers and students to pay attention to and participate in discussions on issues related to the development of globalization and industrialization, cultivates critical thinking ability, and participates in the inheritance of local culture and cross-cultural communications.

Multiculturalism shows the difference between the material culture carrier and the values of the national, ethnic groups and community. It also shows the difference between industrial civilization and agricultural civilization and the way of life and development of the country. The globalization of information provides the opportunity to communicate and integrate with multiculturalism, but industrialization and capital globalization bring challenges to multiculturalism. The school education is lack of attention to the development of globalization and cultural diversity.

Through the investigation, we found out the facts that some schools have carried out educational activities related to local culture, but it is limited to material and technology, and even the performance is greater than the connotation, and lack of attention to the culture behind material and technology. In addition, the teacher lacks the perspective and ability of multiculture, and they also lack the sensitivity of the multiculturalism issue. Therefore, the multi-dimensional dialogue between teachers and students in the society and age can be difficult to perceive and benefit from the social and cultural demands of the future. Consider the text of 'Cat' which is

written by Mr. Laoshe as an example. The textbook has made a lot of changes to the original and can not reflect the author's original critical thinking about reality, such as the problem of agricultural production, which is against the nature law, is the criticism and reflection of the commercial development of the natural landscape. Teachers' teaching is generally based on the requirements of textbooks and current curriculum standards. As long as students master language art and expression skills, their emotional and value goals are only "love for cats and Baotu spring", rather than the criticism of rough industrialization and commercialization. In view of the above findings and problems, the author will design the course:

- First of all, by the subject curriculum in the morning, the teacher based on the textbook to impart knowledge and set up reading and practical work.
- Secondly, by activities curriculum in the afternoon, students do a lot of research and discuss in high quality between teachers and students, and realize the cross-time dialogue between Mr. Lao She and students.
- Finally, by the investigation and research report of outside school, students understand the reality and write articles to compare with the author in that place and that time. Through this learning process, the students realize that the local culture destruction has never been stopped, but the protection needed to start from now and around. Such courses can inspire students to read and read extensively, and enlighten students based on empirical research and methods, can help teachers and students combine the current social reality to understand and record the history, and the continuation of the author's reflection on the development of the local culture.

In view of teachers' lack of knowledge in the fields of sociology of development and sociology of education, it is necessary to organize teacher training and reading clubs on social development topics in order to alleviate teachers' confusion and powerlessness in face of social problems when educating students.

For example, a discussion about the adjustment of the stage policy: Why there is a combination of agriculture, technology and education during the 1980s? But no combination of industry and technology and education in rural areas? Why the rural labour force should be transferred to the city? Why stimulate consumer consumption? Why does the land only become capital? Why is the local culture facing a crisis? Because teachers have these social issues thinking and vision, they have the ability to find problems and solve problems: If I was a policy maker, I would improve the policy. If I were a proposal, I would suggest how to do it, and promote their views and opinions to the society and take action.

In short, cultural heritage education and cultural diversity education are not to make a choice in the city culture and the country's cultural and local culture. But in order to promote the development of the city and rural cooperation, the industry and agriculture cooperation, the future society and the individual development cooperation, and the way of life to be more free and comprehensive.

Through multicultural education and cross-cultural learning, we can build confidence and respect others, realize that there is no high and low between every culture, and there is good and bad inside, we are willing to build a world full of diversity

and appreciation. Thus, in such a world, each individual can get the maximization freedom and comprehensive development.

### 6.3 Conclusions and Thinking

Firstly, to promote curriculum integration and cross-grade teaching in the rural small-scale school, at the same time, launch the multicultural education, especially the rural culture education, which full of the practical value.

Secondly, only to focus on the culture and cultural methods behind the knowledge and skills of the course, the basic education curriculum reform could become more comprehensive and sustainable, and it is possible for curriculum diversity to create the curriculum ecological construction. Thus, the teaching method of the course could become dialogic, cohesive and complementary.

Thirdly, globalization and urban-rural integration are the opportunities and challenges for the human culture development. Multicultural education could enrich the curriculum content of school education, enhance learner's critical thinking and the ability of discovering problems and solving problems. Meanwhile, multicultural education could provide more opportunities for the world peaceful coexistence, mutual learning and sustainable development.

The author tries to comb out the relationship between the curriculum reform and the multiculture. The multiculture is not only involved in the curriculum setting and teaching practice but also involved in the course teaching and becomes a significant path in social progress.

Since 100 years ago, Mr. Cai Yuanpei has advocated the inclusive university spirits. Peking University initiated the debate between atheism and theism under the banner of metaphysics, science and philosophy (Chen 2007). Whatever the theological education and scientific education, all not be separated from the soil of multiculturalism, and whatever theological course or science course, if only left the memory of knowledge, there is no religious spirit and scientific spirit, meanwhile, lost the original purpose of theology and science courses. At present, the reform of basic education curriculum should not only solve the problem of knowledge and cultural division but also pay attention to the cultural spirit behind the curriculum. We should concentrate on the globalization opportunities and challenges of China and the world in great changes, take the initiative to develop multicultural education and establish a more inclusive society.

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# Chapter 7

## Factors Affecting International Student Mobility in Transnational Higher Education: Perspectives from China and Germany



Hongmei Sziegat

**Abstract** This study overviews contextual push–pull factors affecting international student mobility between Chinese and German higher education institutions from comparative perspectives. It verifies the important role of DAAD and China Scholarship Council (CSC) as well as diverse governmental and non-governmental initiatives in promoting international student mobility, especially financial incentives. Transnational higher education collaborations between China and Germany have also promoted international student mobility. It reveals the trends of emerging transnational models of degree programs moving from the traditional credit and degree mobility of “A” model (one host country) to “A + B” model (two host countries), “A + B + C” model (three host countries), and “A + B + C + D” model (four host countries), which make international student mobility more complex than “horizontal mobility” and “vertical mobility.” As the development of transnational higher education, internationalization, and “Englishization” of higher education, it is of most importance to set up transnational knowledge network and talent pools to promote “brain circulation,” “brain exchange,” and “brain gain” instead of “brain drain” or “brain waste.” Since global competitions for human capitals have increased greatly, not only host and sending countries, but also the third countries may benefit from attracting international students to enrich national human capitals.

**Keywords** International student mobility · Transnational higher education · China · Germany

### 7.1 Introduction

“Asian students account for 53% of all students studying abroad worldwide. The largest numbers of international students are from China, India and Korea. The share of international students in some of the most attractive countries such as Germany and the United States has declined. The share of international students in Germany fell by three percentage points between 2000 and 2011” (OECD 2013). “The US is still

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the world's leading destination, but its market share is falling (from about 23% of all internationally mobile students in 2000 to 17% in 2011), partly due to the increasing share of other English-speaking destinations such as the UK, Australia, and Canada, and partly due to the growing trend toward intra-regional mobility" (ICEF 2015). "Asia is becoming a compelling destination for international students, particularly those from within the region" (ICEF 2015). "International student mobility from China is one of the world's leading sources of international students, and one of every six internationally mobile students are from China" (ICEF 2015). "As one of the middle powers (including France) of higher education destinations, Germany has attracted large numbers of students from China, one of the world's two most promising markets (India being the other), not least because of the extremely good value provision on offer at higher education institutions" (Verbik and Lasanowski 2007, p. 5). "As one of the emerging contenders, China has experienced especially rapid growth in terms of international student numbers, since it has taken active measures to develop strategic initiatives to recruit international students, which has dramatically increased its competitiveness in the rapidly changing global higher education market" (Verbik and Lasanowski 2007, p. 7).

"According to the OECD reports in 2011, almost half of all foreign students were enrolled in one of the top five destinations for tertiary studies abroad: the US, with 17% of all foreign students worldwide, followed by the UK (13%), Australia (6%), Germany (6%) and France (6%)." (OECD 2013). "While the composition of the major destination countries has remained largely stable, with the main hosts being the United States, United Kingdom, Germany, France and Australia, the share of 'frequent movers' has significantly expanded." (Knerr et al. 2010). "A record breaking 397,635 international students went to China in 2015, solidifying its position as the third most popular destination country for overseas students. With an average 10% year-on-year growth, the number of international students in China has doubled since 2005, making China the third most popular destination for overseas students, ahead of Canada, Germany and France and behind the US and the UK" (Nolan 2016). "As of 2014, there are round 1000 Chinese Ministry of Education (MOE) approved joint & articulation programs for bachelor and postgraduate courses" (Hearps 2016).

Global student mobility flows show the importance of inward and outward international student mobility not only in China and Germany but also between China and Germany, which indicates the important significance of this study. The specific objectives of this study are to identify contextual push-pull factors affecting international student mobility associated with transnational higher education collaborations between China and Germany; and to identify new patterns of international student mobility and emerging transnational models of degree programs in the context of transnationalization of higher education, internationalization, and "Englishization" of higher education. In doing so, this study aims to answer the following research questions: What are emerging transnational models of degree programs linked with international student mobility in transnational higher education? And what contextual factors have affected international student mobility between Chinese and German higher education institutions?

## 7.2 International Student Mobility and “Brain Circulation”

“Diversified definitions of ‘international’ or ‘foreign’ students in global different education systems challenge the analysis of comparative mobility between countries” (Verbik and Lasanowski 2007, p. 4). “Foreign students are defined according to their citizenship.

International students are thus a subset of foreign students, so international students are those who have crossed borders for study” (OECD 2013). In German higher education system, “foreign students are defined as ‘mobile foreign students’ (Bildungsausländer), those who travel to Germany specifically for study, and ‘non-mobile foreign students’ (Bildungsinländer), those in possession of German secondary school qualifications and who likely have German residency status, including students who are long-term or permanent residents without German citizenship” (Verbik and Lasanowski 2007, p. 10). “An internationally mobile student is a student having crossed a national border in order to study or to undertake other study-related activities for at least a certain unit of a study program or a certain period of time in the country they have moved to” (Richters/Teichler 2006, p. 83).

However, there are still problems with nationality versus residency: foreigners since birth, migrants, double nationalities, change of nationality, and move to or return to the country of study (De Wit et al. 2008). “UNESCO introduced the concept of ‘internationally mobile students’, individuals who leave their country or territory of origin and travel to another for the purpose of studying there. According to UNESCO, statistics about ‘internationally mobile students’ more accurately represent inbound and outbound student flows, as they consider more than the singular criterion of citizenship, which has traditionally been the defining indicator of ‘foreign students’. By considering other criteria such as permanent residency and prior education in addition to citizenship, the concept of the ‘internationally mobile student’ eliminates potential misunderstandings resulting from different definitions between countries and facilitates a more comprehensive understanding of trends in worldwide mobility” (Verbik and Lasanowski 2007, p. 4).

“The definitional clarification concerns typologies of mobility defined in relation to criteria of stage and type of qualification or ‘credit’. Three types of student mobility are mobility for an entire program of study termed diploma or degree mobility, mobility for part of the program termed credit mobility, and voluntary mobility undertaken for a variety of personal reasons” (King et al. 2010, p. 2). “Regarding mobile students’ socio-economic and demographic characteristics, a distinction needs to be made between credit and degree mobilities, although there are common features. Various studies show credit mobility has an income pay-off and tends to lead to subsequent career or residential mobility abroad. Studies on degree mobility also reveal academic and social selectivity—indicated by parental wealth, predominantly independent-sector school background and personal/family history of travel and international links. Some of the literature ties this into issues of cultural capital and reproduction of social privilege and class divides across generations” (King et al. 2010, p. 2). “Student mobility are considered within the dual context of the interna-



tionalization of higher education and skilled migration (IOM 2008, pp. 105–125)” (King et al. 2010, p. 2). “International student mobility as a process of ‘becoming’ encompasses students’ aspirations for educational, social, personal and professional development, and captures international students’ lived realities, having the potential to facilitate the re-imagining of international student mobility with new outlooks” (Tran 2016).

“Teichler (2001) identified ‘vertical mobility’, i.e. students from poorer regions and countries decide to study in countries or at universities in which they hope to get a better education than the one provided in their home country, or mobility from economically and academically less favored countries to economically and academically more favored countries; and ‘horizontal mobility’, i.e. free of immediate economic motives and without politically induced barriers such as student mobility within the Erasmus program” (Kehm 2005, p. 19; Teichler 2012, p. 9). Finger (2011) argued that “it is possible to differentiate between social (vertical or upward) and horizontal mobility. Social (vertical or upward) mobility refers to a change of the social position that is associated with a higher appreciation by others, while horizontal mobility means geographical or spatial mobility that is linked with an actual movement of persons that can be differentiated in terms of the scope of the movement” (p. 6). Powell and Finger (2013) addressed social selectivity of spatial mobility as well as the relationship of social and spatial mobility. “Higher education is viewed as the most assured pathway to higher incomes and maintained or upward social mobility. Higher education institutions have continuously facilitated spatial mobility, as individuals’ cross-national borders to study or conduct research abroad—finding opportunities for career advancement. Selective higher education institutions recruit young adults from privileged segments of society (with the means and desire to cross borders) and are a key factor in global ‘brain circulation’” (Powell and Finger 2013, p. 271).

However, “Vertical mobility” (Teichler 2001) may lead to two directions: upward or downward. Teichler’s (2001) “vertical mobility” and Finger’s (2011) “social mobility” are only focused on “upward (vertical) mobility,” but it is not concerned about “downward (vertical) mobility.” “Downward (vertical) mobility” may occur due to different reasons and factors such as financial incentives, cultural attractiveness, and career development in economically and academically less favored host countries. For instance, international students may get chances of education that are not available in their home country such as specific language and cultural experience. There may exist some potential barriers (such as no available opportunities, lack of financial support, too high competitions, and higher tuition fee) in their home country, which could be solved or be avoided through international student mobility in the globally differentiated higher education systems. Some popular or specialized majors are not possible or difficult to obtain opportunities in the host country, but it could be possible and easier to get them through “downward (vertical) mobility” or “horizontal mobility.”

“Many vertically mobile students aim to get employed in the host country of study or in another economically advanced country, which tends to be appreciated by students and graduates themselves, but is often deplored by their country of origin as ‘brain drain’” (Teichler 2012, p. 10). Furthermore, the multi-destinations of

host countries made international student mobility more complex such as “vertical–horizontal mobility,” “horizontal–vertical mobility,” and “double/triple vertical or horizontal mobility,” which associated with emerging transnational models of international degree programs in the global higher education market. Among different host countries of “horizontal mobility,” some host countries may have comparative advantages due to linguistic, geographical, economic, and social–cultural advantages or other reasons. “Disparities in participation in international exchange are likely to persist, reproducing social reproduction of dis/advantages” (Powell and Finger 2013, p. 271). The new trends of international student mobility move from one destination to multi-destinations as transnational mobility, or move back for a higher level of degree education. The increasing number of students go abroad for bachelor’s or master’s degree and go back home country to study a higher-level degree associated with “return mobility,” which reflects more diverse and complex trend of international student mobility. Such tendency of international student mobility may occur in bachelor, master, and doctoral phases, which can also be credit or degree mobility. Return mobility in post-doctoral phase is also a growing trend in China nowadays.

It is important to keep balance between inward and outward mobility (King et al. 2010, p. 3). “Most discussion focuses on inward mobility, for its revenue-generating benefits to host HEIs and to the wider economy” (King et al. 2010, p. 3). “However, there is a growing appreciation of the importance of outward mobility, in recognition of the fact that graduates of source countries with foreign experience bring greater human capital to the knowledge economy of the host countries. A range of good practices HEIs can implement to foster greater outward mobility: the promotion of mobility options at admissions open days, greater provision of clear and accurate information, greater staff mobility (since this has synergies with student mobility), highlighting financial benefits and support, good employment outcomes from alumni and employers’ testimonials, ensuring clarity of credit transfer systems, and using returning students as mobility ambassadors to prospective mobile students by involving them in promotional events, particularly for work placements. For degree mobility, HEIs can do little except promote foreign universities as destinations for postgraduate study” (King et al. 2010, p. 3).

“The notion of ‘brain circulation’ helps to distinguish the issue of knowledge transfer from the physical presence of the individual migrant” (Ackers 2005, p. 100). “Brain circulation” offers a conceptual alternative to the “never straightforward boundary between migration and mobility” (King 2002, p. 90) and converges with the notion of “circular academic mobility” (Jöns 2009, p. 6). “Imbalances in mobility flows are increasingly being raised by countries which find themselves in an unfair position, displaying either higher outflows than inflows, or the opposite” (De Wit et al. 2013, p. 22). In general, higher education institutions with comparative advantages on regional, national, and international levels may benefit more from international student mobility than those in relative disadvantageous situations. Saxenian (2005) argued that “the same individuals who left their home countries for better lifestyles abroad are now reversing the brain drain, transforming it into ‘brain circulation’ as they return home to establish business relationships or to start new companies while maintaining their social and professional ties to the host country.” However,

how to sustain balanced “brain circulation” and “brain exchange” still leave space to discussion, since some nations may benefit from comparative advantages.

As the development of technology at the age of big data, it is easier to access information of study abroad than before. As the alternative to physical mobility, virtual mobility (Kenyon 2006) has changed the patterns of spatial mobility (Powell and Finger 2013). “The diversity of opportunity for cross-border learning is the expansion of alternative modes of educating students including branch campuses, distance learning (i.e. ‘open courseware’ and MOOCs), joint and dual degree programs, ‘sandwich’ short-term study abroad programs, twinning, and MOOCs in curricular integration. The new multi-directionality of student flows has forced a new interpretation of ‘brain drain’ and the more applicable terms are ‘brain circulation’ or ‘brain exchange’; Increasing numbers of students are returning to their sending countries to find employment” (Bhandari and Blumenthal 2010).

“Return brain drain” (Jonkers and Tijssen 2008) for host countries usually means “brain gain” for sending countries. “Host countries may lose human capital when Chinese scientists return home, but they may gain in terms of scientific linkages within this rapidly emerging and globalizing research field” (Jonkers and Tijssen 2008, p. 299). With the development of transnational student mobility, “transfer brain drains” emerges when international students choose to move to the third countries, which will be “brain drain” for both sending and host countries. Welch and Zhen (2008) explored the evolution of a concept—brain drain, brain gain, and brain circulation/diasporic networks. “The loss of significant numbers from the elite group through brain drain, represents a major and permanent loss to the country of origin” (Welch and Zhen 2008). “Such flows deepen the existing global inequality of knowledge creation and application: developed countries compete to attract research talent from developing countries, who consolidate the already strong knowledge base in the former (Hugo 2002; Welch 2007), at the cost of the latter” (Welch and Zhen 2008, p. 2). “The hierarchical structure in knowledge distribution and dissemination has become less fixed, as the loci of power and growth are multiplying, and becoming more dispersed (Meyer et al. 2001)” (Welch and Zhen 2008, p. 4).

### 7.3 Transnational Models of Degree Programs

Transnational higher education (TNHE) can have numerous forms (GATE 1999):

“Branch campuses: set up by an institution in another country to provide its educational or training programs to foreign students; Franchises: an institution (A) approves an institution (B) in another country to provide one or more of A’s programs to students in B’s country; Articulation: the systematic recognition by an institution (A) of specified study at an institution (B) in another country as partial credit towards a program at institution A; Twinning: agreements between institutions in different countries to offer joint programs; Corporate programs: many large corporations offer programs for academic credit from institutions, often involving crediting across national borders; Online learning and distance education programs:

those distance education programs that are delivered through satellites, computers, correspondence, or other technological means across national boundaries; Study abroad: a student from institution (A) travels to take courses and live for a fixed period of time at institution (B) which is located in a different country” (Huang 2003, p. 193).

“Cross-border mobility of programs is ‘the movement of individual education/training courses and programs across national borders through face-to-face, distance or a combination of these modes. Credits towards a qualification can be awarded by the sending foreign country provider or by an affiliated domestic partner or jointly” (Knight 2005). “Franchising, twinning, double/joint degrees and various articulation models are the more popular methods of cross-border program mobility” (Knight 2006, p. 23). “A key factor in program mobility is ‘who’ awards the course credits or ultimate credential for the program. As the movement of programs proliferates, there will undoubtedly be further changes to national, regional and even international regulatory frameworks” (Knight 2006, p. 23). Therefore, cross-border mobility of programs in transnational higher education has diversified international student mobility.

As the development of transnational/cross-border higher education, new models of international degree programs have emerged and have changed the main traditional “A” model (degree programs with one host country) of degree programs to facilitate international student mobility. Even in one host country, “A1 + A2” model (degree program in two partner institutions in one host country) of national joint degree programs or (national branch campuses of one higher education institution inside one country) is developing in recent years, due to the collaborations of national higher education institutions and the development of national branch campuses. In Germany, the joint doctoral program “dynamic capabilities and relationships” is cooperated by two German universities: the European University Viadrina Frankfurt (Oder) and the German Graduate School of Management and Law in Heilbronn. In particular, German private universities are very actively engaged in expanding national campuses or study centers such as FOM, European School of Management and Technology (ESMT), and Frankfurt Schools of Finance and Management. In China, some top universities have set up their national or international branch campuses in cooperation with international or national higher education institutions such as Zhuhai branch campus of Beijing Normal University. The model combined national and international delivery of degree programs in one higher education institution also emerged such as exported curricula and qualifications delivered via local partners and overseas branch campuses. Studying in one university with opportunities to study their international branch campuses also stimulates international student mobility. For example, FOM has cooperated with Chinese universities in running colleges/schools and programs in China (see Table 7.1).

The development of transnational higher education collaborations and international branch campuses is promoting “A + B” model (degree programs with two host countries such as dual degree programs) of degree programs, which A and B could also be either host country or sending country. For instance, Bremen University of Applied Sciences offers dual degree IMBA programs through international

**Table 7.1** List of main China-German cooperation in running schools and degree programs

End year <sup>a</sup>	China-German cooperation running schools/Colleges (enrollment start and end year according to the validity of instruments of ratification)	Cooperated German Universities/Organizations
2020	China-EU School of Law at China University of Political Science and Law (2008–2017)	University of Hamburg
2028	Sino-German College at University of Shanghai for Science and Technology (2014–2024)	Hamburg University of Applied Sciences, Coburg University of Applied Sciences, and Furtwangen University of Applied Sciences
2020	Sino-German College Applied Sciences of Tongji University (2005–2016)	Esslingen University of Applied Sciences
2018	Sino-German College of Tongji University (1997–2017)	DAAD
2023	Chinese-German Institute of Engineering at Zhejiang University of Science and Technology (2014–2019)	University of Applied Sciences Lübeck, Germany, University of Applied Sciences West Coast
2024	China-German Technological Institute at Qingdao University of Science and Technology (2013–2023)	University of Paderborn, Koblenz University of Applied Sciences, University of Siegen, Ruhr West University of Applied Sciences
2028	College of International Exchange, Shandong Agricultural University (2012–2024)	University of Applied Sciences for Economy and Management in Essen (FOM)
2025	Sino-German School of Shanxi University of Finance and Economics (2010–2021)	University of Applied Sciences for Economy and Management in Essen (FOM)
2016	China-German College, Shanxi Agricultural University (2008–2011)	Anhalt University of Applied Sciences
End year <sup>a</sup>	China-German Cooperated programs (enrollment start and end year according to the validity of instruments of ratification)	China-German Cooperated Universities/Organizations
2024	Electrical Engineering and Automation undergraduate program chemical (2003–2020); Engineering and Technology undergraduate program (2003–2020)	East China University of Technology and Germany Lübeck University of Applied Sciences
2020	Applied Chemistry undergraduate program (2012–2016)	East China University of Technology and Clausthal Technical University
2025	Chemical Engineering and Technology undergraduate program (2013–2021)	

(continued)

**Table 7.1** (continued)

2025	Mechanical Design, Manufacturing, and Automation undergraduate program; Electrical Engineering and Automation undergraduate program; International Economic and Trade undergraduate program (2002–2025)	Shanghai University of Technology and Hamburg University of Applied Sciences
2021	Economy and Management undergraduate program (2004–2017)	Shanghai University of International Business and Economy and Osnabrück University of Applied Sciences
2023	German undergraduate program (2015–2019)	Shanghai International Studies University and University of Bayreuth
2025	Engineering in Automobile Industry and Automotive Technology undergraduate program (2012–2021)	Shanghai Normal University and Landshut University of Applied Sciences
2023	Light Chemical Engineering undergraduate program (2002–2019)	Donghua University and Reutlingen University of Applied Sciences
2022	Electrical Engineering and Automation undergraduate program (2014–2018)	Chongqing University of Posts and Telecommunications and Heidelberg University of Applied Sciences
2017	Marketing undergraduate program (2012–2013); Applied Chemistry undergraduate program (2012–2013)	Jiangsu University of Technology and Merseburg University of Applied Sciences
2024	Mechanical Design, Manufacturing, and Automation undergraduate program (2004–2019); Environmental Engineering undergraduate program (2004–2019).	
2022	Mechanical and Electrical Engineering undergraduate program (2013–2017); Mechatronic Engineering undergraduate program (2013–2017)	Changshu Institute of Technology and North Hesse University of Applied Sciences
2020	Technical Management undergraduate program (2013–2017)	Nanjing University of Aeronautics and Astronautics and Hamburg University of Technology
2023	Visual Communication Design undergraduate program (2015–2019); Arts in Brand design undergraduate program (2015–2019)	Beijing Normal University, Zhuhai, and Hamburg University of Applied Sciences for Communication and Management
2024	Electrical Engineering and Automation undergraduate program (2014–2018)	Hubei University of Science and Technology and SRH Heidelberg University of Applied Sciences
2023	Logistics Management undergraduate program (2015–2019)	Wuhan Business University and Essen Economic Management Applied Science and Technology University (FOM)

(continued)

**Table 7.1** (continued)

2019	Logistics Management undergraduate program (2011–2018)	Hefei University and Osnabrück University of Applied Sciences
2021	Mechanical Design, Manufacturing, and Automation undergraduate program (2013–2017); Industrial Design undergraduate program (2013–2017)	Hefei University and Hannover University of Applied Sciences
2024	German undergraduate program (2017–2020)	Jilin Huaqiao University of Foreign Languages and Munich University of Applied Languages
2021	Electrical Engineering and automation undergraduate program (2013–2017)	North China University of Science and Technology (former Hebei Union University) and Heidelberg University of Applied Sciences
2022	Machine Manufacturing and automation undergraduate program (2014–2018)	
2023	Environmental Engineering undergraduate program (2014–2023)	Hebei University of Technology and Nordhausen University of Applied Sciences
2021	Business Engineering undergraduate program (2013–2017)	Shenyang University and Heidelberg University of Applied Sciences
2025	Digital Median undergraduate program (2017–2021)	Beijing University of Technology and Technical University of Dresden
2025	Mechanical Design, Manufacturing, and Automation undergraduate program (2017–2021)	Yantai University and Merseburg University of Applied Sciences
2020	Mechanical Design and Manufacturing, and Automation undergraduate program (2011–2016)	Liaocheng University and Anhalt University of Applied Sciences
2022	Mechanical Design, Manufacturing, and Automation undergraduate program (2014–2018)	Qilu University of Technology and North Hesse University of Applied Sciences
2026	International Economic and Trade undergraduate program (2005–2021); Biological Engineering undergraduate program (2005–2021)	Henan University and Anhalt University of Applied Sciences
2023	Automation undergraduate program (2015–2019)	Shenyang University and University of Applied Sciences for Economy and Management in Essen (FOM)
2023	Engineering undergraduate program (2014–2018)	Xi'an Aviation University and Nord-Hessen University of Applied Sciences
2019	Master's degree program in Vocational and Technical Education (2004–2017)	Beijing University of Technology and Technical University of Dresden
2022	Electrician and Vehicle Electrification master's degree program (2018–2020)	Beijing University of Technology and Technical University Ingolstadt

(continued)

**Table 7.1** (continued)

2019	International Brand Communication master program (2014–2017)	China Academy of Fine Arts and University of Applied Sciences for Design and Communication
2023	Monumental Heritage master program (2016–2020)	China Academy of Fine Arts and Anhalt University of Applied Sciences
2019	Science in Chemical and Energy Engineering master program (2012–2016)	Jiangsu University and Otto von Guericke Universität Magdeburg (University of Magdeburg)
2020	Non-destructive Testing master program (2013–2017)	Southwest University and Dresden International University, Fraunhofer Institute for Non-Destructive Testing
2016	Fine Arts master program (2010–2014)	China Academy of Fine Arts and Berlin University of Arts
2011	Mechanical Design, Manufacturing, and Automation undergraduate program (2003–2007)	Shanghai Normal University and Oberfranken Institute for Technology and Innovation Management
2010	Economics undergraduate program (2010)	Northeast University of Finance and Johannes Gutenberg University Mainz
2010	Economics undergraduate program (2010)	Northeast University of Finance and Anhalt University of Applied Sciences

<sup>a</sup>End year: according to validity of instruments of ratification. Sources in Chinese: Sino—foreign cooperation in running school supervision information platform <http://www.crs.jsj.edu.cn/index.php/default/approval/orglists>; [http://www.de-moe.edu.cn/article\\_read.php?id=12054-20160712-3591](http://www.de-moe.edu.cn/article_read.php?id=12054-20160712-3591)

business school alliance (IBSA) in two optional countries. The “A + B” model of dual/double degree program includes two separate courses of study carried out at cooperating universities from two host countries. The student completes parts of the academic program at both universities. At the end of a double degree program, both universities confer their own degree certificates. The “A + B” model of joint degree program is shared by two or more universities that require a stay abroad. The student receives a shared degree certificate upon successful completion of the program.

“A + B + C” model (degree programs with three host countries) and “A + B + C + D” model (degree programs with four host countries) are developing in Germany and in the EU member states. It is also expanding to non-EU member states. Erasmus+ Joint Master Degrees aim at fostering quality enhancements, innovation, excellence, and internationalization in higher education institutions; at boosting the attractiveness of the European Higher Education Area (EHEA); and at improving the level of competences and skills of master graduates, and their employability. For example, the European Doctorate in Law and Economics (EDLE) and the European Master in Law and Economics (EMLE) programs offer interdisciplinary studies of law and economics at two or three European and non-European universities. Each partner university awards a master’s degree. The EMLE program offers multiple degrees with nine partner universities from nine countries for students to choose



from and study at up to three different universities, which has been recognized by the European Commission as an Erasmus+: Erasmus Mundus Master program of “outstanding academic quality.” MARIHE Joint Master Degree program can choose four host universities of all partner universities in different countries and is supported by the Erasmus+ program of the European Union.

“A + B” model, “A + B + C” model, and “A + B + C + D” model with multi-destinations of international student mobility are gaining the popularity and have become the promising trends of international degree programs. “A + B” model (degree programs with two host countries), “A + B + C” model (degree programs with three host countries), and “A + B + C + D” model (degree program with four host countries) of international academic programs cooperated by universities from different countries also increased the competitions of international student recruitment among host countries. The new trend of international student mobility is moving from the traditional “A” model (degree programs with only one host country), to “A + B” model (degree programs with two host countries such as dual degree programs), “A + B + C” model (degree programs with three host countries), and “A + B + C + D” model (degree program with four host countries) through international academic programs among universities. Among these three models of programs, students can move in different host countries. The most important factor among these models is that one host country could also be the sending country at the same time. For example, the Erasmus Mundus MARIHE program for Chinese students is “A + B + C” model because a Chinese university is a host university, but it is regarded as “A + B + C + D” model for international students from non-host countries. Most noticeably, if sending country is also one of the host countries, it tends to have higher potential to recruit more students from the sending country. The involvement of the sending country into transnational degree programs as one of the host countries may enhance international student mobility from host countries and non-host countries.

Furthermore, the expanding of overseas branch campuses of universities makes it possible for students to study in multi-host countries within a university. This new trend is very promising, especially for world-class universities and private universities. The traditional “A” model among world-class universities remains its competitive advantages and its popularity among international students worldwide. “A + B” model is popular among international degree programs for international students. Some German universities run “A + B” model in cooperation with international higher education institutions to enhance their global competitiveness to attract international students.

## **7.4 Internationalization and ‘Englishization’ of Higher Education in China and Germany**

Internationalization and “Englishization” of higher education are intertwined with each other. “In the process of globalization, internationalization is the key to survival

for higher education institutions” (Earls 2013, p. 1). “Facing limited resources, it is necessary to develop and implement the most effective ways to bring internationalization in higher education systems” (Berchem 1991). The trend of internationalization of higher education goes two directions: internationalization of higher education at home such as international joint programs and cross-border higher education such as setting up overseas branch campuses. “International students are now more likely to be enrolled in the highest levels of education than in the past, reflecting an increasing internationalization of academic research and science” (OECD 2009, 2013). “English has become the most widely used language worldwide. Consequently, non-native English-speaking countries have entered a process of introducing English-medium higher education as a means of overcoming any competitive disadvantage associated with their linguistic situation. As a result, an ideology has emerged among higher education institutions in non-English-speaking countries that internationalization is synonymous with the introduction of English-medium degree programs” (Earls 2013, p. 1). English is playing a rapidly increasing important role in higher education in both Europe and Asia (Kirkpartrick 2011). Germany began to introduce English-medium degree programs at higher education institutions since 1996 (Earls 2013), while China also started English-medium degree programs. “Internationalization may have an invidious side in that ‘internationalization’ often results in ‘Englishization’, as universities succumb to pressure to use English as the medium of instruction to attract international students and staff to their campuses and courses. Quality of higher education and the availability of programs with English as the language of instruction that drive inflows of international students” (Kahanec and Králiková 2011, p. 9). English-medium degree programs in non-English native-speaking countries are gaining popularity among international students.

“Both Chinese government and universities have realized that only with practice at the international level can Chinese higher education become globally competitive and eventually gain world-class status” (Wang 2009; Cai 2011). Chinese higher education opens to further international cooperation, and exchange of education resources is clearly reflected in the Outline of China’s National Plan for Medium- and Long-term Education Reform and Development (2010–2020), issued by the State Council in 2010. The latest policy of the Design of Building World-Class Universities and World-Class Disciplines in China, which was announced in November 2015, made it clear to develop the internationalization in China’s higher education at a higher level.

Meanwhile, Germany also went through a series of policies to internationalize higher education, and to enhance international visibility and global impacts. The “Excellence Initiative,” initiated in 2005, provided additional funding for elite institutions, research clusters, and postgraduate schools, has increased the international visibility of German higher education institutions and has promoted international student mobility flows to Germany. The DFG supports international research cooperation in all its funding programs and offers opportunities for researchers to participate in international collaborations.

Furthermore, the development of the privatization, commercialization, and marketization of higher education, increase the dependence of German private higher

education institutions recruiting self-funded international students. Chinese students are the main target international students for those German higher education institutions. Most German private higher education institutions and some fees-based programs of German public higher education institutions rely on international student recruitment. Some private universities have expanded branch campuses through the collaborations with Chinese universities running degree programs or joint colleges. Chinese-foreign cooperation in running degree programs in Chinese universities and branch campuses of foreign universities in China also tend to recruit international students such as NYU Shanghai, Duke Kunshan University (DKU), Xi'an Jiaotong-Liverpool University (XJTLU), and China Institute of the University of Birmingham. With the potential expanding tendency of national and international branch campuses, several top Chinese universities expand cross-border campuses such as overseas branch campuses of Peking University and Zhejiang University in UK.

## **7.5 Transnational Higher Education Collaborations Between China and Germany**

The economic connection between China and Germany leads to the need of talent pools and increased collaborations among higher education institutions in Germany and China.

German government regards China as an important strategic partner to strengthen political, economic, and educational cooperation between Germany and China. “Two governments’ strategies include not only measures such as the German-Chinese investment-protection agreement and opening Chinese Chamber of Commerce in Europe, but also the facilitation of cultural, linguistic, academic and educational exchange through bodies such as the Confucius and Goethe institutes, the DAAD (German Academic Exchange Service) and China Scholarship Council. Transnational research partnerships between prestigious organizations in China and Germany have resulted in the establishment of the CAS-MPG Partner Institute for Computational Biology in Shanghai, Center for Sino-German Cooperation in Marine Sciences in Qingdao, Sino-German Institute for Law Studies, German-Chinese Lab for Research on Inorganic Membranes, and bilateral government-sponsored initiatives such as Chinese-German Platform for Electric Mobility” (Michael 2015). With the close cooperation with German universities, 14 Confucius Institutes have spread in Germany, which have played an important role in promoting Chinese language and culture as well as the collaborations between Chinese and German higher education institutions. To support the development of Confucius Institutes, to facilitate Chinese language cultural transmission, to cultivate qualified Chinese language teachers and promotion and Chinese talented students of Chinese language, Confucius Institute Headquarters (Hanban) launches the “Confucius Institute Scholarships” program to provide sponsorship to students, scholars, and Chinese language teachers of other countries to study in Chinese universities.

Germany and China had joint declarations of intent in education and research since 2011 and further intensify the cooperation in research and innovation including “the promotion of comprehensive cooperation and establishment of a strategic partnership in higher education in 2011; Strengthening of strategic partnership and cooperation in education and research as well as promotion of ongoing cooperation between German and Chinese universities in innovation-oriented research for the solution of global challenges in 2014” (BMBF 2015, p. 18). “Chancellor Angela Merkel proposed establishment of a joint research fund to ensure a reliable framework for strategic cooperation with China and the fund is to be launched in 2018 and, as of 2020, will be endowed with up to 4 Million Euros from each side every year” (BMBF 2015, p. 18).

Free University Berlin and Ludwig-Maximilians-University set up representative offices and collaborative projects in China in partnership with local universities (Michael 2015). Some German Universities established offices in China such as RWTH Aachen, Free University Berlin, Technical University Darmstadt, Frankfurt School of Finance & Management, University of Göttingen, Bucerius Law School, Kühne Logistics University, University of Hamburg, Friedrich-Schiller-University Jena, Karlsruhe Institute of Technology (KIT), University of Köln, Hochschulkon-sortium China NRW, TUM, University of Siegen, and University of Bayreuth. German education and research institutions in China include Alexander von Humboldt Foundation, Fraunhofer-Gesellschaft, Helmholtz-Gemeinschaft, Goethe-Institute and Goethe Language Centers, and Sino-German Center for Research Promotion (SGC). SGC is established in 2000 by the DFG (German Research Foundation/the Deutsche Forschungsgemeinschaft) and the National Natural Science Foundation of China (NSFC) to promote scientific cooperation between Germany and China. The Fraunhofer-Gesellschaft operates a representative office in Beijing since 1999. The Helmholtz Beijing Office as the Helmholtz Association in China promotes cooperation between the Helmholtz Centers and partners in the Chinese scientific community.

The cooperation between Chinese and German higher education institutions and research institutions stimulated the growth of international student mobility in both countries. “Higher education institutions play an important role in promoting international student mobility, because they are links between policy (government’s perspective) and practice (student’s perspective)” (Chen 2016, p. 101). “In 2012, among 328,330 foreign students in China, there are 6200 German students; Among 399,600 Chinese students overseas, 23,833 Chinese students study in Germany” (BMBF 2015, p. 12). Transnational higher education collaborations to offer international degree programs cooperated by higher education institutions between China and Germany have also increased international student mobility flows. “As of September 28, 2016, Education Foreign Affairs Supervision Information Network of Chinese Ministry of Education announced Chinese and German cooperative education (undergraduate and above levels) institutions and programs with a total of 53, removing 18 undergraduate programs due to the enrollment deadline to 2016, the remaining enrollment in 2017 with a total of 30 undergraduate programs accept 5 master programs. Sino-German cooperative education programs involved 20 Chinese universities, 21 German universities have opened a total of 38 courses, involving 21 majors, the

largest professional major is electrical engineering and automation. All projects are integrated into the Chinese national college entrance examination. Part of the programs can get the Chinese and German university diploma without going abroad and part of the programs requires that students only need to study at German University for a year or one and a half year to get a joint degree from Chinese and German higher education institutions” (IEduChina 2017). Main China-German cooperation in running schools and degree programs, proved by Chinese Ministry of Education, is listed in Table 7.1. Some programs ended due to the validity of instruments of ratification.

## **7.6 Factors Affecting International Student Mobilities in Transnational Higher Education**

“According to Altbach’s (1998) push–pull model for international student mobility, international mobility of students not only contributes to the internationalization of higher education institutions but also have impacts on the outlooks and subsequent careers and lifestyles of the students themselves” (Li and Bray 2007). “Some students were pushed by unfavorable conditions in their home countries, while others were pulled by scholarships and other opportunities in host countries. While some host societies have been ambivalent about non-local students, particularly when those students have been subsidized by the host governments, other societies have actively welcomed non-local students both as an economic investment and to broaden the horizons of domestic students. The pull factors of the host countries have included advanced research facilities, congenial socio-economic and political environments, and the prospect of multinational classmates” (Li & Bray 2007, p. 793). “The push factors create a generalized interest in overseas education but do not give specific direction to individuals, while the pull factors are specific to potential host countries and institutions” (Davis 1995; Li and Bray 2007, p. 794). “Both push and pull factors are external forces which impact on actors’ behaviors and choices, but much depends on the personal characteristics of the actors including socio-economic status, academic ability, gender, age, motivation, and aspiration” (Li and Bray 2007, p. 794). “While some individuals choose to respond to push and pull forces, others do not do so” (Altbach 1998, p. 240; Li and Bray 2007, p. 794). Li and Bray (2007) extended the one-way push–pull model into a two-way push–pull model, adding reverse push–pull factors, including pull factors at home and push (repel) factors outside (Li and Bray 2007, p. 813). “The volume of movement has greatly increased, and the roles of governments in both sending and receiving students have changed from direct sponsors into regulators and facilitators” (Li and Bray 2007, p. 792). Although the push–pull model (Li and Bray 2007) provides a basic classification and show how supply and demand relationships are formed, it still has some limitations (Liu and Wang 2009). Thus, this study further discusses the multi-way push–pull factors influencing international student mobility including the push–pull factors from the third

countries and from multi-host countries delivering the transnational models of degree programs.

“From a student perspective, push factors include their desires to study or travel abroad for personal development (to experience a different culture or learning context, enhance language skills, pursue high-quality study or research options unavailable at home); to enhance their employability; or eventually migrate to their chosen study destination. From a governmental perspective, push factors include a desire to improve the country’s educational and research capacity through students’ application of the skills and experiences gained abroad to support national socio-economic development, or a desire to help foster connections and build relationships in other countries to help meet foreign policy goals. Students are encouraged to study abroad via scholarships and student support packages, especially at postgraduate level. At the national level, ‘pull’ factors focus on the relative attractiveness of the study destination related to the motivations. Students’ motivations for mobility are also heavily influenced by the types of mobility that are available (credit or diploma), and the length and mode of study. At the institutional level, pull factors based on quality perceptions, credit transfer regulations, location, institutional marketing and internationalization strategies, financial incentives, and the student support infrastructure that institutions are able to provide” (Maringe and Foskett 2012). Universities can be regarded as areas of cultural differentiation for intercultural and language experiences (Sun 2010) or as transcultural space and as an approach of internationalization and migration (Darowska et al. 2014). “Global student mobility mirrors inter- and intra-regional migration patterns” (OECD 2013).

Important factors affecting international student mobility are summarized as follows: “Economic, educational and personal factors were the most important determinants of students’ intentions to study abroad” (Zheng 2003; Liu and Wang 2009). “The push factors relate to the economic, social and political forces within the source country and the pull factors are associated with the characteristics of the host country that the student selects as a final study destination (Mazzarol et al. 2001)” (Yang 2007, p. 3). “Tuition fees, government support and young generation population have significant impacts on international student mobility. Tuition fees, relative living expense and distance between host and source country have negative effect” (Liu and Wang 2009); “Four motivating factors of particular importance were a perception that an overseas course of study was better than a local one; the students’ ability to gain entry to particular programs; a desire to improve understanding of foreign societies, particularly Western ones; and an intention to migrate after graduation” (Mazzarol and Soutar 2001, p. 57; Li and Bray 2007, p. 794). “Elite list is a key strategic tool in relation to the concepts of educational ‘value’ and ‘difference’” (Findlay et al. 2012, p. 124); “Important factors such as returns to skills, visa policies and contextual variables such as multiculturalism, safety, weather and the friendliness of people as well as a number of higher education policies are important for international student mobility including tuition fees and costs of study, language of instruction, and the quality of education and its reputation” (Kahanec and Králiková 2011, p. 9); “Six key attributes (attractiveness factors) affecting student choice of destination country

were quality of education, employment prospects, affordability, personal security, lifestyle, and education accessibility”.

“High-skilled immigration is desirable in view of its economic benefits, and international student mobility is an important channel of high-skilled immigration” (Kahanec and Králiková 2011, p. 4). “Skilled migration policy has a great impact on students’ choice of destination and program selection. Quality of education is likely to remain the most important factor influencing students’ destination choice” (Yang 2007, p. 9). “Placement in the world rankings appears to have strong effects. As international students face a degree of informational asymmetry when deciding about where to study (Bourke 1997), governments and higher education institutions can, besides improving their placement in the world rankings as a long-term aim, concentrate on shorter-term activities mitigating such asymmetry, marketing higher education and concrete institutions, transparent quality control and evaluation systems, information about recognition of the diplomas they offer, and setting up national agencies facilitating and coordinating these efforts” (Kahanec and Králiková 2011, p. 8). “Visa schemes and immigration procedures also play an increasingly important role in the decision-making process, with students not only seeking employment upon graduation, but perhaps (at least temporary) residency in their country of choice. Countries which facilitate the arrival and integration of overseas students through employment and immigration initiatives are likely to be more competitive in the international market. Given the rising fees of study abroad, the comparative cost of higher education is likely to give certain countries a competitive edge in the coming years. Institutional and national recruitment strategies may consider indicators to compete in a rapidly changing industry and in the global economic development” (Verbik and Lasanowski 2007, p. 9). “Motivational factors in the decision-making process for student application to an overseas destination include employment and residency opportunities, the quality of the university and the quality of ‘student experience’, including accommodation and social activities, and the costs associated with an international education” (Verbik and Lasanowski 2007, p. 2). “The motivations for recruiting international students are diverse: clearly financial rewards are associated with the export of education; foreign students are sought to increase and maintain scientific, technological and economic competitiveness; socio-cultural advancement and the development of host countries’ international profile and reputation; alternative revenue generation from international student recruitment could also be a key motivating factor for some higher education institutions. While motivations vary, international foreign students have significant social and cultural impact on host campuses and the development of an institution’s research and innovation profiles (Middlehurst 2003)” (Bodycott 2009, p. 345).

As interactions with people from other countries increase, the need for greater knowledge about such countries also increases. The interconnectedness and interdependence of the world are enhanced through international student mobility to receive transnational higher education or international labor immigration to gain comparative advantages in socioeconomic benefits in host countries. The main drivers and factors for individual’s motivation for international student mobility are mainly focused on quality of education such as global rankings and ratings of programs,

brand/reputation (especially for Chinese students) of universities in the host country; scholarship opportunities; affordability includes no tuition fees or very low fees, and reasonable living costs; employment prospects and advantages such as work opportunities while studying plus post-graduation employment opportunities' equal residency opportunities; English-medium degree programs; cultural experience such as traveling and life experience. Supply and demand of student places also shape each other in dynamic relationships; foreign languages could be considered as barriers to prevent international student mobility or as one of main reasons for international student mobility.

Chinese language as the world's most-spoken language is one of the main reasons for international students to choose China. While the free or low tuition fee is attractive for most students with income restrains, those without the financial constrains regard the quality of education and the prestige of the host university as an important factor. The value added to personal development and career development through international student mobility has also become an important factor for international student mobility, since internationalization of individuals to gain international study experiences may be beneficial for future job opportunities and career development.

In terms of inward mobility, Chinese central government has promoted international students to study in China through policy and financial incentives, and the number of scholarship of degree programs for international students has increased significantly in recent years, especially English-mediated programs. "In 2015, 40% of all international students to China received government sponsorship" (Nolan 2016). For instance, Chinese Government Scholarship EU Window is a full scholarship program set up by the Chinese Ministry of Education for European youth to expand student exchanges between China and the European Union. The Great Wall Program is a full scholarship established by the Chinese Ministry of Education for the United Nations Educational, Scientific and Cultural Organization (UNESCO) to sponsor students and scholars in developing countries to study and conduct research in China. Diverse governmental scholarships from different local governments offer scholarships to international students such as Beijing government scholarship, and Shanghai government scholarship. More and more Chinese universities have also set up their own scholarships to attract international students.

In terms of outward mobility, China is one of the biggest sending countries. Chinese CSC Association has been engaged actively in sending Chinese students abroad to study master's or Ph.D. degree worldwide in recent years. "Sending large numbers of talented graduate students abroad to research universities also was a strategy aligned with the gradual opening of Chinese society and its embrace of a quasi-capitalist economy. China is also intent on reducing brain drain by providing inducements for talented graduates and researchers who study abroad to return to China" (Douglass and Edelstein 2009, p. 10). Chinese students are encouraged to study abroad as part of a capacity building strategy (OECD/World Bank 2007; OECD 2013). "A great number of mainland Chinese students who leave the country for their higher education were influenced by 'push and pull' factors" (Mazzarol and Soutar 2002). "Four push factors motivating Chinese students to study abroad are China's strong economic growth; Going abroad to study has become a trend in Chinese soci-



ety; Recently Chinese government policy has changed to a more positive attitude towards supporting international education; And an inadequate supply of university places in China's higher education" (Zhao and Guo 2002). "Pull factors include knowledge and awareness since Chinese market is a brand-conscious market and the host country's preference ranking has a great impact on students' choices; Recommendation—the influence of relatives, parents, and friends; Cost—the cost of tuition fees, living expenses, travel cost, and social cost; Environment—climate, lifestyle, crime, safety, and racial discrimination; Geographic proximity—the importance of geographic proximity to a destination country; Social links—family and friends living in the destination country or whether family and friends have studied there. The host country's government policies, such as immigration policy, have a strong influence on the flow of Chinese students abroad" (Yang 2007, p. 4).

In China, CSC scholarship's support for Chinese students to study abroad has increased the tendency, and this has become one of most important channels for Chinese students to go abroad. CSC increased the sum of scholarship for international students to study in China since September 2014, which made CSC scholarship more attractive on international levels. Some Chinese top universities also set up their own scholarship to attract international students. Governmental and non-governmental initiatives also offer diversified scholarship to promote more international students to study in China. However, most Chinese scholarships focus on financial support of living allowance for international students.

In Germany, one of the most important factors is diversified scholarship incentives from different foundations such as DAAD, Erasmus Mundus Scholarship programs, and German foundations' scholarship programs. Among large-scale regional programs, European Erasmus+ plays a major role in driving international student mobility. "With three strategic fields of activity 'Scholarships for the Best', 'Structures for Internationalization' and 'Expertise for Academic Collaboration', the DAAD supports over 100,000 German, international students and researchers around the globe each year—making it the world's largest funding organization of its kind. The DAAD created some network to attract alumni who are supported by DAAD scholarship. The DAAD also promotes internationalization at German universities; help developing countries build their own higher education systems; and support German studies and German language programs abroad" (DAAD 2015). DAAD scholarship has promoted very well to attract Chinese students to study in Germany. The free tuition fee or very low tuition fee of most German public higher education institutions and part-time work permit for international students also attract many students to finance themselves to study in Germany. Tuition fees at German higher education institutions are comparatively low by international standards, making Germany an affordable and popular study destination for international students who might be priced out of countries with higher tuition fees like the USA and the UK. Furthermore, English-medium programs make Germany a viable option for international students without German language skills. "There have been dramatic increases in the proportion of Chinese students for the purposes of higher education, especially to Germany. Importantly and presumably to attract more students, some higher education institutions have

introduced English as a medium of instruction in Germany” (Verbik and Lasanowski 2007, p. 5).

The Erasmus Mundus Scholarship programs of the European Union offer numerous programs for master’s and doctoral students coming from developing countries (Hughes 2013). “Sponsorship programs have provided the focus of most recent studies on academic mobility of post-docs and professors, either by looking at archival material or by examining statistical, survey and interview data on the ERASMUS/SOCRATES scheme, the Humboldt Award Winner and Research Fellowship programs and EU Marie Curie Fellowships.” (Charle 2004; Jöns 2009). China-German/EU Cooperation and Degree programs as platforms for China-EU research, teaching, academic and professional exchanges, and collaborations also promote international student mobility such as Erasmus Mundus Master of Research and Innovation in Higher Education (MARIHE), China-EU School of Law at the China University of Political Law and Science (CUPL), China Europe International Business School, and Sino-European School of Technology of Shanghai University. The German foundations’ scholarship programs also provide financial aid. For example, the Heinrich Böll Foundation (Heinrich Böll Stiftung) offered through the Green Political Foundation; The Rosa Luxemburg Foundation (Rosa Luxemburg Stiftung) offered scholarship grants to students from Germany and abroad in political education; German Federal Foundation in Environment (Deutsche Bundesstiftung Umwelt), a government-associated environmental foundation, offers scholarships to doctoral and post-doctoral students from Germany and abroad working in environmental sciences (Hughes 2013).

German Scholars Organization (GSO) started “Brain Gain” projects to attract German scholars in the USA, Canada, and the UK to return Germany. DAAD and Botsch Foundation also have projects to support and send German language lecturers to teach German in Chinese universities. However, the engagement to promote German students and scholars to China and back from China is still limited. The BMBF China strategy 2015–2020 stated to promote long-term study and research in China (BMBF 2015) and “Germany is putting its weight behind a new policy initiative to send half of all its graduate students overseas by 2020, to gain competitive advantage and increase its global ‘soft power’” (Higher Education Report 2016, p. 2). Some German federal states initiated projects to support German and international talents to return to Germany, which are good practices to follow. The German policy promotes very well to attract international students to study in Germany, but the international competitiveness of German higher education institutions could be further enhanced. German higher education institutions have taken strategies to attract international students, especially offering English-medium programs. However, strategies, financial incentives, and diverse initiatives to promote outward credit and degree mobility of German students still need to be strengthened because “outward student mobility could be as another way to extend global influence of sending countries” (Higher Education Report 2016, p. 7). Most governmental or non-governmental incentives prefer promoting outward credit mobility to increasing outward degree mobility. Financial incentives to support German students for degree mobility such as to study master or Ph.D. programs abroad are still limited. ERP

Scholarship program, financed by Federal Ministry of Economics and Energy since 1994, supporting German students to study Master or Ph.D. programs abroad, is the good practice to follow. The higher tendency of Chinese student mobility flows to Germany shows the unbalanced “brain circulation” between Chinese and German students mobility, which implicates the need to promote more German students’ outward mobility to China. Compared to international students of other regions, German students still have competitive advantages to study in China.

## 7.7 Conclusion

The new trends of transnational models of degree programs are moving from the traditional credit and degree mobility of “A” model (one host country) to “A + B” model (two host countries), “A + B + C” model (three host countries), and “A + B + C + D” model (four host countries), which make international student mobility more complex than “horizontal mobility” and “vertical mobility” (Teichler 2001). The model of national and international delivery of degree programs to study in multi-host countries within a university through overseas branch campuses further strengthened international student mobility. As the partner universities are increasing in transnational higher education collaborations, students have more options.

Meanwhile, it also increases global competitions among different transnational degree programs or even in a transnational degree program. In the transformation to the knowledge society and the global knowledge economy (Guruz 2011), international student mobility has significant impacts on national economic development, while transnational higher education also has influenced the way of the accumulation of human capital. The digitalization of higher education in the age of information offers greater transparency of higher education and the accessibility to global higher education. Transnational higher education collaborations also stimulated the international student mobility on regional and international levels. Following Teichler’s (2001) “horizontal mobility” and “vertical mobility” and Finger’s (2011) “social mobility,” this study further conceptualized transnational “horizontal mobility” and “vertical mobility” with multi-host countries by identifying new patterns of international student mobility that associated with transnational models of degree programs, which may lead to “brain circulation,” “brain exchange,” “brain gain,” “brain drain,” “return brain drain,” or “transfer brain drain.”

As the development of transnational higher education, the internationalization and “Englishization” of higher education in China and Germany, international student mobility between China and Germany has been strengthened through diverse degree programs as well as academic cooperation and exchange programs between Chinese and German higher education institutions. As non-native English-speaking countries, international student mobility between China and Germany is increasing quickly since more and more English-medium degree programs are offered and the enhanced higher education collaborations between China and Germany have mutual benefits for both countries in terms of enhancing quality,

the internationalization, and “Englishization” of higher education. Transnational English-medium degree programs cooperated with international partner universities have gained the popularity among international students worldwide and national students from host countries. English-medium degree programs of prestigious universities from non-native English-speaking countries such as China and Germany have enhanced their international visibility and competitiveness as well as international comparability and compatibility in the global higher education market, which also turned their linguistic disadvantages in the global dominant “English as lingua franca” into multi-linguistic and cultural advantages. China and Germany have gained the rising popularity as the destinations of non-native English-speaking countries through their multilingual strategy, and this trend is promising. “Studying in English and living in other languages and cultures” is also one of important factors for international students to choose English-medium programs in non-native English-speaking countries.

English-medium degree programs have tackled problems of language barriers of international students in the non-native English-speaking host countries. “The growing number and diversification of players in the international student market partly explains why host countries are seeking innovative strategies and approaches to attract higher numbers of international students” (Verbik and Lasanowski 2007, p. 35). It is important to come up with proper strategies positioning in global higher education market and targeting international student market.

China is the most important player in international student mobility in Asia, while Germany is one of the most important players in Europe. China is a key cooperation partner for German higher education institutions in Asia while Germany is a key collaboration partner for Chinese universities. Both countries are cooperating while competing for international students. The fast rise of Chinese universities in the global ranking of world-class universities and the improvement of quality in higher education made Chinese top universities more attractive. The structured study programs and dual qualification options that are jointly developed and offered by Chinese and German higher education institutions play a prominent role (BMBF 2015, p. 29) in facilitating channels for international student mobility.

Educational exchange and collaborations play an important role in mutually beneficial collaborations. Due to the development of the internationalization of higher education and transnational higher education, international student mobility has been strengthened through degree programs as well as academic cooperation and exchange programs among higher education institutions. On one hand, close cooperation between Chinese and German higher education institutions stimulates international student mobility with higher Chinese students’ mobility flows to German higher education institutions. On the other hand, international student mobility between China and Germany has been strengthened through multi-layer China-EU and China–Germany academic cooperation projects and degree programs.

## 7.8 Implications

Intense supply of transnational degree programs associated with international student mobility has been increasing the competitions among key destination countries. “Increased higher education opportunities to study at home and abroad is contributing to rising global competitions in the international student market and international higher education market. To attract the growing number of prospective students, higher education institutions and national governments are looking to differentiate themselves from their competitors and they are developing and implementing targeted recruitment strategies to grow new markets or expand in already established ones.” (Verbik and Lasanowski 2007, p.2). “The key to success in the global higher education market to attract international students is the ability to support and satisfy the needs of students and ensure to deliver high quality of degree programs, to ensure students’ academic and professional success and fulfill students’ career goals” (Yang 2007). “Higher education institutions should make sure their promotional activities and partnerships align with government policies and priorities, because government initiatives could give an extra boost to their reputation and increase brand awareness. It is important to demonstrate the economic value of international students at local, regional and national levels; Focus the recruitment efforts on areas where your country has strong business, cultural and diplomatic ties; Monitor developments and adapt strategies to the shifting political landscape” (Higher Education Report 2016, p. 2). “Although student mobility is expected to grow, institutions must compete hard for talented and self-funded students” (Choudaha and Chang 2012, p. 3). “International student recruitment is becoming integral to the financial health of many higher education institutions worldwide, in addition to remaining an important means of attracting talent and expanding campus diversity” (Choudaha and Chang 2012, p. 6). “An understanding of global mobility trends and their relationship to the applicant pipeline will help institutions channel their efforts and institutions that are strategic, deliberate and informed in their recruitment efforts will maximize the investment in an efficient manner” (Choudaha and Chang 2012, p. 3). “With public per student funding for higher education decreasing in many countries, universities are looking to diversify their generated income and the revenue earned from overseas student tuition has become one important way of doing so. In the long term, and in the wider socio-economic context, developed countries are looking to attract foreign skilled labor to supplement the rapidly decreasing and ageing populations” (Verbik and Lasanowski 2007, p. 3). Considerable student and academic mobility already exists, some of them without special public financial support. More initiatives are needed to stimulate greater international student mobility. “There has been a trend toward support for groups rather than individual students, for a more intensive ‘restructuring’ of stay abroad and a stronger international dimension in larger scientific projects. Both financial support and favorable conditions are necessary for programs aimed at promoting effective exchanges” (Berchem 1991).

Both China and Germany need to be properly positioned in the global higher education market to reap the benefits of international student mobility and facilitate

“brain circulation.” Since outward mobility may have relative high financial costs and the potential danger of “brain drain,” it may explain the reasons why most policies and financial incentives are mainly focused on outward credit mobility instead of outward degree mobility. Enhancing the knowledge network and building knowledge bridges between China and Germany through international student mobility can be beneficial to both sides. It is important to facilitate multi-channels to set up the strategies for “brain circulation” and “brain exchange” through multi-layer collaborations and policy support, governmental or non-governmental initiatives. Otherwise, international talent pools of human resource will be wasted, and international students may fail to integrate into labor market in host country or sending country. As “Haigui” referring to those who have returned from overseas (Wang et al. 2006), international students as “Haigui” returned to their home country with an edge on the job market could also face challenges and become “Haidai” (those are still seeking for the job after returned to their home country from overseas). To optimize the productivity of international student as human capital has become an important focus for host and sending countries. “Host countries are now pursuing international students through more aggressive marketing campaigns due to political, economic and diplomatic benefits international student can bring to both individual universities and the society” (Fernandes 2006, p. 142). Host countries may suffer “return brain drain,” while sending countries may benefit from “brain gain.” However, it could also turn to a positive “brain circulation.” Therefore, it is important to set up transnational knowledge network through international student mobility and facilitate sustainable “brain circulation” and “brain exchange.” International student mobility could be served as the knowledge bridge for sending and host countries. It is beneficial to integrate inward mobility to the development of national human resources and economy. It also indicates the importance of policy support and financial incentives to promote the employment of international students in host and home countries, to foster their employability during their study in the host country, and to optimize the productivity of human capitals (Solimano 2002). “The higher education system’s attractiveness for global talent depends not only on myths of meritocracy and social mobility (Liu 2011), but also on very real employment benefits and returns to higher education” (Powell and Finger 2013, p. 271). Generally speaking, international student mobility in transnational higher education is beneficial for all stakeholders, although it may have some unexpected negative impacts.

International student mobility could also be used as a tool to strengthen soft power of host countries in certain areas on regional or international levels, which may have positive impacts on national development and international cooperation. China has very high potential in generating inward and outward student mobility. “China can use student as a valve to control their influence on a particular area. China may seek to use international students to spread its influence and power. Globally mobile Chinese students could be used as a tool to control the direction of soft power” (Atack 2017). It indicates the political dimension of international student mobility that is also closely linked with social and economic aspects. Politicizing international student (Atack 2017) could have positive or negative social and economic impacts on many aspects. Therefore, the political dimension of international student mobility

“International student mobility is embedded in political aspirations and priorities, but it also a matter of adjusting and responding to the global development of higher education” (Nilsson 2017, p. 30).

Alternatively, the third countries may benefit from attracting international students. The global competitions for human capitals have increased greatly in the globalized knowledge economy and globalized higher education. “The mobility of high-level personnel affects the socio-economic and socio-cultural progress of a nation and the world” (Teferra 2005). The host countries are competing for attracting international students and overcoming competitive disadvantages associated with their linguistic situation. The global competitions for highly qualified labor force have become stiffer, and international students have become the focus. “Countries of origin, host countries, and the third countries are trying to attract them after their graduation, and those who have studied in the ‘right’ areas usually have many options. As the major ‘global players’ in terms of the number of students abroad, China is sending an increasing amount of ‘semi-finished human capital’ (Khadria 2012) upgrading to higher education institutions worldwide, a large share of them to most prestigious universities. After their graduation, they are considered as the asset for economic progress in host, origin and the third countries, and many of them would bring the highest benefit.” (Knerr et al. 2010). The third countries may gain the most net benefits by attracting highly qualified human capitals at no or marginal expenses. Together with knowledge mobilization, academic mobility, professional mobility, and international student mobility have become main important factors to influence the global competitions of human capitals. “Human capital embodied in the skills knowledge and competencies individuals possess through education and training, can offer a return in terms of earnings in the labor market and in achieving economic growth in the host country.” (Li and Bray 2007). International student mobility is the important way to attract international human resource. The host country can benefit from “brain circulation” with the high return rate.

What’s more, efficient and effective policy and financial incentives to attract national and international talents are gaining its importance to facilitate multi-channels of international student mobility, to promote transnational “brain circulation” and knowledge mobilization, to attract international labor force, and to enrich national human capitals. If international students return their home country, host countries may suffer from “return brain drain.” If international students transfer to the third country, sending and host countries may suffer “transfer brain drain” while the third country may benefit from “brain gain.” Furthermore, host countries may benefit from “brain gain” while sending countries may suffer from “brain drain” or vice versa. Countries with comparative advantages may gain more benefits from international students as human capitals. Not only individual students may benefit from international student mobility but also host, sending, and the third countries. Therefore, to facilitate “brain circulation” is of most importance for host countries, sending countries, and the third countries. Diversified policy support and financial incentives are needed to foster employability and to promote the employment of international students in both host country and sending country. It is beneficial to facilitate multi-channels of governmental and non-governmental initiatives for “brain circulation”

and to promote international student mobility between China and Germany. It leads to the further discussion about the international circulation of human capital (Thomas 1967) and the accumulation of human capital (Straubhaar 2000). National dimension of human capital has changed dramatically (Straubhaar 2000) due to the transnationalization of higher education as well as the internationalization and “Englishization” of higher education: home-based accumulation of human capital or import (Straubhaar 2000)? Could it also be international-based or transnational-based accumulation of human capital through transnational higher education?

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# Chapter 8

## Promoting British Values in Multicultural Society: Identity and Diversity



Lin Qiu

**Abstract** It is generally believed that identity and cohesion have increasingly weakened, due to lack of common values and basic norms in multicultural society with diversified development of beliefs, faiths and lifestyles, etc. As original value consensus has been replaced by pluralism, the clashes of values between different groups and individuals are growing sharpened in some ways. This paper, from the perspective of a non-native observer and researcher, looks at the representative political discourse on “British values”, and an official definition of “fundamental British values” (FBV) in the contexts of countering terrorism and extremism; analyses the immediate cause and deeper reasons for actively promoting the prescribed British values to resist extremist ideologies and build stronger identities in the globalised context; explores the related policies and measures to actively promote FBV in schools and the whole society; introduces the mandatory principle and prominent features; and then, examines the controversies over official definition and interpretation of FBV, as well as criticism of the DfE’s requirements for promoting FBV in all types of school; finally, findings are concluded by comparing the government-led promotion of core Chinese values (CCV) with that of FBV, within their respective contexts.

**Keywords** British values · Multicultural society · Diversity · Identity · Fundamental British values

### 8.1 Background

Due to the post-war immigration policy, a great number of immigrants with different backgrounds of ethnic, religion and culture flooded into the UK, through two large-scale waves of immigration: the immigrants from Commonwealth of nations in the 1950s and 1960s; and the immigrants from Continental Europe, Africa and Middle East in the late 1990s. Since then, multicultural British society has gradually formed and has fallen into the “progressive dilemma” between unified integration and diversified development.

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In the globalised context, along with the greater population mobility and cultural diversity, common values have been eroded gradually, and identity crisis has aggravated in the multi-ethnic, multi-faith, multicultural and multilingual Britain. Consequently, the clashes of values and tension between unity and diversity have increasingly intensified; as extremist ideologies fill the vacuum caused by lack of identity, the threats of terrorism, radicalisation and separatism have grown rapidly. Therefore, more and more attention has been paid by the UK Government and mainstream to the issues on common culture, shared values, community cohesion, social integration and national identity over the last few years. Eventually, the government, civil society and school have all recognised that it is vital to define and promote the stated British values serving as foundation of the diverse and united Britain.

## 8.2 Discourse and Definition

The political discourse upon “British values” can date back to the New Labour government. In 1997 general election victory speech, Tony Blair stated that the underlying values have united Britain as one nation and guided the political process, governance, policy-making and administration. However, the 7/7 London bombings in 2005, known as a series of coordinated suicide bomber attacks by home-grown young Muslim in central London, shocked the whole world and showed that it was difficult for a number of young Muslim to identify with British values or their parents’ values and integrate into the mainstream society.

This terrorist incident led then Prime Minister Tony Blair to tighten civil liberties and realise the priority of integration. He (2006) warned various communities of “a duty to integrate” and declared that “promoting basic values must take priority over separate beliefs and customs”. Integration was explained as “about integrating at the point of shared, common unifying British values”. British values were regarded as “belief in democracy, the rule of law, tolerance and equal treatment for all” (The Duty to Integrate, 2006).

Gordon Brown (2006) proposed to maintain the Britishness through inheriting “the values of liberty, responsibility and fairness—shared civic values which are not only the ties that bind us, but also give us patriotic purpose as a nation and sense of direction and destiny” (The Future of Britishness, 2006).

Subsequently, “common British values” and “British statement of values” were highlighted in the *Governance of Britain* (Ministry of Justice, 2007). “Shared values” were described as “bedrock on which the elements of British nation are built” (2007, p. 57). In addition, it advised that the British statement of values should reflect “the voices of citizens across the country” (2007, p. 59), and the related debate would also “provide valuable insights into national views on citizenship and Britishness” (2007, p. 59).

In 2010, David Cameron delivered a speech outside 10 Downing Street as Prime Minister and committed the coalition government would be built on the basis of some clearer values—“freedom, fairness and responsibility” (Cameron 2010).

In 2011, at Munich Security Conference 2011, he criticised saying that “a passively tolerant society stands neutral between different values” and declared that the UK Government believed in certain values and actively promoted them, such as “freedom of speech”, “freedom of worship”, “democracy”, “the rule of law” and “equal rights” (Cameron 2011).

In 2014, then Secretary of State for Education, Michael Gove stated that “there has been a failure in the past ...to tackle non-violent extremism and radicalisation”, (Gove 2014) when he was informed with the result of investigation arising from the “Trojan Horse” letter in some Birmingham schools. Subsequently, David Cameron set out the British values of “freedom, tolerance of others, accepting personal and social responsibility, respecting and upholding the rule of law” in his article, entitled “British values aren’t optional, they’re vital” and proposed to promote them “in every school and to every child” (Cameron 2014).

To sum up, since the end of the twentieth century, political figures notably prime ministers generally discoursed on the importance and intension of British values, with emphasizing democracy, liberty, fairness, equality, the rule of law, tolerance, responsibility and respect for British history, culture, tradition, institutions as well. Nevertheless, there had not been an uniform definition of British values, until “fundamental British values” (FBV) were formally defined as antagonistic to extremism in glossary of terms, *Prevent Strategy 2011*. “Extremism is vocal or active opposition to fundamental British values, including democracy, the rule of law, individual liberty, and mutual respect and tolerance of different faiths and beliefs” (Prevent Strategy 2011b, p. 109). But “the rule of law”, “democracy”, “individual liberty” and “tolerance” were not interpreted clearly; they all have different implications in different contexts, and none of them refers to absolute.

As FBV defined officially, the promotion of FBV was determined as a requirement of strategic policies on countering extremism and preventing terrorism, and implemented in public institutions covering schools, universities and colleges, local authorities, charities, prisons, faith institutions and NHS.

### 8.3 Cause and Reason

In the globalised context, the greater influx of immigrants with different backgrounds, has aggravated ethnic incompatibly, religious tension, clash of cultures and conflict of values in diverse British society. With the rise of religious fundamentalism and international terrorism, one of the toughest challenges facing the UK Government is the threat of extremism, and this is also **the immediate cause** for the government-led promotion of FBV; because public security and civic liberty are threatened by terrorism which is rooted in an invisible extremist ideology opposite to British values, radicalisation and separatism undermining stability and cohesion are critical issues behind different forms of extremism (such as Islamist extremism and extreme right wing).

Since 2011, the collapse of Syrian regime, emergence of ISIL and instability in Iraq have put the Middle East and Europe at risk. At Munich Security Conference, David Cameron (2011a) stressed the origin of terrorist attacks is “Islamist extremism”, while Islam as a religion with long history and billions of believers is different from Islamist extremism as a political ideology supported by minority hostile towards Western democracy and liberal values. He recognised it is hard for some young Muslims to identify with their parents’ faith or British values, while the search for something to belong and something to believe in easily lead many rootless young Muslims to extremist ideology, they do not turn into terrorists overnight, but go through a process of radicalisation. Therefore, the UK needs to actively promote certain values rather than stand neutral between different values, needs to practice much more “muscular liberalism” rather than passive “hands-off tolerance” and needs to build a stronger shared identities instead of encouraging ethnic segregation.

After the world-shaking 9/11 terrorist attacks, the United Kingdom’s Counter-Terrorism Strategy (CONTEST)<sup>1</sup> was firstly formulated and implemented by the Home Office in 2003 and most recently revised in 2018. As a part of CONTEST, the Prevent Strategy aims to prevent people from becoming terrorists or supporting terrorism, through countering extremist ideology and its promoter.

The initial appearance of FBV was in the glossary of *Prevent Strategy 2011*, to elaborate how the government would make judgment and decisions about treating certain groups and individuals, particularly in relationship with the Muslim communities. If they reject FBV, the government will not work with or fund them. It is clear that the definition and use of FBV are to prescribe denotation of extremism, and accordingly, any “vocal or active opposition to fundamental British values” or “calls for the death of members of our armed force” can be regarded as manifestations of extremism (Prevent Strategy 2011b, p. 109). As “CONTEST reflects FBV, and in particular, the commitment not only to protect the people of Britain but also their interests overseas” (CONTEST, 2011a), then through the investigation of “Trojan Horse” affair, an intolerant and politicised form of extreme social conservatism (Islamist extremism) in some Birmingham schools was exposed, and this greatly strengthened the UK Government’s determination to react against non-violent extremism with the requirement for promoting FBV in all types of school. Soon after, the Counter-Extremism Strategy aimed to “counter the ideology spread by extremists” and “stand up for the shared British values” was formulated and then started to come into force (Counter-Extremism Strategy, 2015, p.7).

Then Home Secretary Theresa May (2015) declared the government would develop positive campaign and seize the opportunities offered by social media, internet and communication services, to promote British values. She said:

If we want to put British values at the heart of the counter-extremism strategy, we need to make sure that every single person living in the UK is fully aware of the rights

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<sup>1</sup>CONTEST is abbreviation of the United Kingdom’s Counter-Terrorism Strategy. Its aim is to reduce the risk to the UK, and its interests overseas from terrorism, so that people can go about their lives freely and with confidence. CONTEST is split into four work streams that are known within the counter-terrorism community as the “4Ps”: *Prevent, Pursue, Protect and Prepare*.



and responsibilities of living in a pluralistic society. We will therefore develop a positive campaign to promote British values and show clearly the opportunities they bring. (A stronger Britain, built on our values, 2015)

In a word, the UK Government realised guiding and instructing British people (especially young people) to respect, understand, identify with and act on British values through actively promoting them in schools and the whole society have played a vital role in identifying extremism, eradicating terrorism, preventing radicalisation and opposing separatism as well.

**The deeper reasons for** promoting British values are the weakening British identity and the dilemma between unity and diversity in multicultural society. Since diversity, multiplicity and mobility characterised the developed British society, especially in the era of globalisation, it has become more diverse, as common culture and collective identity have been replaced by pluralism. The tension between unity and diversity resulting from unified integration is likely to conflict with diversified development in multicultural Britain with liberal tradition and democratic state. This is an acute and unavoidable dilemma for the government and progressives who want not only unity (integrated values, common culture, higher social cohesion and welfare paid), but also diversity (respect for the wider range of groups and diverse cultures, faiths, lifestyles as well as legitimate interest).

On the one hand, the dilemma shows up in politics and policies, such as the debates on immigration policy (multiculturalism or integration), Scottish independence from the UK or not, and the UK's departure from or stay in the European Union. On the other hand, it appears in the fields of economy and culture, and the higher immigration and greater diversity have brought labour resources, dynamism and prosperity, but they have also eroded already weakened British identity, sense of mutual obligations, willingness to pay tax, and inclining to be isolated from the public domain, because the ethnic minority with high fertility (mostly immigrants from non-western nations and their next generation) with acculturative stress and identity crisis cannot integrate into mainstream and become real British citizens or shoulder responsibilities in a short term.

Since the middle of twentieth century, the UK Government with characteristic of eclecticism and incrementalism has always sought balance of unity and diversity through implementing public policies covering immigration/asylum, culture, language and welfare, etc. Multiculturalism which usually promotes maintaining distinctiveness of multiple cultures (cultural diversity), through avoiding indoctrinating any specific values of cultural group or religious community as central, was adopted by local administrations since the 1970s. The New Labour government committed to a nationwide multiculturalistic approach in 1997, but there was something of a backlash led by commentators, especially after urban riots in 2001, caused by Asian youths' protest against the long-term marginalisation and discrimination. Until the 7/7 London terrorist incident was mainly blamed on the multiculturalistic policies unable to integrate diverse values and solidify British identity, the government began to acknowledge the priority of integration. "Integration was not about culture or lifestyle, but about integrating at the point of shared, common unifying British

values, and citizenship should be taught in all schools and faith schools should also ensure that were teaching tolerance and respect for other religions; no cultural or religious beliefs superseded the laws made by parliament” (The Duty to Integrate, 2006).

Soon after, Prime Minister David Cameron (2011a) declared that multiculturalism had failed to supply “a vision of society” to those people wanting to belong. Then, he (2014) described the function of common values in the multi-ethnic Britain and its multicultural society, saying “our values have a vital role to play in uniting us. They should help to ensure that Britain not only brings together people from different countries, cultures and ethnicities but also ensures that, together, we build a common home”.

Since the end of the twentieth century, successive UK government has stressed that British values should play an uniting role in enhancing national identity and strengthening social cohesion through integrating a range of ethnic groups and individuals with diverse backgrounds of kinship, language, culture, faith, belief and lifestyle as well and, furthermore, play an underlying part in boosting national economy as well as exerting international influence. Then Prime Minister David Cameron (2014) set out a range of considerable measures to intensify people’s sense of national identity and emphasised that common values are the most of the things that bring British people together as a diverse and unified nation.

## 8.4 Policy and Measure

The UK Government has attached importance to putting proposal into practice, formulating the related policies, promulgating new regulations and implementing a series of considerable measures to promote the specified British values by public education, democratic institutions and operation, social campaigns and mass media, etc. For instance, building on existing programmes of National Citizen Service and English Language Training; encouraging active and meaningful public participation; and increasing opportunity in those isolated communities, etc.

From viewpoints of policy-makers, a clearer civic awareness would give young people a stronger sense of national identity and belonging in multicultural and democratic society. So, a range of concepts, such as active citizenship, civic engagement and inclusive identity have frequently appeared in the related in official documents, which pay attention to the social function of schooling and advise maintained schools to promote British values by citizenship education and teaching of British history.

For instance, *the Governance of Britain* (Ministry of Justice 2007) paved the way for setting out steps to intentionally promote British values and national identity through interpreting the importance of citizenship in multicultural democratic society and further elaborating the implication of citizenship for British identity. It indicated that British citizens must act in accordance with a set of common values including not only the belief in individual liberty, but also the principles underpinning relationship between citizens and the state.

When answering how British values should be promoted actively and designedly, David Cameron (2014) said that some practical steps had been already taken: making sure new immigrants understand British values and history of institutions in the UK, changing approach from respecting British values to promoting them in schools, bringing proper narrative history back to curriculum and running the events to bring people together as a diverse and unified nation, etc.

In July 2014, the newly appointed Education Secretary Nicky Morgan (2014) made an oral statement about the “Trojan Horse” affair and announced that Ofsted would “inspect how well all schools were actively promoting fundamental British values through their curriculum”.

Subsequently, the DfE launched the consultation on intensifying powers to intervene in schools failing to promote FBV. Independent schools, academies and free schools were required to encourage all pupils to respect and understand the British values according to *Independent School Standards* which sat alongside the requirements of Equality Act 2010.

The Ofsted introduced the same expectation on maintained schools through revising the framework in late 2014. Thus far, all types the school were required to pay more attention and show whether their work was effective in embedding FBV.

Over the past decade, the UK Government has taken a range of considerable measures to promote British values, through introducing education policies and enacting regulations which require all schools (non-faith school and faith schools), local authorities, teaching staff, head teachers, governing bodies and proprietors to work in accordance with the British values. And the corresponding inspection is provided by the Ofsted.

In terms of **teachers’ standards**, the DfE adopted the official definition of FBV and introduced this term into *Teachers’ Standards: Guidance for school leaders, school staff and governing bodies*, updated in June 2013. There followed five bullet points, three of which are:

- treating pupils with dignity, building relationships rooted in mutual respect...
- showing tolerance of and respect for the rights of others;
- not undermining fundamental British values, including democracy, the rule of law, individual liberty and mutual respect, and tolerance of those with different faiths and beliefs. (Teachers’ Standard 2013a, p. 14)

In terms of **financial fund**, the DfE added new clauses into funding agreement for academies, stipulating their governors demonstrated FBV and enabling the secretary of state to order closure of schools if they do not comply with the regulations.

*School and Early Years Finance Regulations (2014a)* also inserted a new clause stipulated that “early years expenditure held centrally cannot relate to an excluded provider”, which is regarded as an independent school that “does not meet the standards in relations to the spiritual, moral, social and cultural development of pupils set out in the *Independent School Standards*” or “does not actively promote fundamental British values”.

In terms of **revised guidance**, the DfE published specific *guidance on promoting fundamental British values as part of SMSC development (2014d)* to ensure young people prepared for life and work in multicultural Britain, when they leave school.

The guidance separately includes non-statutory departmental advice for maintained schools and independent schools, academies, free schools. And it also indicates the main points as what is expected of schools in promoting FBV and how this aligns with school's duty to promote pupils' SMSC development.

The guidance is aimed at helping schools understand their responsibilities and duty to actively promote FBV and requires all maintained schools, as part of broad and balanced curriculum, to promote SMSC development of pupils, in their provision, under the Education Act 2002. Schools can also demonstrate that they actively promote FBV through ensuring pupils' SMSC development.

The departmental advice for independent schools, academies and free schools, as supplementary to the previous consultation, was amended to strengthen the requirement for promoting FBV in 2014. The new part of standard requires independent school proprietors to "actively promote" FBV, rather than encourage "respect" for them and develop a clear strategy for embedding FBV into the process of working with pupils.

In terms of **school inspection**, the Ofsted and independent inspectorates have taken school works related to the active promotion of FBV into account during the inspections. Parliamentary Under-Secretary of State Lord Nash stressed that every school was expected to promote the basic British values and ensure the young people leave school fully prepared for life in multicultural Britain, become well-rounded and valuable members of society and treat others with respect and tolerance, regardless of background.

In 2015, the Chief Inspector of schools Sir Michael Wilshaw announced to the House of Commons select committee that one of the most important tasks of inspectors at the moment was to inspect how British values were taught, because schools are on the frontline in terms of helping society to become a cohesive one.

In School Inspection Handbook in England (2018), "acceptance and engagement with the FBV" (p. 41) is used as one of the criteria for evaluating social development of pupils, to help inspectors make judgements about a school's overall effectiveness. Moreover, in making the judgement about the effectiveness of school leadership and management, inspectors will consider "how well the school prepares pupils positively for life in modern Britain and promotes the FBV" (p. 42); if "pupils' SMSC development and within this, the promotion of FBV, are at the heart of a school's work", this school's grade would be **Outstanding** (p. 47).

*Early Education and Childcare Statutory Guidance* updated in 2017 also requires local authorities to take actions against the providers that fails to promote the FBV.

In terms of **subject content**, the DfE separately reformed and published *Religious Studies GCSE and AS/A-level subject content* in February 2015, as a reaction against the "Trojan Horse" affair and a positive response to the required promotion of FBV.

In Western countries maintaining fine religious tradition, religious education (RE) has always played an irreplaceable role in improving the personal virtues of respect, tolerance, benevolence and empathy and has made a significant contribution

to personal moral and spiritual development. However, religious education has not fully realised its potential in the majority of British schools and has even been inclined to extremist in a few schools.

For example, the inspection on Birmingham schools arising from the “Trojan Horse” letter showed that RE became a central core subject in a number of non-faith state secondary schools and was taught largely from the Islamic perspective in a few primary schools, and a number of governors were “trying to impose and promote a narrow faith-based ideology in what are non-faith schools” (DfE 2014c), through narrowing the content of curriculum, manipulating appointments of staff and using school funds inappropriately.

Although, the term FBV does not appear in the reformed religious studies GCSE or AS/A-level subject content, “tolerance of those with different faiths and beliefs” was embedded in the specification of “subject aims and learning outcomes”, which requires to:

- develop students’ knowledge and understanding of religions and non-religious beliefs, such as atheism and humanism;
- challenge students to reflect on and develop their own values, beliefs and attitudes in the light of what they have learnt and contribute to preparation for adult life in a pluralistic society and global community. (DFE, 2015, p. 3)

The reformed subject content still came into effect on September 2016, although a large number of objections were received through the consultation.

To sum up, the requirements of guidance for promoting FBV have affected all types of school in England, even analogous duties were placed on universities and colleges, and also made explicit in the professional standards of teachers and regulations of financial fund. So far, the routines and worries of schools involving promotion of FBV have been incorporated into the revised framework for school inspection.

## 8.5 Principle and Feature

With respect to the active and deliberate promotion of FBV by schooling, it is worth mentioning a **mandatory principle**; namely all teaching staffs in all schools are required to maintain “partisan political neutrality” and offer balanced presentations of different/opposing views. This principle also specifically applies to all the teaching staff working on the promotion of FBV through school curriculum and/or teaching.

In line with the commitment to strengthen the SMSC development standard, a new part added to the consultation (2013b) on improving the SMSC development of pupils was aimed at preventing the indoctrination through curriculum and/or teaching, and ensuring schools:

- encourage pupils to respect specified fundamental British values;
- encourage pupils to respect specified fundamental British values;
- encourage pupils to respect specified fundamental British values;

- do not promote extremist views, or partisan political views, through their curriculum and/or teaching;
- offer pupils a balanced presentation of views when political issues are

brought to their attention (DfE, 2013b, p. 4).

The principle of “partisan political neutrality” and rejection of blinkered indoctrination in pupils’ SMSC development standard are both based on section 406(1)(b), Chapter IV in the Education Act 1996, as “the local education authority, governing body and head teacher should forbid the promotion of partisan political views in the teaching of any subject in the school”, which has been applied to all types of school. The primary purpose of this provision is not to prevent pupils from being exposed to political views or causing debates on political issues in schools, but to protect pupils from being encouraged by teaching staff or any others to support partisan particular political viewpoints.

The most prominent features of specific FBV promotion in schools are the latent approach, flexible way and all-round vision. Infiltration (such as value-embedded and value-woven) is encouraged as one kind of acceptable approach to promoting the specified British values imperceptibly, rather than dominant indoctrination.

Nicky Morgan (2014) expressed how British values could be taught in her oral statement. She said “British values need to be ‘woven’ into the school curriculum to prevent extremists filling the vacuum, as well as cultural change needs to tackle extremists”; these encompassed tolerance, respect and the way someone reacted when a different view was put forward. And the ways of embedding this in the curriculum included debating societies, visits to parliament and additional activities that bring out character and grit.

*The Consultation on promoting British values in school* gave recommendations and examples of a range of diverse ways by which schools could meet the requirements.

Reputedly, pupils’ SMSC development can be improved through almost all parts of the curriculum and infused within the extra-curricular activities, whole life, ethos and day-to-day operation of schools. In addition, the educational expectations in different fields of development must be flexibly adjusted for the age and ability of pupils, including those with special needs.

Based on views of individualism and multiculturalism, every person (including child) has been inclined to be regarded and treated as an independent and unique individual with his/her own autonomy in varying degree. On the contrary, one-sided and rigid indoctrination is not helpful to promote individual autonomy, critical thinking and the SMSC development of pupils or prepare them for the abundant opportunities and broad experiences in future life.

That is why political indoctrination or religious indoctrination from the local education authority, governing body, head teacher and teaching staff has been forbidden under the Education Act 1996.

The explicit approach to promoting the FBV in schools is infusing them into the curriculum of citizenship education, British history education and religious education, etc. For example, providing pupils with a broad knowledge of public life

services and institutions in England, advantages and disadvantages of democracy, and how it works in Britain, and in comparison with other government forms in other countries, through teaching citizenship, helping pupils to acquire respect for their own and other cultures in the way promoting tolerance and harmony between different cultures, through teaching history, as well as using a wide variety of teaching resources to help pupils understand a range of faiths and beliefs, such as atheism by religious education.

The implicit approach to promoting the FBV in schools is making the ethos, extra-curricular activities, whole life and day-to-day operation of schools permeated with British values. For example, ensuring each pupil makes their own voice that is listened to, through democratic voting of school council, holding mock elections whereby pupils can learn how to argue and defend their viewpoints, as well as organising visits to local councils, the parliament and worship places of other faiths, etc.

## 8.6 Controversy and Criticism

Since British values were discussed as a public issue and discoursed by the political figures, there have been a number of controversies over the definition and interpretation of British values as well as the requirement for promoting British values in all schools.

**First**, due to the uncharacteristic definition of FBV does not highlight the Britishness, it is quite difficult to distinguish the British values from human values or the shared values in other nations. Therefore, some commentators, members of the shadowed government, and religious figures deemed that human values should be actively promoted rather than the “British values”.

British values were regarded as “lack of British characteristic” because “mutual respect, tolerance and individual liberty” are not unique to Britain. They are shared by other people in other nations. British values “may be valued by the majority of British citizens but that doesn’t make them ‘British’” (3D Eye 2014). Thus, some domestic media comments questioned the differences between the “British values” and human values and stressed as for global citizens and human beings. “It’s the virtue of collective values that shape our society, not their Britishness” (3D Eye 2014).

The shadowed education secretary Tristram Hunt criticised the DfE for requiring all faith schools including Christian and Muslim schools to follow the related regulations and actively promote “individual liberty” and “tolerance of other faiths and beliefs”.

Besides, a few religious groups and figures also questioned “the rule of law” as part of British values. Friends School Council, which supports Quakers in education, argued in consultation that the content of British values should be replaced by “human rights” or “international law”. Quaker headmaster Michael Goodwin warned people of “not blind acceptance of the law” and pointed out pupils should ques-

tion the rules of law, because “it is not difficult to find modern examples of activity endorsed by the government that would seem to breach the demand that we ‘encourage respect for democracy’ and ‘further tolerance and harmony between different cultural traditions’” (Goodwin 2014).

In a word, “Britishness” as the distinctive nature of Britain is not fully reflected in official definition of FBV, so that boundary between particular British values and universal human values blurred and faded in a way, resulted in the government-led promotion of FBV became the controversial issue. From the globalised perspective, this controversy stems from the tension between nationalism and cosmopolitanism, and from the axiological view, it is based on particularity and universality of value. Virtually, there is overlapping part between British values and human values—“mutual respect and tolerance of different faiths and beliefs”; as a kind of formal principle without substantiality, it can be shared by almost all human beings including the British and other peoples, and by also nearly all religions including Christianity and any others.

One major strategy to the controversial less clear definition of British values is interpreting the peculiar Britishness through exploring unitary historical narrative and backing to British cultural tradition. “The left traces democracy back to peasants’ revolt, the right back to Magna Carta and so on” (Goodhart 2004). However, this strategy itself became the **second** controversial issue.

More than a decade ago, Gordon Brown called for “a clear view of what being British means, what you value about being British and what gives us purpose as a nation” in his speech (The Future of Britishness 2006b). Then, he further indicated that a clear interpretation of British values should be put into the historical context, and it was only through unique historical narrative that the peculiar Britishness could be highlighted, on account of a golden thread runs through British history. The golden thread has been woven from “a distinctive set of British values influences British institutions” at a seminar on Britishness in 2007 (Brown 2007).

David Cameron recognised and pointed out that British values were also “vital to other people in other countries”, and “what sets Britain apart are the traditions and history that anchors them and allows them to continue to flourish and develop” (The Mail on Sunday 2014). He claimed that an appropriate narrative history should be back to the curriculum, in order to children in learning how British Parliament and constitutional monarchy formed and developed.

Nevertheless, it is unlikely to solve the complicated realistic problems through telling historical story of the Britain, because “that is only one part of the diversity story, albeit the easiest to quantify and most emotionally charged” (Goodhart 2004).

Nowadays, Britain is so diverse and complex that it cannot give expression to a common culture in the present, let alone the past. There have been diverse historical narratives by variety of narrators with different backgrounds of ethnic, culture, belief and faith, from their own perspectives, positions and viewpoints. As David Goodhart, a renowned editor and commentator of the *Prospect* revealed:

In the rhetoric of the modern liberal state, the glue of ethnicity (“people who look and talk like us”) has been replaced with the glue of values (“people who think and behave like us”). But British values grow, in part, out of a specific history and even geography. Too rapid a



change in the make-up of a community not only changes the present, but also, potentially, changes our link with the past. (Discomfort of strangers 2004)

The UK Government has encouraged a dominant historical narrative in teaching of the British Empire and the immigration, to promote British identity, but this one-sided narrative may not present the all-sided British history. As a result, young people may leave school with less sense of the broad sweep of British history and with weaker critical thinking capacity. So, the designable promotion of FBV does not mean shaping common perceptions of the past, but restructuring present basic value system and looking into the shared ideals in future.

**Finally**, since the second half of 2014, the requirement for actively promoting FBV in all schools has always faced up with a number of criticisms, from educational institutions, religious groups and academic communities.

The main criticism was from the National Union of Teachers (NUT), Association of Teachers and Lecturers (ATL), Russell Group and Muslim Council of Britain. For example, Russell Group of universities pointed out the requirement to promote FBV in all schools might result in closing down spaces for discussion and debate, limiting freedom of speech on campus, and may drive those with radical views underground, where those views cannot be challenged in open occasion (Russell Group 2015).

In the light of the criticism outlined above, a substantial conversation amongst teachers, and between teachers and community, was regarded as the first choice about ways forward. The importance of a national conversation was highlighted in Church of England's response to the DfE consultation in August 2014, saying it would help to "build a stronger sense of the way in which shared values create stronger communities" (Church of England 2014).

## 8.7 Comparison and Findings

This paper, based on a Chinese author's research, aims to provide a reference for the government-led promotion of core Chinese values (CCV), through examining the promotion of FBV in the contexts of countering global terrorism and extremism. As known to all, since the middle of the nineteenth century, China has arduously experienced the unprecedented changes and radical transition. Since the 1980s, under the background of institutional reform and opening up, there have been variety of conflicts and integration between traditional and modern elements, native and foreign elements; the previous sociocultural order has been broken, while the new value system has not been built up yet. Nowadays, Chinese culture, used to be closed and unitary, has developed in direction of more open and diverse, but transforming society, confronted with the tension between identity and diversity, needs urgently to lay common ground for different cultures and values.

Therefore, the "core Chinese values" (CCV) was defined and stated in the 18th National Congress of the Communist Party of China (2012). Three levels and twelve words are included as follows:

National goals—prosperity, democracy, civility, harmony; Social principles—freedom, equality, justice, rule of law; Individual citizen’s qualities—patriotism, dedication, integrity, friendliness. (Cultivating and practicing the socialist core values, 2014, p. 4)

By comparison, the nature, implication, composition and aim of CCV are different from those of FBV. The CCV, reflecting the dominant ideology in contemporary China, with distinctive characteristic of partisanship and class nature, are put forward and defined by the ruling party, promoted by the government and expected to serve as value consensus and common ideals of Chinese people, and the promotion of CCV is aimed to intensify value identity, cultural integration, social cohesion and particularly, the confidence in socialist system and model.

However, the promotion of CCV in contemporary China is faced up with the similar problems to the promotion of FBV in multicultural Britain, particularly, in three aspects of making them appropriately interpreted, effectively cultivated and legitimately practiced.

In terms of **appropriate interpretation**, the following questions should be answered justifiably.

First, “democracy” and “the rule of law” are included in CCV and also FBV, and do they have different meanings in different value systems and concrete contexts? If they do, what are their specific differences? Why?

Second, the CCV are composed of twelve value elements, and how should they be ranked in order of importance? What kind of criterion should be used to determine their priority? Which one should be the highest priority?

In terms of **effective cultivation**, what kind of principle and strategy should be used to heighten effect of the CCV cultivation?

First, the principle of partisan political neutrality and requirement for offering balanced presentations of different/opposing views are helpful to transcend the interests and ideology of a particular party and avoid one-sided indoctrination and empty preaching.

Second, people are always inclined to be influenced by hidden infiltration, so value-embedded and value-woven, as effective approaches, should be encouraged to promote certain values in schools, rather than mechanical instruction.

Values are like air, invisible but almost permeate everything that goes on in the whole society, community, school and family. “Values are learned informally as well as formally and that learning of values may often be unintentional and even unconscious” (Halstead 2010, p. 303). Therefore, the certain values need to be promoted through not only explicit teaching but also implicit influence of sociocultural contexts, ethos and life in schools; extra-curricular activities and social service; routines of class and institutional operation of school; the whole process of education and so forth.

In terms of **legitimately practice**, acting in accordance with CCV in every aspect of social life and under the current legal framework is the best way to promote the CCV.

To make CCV permeated every aspect of public life such as school education, mass media, communication, and various campaign; to integrate CCV into routines

and operation of school, and let them run throughout the process of teaching and educating inside and outside the classrooms; to issue and implement the related regulations and policies; to optimise social guaranteed conditions and interest distribution mechanism; to incorporate CCV into all areas of institutional construction and social governance, especially improve people's action in accordance with CCV, by exerting legal authority and performing legal function.

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# Chapter 9

## The Changing Role of English Teachers in China as a Result of Curriculum Change



Man Lei

**Abstract** This chapter sets out to examine the revised English Curriculum Standards, looking critically at the direction of travel of this educational reform and reports upon the results of research to find out how teachers have understood and fared the changes in the curriculum. This is an issue of considerable importance because across the PRC there are in excess of 9 million full-time teachers of English working within the compulsory education system, so any change to the roles and expectations of those teachers represents a huge endeavour of reform. Another purpose of the chapter is to guide English language readers through an important ministry of the education policy document. In educational research relating to Chinese education, there is often insufficient attention given to what the Chinese Government is actually saying and instituting.

**Keywords** China · English language teaching · Curriculum reform · Revised English Curriculum Standards · Teacher role

### 9.1 Introduction

Foreign language education at all levels in China has reflected the changes of the sociopolitical context in China over time (Cortazzi and Jin 1996; Hildebrandt and Liu 1991; Jin and Cortazzi 2006; Lam 2007; Ross 1993; Xu 1990). From 1902 to 1922, Japanese influence on China meant that English teaching in China was modelled Japanese practices, prioritising reading and translation with little or no attention to spoken English. However, as British and American influence grew, English teaching began to emphasise on listening and speaking. After the founding of the PRC in 1949, China's relationship with the Soviet Union drew language learning towards Russian and English teachers had to learn and subsequently teach Russian, while English as a subject was deleted from the school curriculum. However, from the early 1959, as China's relations with the Soviet Union deteriorated, China's role in international affairs necessitated a command of English. As a result, English teaching

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was gradually reintroduced into the school curriculum in addition to Russian. Since 1977 with the end of the Cultural Revolution, English teaching has been developing vigorously (Adamson 2004).

It can be hard to remember that English has been the first choice of foreign language in China only for the last fifty years. In this time, and particularly in the run up to the 2008 Olympics, a huge amount has been achieved (Pan 2015). Today, almost all children in China learn English for 7 years in primary and middle school. During this time, the PRC has taken a centralised, top-down approach to curriculum planning and delivery (Liao 2004), allowing only local interpretation by provinces. In 2011, as a result of 10 years of piloting, the Ministry of Education (MOE) launched a revised curriculum for teaching English in compulsory schooling in China. The revised curriculum aims to address the English teaching demands of the modern world and the changing expectations of learners. A key goal of the 2011 curriculum was to improve students' speaking and listening abilities, and to harness the interest and emotions of children so that they enjoyed their English learning.

Even a cursory glance tells the reader that the 2011 curriculum was something really new and quite unlike the 2001 curriculum (which was itself intended to be a pilot version). In particular, the 2011 curriculum for English proposes a new and very different role for teachers and demands changes in their teaching practices, their role in curriculum design and their focus on student needs. This change has triggered requirements for a different understanding of the role and approaches of teachers.

## **9.2 A New Role for the English Teacher and for the Students**

The first, and arguably most important, of the key changes in this revised curriculum is the new and much changed role of the English teacher in the teaching, decision-making and resource selection for English teaching in China. The reassessment of the Confucian heritage in relation to the role of teachers and pupils in training for a role in the central administration has evolved over a long period of time. In the modern PRC, the figure of Confucius has been a central feature of revisionist assessments, so he is now presented as the central cultural philosopher, underpinning many aspects of Chinese life, but especially teaching and relationships between teachers and students. Confucius (551–479 B.C.) characterised himself as a teacher, and his legacy has left a very special and distinctive place in Chinese culture and society for teachers (Gu 2005; Rao 1998; Xu et al. 2006, Wang 1999). The modern revisionist representation of Confucius suggests that the teacher plays a dominant and mastery role in the teaching process (Rao 1998). Teachers it is argued, in the traditional context, should already have mastered a profound body of knowledge and have correct answers at all times (Brick 1991) and exert control over the class all the time (Tang and Absalom 1998). Such representations are modern manifestations of a desire to legitimate what takes place currently. Confucius suggested that the teacher should be a paragon

of virtue and learning for students to follow (Rao 1998; Scollon 1999; Wang 1999; Xu et al. 2006). As a result, English teaching across the PRC has in general been seen as quite teacher-centred and teacher-dominated (Adamson et al. 2000; Jin and Cortazzi 2006). However, it could be argued also that almost all curriculum subjects have been taught in this manner. Confucianism, or at least a revised version using his name as a reference point, has become more widespread in the last decade than at other times in the history of the PRC (Yu 2008). However, a different view of the teacher in the curriculum appears to be emerging within the 2011 revised policy for the teaching of English, while suggestions for change in content in the revised curriculum challenge past perspectives.

The changes inherent in the 2011 curriculum reflect the adoption of language teaching practices that aim to develop greater communicative competence and to teach children not only to ‘know’ about English but also to be able to use it in the modern world—in speech as well as in writing (Liao 2004; Hu 2002). To understand, in detail, what the revised curriculum envisages, an analysis of the 2011 curriculum was undertaken, specifically focusing on the main objectives (MOE 2011, pp. 8–24) and on the final teaching suggestions section of the materials (MOE 2011, pp. 25–33) to identify the role the teacher needs to adopt to follow the suggestions and to achieve the objectives. Some aspects of that analysis are discussed in what follows.

### 9.3 Teacher as Organiser of Differentiated Learning

The earlier 2001 curriculum asked teachers to combine the specified teaching content with teaching objectives, to motivate students to participate in classroom activities and to respect every student. However, the revised curriculum goes much further and specifies that the English teachers’ role is as an organiser of learning: ‘It is the teachers’ responsibility to organize the teaching process and teaching content carefully in order to allow students of different levels and different learning background to learn cooperatively and actively’ (MOE 2011, p. 26). This idea of students working collaboratively and at different levels within their class introduces a communicative culture of the teaching of English into a Chinese setting which had previously been dominated by textbooks and by large classes of children all working at the same pace (Biggs 1996; Jin and Cortazzi 2006). Indeed, the revised 2011 curriculum expects teachers to understand and respect ‘all students’ different learning experiences, learning levels, and learning styles; respect students’ personal characteristics; take full advantage of students’ potential’ (MOE 2011, p. 26). Effectively, teachers are expected to differentiate students’ work based on their previous performance and individual characteristics—a new and demanding approach to teaching. These requirements also embody a new view of the assessment of language proficiency as a basis for effective differentiation.

The revised curriculum also confers upon teachers a new responsibility for cultivating students’ positive emotions and confidence: ‘Teachers should arouse all students’ motivation, build up students’ confidence, help them experience the happiness

and the successful feeling of learning English, and enable all the students at different stages to make progress constantly' (MOE 2011, pp. 25–26). This is a new aspect of the curriculum, introducing a much more 'student-centred' approach to English classes and a greater emphasis on students' own experience.

#### 9.4 Teacher as Guide in Co-operative Learning

Whereas the 2001 curriculum asked teachers to provide opportunities for students' independent study and for communication with others, the revised 2011 curriculum asks English teachers to 'guide students to be willing to cooperate with others, help each other, and cooperate to achieve a shared task' (MOE 2011, p. 20) and 'guide students to learn from each other, make progress together'. Teachers are exhorted to lead students to learn to study independently, letting them 'enjoy the happiness of communication and cooperation in the learning process' (MOE 2011, pp. 25–26). The curriculum provides explicit teaching examples for teachers to show them how to guide students' learning. This change indicates that the revised curriculum puts more emphasis on the teacher's role as a guide, rather than on the teacher as the sole dominating presence in the classroom. The revised curriculum also makes it clearer that it is the teacher's responsibility to develop students' willingness to learn English and communicate with other students. It could be argued that this perspective reflects more accurately the historical realities of true Confucian teaching.

The 2001 curriculum asked teachers to recognise and correct students' mistakes, whereas the revised curriculum takes a different approach to mistakes by asking English teachers to 'choose the right time and use appropriate method to cope with students' mistakes' in their language practising process (MOE 2011, p. 26). This student-centred approach, being more sensitive to students' feelings, emphasises that the teacher's role is to guide and help students at appropriate times, a role which may well be unfamiliar to teachers used to simple, straightforward correction.

The revised curriculum asks teachers to harmonise their relationships with students (MOE 2011, p. 26)—something not previously mentioned but which is suggestive of a very different pupil–teacher relationship from that of what had been characterised previously as being the model of traditional Confucian teacher. In Western teaching contexts, an ideal relationship between teacher and students has been seen as one of individuals engaged in collective enterprise (McBer 2000) rather than one of authoritative exemplar as practised in established teaching contexts in China, which has dominant Chinese language teaching classroom. This new emphasis in the revised curriculum has been influenced by perspectives focusing more on the student's personal development which originate from Russian, German, Italian and English language educational thinkers. English teachers are told to encourage students' learning and use of English through 'observation, practice, exploration and cooperation' in well-organised classroom activities (MOE 2011, p. 26). This change encourages English teachers to put more focus on developing students' cooperative skills. This is a newer view of students: Instead of seeing them as passive recipients



of learning, the teacher is required to pay much more attention to the feelings and emotions of their students and their experience of learning English. This aims to create a positive and enjoyable classroom climate, but it also poses challenges for English teachers by questioning traditional beliefs about the role of the teachers and students in class.

## 9.5 Teacher as Curriculum Designer

The change in relationship between teacher and students is evidenced by the range of communicative activities that teachers are asked to design and the examples which are provided for them to follow. The earlier 2001 curriculum asked teachers to provide opportunities for students' communication in class, but the revised 2011 curriculum raises the expectations of teachers by asking them to, 'design communicative activities based on students' individual differences' and to 'create more real-life situations for students' (MOE 2011, pp. 26, 31, 43). Indeed, the 2011 curriculum suggests, 'English teachers should create real contexts through practical language activities' and teachers should 'design and adopt various kinds of suitable teaching approaches which attach equal importance to the process and outcome (such as task-based teaching approach) to improve students' pragmatic competence' (MOE 2011, pp. 26–27). This encourages teachers to adopt a variety of teaching approaches according to the specific teaching content and the prior learning of the students, rather than simply adopting the one-size-fits-all approach specified in the earlier document. Teachers need to plan more creative activities, which are close to students' daily lives and social lives, and provide more opportunities for students to use English language in real communication. This should be positive for students because many commentators and researchers' documents (Pine and Boy 1997; MOE 2011; Wang 2012) have suggested that various meaningful activities based on students' characteristics, interests and feelings can not only broaden students' horizons, increase their knowledge and shape their characters, but also enrich the teaching content, enliven the classroom atmosphere, harmonise the relationship between teachers and students and improve the teaching effects. Moreover, some integrated activities, such as listening to English songs and writing the lyrics, are encouraged because they may assist the students to master new knowledge, as well as to review previous knowledge. These activities are encouraged by the 2011 curriculum because they can contribute to the development of the students' all-round ability in the use of different kinds of language skills within authentic contexts.

The revised curriculum not only requires English teachers to use multimedia resources and real-life examples of language use, but also suggests that teachers make full use of their own life experience and students' learning experience to enrich teaching content (MOE 2011, pp. 30–31). This change reflects a commitment to harnessing students' interests and the aim of making language learning relevant to students' real lives. However, it also asks teachers to take more responsibility for resource choice, expand their range of materials and crucially, go beyond textbooks as

a source of classroom material. For teachers used to using textbooks and workbooks, the requirement to design new types of activities with revised materials is a new and challenging role. Implicit within this ministry proposal is that teachers' experiences and lives become a learning resource for use in their classrooms.

The 2011 revised curriculum advocates not only a task-based teaching approach, as the previous 2001 curriculum did, but also other teaching methods, and encourages teachers to actively explore a wider range of teaching methods to improve the effectiveness of their teaching. This aim of using English in realistic contexts, a key tenet of the communicative approach to English teaching that dominates internationally (Liao 2004; Hu 2002), demands, however, that teachers understand this approach and its goals—a factor which cannot be taken for granted. The revised curriculum means that teachers will need to broaden their range of knowledge about teaching language. This also requires that schools have head teachers who can lead teacher retraining (Cowan et al. 2014, pp. 148–168).

The revised curriculum is fundamentally different not only in its content, but also in its approach to the curriculum. It adopts a curriculum enactment perspective, recognising that the curriculum is not preexisting, external, or static, but should be created and designed through classroom experience and teacher–student interaction process (Ryan 2004; Snyder et al. 1992). This is evident in the emphasis on teacher reflection to improve practice, the differentiation of teaching to suit the situation, the need for teachers to work in teams and the repeated emphasis on teachers making choices in their teaching. In this approach, teachers are not just *delivering* the revised curriculum, but are *designing* and *shaping* the curriculum to suit their students. The envisaged role of teachers is that of curriculum creators rather than simply implementers. However, this is a huge change for teachers trained who are habituated to operating within a top-down curriculum and indeed system. Today's teachers of English in China will need to be aware of their role in creating and shaping the curriculum which, again, cannot be taken for granted, especially unless their training within colleges also adapts to the spirit of the revised 2011 guidelines.

## 9.6 Teachers as Reflective Researchers and Providers of Professional Development

The revised curriculum places much greater emphasis on teacher reflection than the earlier approach, by illustrating, in detail, the importance and benefits of teacher reflection. Reflection can help teachers to 'find, analyse and solve problems in teaching', so it helps to promote teacher professional development. By engaging in reflection, teachers can 'deepen their understanding of the teaching and learning process' and, they can also 'improve their subject knowledge and pedagogical competence' (MOE 2011, p. 33), so this is beneficial for growth in teachers' professional development. But most importantly, teachers will undertake reflection not individually, but within peer groups as they try to address challenges and problems facing them

in their day-to-day professional lives. This emphasis on reflection becomes a mechanism for developing teachers' knowledge and understanding to adapt the changes in their roles.

The revised curriculum encourages teachers to establish teaching teams working in an atmosphere that encourages sharing, communication, cooperative learning and cooperative exploration (MOE 2011, pp. 32–33). This was not mentioned in the earlier 2001 curriculum and suggests that teachers should be working as a learning community to promote their own and each other's professional development.

Therefore, the revised proposals offer a transformative view of what teachers are, implicitly requiring teachers not just to change their practices of teaching, but also the ways they learn about teaching. The revised curriculum demands that teachers participate in personalising the curriculum and teaching methods. They are expected to adopt a more communicative approach and to develop their own professional knowledge through reflection. Chinese teachers of English whose training and professional practice comes from past traditions might find the 2011 revised curriculum unfamiliar and challenging when they want to adapt themselves from 'good teacher' in the traditional context to 'good teacher' in modern society. However, a newer generation of teachers for whom these ideas are now part of the institutionalised framework will perceive them to be normal expectations.

## 9.7 A New Focus on the Student

The other aspect of the revised curriculum that has changed is the greater emphasis on what is described as 'humanistic values', a term which may be unclear to readers coming from outside of the PRC. The term is included many times in the revised curriculum document. In this context 'humanistic values' when related to learning English refers to teachers taking into consideration students' feelings, emotions and general self-development (Ding 2012; Yu 2012; Zheng 2012). This is related to another aspect of the seemingly all embracing the Confucian tradition, of teaching the value of 'humanity' which means care and responsibility for one's students (Rao 1998; Xu et al. 2006). The role of English in the 2001 curriculum focused on the instrumental value of English, but the 2011 curriculum goes beyond the instrumental value of knowledge acquisition and changed the role of English into, 'the combination of instrumental value and student-centred value' (MOE 2011, pp. 1–2), that is learning English for both future or economic purposes but also for the enrichment of the self and the development of a new world view. In this subtle way, a change in language within a key ministry document opens opportunities for a changed attitude reflecting the new realities facing China.

Teachers are now asked to develop students' linguistic competences and their thinking abilities; enrich students' life experiences; promote positive attitudes; develop a positive outlook; and open minds through their teaching activities. Traditionally, English teaching in China has been accused of prioritising learning for passing examinations and ignoring students' emotional development (Wang 2012).

Unlike traditional curricula in China, the revised curriculum prioritises the ‘cultivation of emotion’ as the general objective of the English course. According to the 2011 curriculum (MOE 2011), ‘emotion’ refers to the related factors that may affect students’ learning processes and outcomes such as interest, motivation, confidence, will power and team spirit, and the patriotism and global vision formed gradually during the learning process.

The revised curriculum proposes some very significant changes to the role of the teacher. Teaching in China and other cultures which share Confucian heritages have often been described as teacher-centred (Cortazzi and Jin 1996; Hu 2002), textbook-based (Biggs 1996; Hu 2002, p. 98) and characterised by rote learning (Cortazzi and Jin 1996; Hu 2002). However, much of this style of teaching was assimilated from the late nineteenth century onward from European models put into place in modernising Japan (Wang 1986). It has been viewed as a ‘process of accumulating knowledge only’ (Hu 2002, p. 97), where teachers transmit the knowledge to students, and students are seen as passive recipients of knowledge (Cortazzi and Jin 1996). The 2011 curriculum gives a new focus to the learning process as ‘a practical process of constructing and using knowledge for immediate purposes’ and the teacher is not the ‘learning centre’ any more, but an organiser, guide, designer and co-operator in learning (MOE 2011, p. 36). English teachers, therefore, must change their roles according to the needs of curriculum objectives, learning activities and learning processes as well as the needs of students. Teachers should also guide students to develop their self-learning abilities (MOE 2011, p. 38), so to make students become the true learning focus and to foster learner autonomy. A good teacher in China today, therefore, must go beyond just transmitting knowledge, showing his/her care and concern for the emotions and learning needs of students and paying attention to students’ all-round development as well as their individual academic development. These are lofty goals which demand great changes from teachers, students and materials.

## **9.8 How Teachers Understand the Demands of the Revised Curriculum**

Achieving a complete role change for teachers and a new relationship with students across the PRC is a challenge. Fullan (1993) argues that any educational reform ultimately relies on teachers, so their views and perceptions are pivotal to the success of the revised curriculum. It was the perceptions and experiences of teachers who faced the changing demands that I wanted to investigate. To do this research, I used an extensive questionnaire with 227 teachers to enquire into their understanding about the revised curriculum and their beliefs about language learning. The questionnaire had 81 options within the battery of questions. The study then utilised eighteen in-depth interviews to explore the issues arising from the completed questionnaires. The

purpose therefore was to test the intention behind the policy changes with the realities as experienced in actual classrooms during the implementation and transition period.

The following section of this chapter focuses on what these teachers said about the role of the teacher and attempts to share teachers' perspectives about the revised curriculum and their concerns about undertaking it. 223 (98%) of the surveyed teachers reported that they were teaching the 2011 revised curriculum. All eighteen interviewee teachers had taught the 2001 earlier curriculum, and all of them were teaching the 2011 revised curriculum when they were interviewed. So the assumption was that these teachers would be in a position to answer questions about the curriculum, their understanding of language and their training for the revised curriculum. However, their interviews suggested that the teachers were far from clear about the changes included in the revised curriculum. When asked, 'How are you finding the revised curriculum?' Three teachers (17%) spontaneously mentioned that they did not think there were significant differences between the 2001 earlier curriculum and the 2011 revised curriculum:

I found there was nothing special in the revised curriculum because the 2001 earlier curriculum and the revised curriculum are almost the same. No big differences. (Teacher G, from city)

I think the revised curriculum is okay. The revised curriculum does not include any obvious changes comparing with the earlier curriculum. (Teacher H, from suburb)

This offers a vivid example for policy researchers of the need to move beyond the documents and policy statements and explore the enactments of the policies, however problematic and contradictory they may be. Nine of the interview respondents (50%) stated that they did not know much about the revised curriculum.

Actually I do not know too much about the revised curriculum. I did not have the training opportunity for the revised curriculum; I also have not read the revised curriculum carefully. We need to read the revised curriculum by ourselves. (Teacher B, from suburb)

Actually, I do not have a quite clear mind about how is the revised curriculum because I have not read the revised curriculum carefully; and the training I already have had is far from enough for me. (Teacher E, from suburb)

I found the revised curriculum.... well, to be honest, there might be some changes in the revised curriculum but I do not know anything detailed because I did not learn the revised curriculum yet. (Teacher J, from city)

I do not know too much about the revised curriculum, because I missed the training opportunity for the revised curriculum. I do not have any impression about the revised curriculum. (Teacher O, from a rural school)

These responses suggest that many of these teachers have some way to go in fully embracing the goals and changes in the revised curriculum, although none said they were unwilling to do so. This raises the critical question of how or why this situation arose? The interviews revealed some interesting understandings of the nature of the revised curriculum.

Although almost all the teachers answering the questionnaire were teaching the 2011 revised curriculum, when they were asked about the curriculum in interviews, many of them discussed the textbooks they used and seemed to see this as synonymous with the curriculum.

I am not familiar with the revised curriculum. But I am using the revised textbooks; I found the revised English textbooks based on the revised curriculum are easier than previous textbooks. Students should accept and understand the revised textbooks better. (Teacher C, from suburb)

The revised curriculum seems easy to teach. I found the revised textbooks under the revised curriculum are simpler than previous textbooks. (Teacher N, from rural)

This offers a good example for policy researchers to notice the issue that teachers even do not understand the term ‘curriculum’ well. They seemed to understand the ‘curriculum’ as the content and structure of the ‘textbook’—a much narrower view of curriculum than the one suggested in the 2011 revised curriculum standards. This raises the critical question of why this issue existed? This is perhaps not surprising, as the dominance of a textbook-based approach to teaching English in China is well documented (Adamson et al. 2000; Jin and Cortazzi 2006; Yan 2012). Textbooks can support and guide teachers to complete the teaching objectives in a safe and easy way and include most of the content required for examinations (Gu 2002). The 2011 revised curriculum offers (even demands) more choices and options of materials, techniques and goals than teachers may have been used to in the previous, more textbook-based, curriculum. In this way, the revised curriculum is both more prescriptive than the earlier one, in that it specifies a wide range of teaching methods in a way that the earlier curriculum did not, but is also much less prescriptive because it demands that teachers make choices about the methods and materials they use. It may be that teachers have never encountered a wider meaning of the term but are used to the curriculum being entirely within the textbook.

Interview responses indicate that the teachers recognised there was more content in the revised curriculum, but that they felt they had limited time to cover it. For example: ‘We have lots of content to teach, but very limited time in the class ... We must use the limited time to ensure students learn all the content and get high scores in exams’ (Teacher I from urban school). This may mean that teachers choose the content they like are familiar with or consider more important (Yero 2010), which is likely to be textbook based, rather than the speaking and listening or authentic material-based activities the curriculum suggests. As Ramsden (1992) claimed: The assessment is the curriculum, as far as teachers are concerned. So, teachers are likely to teach what they think students will be assessed on, not what is encouraged by the curriculum. This may be another reason why teachers put great emphasis on the textbook and believe it includes most of the necessary content for English teaching.

The interviews with the teachers suggest that they had very varied understanding about specific aspects of curriculum content such as student-centred teaching, the emphasis on humanistic values and the new demands of professional development, where these did not fit with their extant understanding of curriculum. In the questionnaire responses, 77% of the teachers agreed that ‘the revised curriculum defines the role of English course as the combination of instrumental value and humanistic value’. Given that this is the very essence of the revised curriculum, 77% is a surprisingly low agreement rate. 17% of the respondents gave neutral responses, from which we may infer they did not understand, were uncertain or unwilling to comment, while teachers from rural schools occupied the highest proportion of neu-

tral responses (22%). The choices of teachers' practices are not consistent with the choices made about language learning beliefs and understanding of the revised curriculum. Only 56% of the respondents agreed that 'teaching English for both developing students' basic English knowledge, skills and thinking ability, and improving students' all-round humanistic quality is successful in practice'. However, 35% of the participants neither agree nor disagree with this statement, which suggests they did not understand, were uncertain or were unwilling to comment. It seems this new approach is not yet universally understood or practised and there is more work to do. Questionnaire participants knew that humanistic values are emphasised in the revised curriculum, but the interviews suggested they may not know what this means. For example, some teachers experienced difficulty understanding the term 'humanistic value' in the revised curriculum, Teacher B said,

The humanistic value includes culture infiltration between Chinese culture and western culture in English teaching. Humanistic value demands us to pay attention to the differences between Chinese culture and west culture in English class.

This is a good example showing a misunderstanding of 'humanistic value'. Moreover, the questionnaire results suggest that teachers think that teaching humanistic values is challenging. The majority of the questionnaire respondents (68%) agreed that 'teaching English for both developing students' basic English knowledge, skills and thinking ability and improving students' all-round humanistic quality is difficult', and two rural teachers said that it was difficult for their school or area to achieve the humanistic values of the English course.

Our school cannot achieve humanistic value because we do not know how to achieve that, we did not learn it. Also, our school never focuses on the humanistic value. (Teacher F, from rural)

The interviews suggest that these terms remain new and alien to some teachers and are misunderstood by others. However, some of the teachers had embraced aspects of the revised requirements. Of the nine respondents who said they found the revised curriculum very different from the 2001 earlier curriculum, one teacher said that the biggest difference was that the revised curriculum was more positive about student-centred teaching and the creation of an enjoyable climate for students.

I think the biggest change in the revised curriculum is that it has put more emphasis on student-centred teaching. I remembered the revised curriculum demands students learn from each other; students can study independently, they can enjoy the happiness of communication and cooperating in the learning process. All these new emphasis will make the revised curriculum more student-centred. (Teacher A, from city)

This teacher highlighted the issue of student-centred teaching and teachers' new roles of guiding, helping students and putting students at the centre of the class, even though this is not how she discussed it. If not all teachers have understood their new roles under the revised curriculum, some have begun to see changes in the teaching demands.

All eighteen teachers were asked the question 'do you feel you understand the revised curriculum well?' Sixteen teachers (89%) said they did not think they understood the revised curriculum well and said they had not had adequate training.

Without training for the revised curriculum, I do not understand the revised curriculum well. As teachers, our main job is teaching. We seldom have the training opportunities for the curriculum change. I think there may be more training opportunities in big cities such as Shanghai. (Teacher B, from suburb)

I do not have any training for the revised curriculum so I do not understand the revised curriculum. We do not analyse the revised curriculum. We just follow what the school leader asked us to do. I have read the revised curriculum, but actually I do not have any impression. (Teacher L, from rural)

Training for only two days did not help me to understand the revised curriculum. I forgot most of the contents I learnt from the short training. Then, I can only read and summarise the revised curriculum by myself. (Teacher G, from city)

Two teachers, including the teacher who had adequate training, said that the training they had had helped them to understand the revised curriculum better, but they complained that they soon forgot what they had learnt from the training, for example, Teacher C said:

With training, I can understand the revised curriculum better. I thought I understood the revised curriculum well when I was in the training process. But just like students, they forgot most of the things teachers taught after the class. I forgot what I have learnt soon after the training programme ended. But I have been a teacher for so many years, I know how to teach English even if I forgot what the revised curriculum said. (Teacher C, from suburb)

Questionnaire results support the interview responses in identifying a perceived shortage of training by the teachers. 73% of the teachers agreed with the statement that ‘the training programme I already have had is attended by teachers on a selective basis and did not cater for all the teachers’. The selective training programme for teachers in China may be one of the reasons why teachers do not understand the revised curriculum well. From this study, we know the teachers do not all understand the new curriculum and that they want more training. This is not surprising, because they are used to ‘being trained’. However, it is slightly surprising that teachers would not find out about, or at least read thoroughly, a curriculum they are actually teaching. These comments raise questions about what they believed to be their responsibility for professional development and, of course, whether this like the old understanding of ‘curriculum’ has changed as part of the changes in the new curriculum. Whether the teachers’ role is understood as an implementer of an educational change (Goodson 2005; Johan et al. 2012) or as a joint designer of the change (Spillane et al. 2002; Coburn 2004) is a key issue. With the revised curriculum, teachers need to choose and develop the curriculum rather than simply knowing and delivering the curriculum. For example, the revised curriculum demands teachers:

.... develop the curriculum rather than simply know and deliver, and can both teach and research in the teaching process, improve the knowledge level of teaching theories and practices, and then create and shape their personal way to teach in the class according to students’ conditions. (MOE 2011, p. 33)

This new role might demand a more active approach to professional development—including being proactive in planning for training.



## 9.9 Understanding of New Roles and the Demands of Teaching the Revised Curriculum

Teachers' perceptions about their new roles were a focus of this study. One of the most challenging aspects of the revised curriculum is the culturally unfamiliar practice of student-centred teaching. In the questionnaire, the majority of respondents agreed that English classes should be student-centred and teachers should not dominate the class. Although 20% of the questionnaire respondents also agreed that the role of the English teacher in the language classroom was only to teach knowledge of foreign language, 20% agreed that 'the revised curriculum emphasises that teachers should dominate and design all the teaching content, process and assessment criteria. Students do not need to participate in these choices'. Almost half of the respondents agreed that 'student-centred teaching is successful in practice', but half of them claimed 'it is difficult for me to implement the student-centred teaching'. Interviews with teachers revealed that most of the interviewees stated that the roles of the English teacher in the classroom were initiator, explainer and class controller. Those teachers advocated teacher-centred and teacher-led English teaching rather than student-centred teaching and thought that teachers should control the class, supervise and push students to learn. Teachers suggested disciplining children to follow what teachers said. These responses suggest the new approach is not yet fully understood or embraced and that many teachers were not sure about, reluctant to accept or felt unprepared to undertake the change in the teacher's role in English language teaching, and the demands of teaching the revised curriculum.

Some teachers in the interviews expressed their views that English teachers should be a guide, communicator and organiser in English teaching and the class ought to be student-centred instead of teacher-centred, for example, teacher I said:

I think the class should be student-centred rather than teacher-centred. Sometimes we can have students to ask questions by themselves instead of teachers asking students. Teachers should guide students and let students find problems and solve problems by themselves. (Teacher I, from city)

However, other teachers claimed that the pressure of examinations in China made this approach impractical.

I know students should be the centre and teachers should not control the whole class. However, student-centred is very time consuming and does not seem helpful for passing exams. The pressure of exams makes me focus on the role of imparting knowledge rather than being a guide, communicator, etc. (Teacher Q, from rural)

Teacher Q's answer exposes the tensions between teachers' concerns about the summative assessment of their students and their wishes to engage with the new role in the revised curriculum. Teachers' responses showed that they did not see a link between promoting a communicative use of language and examination performance. This means that the huge pressure of examinations can be a factor in preventing some teachers from accepting the changing of their role in English language teaching. For the teachers in this study, this is the key point: if the assessment system stays the same,

there seems little point in the new content (e.g. communicative activities, listening and speaking) as these aspects of language will not be tested in the examinations.

## 9.10 The Challenges English Teachers Face in Implementing the Revised Curriculum

The findings of the interviews showed that less than half of the teachers stated that they were adopting teaching approaches that helped students enjoy learning English, or included more communicative activities. Teachers' stated behaviour conformed to the key principles of 'humanistic' teaching which can be translated into 'student-centred teaching' and 'communicative language teaching'. These are approaches suggested by the revised 2011 curriculum standards but which demand that teachers change their teacher-dominated teaching and put students at the centre, organise communicative classroom teaching activities and develop students' English language knowledge and language abilities to achieve the purpose of effective teaching (MOE 2011, p. 20). English teachers need to include more oral practice and create more authentic language contexts for students (MOE 2011, pp. 25–26); English teachers should benefit students' lifelong development (MOE 2011, pp. 1–2).

Although the questionnaires indicate that most teachers felt they were successful in adopting various kinds of language teaching approaches, the interviews suggested that most of the respondents were still following more traditional approaches that focused on teacher-dominated, textbook-based teaching, grammar-translation teaching and task-based teaching without or using very few communicative activities in English classes. This is in line with established research findings that although teachers often claim to follow a more communicative teaching approach, most of them are still employing a traditional teaching approach rather than communicative teaching in classes (Long and Sato 1983; Guthrie 1984; Nunan 1987; Walz 1989; Kamaravadivelu 1993; Hu 2005). It seems that student-centred teaching and communicative language teaching as suggested by the revised curriculum standards is not yet fully understood or embraced.

Many obstacles may prevent the adoption of communicative language teaching (CLT) which the revised curriculum advocates. CLT has not been very successful in China since its introduction (Hu 2005). It has not received widespread support, and what little support it has is often a matter of paying lip service, and the traditional teaching approach is still dominant in many classrooms (Hu 2002, 2005). This raises the question of why some teachers were not adopting the communicative approaches encouraged by the revised curriculum. What challenges were preventing teachers from changing to student-centred teaching?

This study found a number of issues related to difficulties in implementing the revised curriculum. One issue which teachers identified as having an impact on this was the training they had had for the revised curriculum.

The findings in questionnaires and interviews suggest that training about the revised curriculum content had been valued, but teachers identified the need for more training in the substantial issues raised by the revised curriculum—how to operationalise it and improve their own knowledge for teaching. Furthermore, teachers wanted a different approach to training. They found the training they had already had was ‘lecture-based, spoon feed the trainees and lacks interaction’, ‘short intensive training’, ‘attended by teachers on a selective basis’ and ‘did not focus on the particular needs of teachers’ and all of the teachers claimed that they did not get adequate training. For example,

The three-day training enables me to know that I did not understand the revised 2011 curriculum fully in the past. As a new teacher, I am inexperienced. I cannot grasp the key points and the difficulties. These days’ training shows me the way for my future teaching. I want to have more training to help me. (Teacher S, from suburb)

The literature suggests that problems relating to teacher training provision in China are not new, particularly the nature of the, mainly short, intensive courses which are attended by teachers on a selective basis and do not cater for all the teachers (Vandenberghe 2002). Chinese teachers’ views on teaching are greatly influenced by traditional teaching concepts, while the revised curriculum includes ideas of Western origin, developed in a different cultural and teaching context. Teacher training programmes, therefore, need not only update teachers’ knowledge but also make huge changes to teachers’ existing beliefs, and help teachers to understand and own the innovation (Vandenberghe 2002). Though the majority of the respondents in this study stated that the short courses had had a huge impact on them, especially the rural teachers, and they believed the training programme they had had was helpful to them, the findings from interviews and questionnaires indicated that these teachers were experiencing trouble in understanding the revised concepts in the curriculum and were unable to adopt the innovations. For example,

In our school, we have the training held by our English subject team. Our English team leader let every English teacher sit together and let us read the revised curriculum standard by turns. So every teacher there can listen while others were reading the curriculum. This means every teacher there was learning the revised curriculum at the same time. We have this training twice each week, every time the training lasts for almost 45minutes. The whole training lasts for one semester. (Teacher C, from suburb)

This offers an example for policy researchers to think about the issue of the approach to training. This approach to learning the curriculum (reading it aloud) does not suggest training focused on teachers’ need to understand, own and see the practical implications of the revised curriculum. Teachers in this study felt able to confess that they did not understand the revised curriculum, but did not seem to feel they should find out about it themselves. This suggests a rather limited view of professional development and may even hint at a passive approach to professional change. This is a slightly speculative conclusion, but the top-down nature of curriculum change might have had the effect of leaving teachers to feel they were ‘implementing’ change in the curriculum, rather than designing change. The high level of discussion of the textbooks in the interviews seemed to suggest that many

of the teachers saw the change in the textbooks as the major change, but had not entirely engaged with the key goals of the new approach. The lack of ownership of change from the teachers may also have been related to the parts of the revised curriculum that discussed teachers developing their professionalism and professional responsibility in ways which were new to them.

Another issue which seems to have an impact on the implementation of the revised curriculum is the nature of the assessment of the curriculum, for example,

Most of the time, I will include less communicative activities because the pressure to complete all the teaching tasks. I want to have student-centred teaching in class and I know this could benefit students more. However, we have lots of contents to teach, we have lots of students in one class (70 students), also, we only have 45 min to finish one lesson. All these factors force me to use less communicative activities such as group work that may take too much time in class. I feel very pressured because the revised curriculum asked teachers to do many new things such as including more group work and more teaching approaches, but the headmaster and parents mainly put their emphasis on students' exam score. (Teacher F, from rural)

This is a vivid example for policy researchers to think about the issue—what is emphasised in the revised curriculum and assessed in examinations seems inconsistent. Biggs (2003) argues that teaching, curriculum and assessment practices should be aligned to the aims of teaching. Perhaps one of the greatest challenges to successful implementation of the revised curriculum is the mismatch between curriculum content and assessment. In this study, most of the teachers claimed the mandated testing failed to test students on what they had been taught (based on the revised curriculum) and this had resulted in a narrowing of the curriculum so that, instead of experiencing the wider, more authentic curriculum planned by the MOE, students actually experienced a curriculum dictated by the demands of tests. For instance, teachers said they did not have time to focus on speaking and listening, a key part of the revised curriculum, because it was not emphasised (or sometimes, included at all) in the examinations. Assessment focused on testing language knowledge was not aligned to the aims of teaching proposed by the revised curriculum that 'the main aim of learning English is to improve students' all-round language use ability and help students develop as a whole person' (MOE 2011, p. 8). Assessment was perceived by these teachers as poorly aligned with the revised curriculum. Teachers now had two main pressures—the examination and the curriculum—which they did not see as pulling in the same direction. So, despite the introduction of student-centred, communicative teaching into the revised curriculum, students' English knowledge was still tested by means of a written examination based on textbook content as it had been in the past. This meant the students' main goal was passing the exam, not mastering the language. With no quantifiable reward for embracing student-centred approaches, teachers in this study tended to feel discouraged from engaging with them.

The revised curriculum encourages formative assessment focused on students' language use ability and adds various examples for how to evaluate students in formative assessment and emphasises the function of assessment to promote English learning and students' development (MOE 2011; Yu 2012). The 2011 English curriculum puts forward formative assessment methods and 41 examples (25 for primary

schools) including formative assessment scales, summative assessment exercises and scoring criteria. However, despite the rhetoric about more formative assessment and a stronger emphasis on speaking and listening, teachers' interview responses in this study indicated that they did not see this. Teachers stated that they were not bothered to teach or rarely had the chance to teach speaking and listening since these skills were not included in the big examinations especially when they were facing so many challenges and pressures in involving communicative teaching, student-centred and student-participated teaching in class. So, teachers taught what they thought students would be assessed on, not what was encouraged by the curriculum. This explained why teachers were so concerned with teaching grammar, vocabulary, reading and writing because they accounted for more marks in the big examinations in China and examinations meant more to the teachers, students and parents rather than improving students' language use ability. This is the 'washback effect' of the important examinations in Chinese exam-oriented education system (Dai et al. 2011; Xiao et al. 2011 and is well documented in the literature about English language teaching and learning in China (Cortazzi and Jin 1996; Sun and Cheng 2002; Hu 2002, 2005; Halstead and Zhu 2009; Dai et al. 2011; Xiao et al. 2011)

## 9.11 Conclusion

The revised curriculum for teaching English in China seeks to take English teaching and learning into a modern age. This curriculum sets out to improve the students' use of language, in speech as well as writing, rather than just increasing their knowledge about English. It aims to do this by empowering teachers to make choices from a much wider range of teaching techniques and resources. This curriculum also considers the needs and feelings of students in a way that is new and seeks to ensure that students' needs and feelings are addressed. The fact that the Chinese authorities felt confident enough to introduce such a massive reform programme should be welcomed, because it shows that however great the impact of English teaching has been in the last 50 years, the PRC strives for even greater progress. However, this study suggests that implementing these changes in the teaching of English to meet the demands of a modern age will take time in such a huge country, and the study has identified some of the challenges that will need to be addressed in the next few years. The new roles of teachers of English are far from completely understood by teachers. Many teachers have not yet realised that they need to make changes not just to the methods they use and the resources they choose, but also to how they learn to use the methods—they will need to show more autonomy and more responsibility for their professional development. Moreover, some issues are hindering teachers in developing their understanding and practice of the new curriculum. At the moment, teachers perceive tensions between the goals of the revised curriculum and the daily goals teachers seek to achieve for their students. Though the revised curriculum raises the profile of speaking and listening in English, the teachers in this study are still consumed by the need to ensure students are successful in written assessments,

which do not include speaking and listening. There is a tension between the written curriculum and the current assessment which needs to be resolved. If the revised curriculum is going to achieve its lofty goals of English curriculum to take China into a modern age, these issues will need to be a focus of professional development in the next few years.

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# Chapter 10

## Does Poverty Matter or Inequality? An International Comparative Analysis on the Intergenerational Education Persistence



Qiang Liu and Ruichang Ding

*Inequality rather than want is the cause of trouble.*  
Confucius

**Abstract** We undertook an international comparative study to empirically examine the similarities, differences as well as development trends of the intergenerational educational persistence, which refers to the correlation between the educational attainment of individuals and those of their parents, across 20 Organisation for Economic Co-operation and Development (OECD) member countries. We found that intergenerational educational persistence existed in all 20, but the degree varied among them. It was highest in the USA and Slovakia and lowest in Finland. Most interestingly, we demonstrated that countries with greater income inequality tend to exhibit stronger intergenerational educational persistence, while found no evidence of any correlation between the latter with some factors we always suppose they should have, like the poverty, public spending on education, etc.

### 10.1 Introduction

Equity and justice are issues of considerable concern at the global, national, and subnational scales. From a sustainable development perspective, equity-related problems are usually analyzed across two dimensions: generational and intergenerational equity. Generational equity refers to equal access to natural and cultural resources among people of the same generation who differ by nationality, sex, race, religious beliefs, and socioeconomic status. Intergenerational equity entails the concept of fair-

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ness or justice across generations, that is, in relationships between children, youth, adults, and seniors, particularly with regard to how they are treated and their interactions (Foot and Venne 2005). It is noteworthy that intergenerational equity, on its own, is not always the only problem, but also has complicated and comprehensive impacts on generational equity. Consequently, intergenerational equity has received much attention from politicians and has been widely researched from both economic and sociological perspectives. It is also the focus of this study.

In recent decades, the concept of intergenerational equity has been widely discussed and explored across several fields, including transition economics, social policy, governmental budget-making, and in relation to environmental concerns such as sustainable development and climate change. Moreover, it is a popular topic in the social justice arena. In the context of social justice, intergenerational mobility is a central concept concerned with the correlation between the socioeconomic status of parents and the socioeconomic outcomes of their offspring as adults. It can be assessed in a variety of ways, for example, through family income, individual earnings, social class, occupational status, or education. If most individuals' socioeconomic outcomes are strongly related to those of their parents, this means that children from disadvantaged families are likely to be relatively disadvantaged as adults and that inequality will consequently be perpetuated (Blanden 2013). Therefore, intergenerational mobility can be considered as a dynamic indicator for evaluating the openness and equality of opportunities within a society.

According to the theory of human capital, education is a key factor for changing socioeconomic status and promoting social mobility. Hence, intergenerational correlation of education remains a continuing area of study even when researchers want to focus only on intergenerational income mobility or social class mobility (Blanden 2013). Here, we consider these issues and specifically aim to shed some light on intergenerational education mobility by focusing on its opposite dimension of persistence. This refers to the correlation between individuals' educational attainment and those of their parents. We conducted an international comparative study to examine similarities, differences, and development trends relating to this issue across different countries.

## 10.2 Literature Review

Intergenerational education persistence/mobility has been widely researched and is not, therefore, a new topic. In a specific study on this topic, Nimubona and Venkatachellum (2007) examined the intergenerational education mobility of black and white South Africans based on the results of the October Household Surveys held during that year. They found that the intergenerational education mobility of whites was higher than that of blacks. Among blacks, females exhibited higher intergenerational education mobility than males, while the poorest respondents showed the lowest intergenerational education mobility. Tverborgvik et al. (2013) used educational data from the Education and Employment of the Population Register published

by Statistics Denmark (October 18, 2006), to investigate intergenerational education mobility in Denmark. They concluded that the children of parents with just a basic education had a three times higher risk of also achieving only a basic education compared with the children of well-educated parents, despite the provision of free education and generous governmental grants and loans. Golley and Kong (2013) used data from the Rural-Urban Migration in China and Indonesia Survey (2008) to investigate trends in intergenerational patterns of educational attainment of those born in China between 1941 and 1990. They found that the intergenerational correlation was lower within rural and migrant populations than within urban populations.

In addition to regional studies, cross-national comparative studies have been conducted. One of the most influential studies in recent years was conducted by Hertz and colleagues in 2007. They estimated 50-year trends in the intergenerational persistence of educational attainment measured in schooling years for a sample of 42 nations. They found large regional differences in educational persistence across different nations, with countries in Latin America displaying the highest intergenerational correlations, and the Scandinavian countries the lowest. The study demonstrated that the global average correlation between parents' and children's schooling has held steady at about 0.4 for the past 50 years. Chevalier et al. (2009) used the UNESCO-designed International Standard Classification of Education (ISCED) as the basis of a five-category coding of education to measure intergenerational educational associations in Europe and the USA. Blanden (2013) performed a comparative analysis of the methodologies and conclusions of these two studies, offering explanations for their differences. The last but not the least we must mention here is the study done by Jerrim and Macmillan (2015), which inspired our work a lot. They used the cross-nationally comparable Programme for the International Assessment of Adult Competencies (PIAAC) data set to examine the mechanisms thought to underpin the Great Gatsby Curve (GGC), and concluded that unequal access to financial resources plays a central role in the intergenerational transmission of advantage.

### 10.3 Conceptual Framework, Data Sources, and Research Methodology

The theory of cultural capital, formulated by French sociologist Pierre Bourdieu, is frequently invoked to explain issues pertaining to the relationship between social class and education or related areas. Bourdieu (1986) delineated three forms of cultural capital: embodied, objectified, and institutionalized. Examples of embodied cultural capital include mannerisms, tastes, posture, and cultivation, while institutionalized cultural capital includes credentials and qualifications. These could be passed down from generation to generation. Given that education is an important type of cultural capital, we supposed that it should have the characteristic of intergenerational inheritance. We therefore hypothesized that the education levels of individuals would have a positive impact on their children's education levels for various reasons. Regardless

of genetic influences, there was a greater possibility that highly educated parents would attach more importance to their children's education and have stronger motivation as well as greater capacity to invest in their children's education compared with parents with less education.

This hypothesis has been confirmed by a large number of scholars working from different perspectives. In contrast with similar studies, this study used a set of international data from the first round of PIAAC published in 2013 by the OECD, inspired by Jerrim and Macmillan (2015). The comparability of data derived from this source was considerably greater than that of data derived from different sources and applied in the same comparative study, as commonly practiced in existing studies such as Hertz et al. (2007). Moreover, we followed Chevalier et al. (2009) in using the ISCED classification instead of years of schooling as the research variable considering the variation of the latter in different regions; i.e., the same value is not necessarily equal to the same educational attainment in different countries. Of particular note was our attempt to identify possible factors that could potentially influence intergenerational education persistence through our cross-national comparative analysis and correlation tests.

Regarding the research methodology and analytical instrument, Solon (2004) has proposed a regression model to examine the relationship between children's incomes and those of their parents as follows:

$$y_1 = \alpha + \beta y_0 + \varepsilon \quad (10.1)$$

where  $y_0$  and  $y_1$  are long-run average log incomes of parents and their children, respectively,  $\beta$  is the intergenerational income elasticity that can be used to measure intergenerational income persistence, and  $1 - \beta$  can be regarded as the intergenerational income mobility coefficient, which is a key indicator for measuring the open degree of social opportunities. In addition to  $\beta$ , the intergenerational income correlation coefficient  $\rho$  is another parameter for measuring the intergenerational income relationship. It can be converted from  $\beta$  using the following equation:

$$\rho = \left( \frac{\sigma_0}{\sigma_1} \right) \beta \quad (10.2)$$

where  $\sigma_0$  and  $\sigma_1$  are the standard deviations of the education levels of parents and their children, respectively. Evidently,  $\rho$  and  $\beta$  would have the same value when parents and their children share the same education level standard deviation.

Equations (10.1) and (10.2) have been widely employed in similar studies. Moreover, applying Mincer's equation, Hertz et al. (2007) derived a bivariate linear regression model, which they used to explore intergenerational education mobility as follows:

$$\text{YearsEd}_i^{\text{children}} = \pi + \psi \text{YearsEd}_i^{\text{parents}} + u_{2i} \quad (10.3)$$

$$\text{Corr}_{\text{YearsEd}^{\text{parents}}, \text{YearsEd}^{\text{children}}} = \psi \left( \frac{\text{SD}_{\text{YearsEd}^{\text{parents}}}}{\text{SD}_{\text{YearsEd}^{\text{children}}}} \right) \quad (10.4)$$

To briefly explain the above equations, years of schooling were selected as the research variable for measuring the education levels of individuals and their parents. The linear regression coefficient  $\psi$  denotes intergenerational education correlation, and  $\text{Corr}_{\text{YearsEd}^{\text{parents}}, \text{YearsEd}^{\text{child}}}$  denotes the intergenerational education correlation coefficient. As with  $\beta$  and  $\rho$  in Eqs. (10.1) and (10.2),  $\psi$  and  $\text{Corr}_{\text{YearsEd}^{\text{parents}}, \text{YearsEd}^{\text{child}}}$  can be used to measure intergenerational educational persistence within a society.

Following Hertz et al. (2007), we first performed a bivariate linear regression between the education levels of respondents who participated in PIAAC, 2013, and those of their parents/guardians. The former were measured using the indicator “Education—Highest qualification—Level” (code: B\_Q01a), and the latter were measured using the indicators “Background—Mother/female guardian—Highest level of education” (code: J\_Q06b) and “Background—Father/male guardian—Highest level of education” (code: J\_Q07b). PIAAC divides “Education—Highest qualification—Level” into the following 15 levels: (1) no formal qualification or below ISCED 1; (2) ISCED 1; (3) ISCED 2; (4) ISCED 3C of less than 2 years; (5) ISCED 3C of 2 years or more; (6) ISCED 3A-B; (7) ISCED 3 (without distinction A-B-C, 2y+); (8) ISCED 4C; (9) ISCED 4A-B; (10) ISCED 4 (without distinction A-B-C); (11) ISCED 5B; (12) ISCED 5A, bachelor’s degree; (13) ISCED 5A, master’s degree; (14) ISCED 6; (15) foreign qualification; (16) ISCED 5A bachelor’s degree, 5A master’s degree, and 6 (without distinction). It further divides “Background—Mother/female guardian—Highest level of education” and “Background—Father/male guardian—Highest level of education” into the following three levels: ISCED 1, 2, and 3C short; ISCED 3 (excluding 3C short) and 4; and ISCED 5 and 6. It was necessary to convert these indicators into comparable continuous variables before performing the regression. We, therefore, combined the first five levels of “Education—Highest qualification—Level” (respondents’ education levels) into the first level, which was basically equivalent to the first level of “Background—Mother/female guardian—Highest level of education” and “Background—Father/male guardian—Highest level of education” (the education levels of the respondents’ parents/guardians) and assigned a value of 1 to both of them. We then combined the next five levels of respondents’ education levels into the second level, which was basically equivalent to the second level of the education levels of respondents’ parents/guardians and assigned a value of 2 to them. Last, we combined the final five levels into the third level which was basically equivalent to the third level of the education levels of the respondents’ parents/guardians education levels and assigned a value of 3 to them.

To endow the linear regression coefficient with practical meaning, log values were used for the regression. Accordingly, the regression model was amended as follows:

$$\lg(\text{ISCED}_i^r) = \gamma + \mu \lg(\text{ISCED}_i^p) + \vartheta_i \quad (10.5)$$

$$\varphi_i = \mu \left( \frac{SD^{ISCED_i^p}}{SD^{ISCED_i^r}} \right) \quad (10.6)$$

where  $\lg(ISCED_i^r)$  is the log education level of respondent  $i$  and  $\lg(ISCED_i^p)$  is the log education level of respondent  $i$ 's parents/guardians. Thus, the practical meaning of the regression coefficient  $\mu$  pertained to the growth percentages of the respondents' education levels. When the education levels of their mothers/female guardians or of their fathers/male guardians increased by 1%, this was defined as intergenerational education elasticity and used as a measure of intergenerational educational persistence in the target countries. These were Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Korea, the Netherlands, Norway, Poland, the Russian Federation, Slovakia, Spain, Sweden, the UK and the USA.<sup>1</sup> In our study,  $\varphi_i$  represented the intergenerational education correlation coefficient, and  $SD^{ISCED_i^r}$ ,  $SD^{ISCED_i^p}$  denoted the standard deviation of the respective education levels of the respondents and their parents/guardians, which could be used to measure generational differences in education levels.

## 10.4 Data Analysis Results

### 10.4.1 Education Levels of the Respondents and Their Parents/Guardians as Well as Intergenerational Gaps

We first compared the regional and intergenerational dimensions of the respondents' education levels and those of their parents/guardians. The results (Table 10.1) indicate: (1) The average education level of respondents ( $\overline{ISCED_i^r}$ ) was highest in Spain and lowest in Belgium. (2) The average education level of the respondents' mothers/female guardians ( $\overline{ISCED_i^m}$ ) was highest in the USA and lowest in Korea. (3) The average education level of the respondents' fathers/male guardians ( $\overline{ISCED_i^f}$ ) was highest in Denmark and lowest in Korea. (4) Overall, the average education levels of the respondents were higher than those of their parents/guardians in all of the surveyed countries except for Belgium, the Czech Republic, Denmark, and Sweden. (5) Norway and Japan evidenced the widest gaps between average education levels of the respondents and those of their mothers/female guardians ( $\overline{ISCED_i^r} - \overline{ISCED_i^m}$ )

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<sup>1</sup>A total of 22 OECD member countries underwent the first Survey of Adult Skills organized by OECD. These were Australia, Austria, Belgium (Flanders), Canada, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Ireland, Italy, Japan, Korea, the Netherlands, Norway, Poland, Slovakia, Spain, Sweden, the UK (England and Northern Ireland), and the USA. However, Canada and Estonia were excluded from this study, because their country data relating to the indicator "Education—Highest qualification—Level" (code: B\_Q01a) were not available.

**Table 10.1** Education levels of the respondents and those of their parents/guardians, and intergenerational gaps

	$\overline{\text{ISCED}}_i^r$	$\overline{\text{ISCED}}_i^m$	$\overline{\text{ISCED}}_i^f$	$\overline{\text{ISCED}}_i^r - \overline{\text{ISCED}}_i^m$	$\overline{\text{ISCED}}_i^r - \overline{\text{ISCED}}_i^f$
Austria	2.10	1.60	1.89	0.50	0.21
Belgium	1.58	1.63	1.75	-0.05	-0.17
Czech Republic	1.77	1.84	2.02	-0.07	-0.25
Denmark	2.16	1.89	2.21	0.27	-0.05
Finland	1.94	1.63	1.83	0.31	0.11
France	1.76	1.24	1.35	0.52	0.41
Germany	2.22	1.62	1.63	0.60	0.59
Ireland	1.78	1.51	1.64	0.27	0.14
Italy	1.95	1.60	1.73	0.35	0.22
Japan	2.13	1.54	1.52	0.59	0.61
Korea	1.70	1.24	1.30	0.46	0.40
Netherlands	2.22	1.91	1.95	0.31	0.27
Norway	1.99	1.39	1.63	0.60	0.36
Poland	1.94	1.40	1.65	0.54	0.29
Russian Federation	1.99	1.77	1.94	0.22	0.05
Slovakia	1.92	1.90	1.91	0.02	0.01
Spain	2.57	2.00	1.99	0.57	0.58
Sweden	1.71	1.62	1.75	0.09	-0.04
United Kingdom	2.00	1.76	1.77	0.24	0.23
United States	2.26	2.01	2.02	0.25	0.24
Average	1.98	1.65	1.77	0.33	0.21

Source Authors' calculation based on data extracted from PIAAC, 2013

(Norway) and of their fathers/male guardians ( $\overline{\text{ISCED}}_i^r - \overline{\text{ISCED}}_i^f$ ) (Japan). These gaps were smallest in Slovakia.

### 10.4.2 *Generational Differences in Education Levels of the Respondents and Those of Their Parents/Guardians, and Intergenerational Gaps*

Next, we compared the regional and intergenerational dimensions of the education level standard deviations of both respondents and their parents/guardians. The results (Table 10.2) indicate: (1) Generational differences in education levels ( $\overline{\text{SD}}^{\text{ISCED}}_i$ ) were highest among respondents in Denmark and lowest among those in the Russian

**Table 10.2** Generational differences in education levels of the respondents and those of their parents/guardians, and intergenerational gaps

	$\overline{SD}^{ISCED_i}$	$\overline{SD}^{ISCED_i^m}$	$\overline{SD}^{ISCED_i^f}$	$\overline{SD}^{ISCED_i} - \overline{SD}^{ISCED_i^m}$	$\overline{SD}^{ISCED_i} - \overline{SD}^{ISCED_i^f}$
Austria	0.678	0.632	0.686	0.046	-0.008
Belgium	0.800	0.758	0.770	0.042	0.030
Czech Republic	0.757	0.569	0.516	0.188	0.241
Denmark	0.927	0.793	0.785	0.134	0.142
Finland	0.727	0.704	0.724	0.023	0.003
France	0.884	0.709	0.737	0.175	0.147
Germany	0.683	0.670	0.641	0.013	0.042
Ireland	0.773	0.732	0.742	0.041	0.031
Italy	0.744	0.511	0.561	0.233	0.183
Japan	0.806	0.726	0.769	0.080	0.037
Korea	0.870	0.626	0.762	0.244	0.108
Netherlands	0.822	0.667	0.799	0.155	0.023
Norway	0.886	0.794	0.782	0.092	0.104
Poland	0.741	0.613	0.555	0.128	0.186
Russian Federation	0.624	0.772	0.750	-0.148	-0.126
Slovakia	0.743	0.597	0.597	0.146	0.146
Spain	0.869	0.574	0.665	0.295	0.204
Sweden	0.828	0.847	0.841	-0.019	-0.013
United Kingdom	0.898	0.706	0.723	0.192	0.176
United States	0.670	0.727	0.744	-0.057	-0.074
Average	0.786	0.686	0.707	0.100	0.079

Source Authors' calculations based on data extracted from PIAAC, 2013

Federation. (2) Generational differences in education levels ( $\overline{SD}^{ISCED_i^m}$ ) specifically relating to respondents' mothers/female guardians were highest in Sweden and lowest in Italy. (3) Generational differences in education levels ( $\overline{SD}^{ISCED_i^f}$ ) specifically relating to respondents' fathers/male guardians were highest in Sweden and lowest in the Czech Republic. (4) Overall, generational differences in the average education levels of the respondents were higher than those of their parents/guardians in all of the surveyed countries except for Austria, the Russian Federation, Sweden, and the USA. (5) Spain and the Czech Republic evidenced the widest gaps relating to differences in the average intergenerational education levels of respondents and their mothers/female guardians ( $\overline{SD}^{ISCED_i} - \overline{SD}^{ISCED_i^m}$ ) (Spain) and of respondents and their fathers/male guardians ( $\overline{SD}^{ISCED_i} - \overline{SD}^{ISCED_i^f}$ ) (Czech Republic). These gaps were smallest in Sweden and Finland, respectively.



### 10.4.3 Intergenerational Educational Persistence

We employed Eqs. (10.5) and (10.6) to calculate the intergenerational education elasticity,  $\mu$ , and the intergenerational education correlation coefficient,  $\varphi$ . The results are presented in Table 10.3.

Table 10.3 clearly indicates a positive correlation between the respondents' education levels and those of their parents/guardians, with the degree of correlation varying across countries. To compare the situation regarding intergenerational educational persistence in each country, we plotted the results in Figs. 10.1 and 10.2, selecting intergenerational education elasticity ( $\mu$ ) as the X-axis and the intergenerational

**Table 10.3** Regression and correlation coefficients for the education levels of the respondents and those of their parents/guardians

	$\mu^m$	$\frac{SD^{ISCED_i^m}}{SD^{ISCED_i^f}}$	$\varphi^m$	$\mu^f$	$\frac{SD^{ISCED_i^f}}{SD^{ISCED_i^f}}$	$\varphi^f$
Austria	0.131*** (0.013)	1.072	0.122	0.158*** (0.013)	0.988	0.160
Belgium	0.245*** (0.014)	1.056	0.232	0.301*** (0.014)	1.039	0.290
Czech Republic	0.236*** (0.016)	1.330	0.177	0.250*** (0.019)	1.467	0.170
Denmark	0.201*** (0.013)	1.169	0.172	0.232*** (0.013)	1.181	0.196
Finland	0.021 (0.013)	1.032	0.020	0.064*** (0.012)	1.004	0.064
France	0.326*** (0.014)	1.246	0.262	0.339*** (0.014)	1.200	0.283
Germany	0.102*** (0.103)	1.019	0.100	0.182*** (0.015)	1.065	0.171
Ireland	0.272*** (0.012)	1.057	0.257	0.301*** (0.012)	1.042	0.289
Italy	0.322*** (0.019)	1.456	0.221	0.364*** (0.017)	1.326	0.274
Japan	0.208*** (0.015)	1.110	0.187	0.258*** (0.014)	1.048	0.246
Korea	0.133*** (0.015)	1.389	0.096	0.234*** (0.013)	1.141	0.205
Netherlands	0.179*** (0.016)	1.232	0.145	0.263*** (0.014)	1.029	0.256
Norway	0.130*** (0.015)	1.116	0.116	0.206*** (0.016)	1.133	0.182
Russian Federation	0.098*** (0.012)	0.808	0.121	0.128*** (0.012)	0.831	0.154

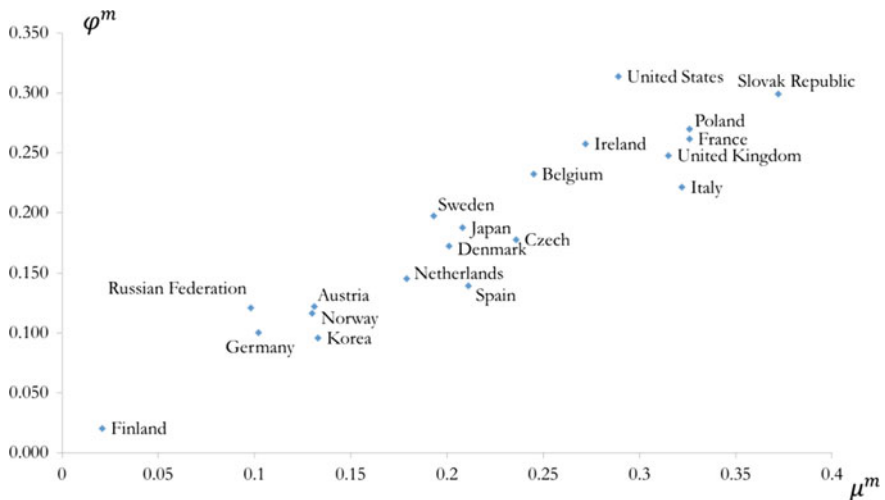
(continued)

**Table 10.3** (continued)

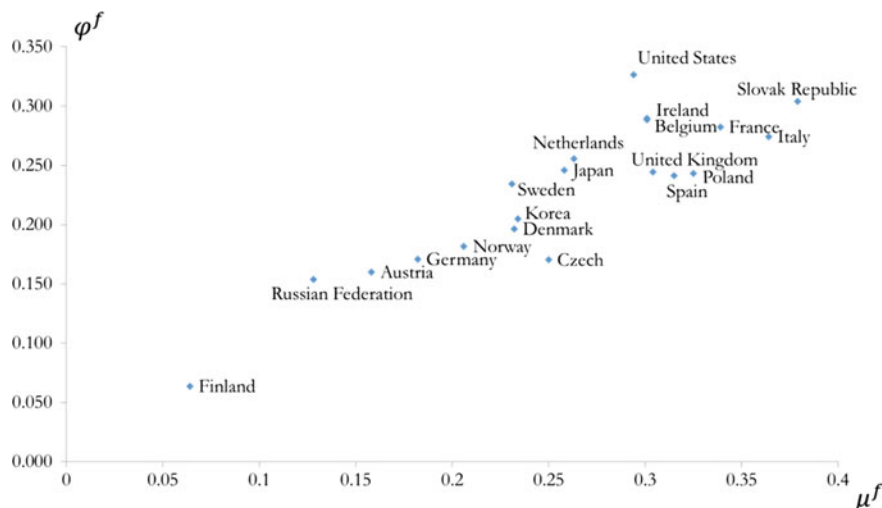
	$\mu^m$	$\frac{SD^{ISCED_i^m}}{SD^{ISCED_i}}$	$\varphi^m$	$\mu^f$	$\frac{SD^{ISCED_i^f}}{SD^{ISCED_i}}$	$\varphi^f$
Poland	0.326*** (0.012)	1.209	0.270	0.325*** (0.013)	1.335	0.243
Slovakia	0.372*** (0.014)	1.245	0.299	0.379*** (0.014)	1.245	0.304
Spain	0.211*** (0.019)	1.513	0.139	0.315*** (0.016)	1.306	0.241
Sweden	0.193*** (0.014)	0.978	0.197	0.231*** (0.014)	0.985	0.234
UK	0.315*** (0.013)	1.272	0.248	0.304*** (0.013)	1.243	0.245
USA	0.289*** (0.012)	0.922	0.314	0.294*** (0.012)	0.900	0.327

*Notes* The values in brackets denote standard errors; \*\*\* $p < 0.001$ ;  $\mu^m$  is the regression for the education levels of the respondents and their mothers/female guardians;  $\mu^f$  is the regression for the education levels of the respondents and their fathers/male guardians;  $\frac{SD^{ISCED_i^m}}{SD^{ISCED_i}}$  is the ratio of the standard deviation of the education levels of the respondents to those of their mothers/female guardians;  $\frac{SD^{ISCED_i^f}}{SD^{ISCED_i}}$  is the ratio of the standard deviation of the education levels of the respondents to those of their fathers/male guardians;  $\varphi^m$  is the correlation coefficient for the education levels of the respondents and those of their mothers/female guardians;  $\varphi^f$  is the correlation coefficient for the education levels of the respondents and those of their fathers/male guardians

*Source* Authors' calculations based on data extracted from PIAAC, 2013



**Fig. 10.1** Intergenerational educational persistence (respondents-mothers/female guardians). *Source* Based on data extracted from PIAAC, 2013



**Fig. 10.2** Intergenerational educational persistence (respondents-fathers/male guardians). *Source* Based on data extracted from PIAAC, 2013

ational education correlation coefficient ( $\varphi$ ) as the  $Y$ -axis. Logically, countries with low intergenerational educational persistence should be located in the lower left-hand side of the graphs, while countries with high intergenerational educational persistence should be located in the upper right-hand side. From Figs. 10.1 and 10.2, it was evident that intergenerational educational persistence was strongest in the USA and Slovakia. This implied that intergenerational education mobility in these two countries was relatively lower. Intergenerational educational persistence was weakest in Finland, which implied that intergenerational education mobility was relatively higher in Finland.

#### 10.4.4 *Factors Influencing Intergenerational Educational Persistence*

Intergenerational educational persistence is not uncommon in each of the surveyed countries. Given its evident complexity and varying situations in different countries, we aimed to further explore which factors would have a significant influence on intergenerational educational persistence. However, considering accessibility of comparable data and the study's operability, we could only investigate the correlation between the parameters  $\mu$  or  $\varphi$  of each country with some of its respective characteristics such as the economic level, wealth gap, education expenditure, and population. We originally assumed that developed countries could afford better social welfare, including education, which could contribute to a decrease in intergenerational educational persistence caused by economic factors. This was also the rationale for

**Table 10.4** Correlation tests for intergenerational educational persistence using selected indicators

		GNIC	GDPG	Gini	PR	PG	PEES	PL
$\mu^m$	Pearson correlation	-0.303	-0.339	0.535*	0.160	0.195	-0.136	0.292
	Sig. (2-tailed)	0.222	0.169	0.022	0.526	0.438	0.590	0.240
$\varphi^m$	Pearson correlation	-0.105	-0.150	0.511*	0.204	0.130	0.129	0.446
	Sig. (2-tailed)	0.679	0.552	0.030	0.416	0.607	0.610	0.064
$\mu^f$	Pearson correlation	-0.279	-0.313	0.559*	0.304	0.355	-0.177	0.249
	Sig. (2-tailed)	0.263	0.206	0.016	0.220	0.148	0.482	0.320
$\varphi^f$	Pearson correlation	0.030	-0.014	0.588*	0.462	0.326	0.214	0.464
	Sig. (2-tailed)	0.905	0.956	0.010	0.054	0.187	0.395	0.052

Notes \* $p < 0.05$ ; GNIC denotes gross national income per capita; GDPG denotes GDP per capita; Gini denotes the Gini coefficient; PR denotes the poverty rate; PG denotes the poverty gap; PEES denotes public education expenditure per student; and PL denotes the population level

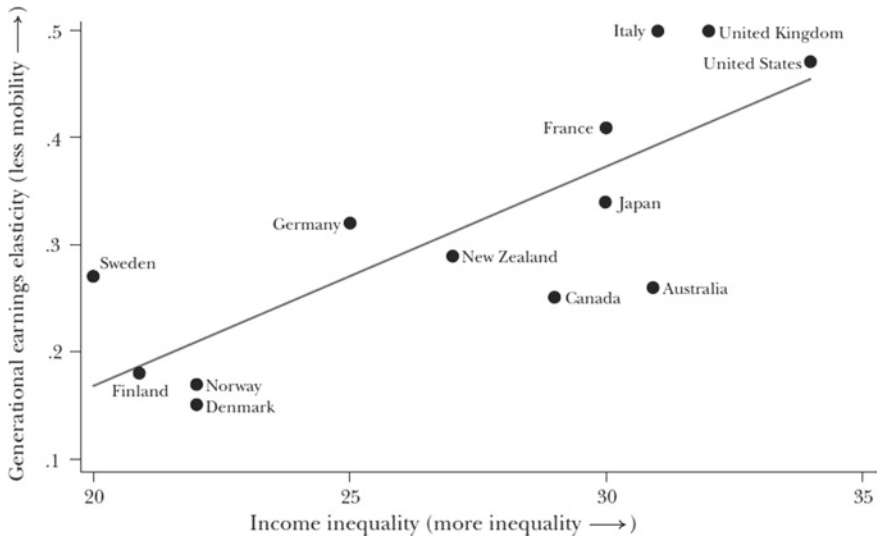
Source Authors' calculation based on data extracted from PIAAC, 2013

selecting the level of education expenditure as a possible impact factor. Countries with smaller wealth gaps may have been more open and equitable. Accordingly, their intergenerational educational persistence may not have been so marked. Countries with large populations would be more likely to face the problem of education resource allocation, which could lead to a relatively higher degree of intergenerational educational persistence.

Consequently, we checked the *OECD Factbook 2013: Economic, Environmental and Social Statistics* and selected seven indicators for correlation tests. These were gross national income per capita, GDP per capita, Gini coefficient, poverty rate, poverty gap, public education expenditure per student, and population level as potential factors that could impact on intergenerational educational persistence. However, the regression results shown in Table 10.4 indicate that only the correlations between the Gini coefficient and  $\mu$  or  $\varphi$  were significant. Thus, the economic level, education expenditure, and population had no significant impacts on intergenerational educational persistence.

Corak (2013) has pointed out that countries with greater income inequality tend to be those in which a greater fraction of economic advantage and disadvantage is passed on from parents to their children. This is commonly represented by what Alan Krueger (2012) has called the GGC (Fig. 10.3),<sup>2</sup> which plots the relationship between intergenerational income elasticity, that is, the likelihood that an individual

<sup>2</sup>The curve was introduced during a speech made by Alan Krueger, Chairman of the Council of Economic Advisers in 2012, and in the President's Economic Report to Congress, based on data



**Fig. 10.3** GGC indicating that more inequality is associated with less mobility across generations. Source Corak (2013) and OECD

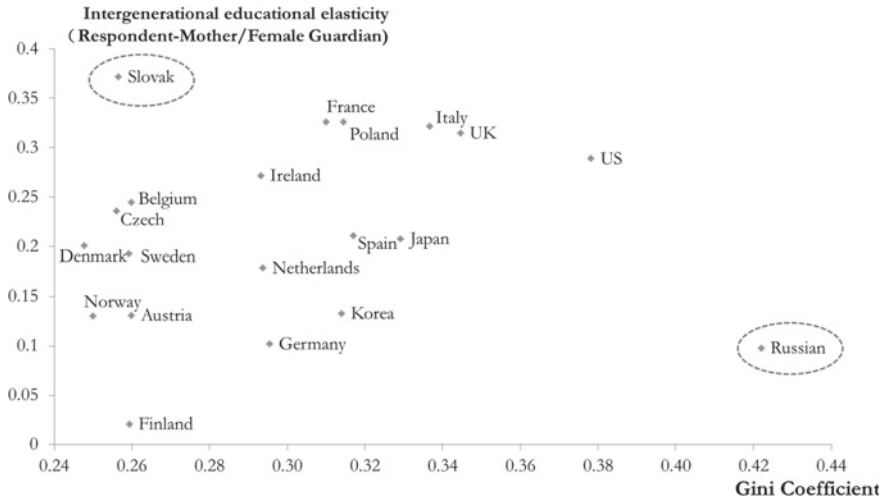
will inherit the relative income position of his or her parents and income inequality (measured by the Gini coefficient) for a group of countries. This figure indicates that countries with low levels of income inequality were among those with the greatest mobility, while countries with a high level of inequality were among those with the lowest mobility. We further supposed that the GGC could also apply to the education field; that is, countries exhibiting higher levels of income inequality would tend to have stronger intergenerational educational persistence than countries with lower levels of income inequality.

Based on the GGC, we would assume that the impact of income inequality on the intergenerational income elasticity would be linear. However, this seems to be unlikely, in general, and even more unlikely in relation to all the countries. Based on the scatter plots depicting the relationship between intergenerational education elasticity  $\mu$  and the Gini coefficient, shown in Figs. 10.4 and 10.5, we speculated that a positive correlation would be evident between these two variables with the exception of two idiosyncratic points, Slovakia and the Russian Federation, that were consequently excluded from the regression.

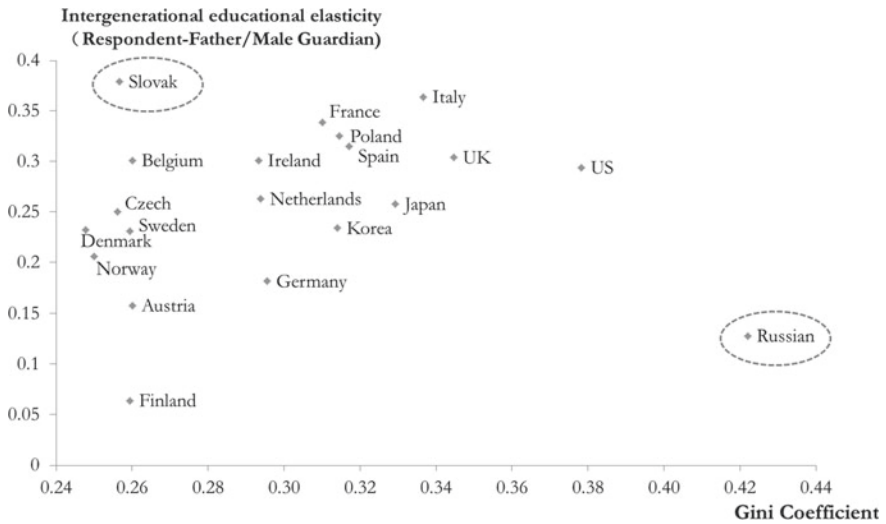
To explore a relatively more accurate functional relationship that could describe the possible correlation between income inequality and intergenerational educational persistence, we performed curve estimations. These entailed the following 11 models: linear, logarithmic, inverse, quadratic, cubic, compound, power, s, growth, exponential, and logistic. Based on the estimation results shown in Table 10.5, we developed

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provided by Miles Corak, a labor economist. The name was coined by Judd Cramer, a former CEA staff economist (Wikipedia, [http://en.wikipedia.org/wiki/Great\\_Gatsby\\_Curve](http://en.wikipedia.org/wiki/Great_Gatsby_Curve)).



**Fig. 10.4** Scatter plot depicting the relationship between intergenerational education elasticity (respondent-mother/female guardian) and the Gini coefficient. *Source* Based on data extracted from PIAAC, 2013



**Fig. 10.5** Scatter plot depicting the relationship between intergenerational education elasticity (respondent-father/male guardian) and the Gini coefficient. *Source* Based on data extracted from PIAAC, 2013

**Table 10.5** Curve estimation for intergenerational education elasticity and the Gini coefficient

Equation	Dependent variable: $\mu^m$						Dependent variable: $\mu^f$											
	Model Summary			Parameter Estimates			Model Summary			Parameter Estimates								
	R <sup>2</sup>	F	df1	df2	Sig.	Constant	b1	b2	b3	R <sup>2</sup>	F	df1	df2	Sig.	Constant	b1	b2	b3
Linear	0.287	6.426	1	16	0.022	-0.154	1.243			0.312	7.254	1	16	0.016	-0.064	1.085		
Logarithmic	0.287	6.43	1	16	0.022	0.672	0.374			0.323	7.630	1	16	0.014	0.664	0.332		
Inverse	0.284	6.357	1	16	0.023	0.593	-0.11			0.33	7.893	1	16	0.013	0.599	-0.100		
Quadratic	0.287	3.023	2	15	0.079	-0.297	2.198	-1.569		0.346	3.97	2	15	0.041	-0.895	6.629	-9.104	
Cubic	0.287	3.026	2	15	0.079	-0.262	1.782	0	-1.92	0.348	3.999	2	15	0.041	-0.618	3.864	0	-9.888
Compound	0.191	3.785	1	16	0.069	0.020	1936.147			0.235	4.923	1	16	0.041	0.053	170.216		
Power	0.192	3.814	1	16	0.069	3.062	2.283			0.243	5.148	1	16	0.037	1.664	1.571		
S	0.192	3.797	1	16	0.069	0.642	-0.676			0.249	5.302	1	16	0.035	0.201	-0.472		
Growth	0.191	3.785	1	16	0.069	-3.918	7.568			0.235	4.923	1	16	0.041	-2.936	5.137		
Exponential	0.191	3.785	1	16	0.069	0.020	7.568			0.235	4.923	1	16	0.041	0.053	5.137		
Logistic	0.191	3.785	1	16	0.069	50.289	0.001			0.235	4.923	1	16	0.041	18.842	0.006		

The independent variable is Gini.

Source: Authors' calculation based on data extracted from PIAAC, 2013 and the OECD Factbook 2013: Economic, Environmental and Social Statistics

the following logarithmic models as relative optimal regression models for describing the correlation between intergenerational education elasticity and the Gini coefficient.

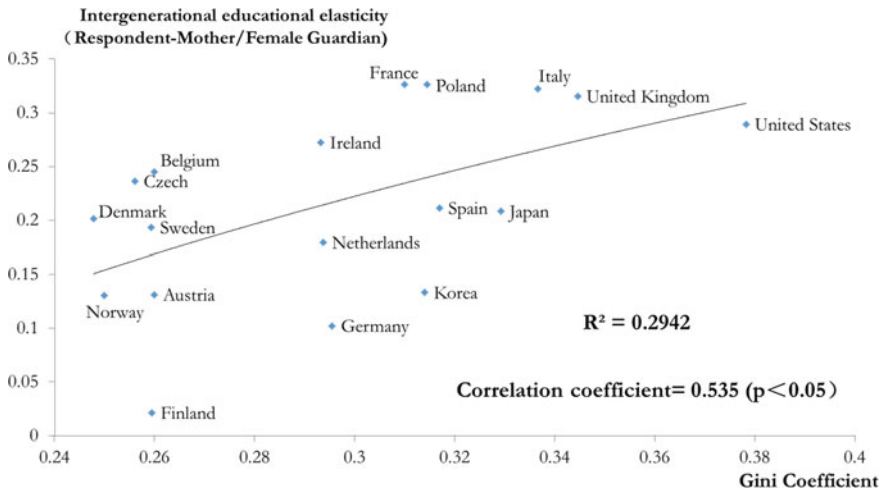
$$\text{Gini} = \exp\left(\frac{\mu^m - 0.675}{0.535}\right) \tag{10.7}$$

$$\mu^m = 0.675 + 0.535 \ln \text{Gini} \tag{10.8}$$

$$\text{Gini} = \exp\left(\frac{\mu^f - 0.664}{0.568}\right) \tag{10.9}$$

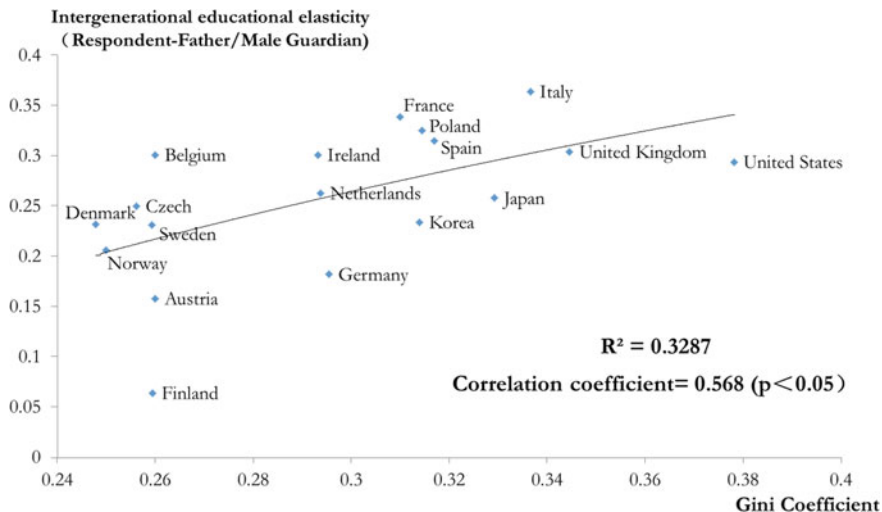
$$\mu^f = 0.664 + 0.568 \ln \text{Gini} \tag{10.10}$$

These demonstrated that the GGC was also applicable, to some extent, to the education field. We thus plotted the “educational GGC” as shown in Figs. 10.6 and 10.7.



**Fig. 10.6** Educational GGC showing that more inequality is associated with less intergenerational educational mobility (respondent-mother/female guardian). *Source* Based on data extracted from PIAAC, 2013



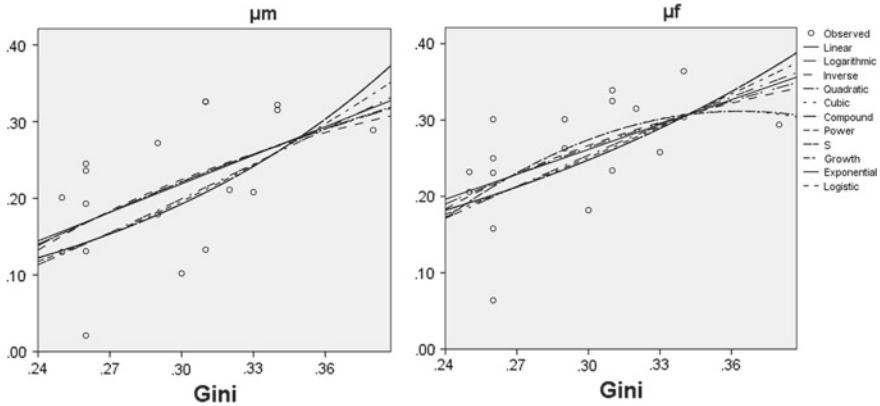


**Fig. 10.7** Educational GGC showing that more inequality is associated with less intergenerational educational mobility (respondent-father/male guardian). *Source* Based on data extracted from PIAAC, 2013

### 10.5 Conclusion and Discussion

The most meaningful contribution of this study may not be the confirmation of some known arguments once again with kind of improved data set and analytical approach, like the ubiquitous existence of intergenerational education persistence all over the world, while the degree varies considerably between different regions, and Finland becomes the model student again as it did in several *big education races* launched by the OECD over recent years (Ding and Liu 2014). Contrastly, what interests us more may be the falsification of some seemingly logical assumptions, at least to some degree, which we may always convince. A typical example is that larger public investment in education would greatly improve, if not guarantee, the equality of education. Actually, it may just like what Confucius said, inequality rather than want is the cause of trouble; countries with the high level of income inequality instead of those having low level of national income or education expenditure are suffering the worse intergenerational education persistence (Fig. 10.8).

Jerrim and Macmillan (2015) concluded that educational inequality is likely to be a key factor mediating the link between income inequality and intergenerational mobility; therefore, policies to minimize educational disparities between rich and poor are crucial in promoting the intergenerational mobility. Our finding is not in contradiction with this conclusion; nevertheless, what we focused on is the inverse impact, and it is found that education itself is bothered by the GGC spell too. To be honest, both of our studies could not offer convincing causal answers. Intuitively, it is a vicious circle; i.e., the education inequality of one generation would deprive their offsprings of equal opportunities to succeed, resulting in the income equality



**Fig. 10.8** Curve estimation for intergenerational education elasticity and the Gini coefficient. *Source* Authors' calculation based on data extracted from PIAAC, 2013 and the *OECD Factbook 2013: Economic, Environmental and Social Statistics*

of this new generation, which leads to another round of intergenerational education persistence, followed with a new GGC.

At last, we have to admit some limitations in this preliminary study. First, the ternary classification of education levels employed for the regression appeared to be too rough. This may have blurred some differences. Obviously, it is kind of helpless choice due to the defect of the data set itself. Second, the “foreign qualification” category was simply merged with the tertiary education level. Although the most of it should be at the tertiary level, it also includes lower education levels, which has been deliberately ignored. A third limitation was that the explanation provided for differences in intergenerational educational persistence among different countries was insufficient and requires more attention in future studies.

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# Chapter 11

## Supporting a SEN School and the Teachers in Creating an App for Language Development



Wai Sum Wilkson Lam, Maria Kambouri and Maria Bremppou

**Abstract** As pupils love technology, many special-education teachers are incorporating various forms of current ICTs into their classrooms and lessons. In this paper, we present a case study conducted in collaboration with a special school in London. Two special-education class teachers and the school IT staff were involved in an in-house development of an app on iPad, to teach word order and sentence structure to their students (age 9–11). This research study followed a participatory mixed methods design, where knowledge was co-constructed with teachers working in parallel and in discussion with researchers. As we investigated how the use of ICT impacted the two teachers' teaching, we also identified factors that were influencing the instructional efficiency, and the teachers' perspectives towards the implementation. Four main domains (Student, Activity, Teacher, and Technology) emerged from the thematic analysis of the reflective material. The correlation between the variables from the structured observation data suggested that out of the four domains, variables such as students' individual differences and the duration of the activity have a higher correlation with the instructional efficiency than the mode of delivery. This result is clearly putting the emphasis on improving pedagogies for more personalised learning. The implications of the findings are discussed, in terms of the ways in which the development and integration of mobile technology could further promote effective instructional practices as well as teacher development.

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Strand selected: Mobilities of Ideas/Mobilities and Technologies

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## 11.1 Introduction

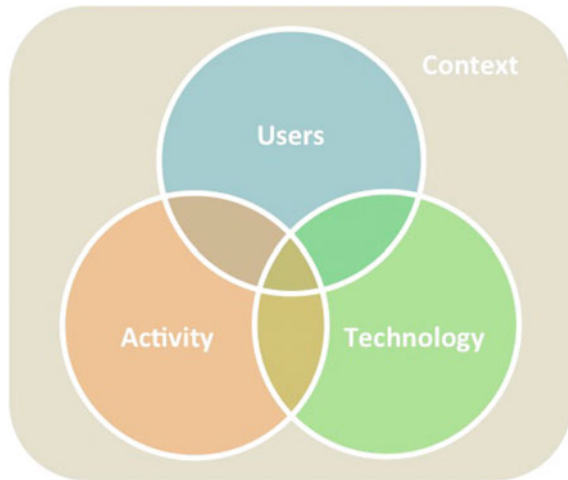
Information and communication technologies (ICT) and mobile technologies have grown at a staggering rate in the past five to six years. Since 2010, global Internet penetration has rocketed from an estimated 6.5–43%, and worldwide mobile-broadband subscriptions have grown from an estimated 0.8 billion to around 3.5 billion (International Telecommunication Union [ITU] 2015). Along with this boom in the development of ICT and mobile technologies, the use of mobile devices in educational settings has become a common practice as well. Based on a 2014 survey of 671 state and independent schools in the UK, close to 70% of primary and secondary schools reported using tablet computers, with 9% of these schools having an individual tablet device for each of their students (Coughlan 2014). Many teachers and practitioners have adopted the use of mobile devices in various aspects of their teaching. Educators, students, and parents from both mainstream and special educational needs (SEN) settings have reportedly responded positively towards the use of mobile devices (Ellis 2011; Flewitt et al. 2014; Rodriguez et al. 2013). Tech giants like Apple and Google have also become more aware of the need for accessibility and specialised support in the area of special educational. Notable effort has been put into incorporating universal design into their design protocols for mobile platforms (Hayes 2013), and in improving the user experience of mobile devices in classroom settings (e.g. Apple's and Google's respective "Classroom" app). Nonetheless, teachers and practitioners in special education have been and are still facing numerous challenges and barriers in effectively integrating the technologies into their lessons and curricula (Rose et al. 2005; Ellis 2011; Flewitt et al. 2014; Chien et al. 2014; Davis 2016).

In this exploratory case study, we attempt to document and understand the experience of two class teachers in integrating mobile technology to help with reading, and in particular, the teaching of word order to some of their students in a special school, and to identify and discuss what are the promoting or impeding factors that were perceived by the teachers.

## 11.2 Framework

The search for an appropriate app that matches the lesson plans and objectives can be a long and tedious process for the educators (Flewitt et al. 2014). Furthermore, there are other factors such as pedagogy and amount of support, both of which have a profound impact on the success and effectiveness of an implementation (Tamim et al. 2011; Archer et al. 2014). The Center on Secondary Education for Student with ASD (CSESA) Technology Group (2013) offered an organisational model in understanding and guiding an ICT implementation process. The model, adopted from the Cook and Hussey's (2008) Human Activity Assistive Technology (HAAT) Model introduced back in 1995, comprises of the "technology", the "human", and the "activity" domains within a given "context" (Fig. 11.1).

**Fig. 11.1** Organisational model for ICT implementation. Adapted from Framework for selecting technology (CSESA 2013)



The CSESA Technology Group (2013) also offered a well-encompassing definition of “technology” for individuals with ASD. Incorporated the US federal definition of “assistive technology” (The Individuals with Disabilities Education Act of 2004 [IDEA] 2004), the group defined “technology” as “an electronic item/equipment, application, or virtual network that is used to intentionally increase, maintain, and/or improve daily living, work/productivity, and recreation/leisure capabilities of adolescents with autism spectrum disorders.” (p. 2). Educational software has long been employed to enhance teaching and learning (Cuban 1986). These programs were traditionally run on desktop or laptop computers along with physical keyboard and mouse, but as the use of touch-based mobile devices like iPad became more common in schools and at home, the focus for developing educational software for mobile platforms has increased as well. Within the Apple app store alone, over 170,000 apps were categorised as designed specifically for educational use (Apple—Learning with iPad n.d.) in 2016. And in the area of language development and communication, there are many educational and assistive apps that aimed to help learners with SEN to improve their reading, writing, comprehension, and communication skills (e.g. Apple—The Special Education App Collection n.d.). Some of these apps may facilitate the teachers and their students with SEN in learning a language or establishing communication through words, symbols, or images (Kagohara et al. 2010; Shane et al. 2012; van der Meer et al. 2011). In contrast with the traditional teaching material such as folders and picture cards, the use of language and communication apps on mobile devices offers an uncluttered platform along with a higher level of portability, durability, and convenience. Hirsh-Pasek et al. (2015) further suggested that there are two “waves” of educational apps existing in the marketplace today. The “first wave” of educational apps can be considered as “e-worksheets”. These apps are basically the software version of existing hard copy or tangible teaching material (e.g. Math Me Lite, Dolch Sight Words Flashcards, Writing Wizard ABC). In most cases, the intent of such apps was to replicate and transform the physical material

into the virtual touch-based environment for teachers and practitioners, without an explicit consideration on how do students learn or how to promote learning. As such, it is similar to its non-interactive hard-copy counterparts, where promoting learning and interaction is largely dependent on the teachers' pedagogies. On the other hand, there is the newly emerging "second wave" of educational apps. These are apps designed with specific learning objectives and built based on educational principles and theories. In a sense, the app itself takes on some roles of a teacher. For instance, the app could be delivering feedback or reinforcement to the students within the virtual environment, providing prompts and adjusting the level of difficulties when the students are stuck with certain tasks, or suggesting additional readings to expand the students' knowledge (e.g. Alien Assignment, Electric Sums—Lumio Addition & Subtraction, The Word Monsters: Learn to Read).

Nonetheless, regardless of the approach or type of technology chosen, an effective and innovative pedagogy in incorporating ICT into lessons will involve the teachers' (a) understanding of students' individual needs and abilities; (b) careful consideration on the device and software selection; (c) thoughtful planning for meaningful lesson activities and learning objectives; (d) flexibility in adapting and modifying their previously acquired teaching strategies and practices; (e) transference of skills and subject knowledge from the traditional medium to the new platforms such as mobile devices and apps; and (f) the self-efficacy for overcoming potential barriers and achieve worthwhile outcome (Tamim et al. 2011; Messinger-Willman and Marion 2010; Shane et al. 2012; Fu 2013). And during the process of transference, new concepts and principles may emerge, and in turn inform and benefit the traditional practices.

### 11.3 Research Design and Methodology

This small-scale research study attempts to investigate the use of iPad in teaching English language skills, in particular sentence structure, to students with SEN and how its use may benefit the teachers and students in a special-school classroom. The objective of the collaborative project was to develop, integrate, and improve the use of an instructional app into their Literacy and Language lesson's word-ordering activity. The learning activity involved is a sentence reconstruction task. Each "word block" consists of a word and its respective "symbols". The word blocks would be jumbled up and presented to the students, for them to arrange the blocks into a sensible sentence. Two special-school teachers were keen to develop this app and to participate in the study. Adopting a participatory mixed methods design, meetings were set up prior to the commencement of the research, to find out the class teachers' intended implementation, and to make sure the academic targets and objectives were being addressed. The teachers' academic objectives set for the activity were to support and develop their students' understanding towards sentences and in turn be able to form sentences in a meaningful manner. The initial target was to teach the students in forming sentences with a Subject-Verb-Object (S-V-O) structure. Conceptually,

the task will require the students to have the syntactic concept of a S-V-O format, the ability to identify the right word blocks, and the understanding of arranging the words in a linear order. With the input from the teachers, the researcher then drafted out the proposed design of the study.

Three main research instruments were utilised for the data collection and analysis: semi-structured pre- and post-implementation interviews, structured observations, and unstructured practitioner's reflective notes. The mixed-method approach attempts to encompass the two aspects of the research: one of a close-up investigative and qualitative nature; and the other of a hypothesis testing, quantitative nature. The qualitative component of this study involved a pre- and a post-implementation interview and the practitioner's reflective notes. The quantitative component of this study involved a series of structured observations of the lessons. For the structured observations, an alternating treatments design with randomized block (Bulté and Onghena 2008) of pull-out sessions was proposed, and it was agreed by the participating teachers. The teaching sessions were carried out twice a week with the students, during the classes' Language/Literacy lesson. Each session was further broken down into two 5-min work rounds, with one round using traditional paper material (Treatment A) and one round using the app on iPad (Treatment B). Both teaching activities ("treatments") had the same set of target words that the teachers planned to use for each session. However, the teachers may adjust the learning target and difficulties based on their evaluation and pedagogical needs. And differing from a typical alternating treatments design, both activities will be conducted on the same day. The arrangement is made based on the consideration that students' behaviours can vary widely on different days due to unaccountable external factors, which may further confound the results for the small-scale case study. The order of the activities within a session was randomized, and the same order of activities was controlled to not occur for more than two consecutive days (i.e. if both Day 1 and 2 had the order A-B, Day 3 will be forced with the order of B-A.), in order to balance out and minimise any order effects due to practice or fatigue. The resulted roster plan was passed to the two teachers for their reference, but they have had the freedom to change the arrangement anytime as they deemed fit.

### ***11.3.1 Participants***

Both teachers are female and are qualified within the SEN sector (one holds an MTeach in SEN). One class teacher (referred as T01 henceforth) had seven years of experience in the special school and had taught in mainstream schools prior. She was experienced with teaching students with MLD and SLD and had some experience with students with PMLD as well. The other teacher (referred as T02 henceforth) had 15 years of teaching experience in a number of countries. She had worked with students with learning difficulties for eight years. The two class teachers had identified four students, two from each class, as learners intended for incorporating the use of an educational app in their lessons. The four students were aged between 9



and 11, three of which were diagnosed with ASD, and two were diagnosed with SLD, with limited verbal communication and understanding of vocabulary. According to the teachers, the four students were chosen for this alternative mode of teaching because they were not progressing enough with other methods and were keen users of ICTs. The teachers considered the students to have the adequate cognitive level, academic level, manageable behaviours, and have shown a liking towards working on iPad. The app involved, “Smartsymbol” is a web-based program, under development with the support of the teachers and the school’s ICT team. Feedback from the teachers and other data gathered through the project were relayed to the ICT team for their considerations and future development. This model of mediation between the teachers and the ICT colleagues allowed researchers to contribute to both pedagogies and the application.

### ***11.3.2 Method***

The app was preloaded onto the teachers’ iPads, and the words and symbols (virtual material) required for each lesson were uploaded onto the system upon teachers’ request before the sessions. The interface allows the teachers to create blocks, and by keying in a word into the block, the corresponding symbol or picture will be displayed in the block above the word. A “Shuffle” button allows the teachers to jumble up the word blocks, and a “Play” button will have the system to read out the blocks in a left-to-right order.

Besides the virtual material, a set of “traditional” paper cards (tangible material) was prepared for the sessions as well. All the word blocks required for a lesson were produced as  $42 \times 31$  mm laminated cards by the researcher before the sessions. The font size and picture size were standardised to 26 px and 24 px, respectively, in order to keep to a close approximation to the size of the word blocks on iPad. One reason for this standardisation is to establish a level of consistency between the two sets of materials, in order to minimise the potentials of unintended within-stimulus variables confounding the results.

Essentially, the hard-copy tangible material in the form of laminated cards is a close replica of the soft-copy virtual material on iPad. The app offered functionalities that closely resembled how the activities are being carried out in the physical environment. Or based on Hirsh-Pasek et al.’s (2015) stance, this software is somewhat an “e-worksheet” at the moment, and it can be considered as “the first wave” of educational apps. However, this set of circumstances also provided a great opportunity in exploring whether the presentation of teaching materials in hard copy or soft copy alone has any effect on the students’ response and engagement. Furthermore, it also allows us to have a more objective evaluation on how teachers may interact differently when using an electronic device as compared to the traditional paper material.

### **11.3.3 Research Instruments**

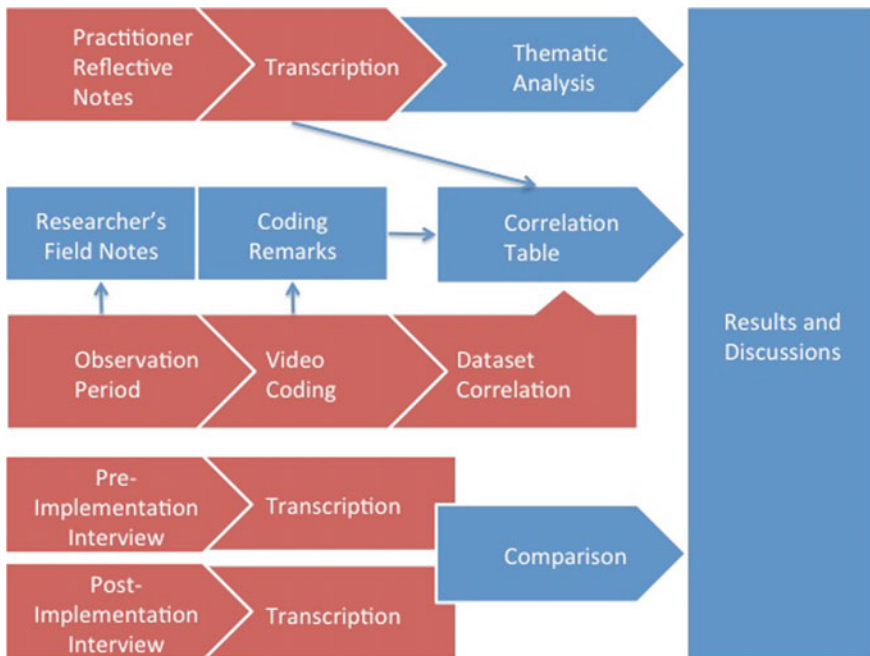
Semi-structured interviews were carried out with the two class teachers and the head of ICT team, before and after the eight-week implementation period. The main objectives of the pre-implementation interview were more towards fact-finding and understanding the participants' perceptions and planning, while the main objectives of the post-implementation interview were more reflective, for the participants to share their insight and feedback, and to see any shift in perception and attitude. Interview questions are largely open-ended, with probes annotated along with the main questions in order to make sure all necessary information was obtained. Practitioner's reflective notes were collected from the teachers during the free time after each session. Data was collected as audio recording using the researcher's voice-recording app on mobile phones and later transcribed into text format. Transcriptions were done in non-verbatim clean-read format. The reason for this approach instead of verbatim transcribing is because firstly, the environment tends to be noisy and the teachers sometimes get disrupted during their recounting, making it not practical for a verbatim approach. And secondly, the transcribed material was also provided for teacher's use in their own practitioner's reflective journals. Transcribed material was passed to the teachers in both hard and soft copies for checking. The reflective material at the end of each session was unguided free response from the teachers, with just occasional probes from the researcher to clarify certain points or to get further elaborations. Data analysis for the reflective data took an inductive approach and were analysed through a six-stage thematic analysis process (Braun and Clarke 2006). Structured observations were conducted for all of the teaching sessions throughout the implementation period. Observation field notes were taken during the observation period, to include any notable antecedence or responses before and after the session. The teaching activity was captured by a pocket-size digital video camera provided by the school. The video material was then later coded using an observation grid devised by the researcher. The devised observation schedule drew inspiration from Pianta et al.'s (2008) Classroom Learning Assessment Scoring System (CLASS), and Downer et al.'s (2010) Individualised Classroom Assessment Scoring System (inCLASS). Independent variables such as the number of session, order of the round, time into the round, student, and the teaching material were taken into account as well. Combining the domains "Emotional Support", "Classroom Organisation", and "Instructional Support" of CLASS (Sandilos and DiPerna 2011; Allen et al. 2013) and inCLASS's "Teacher Interactions", "Task Orientation", "Conflict Interactions", the devised observation grid includes items under the domains of "Task Context and Interruptions", "Teacher's Instructions and Affective Involvements", and "Student's Emotional Responses and On-Task Behaviours". Piloting of the devised observation grid was conducted using videos of T01 carrying the teaching task with her two other students not involved in the study. The piloting process also involved another researcher of the project, to make sure that the definitions are reasonably precise, valid, and operational. After taking into considerations the circumstances of the project (the potential affordance of the app, the reliability of the developed instru-

ment, the regularity of the sessions, and the research timeframe), the researcher has focused the quantitative investigation on the relationships between the variables and on-task behaviours of T01’s first eight sessions for this paper.

### 11.4 Results and Analysis

With the mixed-method design, data was collected from both the quantitative instruments and the qualitative instruments. Datasets generated by each instrument were analysed separately, and the results were then utilised to compare and triangulate the findings (Fig. 11.2). The following sections will describe the data analysis process and report on the results.

The first four weeks’ data produced from the devised observation grid was coded and transferred onto Excel sheet. Each individual 10-s interval was treated as an entry ( $N = 960$ ). Each partial-interval sampling data point was entered as binomial data ( $1 = Y, 0 = N$ ). This dataset was then imported into SPSS for statistical analyses on correlations. A test for normality was carried out for the aggregated dataset, and the result suggested a mix of normal and non-normal distributions among the variables. And because two of the variables were ordinal (“Session” and “Order”),



**Fig. 11.2** Organisational map of data processing. This figure explains how data are collected, analysed, and consolidated into results for discussion

and the rest of the variables were nominal with two categories (e.g. “Material A/B” and “Student W/X”), a two-tailed bivariate correlations test using Kendall’s tau-b correlation coefficient was employed with the dataset to explore the relationships between the variables (see Appendix for the resulted correlation table).

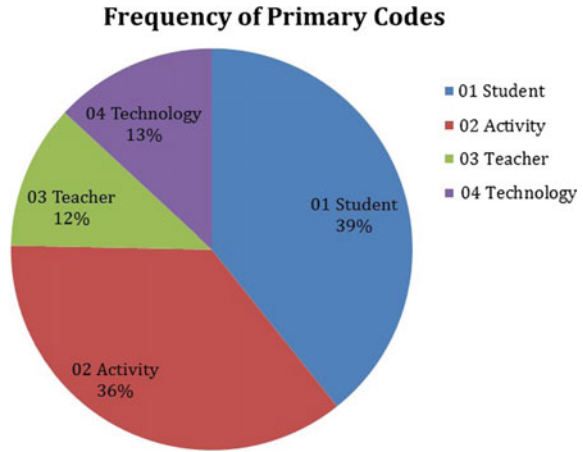
The coding process of the transcribed reflective material generated 466 entries across the first eight sessions of implementation (material that was fit for more than one code was counted as multiple entries). Four primary themes, ten secondary themes, and eight tertiary themes emerged at the end of the six-stage thematic analysis (Fig. 11.3).

As the reflective notes were free-response material from the teachers, frequency of the codes in each theme was tallied and compared to illustrate the teachers’ primary thinking process and concerns for their lessons in teaching word ordering. Of the 466 coded entries, 183 entries pertained to the students, 168 was on the lesson activity and instructions. Only 55 entries were teachers expressing their feelings, such as “impressed”, “happy”, “frustrated”, and “stressed”. A total of 60 coded material entries were pertaining to the use of technology of the teaching material (Fig. 11.4). Below, we present the analysed results with supporting abstracts for each domain.

Primary	Secondary	Tertiary
<b>01 Student</b>	01 Performance	01 Affective
		02 Cognitive
		03 Conative
	02 Characteristic	01 History
		02 Abilities/ Needs
<b>02 Activity</b>	01 Lesson	
	02 Response	
	03 Planning	
<b>03 Teacher</b>	01 General /External	
	02 Students Attainment	
	03 Lesson Efficacy	
	04 Material	
<b>04 Technology</b>	01 Comparing	01 For Paper
		02 For iPad
		03 The Same
	02 Suggestions	

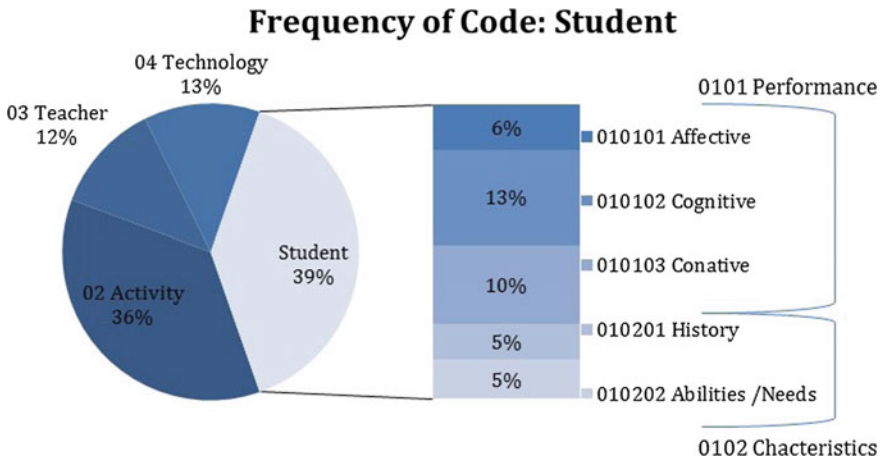
**Fig. 11.3** Tree diagram of thematic codes. This figure illustrates the main themes that emerged from the six-stage thematic analysis

**Fig. 11.4** Pie chart on the frequency of primary codes for practitioner’s reflective notes



### 11.4.1 The Theme of “Student”

One of the most prominent emergences of topics during the analysis process was the teachers’ discussion on student performance. 29% of all coded entries were teachers reflecting on how the students performed for the session, and the teachers’ concepts of student performance seemed to involve three major components, similar to the affective, cognitive, conative model (Hilgard 1980). A more detailed breakdown of the data distribution can be seen in Fig. 11.5.



**Fig. 11.5** Pie on the frequency of ‘Student’ code, along with a bar on its secondary and tertiary codes breakdown

Firstly, when evaluating how well the students “performed” for a session, teachers often described their observations of the student’s reactive emotions or respondent behaviours, such as “calm”, “confident”, and “not upset”.

I was really pleased with the fact that both students are such all 5 or 10 min at the table without running around, without having any breaks, which was a very big success, and a very good progress. **T02\_[W1S1]**

But still, he didn’t drop to the floor, he didn’t scream, he didn’t bite his hand. **T01\_[W3S6]**

Secondly, teachers also described their evaluations of the student’s understanding and cognitive process in carrying out the task.

I think he did get the concept of making the sentence and putting the word in the right place. **T01\_[W2S3]**

I realize that even though he was able to read the sentence himself using the right order, I mean, having the correct syntax in his mind... **T02\_[W2S4]**

Thirdly, teachers also paid attention to how much effort the students seemed to have put in, and their level of concentration in carrying out the tasks.

He couldn’t concentrate as he has been distracted by another activity running in the other class. **T02\_[W1S2]**

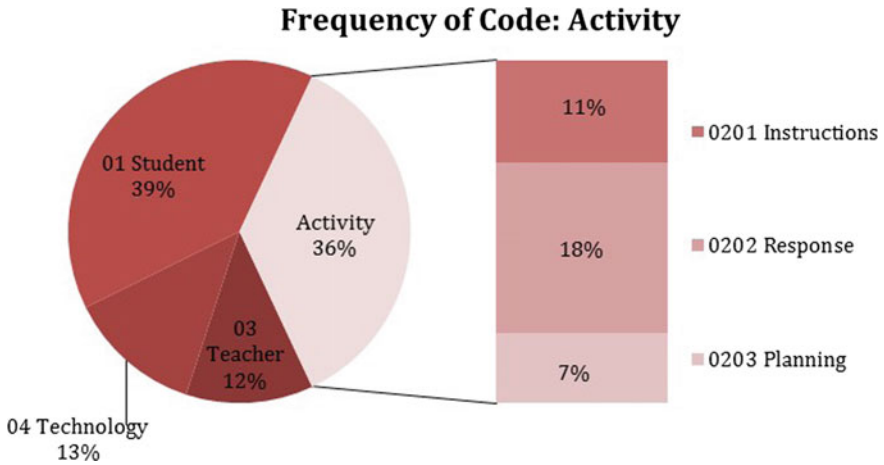
I think if he was more into what he was doing, then he would be able to do it correctly. He did it very mechanically I think, today. **T01\_[W2S4]**

The remaining 10% was around student’s characteristics, such as past histories of the students and the students’ strengths and weaknesses. The large proportion of material on student performance may also suggest that the teacher’s primary emphasis and concern for an implementation is the student’s outcome.

### ***11.4.2 The Theme of “Activity”***

Not surprisingly, another large proportion of teachers’ reflective material was their reflection on the execution of the lesson and the deliberations of what should be the next course of action. The topics seem to involve reflections on their own instructional methods (50 entries), their reason process for student’s responses (84 entries), and plans for improvement for the next session (34 entries) (Fig. 11.6).

Material of self-reflections on instructions included identification of variables during the session and the different strategies the teachers had applied. The teachers’ reasoning process of the activity reflected Webb and Cox’s (2004) description of pedagogy, whereby the process of reasoning and action occurs throughout a teacher’s lesson “planning”, “teaching”, and “reflection”. The teachers reflected on their action or presentation of the lesson and analysed on why did a student respond positively or negatively towards the teaching. In turn, the teachers generated plans and strategies to address the challenges. As a theme, the material reflects teachers’ strategies in



**Fig. 11.6** Pie on the frequency of “Activity” code, along with a bar on its secondary codes breakdown

improving their lessons’ efficacy in teaching their students’ word order. For example, both teachers had mentioned about making the activity more meaningful for the students:

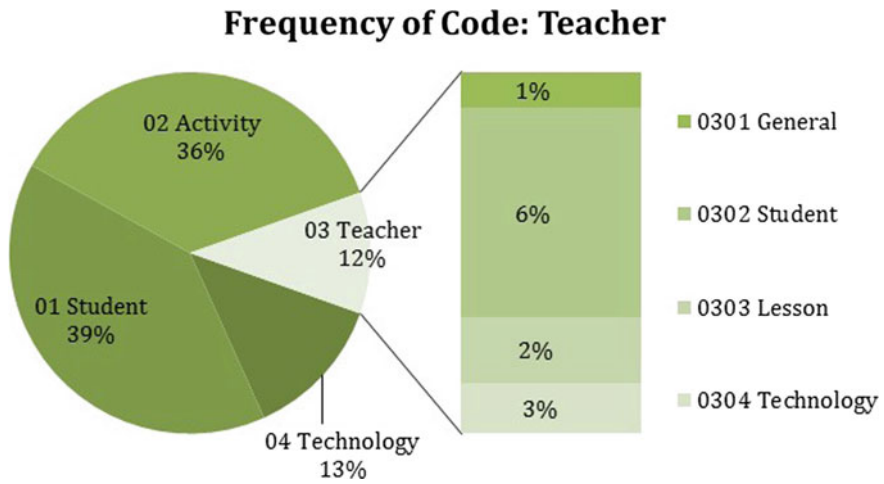
So my thinking is that, if I use prompts, and then move on the activity the way we did it today it’s gonna further support their understanding about linking sound of word, or even, the thing that they are dragging and dropping. **T02\_[W1S1]**

“So I think his eyes are working really well, at the moment, but not understanding still, you know, what he is doing. It’s more about matching the right symbol to the right place”, “because we are working now on understanding more, I think maybe a picture of actually someone drawing would be more, for him to see”. **T01\_[W2S3]**

### ***11.4.3 The Theme of “Teacher”***

55 coded entries were material where the teachers expressed their feelings or emotions (explicitly or inferred by the researcher based on the context of the text). The theme of teacher’s feelings was further subdivided into “feelings towards general set-up”, “feelings towards student’s attainment”, “feelings towards the lesson’s efficacy”, and “feelings towards the material use” (Fig. 11.7).

In particular, for the sub-theme of “teacher’s feelings towards the material use”, the general sentiment was quite different for the two teachers. One teacher expressed more positive comment with regard to the use of the app in teaching word order and liked some of the features and functions of the software, such as the quicker operation with the “Randomize” button. Whereas the other teacher sometimes found



**Fig. 11.7** Pie on the frequency of “Teacher” code, along with a bar on its secondary codes breakdown

it frustrating when the software does not work properly, and that it affected the efficiency of the teaching.

Although the number of entries is much smaller than the previous two themes, the material did highlight some occasions of the challenges and worries the teachers had experienced, and the gain in their some confidence in using the different materials in teaching word ordering.

You know what do you remember last time I was like oh my god it looks like we are reversing, going backwards. And now, they showed today that, yes we can do it. **T01\_[W3S5]**

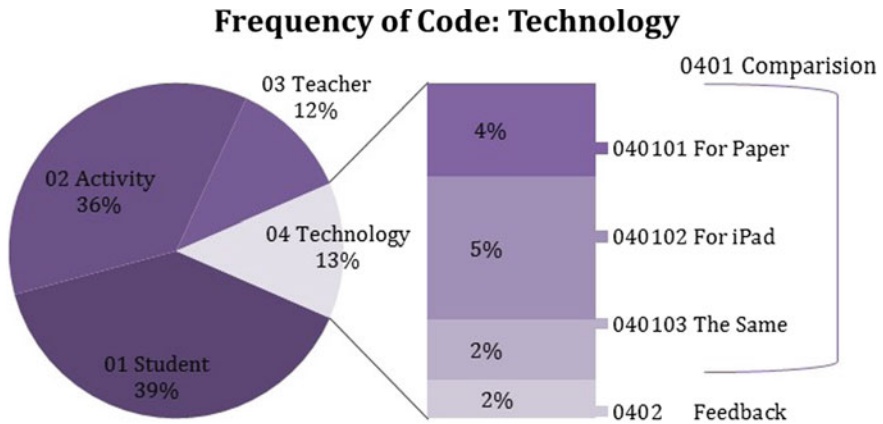
Easier and more because now you told me what the problems are with the sentences, with the randomising, with the “back” going back. For example, the first times when I used to get stuck, you know what I mean, you told me what to do. **T02\_[W4S7]**

#### 11.4.4 The Theme of “Technology”

Another finding is that only 60 entries were coded as material comparing the pros and cons of the two sets of teaching material in delivering the lesson on word order. There are occasions where the teachers find the use of iPad more preferable, while other times paper material was preferred. And there was a fair amount of occasions where the teachers see both as equally effective (Fig. 11.8).

For T01, the opinion was that the preference or advantages of iPad use were mainly around the convenience offered by the device, whereas negative comments were mainly targeting at the intermittent technical glitches of the app. However, the teacher perceived a similar level of effectiveness in delivering the literacy lesson, despite the occasional hiccups in the software.





**Fig. 11.8** Pie on the frequency of “Technology” code, along with a bar on its secondary and tertiary codes breakdown

I think on the iPad, was in a way easier, than do it in the hard copy, because first of all it stays where you put it. In a way was more organised I would say, for the session. **T01\_[W1S1]**  
 When you want to do it quickly, and you can’t because the picture is not changing or the word has changed the picture hasn’t changed, whatever. There are little things which could be still done. **T01\_[W2S4]**

While for T02s, the use of iPad seems to be more beneficial for one child, while paper can be more appropriate for the other. This serves to highlight that there is no one-size-fits-all solution in teaching students with SEN. Planning of lesson activities and material will need to be based on individual needs.

I believe that with [Stu\_Y], the iPad is more useful, Supports his needs, accommodates, addresses his needs in a better way. **T02\_[W2S3]**  
 But if I have to do with a challenging child, like [Stu\_Z], and I’ve tried to get him there, engage him with this one, and then it won’t work, then we’re gonna have a kick-off. **T02\_[W4S7]**

The teachers have also shared several insights during the interviews, with regard to the use of the two materials in teaching word order, or Language and Literacy lessons. T01 commented that the use of one teaching material may be more suitable than the other depending on the activity and lesson objectives. While for T02, an emphasis was placed on having a variety of presentation and stimuli to promote learning. And based on the quantitative data, the two means of teaching (traditional paper material and iPad app) did not show any significant correlation with any of the DVs, except for the DV “look”. Whereas on the other hand, the duration into the teaching within a session appears to play a larger part on the DVs. More interestingly, the task-related behaviours (“look” and “work”) appear to be more closely correlated with the round of practice (“order”, i.e. the first or the second round). The positive correlation between task-related behaviours with rounds may suggest a certain level of warm-up effect, where during the first round the teacher and students are spending more time on preparation and getting into the momentum for learning.

## 11.5 Discussion and Implications

Through the process of supporting the group in developing the app, this research attempted to investigate how an instructional use of iPad may impact or influence how two teachers are teaching word order to their students with SEN. From the qualitative material collected, the findings have shown that the implementation of mobile technology had both directly and indirectly shaped and impacted the teaching of word order to the students.

Directly, the use of the iPad facilitated one of the students in understanding the concept of arranging word blocks in a left-to-right manner. The teacher shared that the student had been having difficulties in understand the concept of sequencing or lining things up in one direction. Her initial approach was to get the student to practice drawing lines from left to right with his fingers on textile material, but it did not seem to be effective. However, after some practice with the word-ordering exercise on iPad, he seemed to have acquired the skill of arranging the word blocks from left to right, and then generalised to the paper material as well. The reason for this difference in outcome is likely to be due to the fact that the “space” of the 2D virtual material is very well defined/confined by the screen of the iPad, whereas on the table in the 3D physical space there may be a lot more other distractors. Furthermore, moving a box to match a box may be conceptually more discrete than to stick a card onto a stripe of Velcro.

Indirectly, using the “Smartsymbol” app promoted a more active role in learning in one of the students. The student had extended his learning beyond the teacher’s expectation and learnt to navigate through the interface independently. The demonstration of independence indirectly prompted to teacher to provide a higher level of autonomy to the student by letting him pick the next sentence on his own.

Both teachers deemed that the implementation of the app in teaching word order to their students was successful. This is in spite of the fact that the app is still under development and intermittent technical glitches occurred throughout the implementation. Also, both teachers found the students’ outcome satisfactory, despite saying that the efficacy of teaching was comparable between the two mediums. The quantitative data seems to support the notion as well, as the variables “work” and “material” did not show a significant correlation, suggesting that the resulted amount of “work” did not differ greatly between using paper and using iPad. This may show that using iPad lead to other forms of improvement in a students’ outcome, apart from efficacy. The benefit of the iPad use seemed to be greater for two of the students than the others, but all four of the students had performed up to the teachers’ expectations.

A number of lessons and implications can be drawn from the present case study for educators, app developers, and future researchers.

### 11.5.1 For Teachers and Practitioners

First of all, beyond using the educational app as it is, more planning is needed to make the use of the material more meaningful. For instance, the material for the word-ordering activity can be tailored to reflect each child's individual interest for digital content. If the child likes to watch "Finding Nemo" on iPad, the word-ordering activity can revolve around the different things "Nemo" sees in the ocean. As such, the lesson retained the object of teaching the S-V-O syntactic structure, while the child got to enjoy his favourite story through the activity. As shown in the case of the present study, a meaningful use of digital content can shift the student's motivation from wanting to just finish the task and leave, to genuinely wanting to create a sensible sentence.

Secondly, from the findings, we can see that a teacher's motivation for the integration of technology may not necessary be that it has certain advantages over the traditional methods, but for the variety in presentation and stimulus provided. Messinger-Willman and Marino (2010) supported this notion, and advocated the adoption of Universal Design for Learning (UDL) as a wider, more holistic approach for lessons and curricula development, on top of the application of assistive technologies to meet individual student's needs. The UDL Guidelines (Rose et al. 2005; Center for Applied Special Technology 2011) proposed three principles in delivering lessons to learners with SEN:

- (a) Support resourceful learning through multiple means of representation.
- (b) Support strategic learning through multiple means of expression.
- (c) Support motivated learning through multiple means of engagement.

In this case, the presentation of teaching material (word-symbols) was presented through multiple means of representation (in the form of prints on paper cards, and in the form of virtual material on iPad). To further the students' learning, the next step can then be to provide them with ample opportunities to create meaningful sentences through the different material. For instance, during circle time, the teacher may ask the students what do they see in a storybook, a student may answer "I see a cat" verbally, and another student may go up to the interactive whiteboard to arrange the words into order, and the rest may watch and circle the right answer on their paper worksheet.

Given that the teachers are all having a heavy workload, having resources readily available and providing initial support is imperative to a successful and sustainable integration. The long and tedious search for a suitable app has been a recurring theme. If we were to compare the "e-worksheet" type of app in this study with actual physical workbooks, it became clear that the search for a suitable app is akin to the search for a suitable workbook for the students. Therefore, to further support the teachers, school may consider to gradually create a library of digital material and apps and systematically categorise them according to targeted subject and skills.

Lastly, there is no definite way of using an app or a device. Different teachers might use the same app in completely different ways or for completely different

purposes. However, teachers may consider categorising their delivery of teaching through educational apps in any of the following six modes: (a) drill and practice, (b) tutorials, (c) games, (d) simulations, (e) problem solving, and (f) device managed instruction (Watkins and Webb 1981), as a way to provide clearer focus when planning for their integration app use in lesson delivery.

### ***11.5.2 For Apps Designers and Developers***

As mentioned by the teachers in this case study, one of the strengths and main benefit of the app is its potential to drastically reduce the logistical inefficiency of making, organising, and handling for the physical material. However, the full potential gain are often compromised due to the intermittent technical glitches of the software, and precious lesson time will be wasted if the teachers need to troubleshoot on their own, nor is it practical as the students will lose momentum and may begin to engage with off-task behaviours. The teachers will then have to switch material. On one hand, this also means that teachers should always have a backup plan in case of tech failure. On the other hand, this highlights the importance of stability and reliability when developing software for teachers and practitioners, as some students with SEN may easily lose attention or get frustrated. Designers and developers should begin to pay more attention to the teachers' and students' needs, in order to develop apps that can sustain usage.

### ***11.5.3 For Researchers***

This study was co-planned with the participating teachers, so they understood and responded positively to a random order design, and the decision to carry out the lessons as mini pull-out sessions created an intermediate setting between a clinical set-up and a classroom or circle time set-up. Future projects may consider adopting a similar participatory action research approach, where the collaborating teachers can participate in research both as the participant and as co-researcher. This will empower the teachers with more control in their implementation and may lead to more meaningful improvements in their professional development. The cyclical development of an Action Research is highly compatible with Instructional Design's ADDIE model (Branch 2009) as well. ADDIE is the abbreviation of "Analysis", "Design", "Development", "Implementation", and "Evaluation". The model can be used for teachers and researchers in designing an implementation plan together.

### 11.6 Conclusion

As Halverson and Smith (2009) had emphasised, “Teachers are at the centre of instructional practices in schools.” (p. 53). More support and training should be provided to empower the teachers with the necessary pedagogical competency, technological competency, and self-efficacy in integrating the various ICT into their lessons and teaching activities. Allowing for models of Continuing Professional Development (CPD) involving research will empower the teachers and provide them with better understanding and more control in such implementation, and may lead to more meaningful improvements in their own professional development. Also, as shown in our study, even though ICT may not bring about a significant increase in efficacy in teaching methods, teachers experienced an improvement in students’ overall outcomes such as more independence and change of behaviours. Hence, ICT still offers many potential benefits that can be further explored based on different settings and for diverse groups of students, allowing for more personalised teaching and learning.

### Appendix—Full Correlation Table (Kendall’s Tau-b)

			Sp	Sn	Look	Work
Kendall’s tau-b	Student	Correlation coefficient	<b>0.419**</b>	<b>-0.102**</b>	<b>0.102**</b>	0.050
		Sig. (2-tailed)	<b>0.000</b>	<b>0.002</b>	<b>0.001</b>	0.103
		N	<b>951</b>	<b>951</b>	<b>951</b>	951
	Session	Correlation coefficient	0.032	-0.053	-0.011	<b>0.131**</b>
		Sig. (2-tailed)	0.247	0.060	0.687	<b>0.000</b>
		N	951	951	951	<b>951</b>
	Order	Correlation coefficient	0.012	-0.042	<b>0.077**</b>	<b>0.083**</b>
		Sig. (2-tailed)	0.684	0.155	<b>0.007</b>	<b>0.003</b>
		N	951	951	<b>951</b>	<b>951</b>
	Time	Correlation coefficient	<b>-0.069*</b>	<b>0.125**</b>	0.034	0.049
		Sig. (2-tailed)	<b>0.010</b>	<b>0.000</b>	0.180	0.054
		N	<b>951</b>	<b>951</b>	951	951
	Material	Correlation coefficient	-0.024	-0.052	<b>0.078*</b>	-0.017
		Sig. (2-tailed)	0.469	0.107	<b>0.012</b>	0.584
		N	951	951	<b>951</b>	951

(continued)

(continued)

			Sp	Sn	Look	Work
Sp	Correlation coefficient		1.000	<b>-0.128**</b>	0.055	-0.001
	Sig. (2-tailed)		–	<b>0.000</b>	0.076	0.969
	<i>N</i>		951	<b>951</b>	951	951
Sn	Correlation coefficient			1.000	-0.052	<b>-0.083**</b>
	Sig. (2-tailed)			–	0.094	<b>0.007</b>
	<i>N</i>			951	951	<b>951</b>
Look	Correlation coefficient				1.000	<b>0.511**</b>
	Sig. (2-tailed)				–	<b>0.000</b>
	<i>N</i>				951	<b>951</b>
Work	Correlation coefficient					1.000
	Sig. (2-tailed)					–
	<i>N</i>					951

\*\*Correlation is significant at the 0.01 level (2-tailed)

\*Correlation is significant at the 0.05 level (2-tailed)

Dependent variables	Short-hand	Examples of observable behaviours
Student positive	Sp	Frowning, fussing, throwing tantrum, etc.
Student negative	Sn	Smiling
Looking	Look	Looking directly at the material or the teacher
Working	Work	Physically manipulating (with one's hand) the material in attempt to complete the learning task

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# Chapter 12

## A Research on Teacher-Education-Related Standards Mobilities from Foreign Countries to Chinese Context



Wei Jin

**Abstract** Standard mobility is explored to show process of standards knowledge from foreign countries to China. With content analysis and comparative studies, it is found that standard mobility takes place within IAM model and meanwhile robustness, and appropriateness and consistence should be paid attention. It is suggested that teacher-education-related standards should go deeper and higher, go from inside to outside, and go beyond standards. Teacher agency and competences should be initiated in the future.

**Keywords** Globalization · Teacher-education-related standards · Standards mobility · Teacher agency

### 12.1 Introduction

Many researchers have asserted that the changing world have exerted great influence on education, including teaching education (Hargreaves 1995). Accompanied with globalization, people, knowledge, and technology begin to move from one country to another. Knowledge mobilization has attracted much attention for researchers, practitioners, and policymakers.

Since 1966, teachers began to be seen as professionals and their status is beginning to be higher and higher. That teachers are centrally important to educational and social changes has become a common understanding among many nations. Among the teacher professional strategies, issuing teacher-education-related standards has been a common practice in the USA, the UK, Australia, Japan, and some other countries.

As one of the developing countries in the world, China has been making great efforts to learn from other countries. “Learning experience from developed countries” has become a mental impetus when the policymakers initiate a new policy. Actually, from 2004, Ministry of Education has passed 14 teacher-education-related standards,

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which are teacher education curriculum standards, teacher professional standards, and principal professional standards. All of these standards are directly or indirectly related to teacher education policy and practices. Here, we would like to claim that although teacher professional standards and principal professional standards are not directly concerned with teacher education. However, the main purpose of teacher education is to prepare and improve teaching task force in primary and secondary educational settings. Therefore, all the above two types of standards can have impact on teachers' preparation and training programs.

However, as we know, these standards are not from China, but from foreign countries. Though some researchers have talked about the development of teacher curriculum standards, no researchers step behind the development of all of these standards, trying to figure out how these standards are made, implemented, and researched. This is the problem that we want to address in this article.

This research focuses on mobilities of teacher-education-related standards from foreign countries to Chinese context. In order to make this mobility process crystal and explicit, in this research, we try to answer the following questions: (1) What teacher-education-related standards have been introduced into China? (2) About what were these standards introduced to China? (3) What motivated these introductions of teacher-education-related standards? (4) How are these introduction related to the establishment of Chinese teacher education-related standards? (5) What are new researches after establishment of Chinese teacher-education-related standards? Answering the above five questions can be taken as a starting point to understand how a foreign teacher-education-related standard moves. To be specific, how a teacher-education-related standard is introduced, researched, and informs our standards making, implementation, evaluation, and modification.

## **12.2 Literature Review**

In literature review part, we try to explain key concepts in our research. Knowledge mobility, teacher-education-related standards, and standards mobility are illustrated as follows.

### ***12.2.1 Knowledge Mobility***

Since, we assume that teacher-education-related standards are highly related and influenced by foreign teacher-education-related standards, we see this influence as a process of knowledge immigration or we can refer to a more general term, that is, knowledge mobilization. We adopt the definition put forward by the Social Sciences and Humanities Research Council (SSHRC 2010):

“Knowledge mobilization” refers to a range of processes that help move research results into society, as well as bring new ideas into the world of research. From knowledge-brokering and outreach, to more effective dissemination through new technologies, to the “co-creation” of knowledge, these processes help ensure that public investments in social sciences and humanities research have the greatest possible impact—intellectually, socially and economically. (p. 12)

As shown in the definition, knowledge mobilization explores the relationship between research and society or practice. Also this mobilization also highly pays attention to the impact on “intellectually, socially, and economically.” Previously, we employed “knowledge mobility,” which, as is supposed, is equal to “knowledge mobilization.”

### ***12.2.2 Teacher-Education-Related Standards***

Teacher education can be divided into three stages: pre-service teacher education, teacher induction, and in-service teacher education. Although we employ teacher-education-related standards, we do not involve all of these three stages in our research. The reason is that too broad research span can go beyond our energy and cannot be finished within the research project time limit. Thus, in our research, we mainly refer to teacher preparation period and in-service teacher training stage.

Connected with the first stage, teacher-education-related standards include teacher education standard, which is perhaps the broadest concept. To be specific, the following standards should be enclosed including standards for teacher preparation institutes, teacher educator standards, and graduate standards, and so on.

Related to in-service teacher-education-related standards are teacher professional standards and principal professional standards. Teacher professional standards refer to standards related to kindergarten, primary, secondary, and secondary vocational school teachers. So are standards with principals. In the western context, there exist some subject teacher professional standards but we are lack of such standards for Chinese.

### ***12.2.3 Standard Mobility***

Standard mobility is a concept which is used to describe the whole process of a foreign standard becoming of a Chinese teacher education standard. Some researchers have argued the process of establishment of Chinese teacher professional standards, especially teacher education curriculum standards (Hu and Cui 2012; Zhong et al. 2008b) are highly relevant with the reference to the foreign teacher-education-related-standards. Still, there is some other standard mobility, which has yet to be explored.

## 12.3 Research Design

### 12.3.1 *Standard Mobility Stage*

We devise the standard mobility process into two stages: The pre-standard-making stage and the post-standard-making stage. The first stage mainly explores how Chinese scholars conduct research on foreign teacher-education-related standards and some other research work for making of a standard. The second stage just focus on how researchers do research related to standards. Through research on the process, we can make further suggestions four standard-related research, practice and policymaking in the future. Content analysis is employed in our research.

### 12.3.2 *Methods*

The method employed in this research, on the whole, is content analysis and comparative method. Content analysis is mainly to figure out themes of the research and their implication for teacher-education-related standards making, and comparative method can be done chronically and spaciouly. We compare research themes and focus between pre-standard-making period and post-standard-making period, and at the same time, we compare our teacher-education-related standards and their counterparts, though we are possibly informed by their standards.

#### 12.3.2.1 *Data Collection*

In our data, all the resources concerning teacher-education-related standards should be included. The first data we referred to is Chinese Network Knowledge Index, which is abbreviated as CNKI. Then, we turned to Ministry of Education websites for the standards profile to locate specific information. In order to ensure the quality of our research data, we took core journal and SCCI journals as the main sources. Through pilot collection, we found some article is just issues of notification or news information, which of course should be deleted. In addition, the standards that have been passed were downloaded from the websites of ministry of education. From the website, we found that the first standard the Chinese Ministry of Education made is concerning about primary and secondary teachers' educational technology standards, which we do not include in our research data, for these standards are more specific to primary and secondary teachers, but far away from teacher education in tertiary education. The data collection can be shown in Table 12.1.

Obviously, articles on teacher professional standard ( $n = 134$ ) doubles the total of other standards added up. Principal professional standards take the second ( $n = 31$ ). The number of articles of teacher education standards and teacher education curriculum standards matches each other, a little above 20 articles. There is only one article concerning teacher educator standard.

**Table 12.1** Introduction and establishment of teacher-education-related standards (in total)

Standard type	Article (in total)	Policy (in total)
Teacher education standards	21	0
Teacher education curriculum standards	22	1
Teacher professional standards	134	5
Teacher educator professional standards	1	0
Principal professional standards	31	4

Of the standards, there exist five teacher professional standards, four principal professional standards, and one teacher education curriculum standard.

### 12.3.2.2 Data Analysis

We downloaded and compiled all the standards together chronically, trying to understand the history of standards. From the history, we try to explore the reasons why the standards were made in such an order instead of other orders. Further, we try to observe standards structurally, trying to understand the constitutes and their arrangement logic. At last, we delve into content of teacher-education-related standards for further understanding.

In terms of articles, we classify three types of files to collect the data and re-named the file with a year when the article is published at the beginning of the article title. Then, we read titles of articles and underline the keywords, which can show the themes, and then we try to make an historic line of the standard research and make a description of the standards. We understand the data according to the standard category from teacher professional standards, teacher leader professional standards, and teacher education curriculum standards. Trying to find the common things in introduce, making, establishing, implementation and modification of teacher education standards.

## 12.4 Results

### 12.4.1 *Teacher-Education-Related Standards Introduced*

Introduction and research of teacher-education-related standards of developed countries, or countries which have similar background with China are beneficial to the

**Table 12.2** Teacher-education-related standards introduced in Core and CSSCI Journals

Standard type	Country	Authors (e.g.)
Teacher education curriculum standards	America, England, France, Japan, HK, Singapore, and Russia	Zhong et al. (2008b)
	England	Wang and Qian (2011)
	Australia	Wu and Gao (2012)
Teacher professional standards	Australia	Zhang and Zhu (2007), Wang and Huang (2008)
	America	Yi (2008)
	UK	Xu (2008)
	New Zealand	Liu (2010)
Principal professional standards	America	Liang (2006), Xu (2010)
	UK	Zhang (2009a, b)
	Australia	Liu (2013)

establishment of Chinese teacher-education-related professional standards. The standards introduced to China are in Table 12.2.

When doing international comparative study and selecting standards, two factors are important: economy status and education status, culture and system similarities. It seemed that we assume the country with a strong economy is supposed to be an educationally strong entry, which must be equipped with qualified teacher-education-related standards. On the other hand, researchers assume that those which have similar cultural background, especially some Asian country should be our exemplars.

### ***12.4.2 Research Span of Teacher-Education-Related Standards***

There are several ways to deal with foreign teacher-education-related standards: introduction, analysis, comparison, comments, and implication.

As for introduction, researchers are mainly concerned of background information and standard contents. Analysis is employed to break standards apart to see structure, structural connection, values, features, and theoretical foundations. Comparison is used to list out differences and similarities after setting standards for putting standards together. Comment is on significance, purpose, and values of teacher-education-related standards. Implication is perhaps a footing point for introduction, which is generally dealing with suggestions for our establishment of our own teacher-education-related standards. However, not every element is included in an article; however, introduction and implication are necessary parts. Besides, some researchers introduced cases in foreign countries.

If we categorize all of these articles, three distinguished models can be clearly seen: Introduction model, analysis model, and comparison model. We all use research articles as examples to support my claims.

As for introduction model, the researchers generally introduce foreign teacher-education-related standards for Chinese scholars and policymakers. Researchers, in general, list out outline and contents of certain standards before showing implications when we try to establish standards (e.g., Yi 2008; Zhang 2009a, b; Tu 2015). Specific cases in point are as follows. Shi (2004) summarized three teacher professional standards models, models connected with teacher certificates examinations, model disconnected with teacher certificate examinations, and layered teacher professional standards and then made suggestion for China. Sun (2012) introduced teacher education standards of German and then made implications for Chinese teacher education.

Analysis model is concerned about history, logic, values, theoretical foundations, ideas, and ideology, which lie beneath the teacher-education-related standards. Admittedly, implication is often appended for Chinese scholars and policymakers (e.g., Xu 2011; Xun 2011; Yang 2014; Yu 2012). Overall, values that lie behind teacher-education-related standards are of great variety.

Comparative model is often used to compare standards among foreign countries or between China and countries after our standards have been issued and published. Xu and Tang (2014) point out three similarities in background, stratus, and appropriateness and differences in locality and evaluation after a comparison and contrast of American and British teacher professional standards. Xie and Zhao (2015) compared and contrasted standard texts between China and America, suggesting that inclusive education, vocational knowledge, and professional skills should be attached great importance for standard modification. Comparative model has become an important access for researchers to put forward suggestions for policymakers and other researchers in homeland.

Besides models, these standards are mainly from America, Australia, England, though some other countries' standards are introduced, for example, Philippine (Xiong and Li 2008), Vietnam (Wang 2009), or Pakistan (Mo 2011).

### ***12.4.3 Motivations for Introduction of Teacher-Education-Related Standards***

The first motivation is catch-up motivation. The rationale behind this introduction and establishment is to make up for the standards. The government follows the international trend. As teaching should be taken as a professional and teacher professional development should be articulated, and therefore, we begin to improve teachers' status and begin to move forward to introduce these standards.

The second motivation is that we have never done standard making before. Therefore, in order to follow example, researchers, with financial support and realistic needs, begin to explore foreign teacher-education-related standards. However, this is not only the case in education but also in other fields, such as economy and technology.

#### ***12.4.4 Relevance of the Introduction of Foreign Teacher-Education-Related Standards and Establishment of Chinese Teacher-Education-Related Standards***

As seen above, implication is an integral part of researchers when they conduct research on foreign teacher-education-related standards. We cannot find direct evidence to say that policymakers must turn to these implications before making our own policy. For example, Zhong et al. (2008a) said that in order to make our establishment of standards scientific, we should turn to standards in developed countries. That is, we can see relevance from these introduction and establishment of teacher-education-related standards.

There also must be some modification when we adopt foreign teacher-education-related standards. Some researchers have put forward establishment subjects, principles, and procedures. Chinese researchers have strived to make their own contributions and dependent thinking for teacher education development. Li (2012) made a comparison between our teacher professional standards and American standards, putting forwards three suggestions.

With great efforts, the government in general formed a standing committee, which is responsible for making the draft standards in the first round. Then the government will call in experts in education, policy-making, and particularly in teacher education. Occasionally, the government also invited local educational authorities and those who work in primary and secondary schools, kindergartens or vocational school, whether they are teachers or principles. Up to 2016, the Chinese Ministry of Education has issued, according to our definition of teacher-education-related standards, ten stands in total, as is seen in Table 12.3.

Through almost eight years, teacher education curriculum was made out and issued. After that, three teacher professional standards were made before attentions were shifted to principals in compulsory education and secondary occupational teacher professional development. Then in 2015, other principal professional standards in kindergarten, secondary occupational, and high school lever were made. The special education teacher professional development was finally made in 2015. The government policymakers' focus changed from curriculum to teachers and then to teacher leaders.

The shifts shown above in the research results hold that the policymakers first and foremost begin to concentrate on curriculum before moving to teachers and teacher education. From another perspective, we can clearly see that the shift have moved from general education to occupational education, kindergarten education, and special education. We can see that quality is highly regarded meanwhile equality concern begins to emerge from the standard mobility.



**Table 12.3** Chinese teacher-education-related standards

Standard type	Standard title	Year
Curriculum standards	Teacher education curriculum standards (trail)	2011
Teacher professional standard	Kindergarten teacher professional standards (trail)	2012
	Primary teacher professional standards (trail)	2012
	Secondary teacher professional standards (trail)	2012
	Secondary occupational teachers professional standards (trail)	2013
	Special education teacher professional standards (trail)	2015
Educational leader professional development	Kindergarten principal professional standard (trail)	2015
	Compulsory education principal professional development standard (trail)	2013
	Secondary vocational education principal professional development standard (trail)	2015
	General high school principal professional development standard (trail)	2015

### ***12.4.5 New Research Trends After Establishment of Chinese Education-Related Standards***

Once the relevant standards are made in China, introduction and further exploration of standards do not cease. However, the focus has been shifted from implementation and evaluation. On the other hand, researchers began to be concerned about how the Chinese teacher education standards are implanted and worked as guidance for teacher education practice, especially for program design and curriculum design in the tertiary education (Liu 2016). Wang (2012) suggest that primary pre-service teacher education programs should be redesigned based on teacher professional standards. As for policy, teacher education profession standards are high with other policies, such as teacher certificate examination. Pan and Zou (2012) discussed the teacher certification examination reform based on kindergarten teacher professional standards. As for basic education in china, these standards are useful for their teacher recruitment, teacher evaluation, and so forth. Yang and Zhang (2016) made an investigation of 680 kindergarten teachers of their adaptability for kindergarten teacher professional standards which was issued in 2012. The survey was based on 62 items in the standards and the results show that teachers' personal understanding and the standard's expectation are of great margins.

Another point I would like to make is that, in general, these standards are trialed in the first few years. Of all the standards, every one of them is trialed. That is, these standards policy is tentative which can be amended in the future.

## **12.5 Discussion**

Mobility of teacher education standards is related to standard-based teacher education. This kind of education is in essence based on scientific research. The whole world can be divided into several parts and if all of these parts can be trained, the whole world will be trained. For readers to clearly understand, we will make a discussion according to our results, which are answers of our research questions specifically. Meanwhile, we will explain what kind of mobility is playing roles among this process.

### ***12.5.1 Strong and Appropriate Standards***

Police researchers and designers assume that standards are better when a country's economy is strong. But this is not always correct and reliable, for our country is a developing country and the standards which are born in developed counties are perhaps our future but not suitable for our current situation. Under such circumstances, those who have similar background, such as Asian country or Russia which has a similar tradition can may be helpful for the establishment of our standards. Hidden in this selection, background plays an important in policymaking.

### ***12.5.2 Introduction-Adaptation-Modification (IAM Standard Mobility Model)***

As can be seen from the results, we have introduced three models, that is to say, introduction model, analysis model, and comparative model for teacher-education-related standards to move from foreign countries to China. However, though Chinese teacher-education-related standards are made, standard mobility does not stop. Researchers and policymakers begin to make some modification. Based on our understanding we put forward. Introduction-Adaptation-Modification Model (IAM Model) to show standard mobility. We would like to understand this model under the background of Chinese policymaking process.

In China, policymaking has been dominated by educational experts and some officials, but as we have shown, some policies have begun to be made in a very scientific way. To be specific, governmental first and foremost authorizes issued the policymaking and the research institutes begin to bid for doing this activities.

**Introduction:** About this period, researchers make comparative research that is being carried out. In the comparative study, foreign countries standards structure, content, and beliefs are fully explored country by country. In case one article was published, the other researcher can sneer the research direction and hurry for publication. However, the introduction can occur on different levels. As is shown in the results, some are just for contents, structure, and others delve deep into background, values, and foundations, and explore rationale under teacher-education-related standards. However, we have to mention that currently Chinese policymakers begin to do survey research while introducing foreign policies into Chinese situation.

**Adaptation:** Although researcher and policymakers turn to foreign policies, but there is no Chinese policy, which is identical with foreign standards. It can be inferred that adaptations are made when we make our own policy, in our research context, we make new teacher-education-related standards.

**Modification:** Modification, as it seems, is close to adaption. Modification here refers the change after standards are made. In this case, implementation effects research and evaluation research, especially empirical research should be made to find evidence based on which new modification should be done. Meanwhile, comparative studies can also be done for implication for modification of newly made Chinese teacher-education-related standards. Xie and Zhao (2015) compared framework and contents of professional standards for secondary vocational teachers between China and America, claiming that American vocational teacher professional standards sing highly of inclusive education, vocational knowledge, and reflective practice. Teacher education standards should further mobile in form of interaction between teacher education standard text and its implementation context. More evidence-based research should be done to rectify the effectiveness of teacher education standards.

### ***12.5.3 Standards Relations***

Though teacher-education-related standards are made one by one, they actually have connection with each other. For example, teacher professional standards and teacher education curriculum should be closely connected with each other. The purpose of teacher education to prepare teachers to work as teachers in primary and secondary education and curriculum are the main access to make sure of this. Thus, the teacher education curriculum should be established on the teacher professional development. However, in China, we first introduced and implemented teacher education curriculum standards and then make teacher professional standards. These are contradictory in logical and no researchers begin to care about the coherence between teacher curriculum standards and teacher professional standards. Actually, Yu (2016) found that professional-oriented is the feature of the Australian Professional Standards for

Teachers, which is highly consistent with teacher education curriculum design. This consistence should arouse our attention in making standards of all levels and they should cooperate with each other.

## **12.6 Conclusion and Suggestions**

### ***12.6.1 Go into Deeper and Higher Standards***

In addition, further detailed subject teacher professional standards should be made in the future. Some of scholars have begun to pay attention to specific subjects, for instance, new science teachers (Li and Wang 2015). Also, teacher education can also be treated as a discipline in a university. If it is, the discipline standards should be made to guarantee the quality of teacher education. Teacher educator professional standards should be further explored and established. Yao and Shi (2015) did a literature review on American teacher educator standards but this is just a beginning. Teng et al. (2017) made a trial research of teacher educator professional standards for disability higher education. Their research employed mixed methods, including literature analysis, interview, and survey. From this, we are safe to claim that new researchers are concerned not only about foreign teacher-education-related standards but also empirical studies of special situations in China.

### ***12.6.2 Go from Inside to Outside***

As is clearly seen above, teacher-education-related standards mobilize from outside to inside. China should also be responsible for education development around the world. Actually, we have great experience in building up a better educational world. The mobilities of ideas concerning teacher education from Chinese context to foreign countries should also researched and introduced to foreign countries, for example, ideas about jiaoyanzu (teaching research community), Saike (demon competition), and so on.

### ***12.6.3 Go Beyond Standards***

Standard mobility is a process which can be interpreted as IAM model. Researchers, policymakers, and practitioners interact with each other as the model takes effects. However, currently, teacher education researchers have begun to argue to move beyond teacher education standard, which are taken as the baseline for teacher education. Therefore, what should be done beyond teacher education standards should

be further researched. Some of the researchers have argued that teacher education should go beyond standards. And the real excellent teachers should take their own agency and can cultivate their knowledge according to the situation where they live and promote new ideas. What's next for the twenty-first century? From the main country and the key organization around the world, and key competences are called forward for educational reform. Understand such circumstance, what is important for teachers. Teachers' competencies should get involved (Lin and Deng 2016). Lin and Deng (2016) took key competences as a lens to show that we should go beyond regulation feature of professional standards and then guide teachers' professional development.

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# Chapter 13

## From Role-playing to Self-discovery—Study of the Identity of Teachers from Mainland China in the Education Reforms



Weiwei Han

**Abstract** Education reforms are invariably based on social transformation. In an age of information and globalization, heralded by the New Curriculum Reform, basic education in Mainland China has entered a phase of frequent revolutions. Education reforms have radically affected the work and life of teachers from China not only by changing the original environment of schools, traditional teaching theories and methodologies but by creating a criterion of what a teacher should do and a systematic expectation of what a teacher should be through a top-down discourse. Referring to the macro-structure of Chinese social transformations and cultural mentality transition, and adopting a qualitative research method and a teacher's point of view, this paper attempts to describe, analyze, and explain the conflicts and tensions that confront teachers in China under multiple social expectations and reforms. It also explores how under such circumstances, teachers in China understand and define the meaning and value of being a teacher, and how they establish their identity by self-discovery in role-playing.

### 13.1 Introduction

Like other social areas, there have been continual reforms in education throughout history. Since global competitions intensified in the 1980s, it has been acknowledged that education is a significant factor on which the nation's future depends, bringing about a wave of education reforms in China. Among them is the 70-year-old basic education reform born with the founding of the nation which aims at a transition from exam-oriented to quality-oriented (Chen and Tan 2010).

Despite remarkable achievements, it is undeniable that curriculum structure, course criteria and evaluation, textbooks, and pedagogy, in other words, the structure, manners, and methods of teaching have been the main focus of both academia and the forefront of basic education. The attention given to the human factor, on the other hand, is insufficient, especially to teachers, the executives and participants of

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education reforms, whose dominant role is often neglected. Typical of a top-down reform, criteria are often proposed by policy makers and reformers on what is a good teacher (Song and Zhang 2012). As Sato Manabu has observed, discussions on teachers have always centered on the normative approach of what a teacher should do and the generative approach of how to be a teacher, overlooking the ontological approach of what is the role of a teacher, what does it mean to be a teacher, and why a person becomes a teacher. In fact, as distinct individuals, teachers have their own life experiences and unique understanding of the concepts and values of education and teaching as well as self-awareness of being a teacher. Their professional self-awareness should be an important factor in the construction of the profession (Nias 1989).

In a period of frequent education reforms and dramatic transformation, the modern Chinese society requires us to consider the “selves” of teachers from the viewpoint of a teacher. It is under such circumstances and combining the idea of being a person as a teacher and the idea of being a teacher as a person, that this study discusses the identity issue of teachers.

## 13.2 Research Methods

This study is a qualitative study that attempts to understand the identity process of individual teachers and their identity situation in the education reform from the perspective of teachers themselves. The study employs the method of purposive sampling and the principle of convenience sampling on H District of Beijing. From 2012 to 2016, the author listened to classes and organized research sessions in the elementary schools and middle schools in H District of Beijing for approximately 200 times, informally interviewing teachers from different schools and disciplines and at different ages and stages of development both inside and outside schools and classrooms. These original and presupposition-free conversations set the foundation of the study. According to the requirement of the research and early investigation results, taking into account the affiliating school, teaching seniority, discipline, job title, gender, and other factors, 15 teachers were chosen as the main research objects and primarily interviewed, all of whom have been teaching for more than 10 years. The interviews make a point of collecting the life experiences of the target teachers while following their teaching journals and blogs in the meantime in assistance of understanding their identity status from multiple perspectives.

## 13.3 Research Findings

Through the long-term observation of the H-district teacher group and the analysis of the 15 teachers in-depth interviews, and putting the teacher’s teaching careers in the context of the whole education reform, it has been discovered that though teach-



ers with different growth experiences have different ways of building identity, the processes and results of the teachers' identity establishment show a certain common characteristics. In general, they can be divided into three types, the most typical cases, events, and experiences of which are selected by this paper to present as research reports.

#### **(A) Losing “selves” in the adaptation of the reform**

Z: I have been teaching for 27 years and undergone many educational reforms. Every time a teacher is asked to make a change, a teacher has to change. But for a long time, you will find that sometimes the reform will turn around in circles, and then back to the beginning. I remember one year when the city and the district released documents that required us to reduce the students' burden, not giving too much homework. In consequence, however, the students get out of school early to attend afterschool classes. After a while, the trend faded in silence. Many reforms are similar. We understand that reforms are to make education better, but there are many problems in the operation. When instructions are given top-down, I cannot stay indifferent, but in fact, a lot of teachers have no idea about what to do specifically. The result is hardly more than scratching the surface.

Teacher Z's attitude toward education reform showed a typical conformity. Adapting to the reform is not an attitude from the bottom of his heart, but a passive response to the wave. In the course of educational practice, teachers find that the ideas and methods of curriculum reform do not solve practical problems as they expect, and the questions that arise in the reforms make them steer away from it. The uncertainty and repetition of reforms also reduce the authority of the reform in their eyes. They either return to experience that they are accustomed to or only appear to comply with the reform. Such teachers accounted for five of objects in this research, all with more than 25 years of teaching under their belts. They show a deep influence of the traditional role of teachers and have experienced the most of those education reforms. They show obedience to the reform externally but doubt the reform deep down. Their understanding of the “self” is not solid, so they ultimately reassume the traditional role of teachers, never building a complete self in the education reform.

#### **(B) Sticking to the self in the critical acceptance of reform**

L: In my teaching career, I am most grateful for two things: one is that I quickly found a teaching style suitable for myself and accepted by my students; the second is that my school gave me a high degree of teaching autonomy. At the beginning, when I was still a new teacher, there were not so many rules. I absorbed the textbooks thoroughly, conceived a general structure, and went to my class. My class was basically teaching-oriented. I taught with high spirits, and students also listened with interests. This used to be the norm of my class. Over time, this became my personal teaching characteristic and style and brought me a high reputation among students. The several classes that I taught were also among the best in the grade. What I have the greatest sense of accomplishment about is that in all the classes that I have taught, students are highly interested in history.

Later, the new curriculum reform promoted a student-centered fashion where teachers talk less but students talk more. In school or district meetings, we often heard education experts criticize the way of teaching I adopted. I have experienced confusion myself. Though I agreed on the theory of the reform that teaching should be student-oriented, I did not think that my teaching methods had any problems. I was happy to teach, and my students were eager to learn and got good grades in exams. In contrast, some teachers' classes were very fancy with group discussions, cooperative learning and many examples they liked, but I thought they were too superficial on the surface, attention was given more to the form rather than to the content. Later, the school leaders came to listen to my class. At first, they questioned my teaching methods, and then they thought I could try, and agreed that I kept it for the time being.

Thus, at this model school of curriculum reform, I became an exception.

Teacher L's experience broke through the attitude of the general teachers toward the reform. From the start, he had a clear understanding of his teaching style and characteristics, and through student feedback, his method has been confirmed. It can be said that early in his teaching career he completed the establishment of "self". Later when the requirements of education reform and his self-awareness conflicted, he did not rush to accept and change, but reflected on it first, and in the process of reflection, he made proper adjustment and compromise, instead of blindly accepting and losing himself. D teacher and L teacher have a similar experience. She believes that although their classes have been successful, the curriculum reform is worth giving a try. She said: "I never refuse any possibility; it has also been proved that students welcome this new class style. This constant attempt keeps my class vigorous, and I thank the curriculum reform for it". It is worth noting that they both achieved understanding in consultation with the school and therefore won the room for self-growth.

### **(C) Rebuilding the self in the shock of reform**

S: I have been working for 23 years. The first year of my work is 1993, right when the first phase of course reform started; the next year another curriculum reform took place. My personal development coincides with the curriculum reform. I thank the educational reform for bringing me here today. The growth of education is itself education.

The ninth year of my work, that is, 2002, I went to listen to a high school physics class, where the teacher did not say a word throughout. I was very excited. The teacher finally finished by saying: "I am proud of you, my students". It had never occurred to me that such kind of chemical reaction could be happening between teachers and students. I began to consider the problem of who should be the dominant part of the class. After the excitement, I decided to do two things, which I thought represented the trend of class teaching. One was to through my normal class teaching gradually change my teaching fashion; second, I began to expose students to experimental teaching innovation, where I take them out to find information for the experiment, transiting from the style of "I teach students" to "I learn with the students." I did not like the job when I first became a teacher, but the education reform provided me a possibility to continually find value and fun of the teaching career.

Teacher S' self-identity is precisely established in the education reform. Among these research objects, there are seven teachers who mentioned that education reform, to a certain extent, promoted their understanding of the occupation. These teachers have a high degree of recognition for the teaching reform, most of who through key events re-understood classroom teaching, re-examined the role of teachers, and reconstructed their identity in the shock of the educational reform. Most of them combined their view of students, of curriculum, and of teaching with the needs of the education reform and made progress through experiments. They expressed self-awareness and repeated attempts to change their classes, and gradually solve the problem of "where to go". They work together with the reform, shaping the "selves" as teachers.

### 13.4 Conclusion and Revelation

**(A) There is a huge conflict and tension between the teacher's role stipulated in the system and the organization, and the teacher's self-recognition in the process of understanding and practicing the reform.** When the wave of reform comes, teachers turn from "middlemen" to "participants", with strong marks of traditional teachers' roles and confusions brought by the reform. All of these prompted them to rethink "Who am I", "How did I become a teacher?" and "what kind of teacher do I want to be". This reflection will encourage them to reexamine their class, reflect on themselves, and try to make a change. However, this change may not be understood and approved by the system and organizations; there will even be conflict and tension.

H: As to our subject, especially in the first grade, there is not much new knowledge. When new textbooks came out, in the course of preparation I found that "students' life extension and social interest development" and "life growth and self-development" are the core of the value of the textbook writers. Therefore, in the class, I try to choose the appropriate teaching methods for students to experience, share, comprehend and practice, and consider that as my main task. Nevertheless, in the third class, when I was organizing student activities in class and intending to end with group discussion, I received a text message from the dean that the principal monitored my class through the security camera and that next time I should pay more attention to classroom discipline and student management. Under such a "warning", although having communicated with and giving explanations to the principal, I became more cautious in my teaching design.

Teachers, standing on the front line of teaching, are often the first to perceive the education reform's requirements on class and its impacts on students and are the real practitioners of reform. Ideally, the professionalism of teachers should be reflected in their ability to internalize the value of reform in their own class and complete the transition of the role. But in reality, teachers often do not have the power of initiative and are even put in a dilemma. The principal as a representative of the institutional organization, students and parents as representatives of social organizations, are both important forces affecting teachers. The process of identification is not only a process

of “self-understanding” and “self-awareness” but also a process of “being shaped” and “affected”. Although they are always active participants in their identification, they need to operate within the framework after all, under the influence of all parties.

**(B) The top-down approach to reform conflicts with teachers’ values and professional autonomy.** State-led educational change is mainly exogenous viewed from the power source, and the main body of the reform is the government and the education administration, not schools and teachers. However, as individuals, teachers exist in social relations not as “roles” but as “people”. In order to coordinate the social requirements of teachers with teachers’ needs of self-development, teachers’ self-awareness needs to be awoken. But the crisis is in that the external definition of the role often disagrees and even conflicts with teachers’ own identification. Reforms often give teachers a new role, and the authority and coerciveness of the top-down reform do not give teachers more space to build the new role. This is reflected in the fact that teachers are educational reform practitioners rather than education reform policy makers. In the education reform policy formulation, the lack of teachers’ opinions and participation lead to the gap between the theory of reform and its practice. The ideal reform at the policy level is likely to be inconsistent with the reform understood by teachers, as well as the expectation of reform with the educational belief of teachers, which bring challenges to teachers’ professional identity (Zhang and Lin 2008).

Moreover, teachers at the same time are in the evaluation system of the educational administration, unable themselves to break through the institutional framework to express their self-appeal or seek personal development. Therefore, once the top-down reform’s ideas and teachers’ professional “selves” conflict, teachers tend to fall into the confusion of self-knowledge or seek compromise to survive.

**(C) Educational change leads to the loss of certainty and the deconstruction of teachers’ self-identity.** China’s educational reform, like China’s economic reform, has been “feeling the stones across the river”. The vision of the reform is beautiful, but there are inevitably mistakes and detours during the process. On the one hand, the reform makes it possible for the awakening of the role of traditional teachers and for the establishment of new teachers’ identity; on the other hand, the uncertainty of reform can lead to the stifle of teachers’ correct teaching methods and the deconstruction of teachers’ self-identity.

Education reform is a systematic project, seen from the change of policies in several China’s educational reforms, the aim is to change the teaching orientation and curriculum structure of the subject-based tendency, passive learning, screening and selection-based evaluation, and overly centered class management. Thus focus on student development, growth of teachers and learning-oriented teaching to achieve real quality education. The new curriculum reform put emphasis on student-centered teaching, changing the traditional core concepts of teaching and learning, the basic teaching problems of teaching what, how to teach, learn what, and how to learn. The traditional educational values and educational values advocated by educational reform are essentially two different educational value systems, which mean that the philosophical basis and the discourse situation of teachers’ professional identity construction have changed. In the process of the reform, teachers continue to experience the overthrow and reconstruction of the concept of education and teaching meth-

ods, having to transform their inherent and accustomed ideas and behavioral system. The reform breaks the teachers' original identity expectations and casts them in an uncertain anxiety.

In general, from the founding of new China to the reform and opening up in the twenty-first century, for a period of more than 60 years, the Chinese mainland teachers "self" consciousness have clearly grown compared with their traditional peers. They began to think about their identity and position in class. In search of "self", teachers generally experienced a huge reality shock, striving to cross the gap between the traditional teacher's role and their self-identity of teachers. The change from the role of knowledge imparter, teaching organizer, and the national spokesperson of the "people's teacher" to "professional intellectual" and "constructor, cooperater, and researcher" is a reflection of the concealment, emergence, and manifestation of the teacher's "selves".

Teachers' identification is at the heart of the teaching profession and determines how the teacher constructs his or her professional role. The identification of teachers plays a decisive role in the teachers' choice and value judgment of education and teaching behavior and is an important perspective to study the professional development of teachers. The identification of teachers affects their teaching effectiveness, professional development, and their attitude and ability to cope with the reform. Therefore, to explore the identity of teachers in the educational reform is not only significant for individual teachers but also guides people to think about how to re-examine the future of China's education from the perspective of "people" in the context of social transformation.

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# Chapter 14

## A Political Economy of English in Japan: The Consumption of English as Investment and Leisure



William Simpson

**Abstract** For decades now, English has enjoyed a privileged position in Japan as the de facto foreign language learnt by all (Butler and Iino 2005). Though Japan's 'miraculous' economic development of the post-World War II period was achieved with little need for English proficiency among its population (Kobayashi 2011, 2013), under the more recent period of neoliberal globalization, the demand for the English language from state actors and individual consumers alike, has grown rapidly.

**Keywords** Political economy of language · Commodification · ELT in Japan

### 14.1 Introduction

For decades now English has enjoyed a privileged position in Japan as the de facto foreign language learnt by all (Butler and Iino 2005). Though Japan's 'miraculous' economic development of the post-World War II period was achieved with little need for English proficiency among its population (Kobayashi 2011, 2013), under the more recent period of neoliberal globalization, the demand for the English language from state actors and individual consumers alike, has grown rapidly.

There is currently a vast array of products and services related to the English language consumed on the Japanese market. Many of these have constructed English in novel ways unconceived of prior to late-capitalism, as is the general neoliberal trend of commodification (Harvey 2005). These English products, or commodities, are produced and consumed within a context where there is a general lack of immediate communicative use for English, and where English is yet to become a consolidated form of social capital exchangeable on the Japanese job market. Faced with such conditions, the commodification of English in Japan has diverged into two streams—that which fetishizes English as an exchangeable 'skill' (Urciuoli 2008)—as an *investment*, and that which commodifies English to be consumed as *leisure*.

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Thus far, discussion of the commodification of language has largely been discussed in terms of consumption as *investment*. This article proposes that this overgeneralization overlooks the way in which English is consumed not only exclusively with the future exchange in the mind of the consumer, but also as a form of *leisure*, as consumption for consumption's sake.

## 14.2 The Language Commodity

The shameless commodification and commercialization of everything is, after all, one of the hallmarks of our times. (Harvey 2002: 107)

If the emergent body of research within applied linguistics on the subject of the commodification of language is anything to go by, Harvey's assertion that the world in which we live is one of increasing and incessant commodification is well taken. The following is but a glimpse into the variety of ways in which commodification is used as a frame for language in applied linguistics; the ELT coursebook as commodity (Gray 2010), language as a product (Del Percio and Duchêne 2012), language itself as a commodity (Heller 2003; Duchêne and Heller 2012; Rubdy and Tan 2008), English proficiency as commodified skill (Heller 2003), and Linguistic performances as commodities (Heller 2010; Irvine 1989).

The scope of objects of commodification runs the gamut from the macro to the micro, from languages themselves as commodities, to individual utterances, from concrete objects such as ELT coursebooks, to abstract notions such as pride. Though the object of commodification in the literature varies greatly, there is consensus on two key points. Firstly, that objects or things which once were non-commodities have somehow become commodities—i.e. they have become *commodified* in some sense and second, that this commodification is related to more recent global political economic developments. The vast majority of this research comes from recent times, with the exception of Irvine (1989) and Monica Heller's earlier work, the literature on language commodification discussed here is from the last ten years, suggesting that there is something of a consensus that commodification in relation to language is very much a phenomenon of contemporary importance.

The uptake of language commodification reflects a general trend in applied linguistics, turning to political economy to explore the interrelations of the political, the economic and the social as regards language. This emergent body of research attempts to answer calls for more interdisciplinary approaches for doing applied linguistics (for example see Rampton 1997) and, more recently, as a reaction to the way, the 2008 global financial crisis has highlighted the gap between the promises of neoliberal capitalism and the political economic realities that undermine it (Holborow 2015). However, the extent to which scholars have engaged deeply with the political and economic workings of neoliberal capitalism varies considerably. Ricento, for example, bemoans a general 'lack of sophistication in political economy' (2012: 32) within applied linguistics, leading to a lack of understanding on the trajectories of

languages, global and endangered alike. Similarly, Block, Gray & Holborow describe political economy as a ‘blind spot’ in the recent sociolinguistic interdisciplinary turn (2012: 1), where applied linguists ‘ignore the economic and material bases of human activity and social life, or only deal with it in the most cursory of manners’ (2012: 3–4). The recent rapid emergence of work on language commodification is no exception to such criticism.

First and foremost among critiques is the question of what it is that is exactly meant by the terms *commodification* and *commodity*. Del Percio and Duchêne (2012), for example, use ‘commodification’, ‘marketization’ and ‘commercialization’ more or less interchangeably. Holborow (2015) and McGill (2013) have both highlighted the lack of theoretical underpinnings of work on language commodification, with terms *commodity* and *commodification* often lacking explicit definition and used in a metaphorical sense with tacitly assumed understandings. In referring to language commodities, one may be referring to languages themselves, to language as part of a set of ‘skills’ or language proficiency, instruction in achieving language proficiency, temporal-spatial experiences involving the language and its speakers, communication within the workplace, or commodities that make use of indexical values attributed to languages, as illustrated by Gray (2010) with English being indexed with cosmopolitan values. As a means to give better theoretical underpinnings of language as commodity, this article turns to the work of Karl Marx, who begins his analysis of capitalism in the first of his three volumes of *Capital* by examining and dissecting the commodity as the ‘elementary form’ of the ‘wealth of societies in which the capitalist mode of production prevails’ (Marx 1992: 125).

### 14.3 Marx, the Commodity and Language

For Marx, the commodity is a unity of three interrelated aspects of value. Firstly, *use-value*—the utility or usefulness of a thing. Secondly, *exchange-value*—the amount of value realized in exchange when the commodity is sold or exchanged on the market, usually thought of in terms of price. Thirdly, *value*—the amount of socially necessary labour time expended by labour in the production of the commodity. It is particularly the third of these aspects, *value*, which undermines the notion of languages themselves as commodities. As critiques from elsewhere have duly noted (Holborow 2015; McGill 2013), it is very difficult to argue that languages are produced by labour, in the same manner in which other more mundane commodities such as shirts or shoes are produced. Whose labour is it that is expended in creating proficiency in the language learner?—the learner herself? The teacher? What of first languages that are *acquired* rather than learnt through conscious effort in education of various kinds? Equating language acquisition with the expenditure of labour is, I would argue, problematic in the extreme.

Furthermore, ‘In order to become a commodity, the product must be *transferred* to the other person...through the medium of exchange’ (Emphasis added. Engels in Marx 1992: 131). To what extent can we say that language is ownable, and hence



alienable? Can one really give away their language to someone else in the same way as money or other commodities in the act of exchange? One is reduced to either imagining language as a finite ownable ‘thing’, or in adopting a more metaphorical interpretation of the commodity that is quite distinct from its meanings and uses in political economy.

#### 14.4 *English Commodities: The Social Labelling of the Commodity*

Though the above problems with legitimately framing language itself as a commodity are, at least from a political economy perspective, insurmountable, this does not mean that applied linguistics should have no interest with commodities at all. Just like Marx, we too live in a world in which wealth appears as an immense collection of commodities, including ELT textbooks, educational services of various kinds, language learning materials and so on. Language may not be a commodity itself, but is undoubtedly related to a huge number of commodities that are produced and sold on a massive scale. Commercial English conversational schools known as *eikaiwa* in Japan, for example, may not sell English in and of itself, but given that the market has been estimated at around \$7.5 billion (Yano Research 2009 in Piller 2010: 187), it is undeniable that commodities of some sort are being produced and sold on a huge scale that involve language in significant ways. How then, and to what extent, is language involved? In the case of romantic *akogae* (yearning or desire) within *eikaiwa*, for example (Bailey 2006), one might argue that the commodity on sale has little to do with English proficiency so much as the ephemeral experience of being with an exoticised and eroticised Other—a white native speaker of English. In cases such as this, I suggest that rather than the English language itself being seen as a commodity produced and sold, commodities and services such as *eikaiwa* classes are indexed as belonging to a particular socially determined group of commodities—*English commodities*.

As further illustration, we could look at the example of a more mundane commodity such as ‘bread’. One may find numerous constituent parts: flour, water, yeast, and the labour of the baker. Yet, all of this is encapsulated as a unity and as a commodity under the single social label of ‘bread’. Supposing new ingredients were to replace the previous ingredients (with the exception of labour), providing the socio-culturally determined ‘bread-iness’ of the commodity remained, so too would its label of ‘bread’. In the same way, while *eikaiwa* sells much more than mere language, they are nonetheless socially construed by both producer and consumer as producing ‘English’ commodities. It is in this sense that commodities are discussed as *English commodities* in this article.

### 14.4.1 *English in the Form of Commodity*

Though, as discussed above, the proposition of language in and of itself as a commodity is tenuous, it is nonetheless possible to talk of language as being discursively imbued with commodity-like qualities. Such a supposition is consistent with Marx who discusses the way non-commodities acquire the form of commodities:

Things which in and for themselves are not commodities, things such as conscience, honour etc., can be offered for sale by their holders, and thus *acquire the form of commodities* through their price. Hence a thing can, formally speaking, have a price without having a value [i.e. without being produced by labour]. (Marx 1992: 197 emphasis added)

To summarize, within this article, English will be discussed in relation to the commodity in two senses. Firstly, in reference to *English commodities*, I refer to commodities produced and sold in the market, which are socially indexed as being *English commodities*, including lessons, educational services, books, ELT materials and resources for language learning among others. Secondly, in discussing languages themselves, I will refer to *English in the form of commodity*, where English has acquired the form of a commodity in so far as it has become discursively imbued with a *use-value* and *exchange-value*, and is thought about as an exchangeable ‘thing’, though it is not in and of itself a commodity.

## 14.5 The ‘Shift’ of the Language Commodity: From *Use-Value* to *Exchange-Value*

Each of the three aspects of the commodity within capitalism, *use-value*, *value*, and *exchange-value*, exists within a dialectical and contradictory unity within the commodity. By means of illustration of these dialectical relations, Harvey (2010) uses the example of housing. Harvey argues that centuries ago, housing was seen primarily in terms of its utility—its *use-value*. Housing was seen as a ‘home’ somewhere for one and one’s family to live with the prospect of moving or selling a relatively rare occurrence. However, as capitalism has unfolded, it is not the *use-value* of housing which is emphasized, but the *exchange-value*—the price of the property and its increase/decrease in *exchange-value* (price)—which has come to the fore. Consequently, housing has come to be viewed more and more as an *investment* rather than as a home.

Akin to the example of housing, much research on the language commodity construes *language in the form of commodity* as undergoing a similar ‘shift’ from emphasis as a *use-value*, to *exchange-value* (Block 2010; Heller 2003). This shift manifests as the discourse on English language education as an *investment*, as an exchangeable *skill*, and as an instrument of social mobility. Along the lines of the dominant discourse of English as a global language and human capital, English has become something finite, quantifiable, and ownable—something one ‘has’, which can be

exchanged on the market. The extent to which this general shift within the historical unfolding of capitalism can be generalized to language, however, comes into question when one considers instances such as *eikaiwa* where leisure and enjoyment come to the fore, where English is often seen as a hobby. In such contexts, there is reason to question whether consumers have *investment* in some future exchange in mind.

There is a sense then, in which the ‘shift’ overgeneralizes, and overlooks the nuances of the dynamic relation within the contradiction between *use-value* and *exchange-value*. It is my contention that these contradictions within the English commodity play out in a much more nuanced way that has yet to be explored. The contention that the *exchange-value* of the language commodity has usurped that of its *use-value* is correct up to a point, however, there are, as I will argue, ways in which this contradiction plays out in very different ways. There are certainly a number of language commodities which are consumed for purposes of *leisure*, either in addition to or even usurping the thought of any future exchange or sense of ‘*investment*’ on the part of the consumer (see e.g. Kobayashi 2007a; Kubota 2011a, b).

## 14.6 The Use-Value of English in Japan

For the vast majority in Japan, there are scant immediate contexts in which English is useful in a communicative sense. Though English has long since been a mandatory subject within the Japanese education system, it remains the case that English proficiency is in no way crucial for the everyday life of most Japanese citizens (Oda 2007), and is yet to have cemented as a form of social capital (Kobayashi 2011). In terms of access to information, Japan has considerable linguistic self-sufficiency, with Japanese-language newspapers enjoying one of the highest levels of circulations in the world and the Japanese language having the second highest presence on the Internet (Gottlieb 2008). In terms of use of the English language outside of Japan, a recent phenomenon in Japan has been the increasing reluctance of students to study overseas, preferring to remain within Japan for the duration of their education (Harden 2010). It is worth pointing out too that within Japan itself, far from being the homogeneous monolingual monolith it is often imagined to be, significant linguistic and ethnic diversity exists. However, the four largest groups of registered foreigners within Japan, Koreans, Chinese, Brazilians, and Filipinos, who make up well over half of the total number of foreign nationals within Japan (Ministry of Internal Affairs and Communication, Japan, 2006 quoted in Gottlieb 2008), generally speaking do not speak English as a first language, if at all. In terms of the linguistic landscape of Japan as regards the communicative use of language, it is problematic to argue that English may be more relevant than far wider spoken languages such as Korean, Chinese, Portuguese and Tagalog.

Given this paucity of immediate communicative contexts for English, it is the *exchange-value* of English, as a means to increase one’s socio-economic status, which dwarfs any sense of the language as having use in a communicative sense. Thus, the

*exchange-value* of English comes to dominate the utility or *use-value* of English. Consequently, as an *investment*, under the neoliberal emphasis of the quantification and rationalization of all, *English in the form of commodity* becomes something finite and measurable (e.g. see Butler and Iino 2005 on the prominence of measurable outcomes in Japanese policy). English is given *the form of commodity* then by being fetishized as something concrete, quantifiable, and ownable—as something one *has*, the sole purpose of which is for exchange on the market. In the role of labour, concerned with the exchange of one's capacity to work in exchange for wages, language becomes an alienable and exchangeable skill. In other words, the reason for desiring English is primarily for the purpose of future exchanges, particularly with regards to employment opportunities and remuneration. It becomes an *investment* in one's human capital.

As an *investment*, *English in the form of commodity* begins to lose those aspects of its *use-value* which we ordinarily associate with language—those related to communication. In the case of Japan, Butler and Iino (2005) argue persuasively that in many instances, the learning of English becomes reduced to a mere intellectual exercise—a way in which through the attainment of scores, grades and qualifications, one can display one's intellectual ability, rather than put to use any communicative skills or proficiencies acquired. To an extent, one could draw a parallel with the learning of the 'dead' language Latin in Europe—language education as an intellectual exercise, but not for communicative use. The divorcing of language from its communicative use, however, is by no means limited to the formal state education system. Take, for example, the widespread practice of large businesses in Japan requiring their employees to *have* English through systems such as TOEIC. It is not uncommon for employees having achieved a set target score in TOEIC to than rarely or even never use English in the workplace for the duration of their career. The attainment of target scores in TOEIC then, signifies not just the employee's intellectual capability, but also her commitment and loyalty to the company she works for (Kubota 2011b). Here, English becomes a measure of effort, rather than a communicative tool.

## 14.7 The *Exchange-Value* of English in Japan

However, English as a skill possessed by labour has clout as *exchange-value* only for the elite, and remains relatively insignificant in enabling social mobility among the majority of Japanese citizens (Kobayashi 2011, 2013; Kubota 2011b). It remains the case that factors such as age, gender, and academic background—particularly whether or not one has to be graduated from one of Japan's more prestigious universities, override specialist knowledge and skills in the Japanese labour market (Kobayashi 2007a, b). This is reflected in the general low level of importance that employers regard language proficiency, despite the rhetoric of English as a global language and the ubiquity of TOEIC. In looking at jobs advertised in Tokyo from the Employment Security Bureau, for example, Kubota (2011b: 257) found that only 1.4% of jobs required English language proficiency.

All of this poses us with a conundrum. If there is a scant immediate communicative utility or *use-value* of English in Japan, and additionally if the *exchange-value*, or what one gets in return for *having* English is not particularly high, then how is it that a huge and incredibly profitable commercial sector producing and selling *English commodities*, such as *eikaiwa*, textbooks, books, etc., exists in Japan? One could reduce consumers within Japan to the status of ideological dupes who credulously swallow whole the dominant rhetoric of English as a global language guaranteeing upward social mobility for all, however, aside from assuming a highly constricted sense of agency on the part of consumers, this fails to take into account the diversification of *English commodities* that have become available on the market.

### 14.8 The Diversification of *English Commodities* and the Creation of Novel *Use-Values* of English

The array of English commodities commercially produced for the Japanese market diverge not just in terms of their material or immaterial forms: services, lessons, courses, books, digital resources, etc., but also in the way in which they index *English in the form of commodity*. Providers of instruction for the TOEIC exam, for example, are highly likely to emphasize the *exchange-value* of English, and to portray English as an *investment* in one's skills. In contrast, consider the opening gambit from the textbook *Roppongi English*: 'So relax and have fun. That cute [foreign] guy is still sitting alone and he seems to be looking at you' (Johnson 2006: foreword). *Roppongi English* then is concerned with facilitating social encounters, often of a romantic nature, rather than as a means to further ones career or climb the social ladder. Though they are both *English commodities*, a TOEIC lesson and *Roppongi English* are undeniably very distinct in the way they index the English language. What are we to make of the earlier assertion that under capitalism everything is seen more in terms of its *exchange-value* rather than its *use-value*, when we consider something such as *Roppongi English* or *eikaiwa* advertisements such as those from *Gaba*, which depict students and teachers in advertisements handcuffed together in a heavily sexually suggestive sado-masochistic relation? Clearly then, the notion of English as a means of exchange for better career opportunities or remuneration does not have a monopoly on the market. Rather, in addition to this emphasis on the exchange potential of English, is the construction of new *use-values* of English, where English is constructed not so much as a communicative tool, but as something fun, enjoyable, potentially sexually fetishized and consumed for its own sake—that is, it is consumed for *leisure*. Indeed, in the case of *eikaiwa*, Kubota (2011b) makes precisely this point, where consumers of *eikaiwa* often are not particularly concerned with how their language proficiency develops at all, let alone what communicative use it could be put to outside of the class.

## 14.9 The Consumption of English as *Leisure*

As consumption of *leisure*, the English commodity can be seen as a product of ephemeral experience. One simply enjoys the process of consumption for its own sake. There is no sense in which what is consumed can be later exchanged as part of one's set of labour skills, nor indeed with any prospect of any future exchange in mind. English consumed as *leisure* is in the moment, not with an eye to the future as with the consumption of English as an *investment*. Rather than language becoming fetishized as something one can *have*, as is the case with consumption of English for *investment*, it is the ephemeral experiential nature of consumption where English becomes something one *does*, much like a hobby.

To again return to the example of *eikaiwa* in Japan, this experiential nature of what the *eikaiwa* offers the consumer is summed up in what Bailey (2006) describes as a 'wonderland', where consumers enjoy temporal-spatial experiences within the company of an exoticised cultural Other, the satisfaction of a romantic yearning for native speakers of English and the 'whiteness' they are attributed (Kubota 2011a), and even as a means of escape from the overwhelmingly 'Japanese' world in which consumers spend most of their time. What is on sale in such cases is just as much the experience of being in the *eikaiwa*, as much as it is about gaining language proficiency. Indeed, the convergence of 'wonderland' and language education has already matured into literal wonderlands or theme parks such as British Hills in Fukushima prefecture—a self-styled 'Education and Culture Resort' which describes itself as 'a small British countryside village complete with castle, British style guesthouses, English speakers, country gardens and surroundings' (quoted in Seargeant 2009: 87).

### 14.10 Conclusion: The Consumption of English for Investment and Leisure

Though not a commodity in and of itself, English as a language, has been discursively attributed with commodity-like qualities of *use-value* and *exchange-value*, and thus appears in a *commodity form*. I have argued throughout this article that there is an oversubscription to the historical shift under capitalism of viewing commodities less for their utility or use, and more in terms of their potential exchange. In the case of English, it is certainly true that the dominant discourse of English as a, or perhaps *the*, global language and as a skill which one can exchange on the labour market has heavily shaped the way English is thought about, indexed, and produced and consumed, particularly as a form of *investment*-oriented consumption. However, as I have attempted to illustrate in this article, this is far from the whole story. Through the example of *eikaiwa*, this article has attempted to illuminate the limits to which one can adequately frame the consumption of English commodities as an *investment* on the part of the consumer, particularly where English becomes something experiential, something one *does* for enjoyment, and in the here and now—as *leisure*.

In the case of Japan, it has been argued that the conditions of a lack of communicative contexts for the use of English, and its limits as an enabler of social mobility—as a skill for labour to exchange—have resulted in the divergence of ways in which English is given new uses, and consequently, in the variety of *English commodities* produced and available on the market. These new *use-values* of English are unrecognisable from previous conceptions of language as a communicative tool, and are concerned with the ephemeral satisfaction of desires rather than investment, skills and labour. Further research must look at the commodification of language beyond that of consumption for investment, and recognize that there are many cases in which an amalgam of motivations for consumption, involving both senses of *investment* and *leisure* will play out in a variety of ways.

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# Chapter 15

## Towards a Common Framework for Global Citizenship Education: A Critical Review of UNESCO's Conceptual Framework of Global Citizenship Education



Xiaodan Sun

**Abstract** UNESCO's Education 2030 Agenda called on a number of countries to integrate global citizenship education (GCE) into their national curriculum and deliver it in the classroom. UNESCO's first guidance on the topic of global citizenship education is titled *Global Citizenship Education: Topics and Learning Objectives*. The term global citizenship was defined by UNESCO as “a sense of belonging to a global community and a common humanity, which emphasises political, economic, social and cultural interdependency and interconnectedness between the local, the national and the global” (UNESCO 2015). This paper aims to provide a critical review of UNESCO's conceptual framework of Global Citizenship Education and to situate into the broader academic discourse and practices of GCE. It starts with a critical review of the relevant literatures to explore the philosophical basis for GCE and its intellectual origins. Then it aims to clarify what that actually means as a feature of educational practice. It then critically assesses the conceptual framework UNESCO provides, especially its cognitive, socio-emotional, and behavioural dimensions.

### 15.1 Introduction

UNESCO calls on countries to integrate and deliver GCE in curricula and classrooms through the 2030 Agenda and its guidance on this, seen in *Global Citizenship Education*, which uses the outcomes of three related UNESCO events to formulate guidance—the Technical Consultation on Global Citizenship Education (September 2013) and the First and Second UNESCO Forum on Global Citizenship Education (December 2013 and January 2015, respectively).

The term global citizenship was defined by UNESCO as “a sense of belonging to a global community and a common humanity, which emphasises political, economic, social and cultural interdependency and interconnectedness between the local, the

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national and the global” (UNESCO 2015). This paper will critically review and assess the UNESCO conceptual framework for GCE and place it into a broader context and discourse.

Starting with a critical review of the relevant literature to explore the philosophical basis for global citizenship, this paper aims to critically analyse UNESCO’s conceptual framework of GCE and its cognitive, socio-emotional and behavioural conceptual dimensions. It finally comes to the conclusion that UNESCO’s conceptual framework of GCE has clarified the conceptual basis of GCE, and it has provided pedagogical guidance for developing the GCE curriculum framework.

## 15.2 Citizenship in a Globalising World

Citizenship is a concept that has historically evolved, rather than being something static at a point in time. In Western thought, citizenship refers to the “legal rights and responsibilities bestowed on an individual by the state in which they are citizens, denoted by their nationality” (Marshall 1950). Recent studies have redefined citizenship as less state-centred, giving it a more actor-orientated approach in which “citizenship is obtained through citizens themselves, based on their diverse sets of identities” (Gaventa 2002). This pluralistic approach “expands the meaning of rights, no longer confining them to just civil and political ones, but now including economic, social and cultural ones, including the right to participate, at the local, national, and global level” (Gaventa 2002).

This expansion of global citizenship (GC) is critical in today’s society: it is a path for “overcoming global governance deficits”, for “maintaining ecological sustainability” and for “promoting universal human values” (Gaventa 2010). Global citizenship is no longer an abstract philosophical idea, but a realistic one, especially now in the twenty-first century, where various complex problems need a new form of citizenship as a response (Gaventa 2002).

## 15.3 The Origins of Global Citizenship

The idea of global citizenship has been widely discussed in Western and Asian political philosophy. In Hinduism, there is the concept of Advaita, which has been translated as “the essential unity of God and man and for that matter of all lives” by Mahatma Gandhi (Heater 2002). The idea of “Datong” exists in classical Chinese philosophy, and it has been translated as “Great Unity”. This concept, first introduced in the *Book of Rites*—an ancient Confucian classic—was further developed in the modern era by reformist Kang Youwei in his *Datong shu* (The Book of the Great Unity), in which he outlined how human society will achieve peaceful development by promoting a central world government, universal love and common good (Chen 2011). Furthermore, Fei Xiaotong (1990), a pioneering Chinese sociologist

and anthropologists, his ideas of “appreciating the cultural values of others to make the world become a harmonious whole” also emphasises the idea of Datong. Currently, China’s President Xi Jinping has advocated Belt and Road Initiative, which aims to the creation of “a big world family of harmonious coexistence”. Even if Datong is a utopian vision of the peaceful world, it has “the sense of belonging to a global community and common humanity”, which shares some common ground with UNESCO’S definition of global citizenship.

In Western countries, the idea that “man belongs to a global community and shares a common humanity” has been discussed constantly from Graeco-Roman cosmopolitan thinkers to contemporary environmentalists (Heater 2002). Socrates said, “I am not a Greek, but a citizen of the world” (Heater 2002). The Stoics believed in “the oneness of the universe and man’s dual identity as a member of his state and of common humanity”, which was also strongly emphasised by the Roman Empire (Heater 2002). Kant, one of the major philosophers in the eighteenth-century, believed in “The Law of World Citizenship” (Heater 2002). In the nineteenth century, the pioneers of communism fought for the replacement of “the bourgeois state by a classless global society” (Heater 2002). In the twentieth century, the idea of Cosmopolitanism has been reinforced by the trend of globalisation, while Cosmopolitans identify themselves as “global citizens who belong to global community and common humanity” (Heater 2002). In the twenty-first century, the world is facing challenges that are even more complex: challenges related to climate change, poverty, terrorism and migration, all calling for human beings to learn to live together.

## 15.4 Global Citizenship as a Feature of Educational Practice

In the 1930s, terms such as “being world citizens” were recognised in educational traditions to fight against the rise of fascism and militarism (Bourn 2016). The term “Global Citizenship Education” has featured as an educational practice in Europe since the 1990s. The interwar period saw antecedent movements such as the emergence of Council for Education for the World Citizenship in the UK (Harrison 2008); while in the 1950s and 1960s, the education programme started to emphasise “empowering the young generation with a global outlook” (Tye 1999). This term, Global Citizen Education, gained currency in Europe and America after 1996 (Bourn 2016).

Global Citizenship Education is related to the policies and practice of a number of “adjectival education”, namely citizenship education, global education and development education. These different educations are transformative and can contribute to fundamental changes among learners, education systems and global society (DEEEP 2015). All of them emphasise the learner’s active and participative involvement in the learning process, involving critical thinking and critical literacy (DEEEP 2015). There are also a number of overlapping and closely related content issues, but with different learning objectives.

Since the 1970s, there has been recognition of the international dimension to citizenship education. Starkey and Osler (2008) reframed education for international citizenship, which addressed the issues of peace, human rights and democracy from a local to a global scale. UNESCO's statement in 2015 made reference to "educating caring and responsible citizens committed to peace, human rights, democracy and sustainable development" (UNESCO 2015). GCE's primary vehicle is citizenship education because local populations are more diverse and more willing to live cooperatively with those from different backgrounds.

Global Citizenship Education is related to the policies and practices of global education. The Maastricht Declaration on Global Education in 2002 is the European strategy framework for achieving the millennium goals by advancing Education for Sustainable Development and Global Citizenship Education. The Maastricht Declaration in 2002 defined global education as "opening people's eyes and minds to the realities of the world, and awakening them to bring about a world of greater justice, equity and human rights for all". The Maastricht Declaration on Global Education influenced the emergence and growth of Global Citizenship Education and informed policies and practices in various European countries (Bourn 2016).

Development education can also serve as an useful entry point to address the topic of global citizenship education. Development education aims to help learners to understand global poverty, develop a critical understanding of aid and charitable giving, and encourage people to act as the agent of change towards a more just world (Bourn 2016). Oxfam developed an educational programme specifically for GCE in 1996 that united these concepts from development and global education; the first curriculum was published in 1997 and has since served as the practical guide for schools in the UK (Bourn 2016).

Global citizenship education is aligned with Education for Sustainable Development (ESD). GCE and ESD are mutually reinforcing approaches connected with Target 4.7 and both advocate a "transformative and holistic pedagogy". Both also "empower learners with knowledge, skills, values, and behaviour to build a peaceful and sustainable world". These two differ in their thematic topics: ESD focuses on common agenda for sustainable development and lifestyles, while GCE promotes a culture founded on peace, non-violence, and intercultural dialogue. These two approaches, connected with Target 4.7, are mutually reinforcing approaches to achieve the 2030 sustainable goals.

Since the 1990s, GCE has been seen as the way which the disparate kinds of "adjectival education" (DEEEP 2015): it uses these different disciplines and provides an educational response to the changes resulting from increased cultural and economic globalisation. It "overcomes the various divides present in development education" (e.g. North-South/developing-developed/First World-Third World), and it "goes beyond a minimalist form of global education dealing with global awareness" (Bourn 2016). It highlights the common agenda for sustainability and the commitment to Sustainable Development Goals. In addition, it goes beyond the legal rights and responsibilities of national citizenship and implies an active role to "forge a more just, peaceful and sustainable world" (UNESCO 2015).

## 15.5 UNESCO's Interpretation of Global Citizenship and Global Citizenship Education

Global Citizenship Education is becoming more popular internationally within bodies such as UNESCO. The normative foundation for UNESCO's approach to global citizenship education was first developed in UNESCO's 1974 Recommendation, which treated education as a foundation for promoting peace, international understanding and cooperation (UNESCO 1974). Since the launch of the UN Secretary General's Global Education First Initiative (GEFI) in 2012, GCE has become one of the three UNESCO education priorities (UN 2012). In 2015, since the launch of the 2030 Agenda for Sustainable Development, GCE became one of Target 4.7's topic areas for sustainable development goals in education (UNESCO 2015).

UNESCO's three Global Citizenship Education Forums have set the global policy directions for global citizenship education in the context of the post-2015 development agenda. The First Global Citizenship Education Forum took place in Bangkok in 2014 with the theme "Global Citizenship Education", aiming to prepare learners for the challenges of the twenty-first century. This first forum was concerned with conceptual issues and promoted a discussion of "Why Global Citizenship Education" and "What is Global Citizenship Education". The Second Global Citizenship Education Forum took place at the Paris UNESCO headquarters in 2015 with a theme of building peaceful and sustainable societies—preparing for post-2015. This second forum identified policy priorities and strategies for the implementation of GCE under the UNESCO's Education 2030 Agenda. The Third UNESCO Forum on Global Citizenship Education took place from 6th to 10th March, 2017, in Ottawa during the UNESCO Week for Peace and Sustainable Development. The objective of the Third GCE Forum was to highlight the central role of teachers and teacher educators in the effective promotion of GCE and implementation of Target 4.7 of the SGD on Education. The third forum on GCE provided a platform for the discussion of innovations in pedagogical approaches, teacher education and practices in GCE.

The aforementioned *Global Citizenship Education*, the first official teaching guidance from UNESCO on GCE, defines global citizenship as a "sense of belonging to the global community and sharing in a common humanity, with emphasis on political, economic, social and cultural interdependency and interconnectedness between the local, the national and the global" (UNESCO 2015). Global citizenship does not, however, entail any legal status but can be understood as an ethos or value, rather than any formal citizenship (UNESCO 2015). GCE transforms learners, giving them the opportunity to acquire knowledge, skills, values and attitudes to contribute to a more just, peaceful, tolerant, inclusive, secure and sustainable world (UNESCO 2015). There are four pillars of learning: "learning to know, learning to do, learning to be and learning to live together" (UNESCO 2015) that uphold conceptual dimensions, namely cognitive, socio-emotional and behavioural (Table 15.1).

The three domains of learning, namely cognitive (intellectual capability, i.e. knowledge or think), affective (feelings, values and attitudes) and psychomotor (skills and behaviours), provide the theoretical foundation for UNESCO's core concep-

**Table 15.1** Core conceptual dimensions of global citizenship education (UNESCO 2015)

<i>Cognitive</i>
To acquire knowledge, understanding and critical thinking about global, regional, national and local issues and the interconnectedness and interdependency of different countries and populations
<i>Socio-emotional</i>
To have a sense of belonging to a common humanity, sharing values and responsibilities, empathy, solidarity and respect for differences and diversity
<i>Behavioural</i>
To act effectively and responsibly at local, national and global levels for a more peaceful and sustainable world

tual dimensions. Bloom’s Taxonomy (1956) first described the cognitive domains of learning, and his colleague David Krathwohl (1964) was the first author of the development of affective domain. Bloom’s Taxonomy of learning has been revised by Anderson and Krathwohl in 2001 by reversing the two highest forms of cognition. The former version ordered functions from simple to complex thus: knowledge, comprehension, application, analysis, synthesis and evaluation. In the newer version, these nominal functions are changed into verbs: knowing, understanding, applying, analysing, evaluation and creating. Krathwohl et al. (1964) further developed the affective domain, which focuses on feelings, values and emotions. The process of internalising of values is ordered as receiving, responding, valuing, internalising and characterising (Krathwohl et al. 1964). The idea of the “psychomotor domain” was developed in the 1970s and I have adopted the work of Dave (1970), although there are two other psychomotor taxonomies from which to choose, namely Anita Harrow’s (1972) and Simpson’s (1972). Dave (1970)’s taxonomy is considered as appropriate as it is ordered as imitation, manipulation, precision, articulation and naturalisation. These three domains are progressive, according to Bloom et al. (1956), who sees learners progress through each of the six stages as their knowledge, attitudes and skills develop.

Cognitive	Affective	Psychomotor
Knowledge	Attitudes	Skills
1. Knowing	1. Receiving	1. Imitation
2. Understanding	2. Responding	2. Manipulation (follow instruction)
3. Applying	3. Valuing	3. Precision
4. Analysing	4. Organising personal value system	4. Articulation
5. Evaluating	5. Internalising value	5. Naturalisation
6. Creating	6. Characterising	

Bloom et al. (1956) Taxonomy of Educational Objectives Book 1: Cognitive Domain New York: Longan

Adapted by Chapman, A (2006) Bloom’s Taxonomy of Learning Domains, Available from: <http://www.businessballs.com/bloomstaxonomyoflearningdomains.htm>, Date Accessed 21.6.2017

## 15.6 The Cognitive Approaches to GCE

UNESCO's cognitive dimension concerns learners' "acquisition of knowledge, critical thinking and critical pedagogy" (UNESCO 2015). UNESCO identifies global citizens as individuals who can "understand and critically think about global, regional, national and local issues and the interconnectedness and interdependency of different countries and populations" (UNESCO 2015). Global Citizenship Education empowers learners to investigate underlying assumptions and power dynamics and to develop skills for critical thinking and critical literacy. Similarly, Oxfam's (2015) GCE curriculum describes the "Global Citizens" as individuals who "have an understanding of how the world works and could be outraged by social injustice".

Oxley and Morris (2013) have defined the critical GC/GCE that advocates these similar concepts with UNESCO's cognitive dimension, such as critical thinking, dialogue and reflexivity. Oxley and Morris (2013) critically describe GC/GCE as promoting "counter-hegemony" that deconstructs "the oppressive global power structures." Critical GC/GCE thereby "emphasises critical thinking and interdependence; this idea is based on post-development theories" (Oxley and Morris 2013). These theories also based on post-structuralist critiques (e.g. by Derrida and Foucault); historical materialism and historicism (from the works of Marx, Hegel and Gramsci); and critical theory (from the "Frankfurt School"), such forms of critical GC/GCE explore and deconstruct imbalances of power and control (hegemony) in global society (Oxley and Morris 2013).

There is thus a connection between UNESCO's cognitive dimension of GCE and Andreotti's theories on critical literacy. However, Andreotti's approach is more radical, based on postcolonial critiques of western liberal and humanist tradition, which is not explicitly recognised by UNESCO's literature. Andreotti (2006a) developed the theories of critical literacy based on the view that "all knowledge is somehow partial, developed in our limited contexts, cultures and experiences". Learners should make decisions and take actions after "*a careful analysis of the context of intervention, of different views, of power relations (especially the position of who is intervening) and of short- and long-term (positive and negative) implications of goals and strategies*" (Andreotti 2006a, b). Andreotti (2006b) further suggests that "the role of educators should be cultural brokers, who can encourage learners to see the world from different perspectives and to critically engage in debates and take global responsibility". This approach is further developed as the teaching methodologies, namely "Open Space for Dialogue and Enquiry" and "Through Other Eyes" (Andreotti 2006a, b), both are based on postcolonial theory, critical engagement and dialogic learning.

UNESCO's cognitive dimension of global citizenship education recognises the importance of critical thinking. Critical thinking in education refers to "teaching students the rules of logic and rationality" (Kurfiss 1998). The first wave of critical thinking advocated a logical approach in which "thinking is legitimate only when it conforms to the necessary logical procedures" (Kurfiss 1998). Critical thinking challenges us to question all of our assumptions; differing opinions are sought out; questioning does not favour any particular outcome or result (Kurfiss 1998). Critical

thinkers aim for appraisals that are analytical, abstract, universal and objective (Walters 1994). Scholars began to figure out what skills constituted critical thinking in the second wave of critical thinking. The skills' critical thinking develop should reduce bias stemming from culture and upbringing. Knowledge and evidence that is based in reality are sought; scepticism is embraced, while the thinking process is founded on a solid and consistent logic, not on emotions or peer pressure (Walters 1994). Educators have recognised that curricula aim at building cognitive skills and habits of inquiry associated with critical thinking would benefit the individual learners, the community and the entire society.

## 15.7 The Socio-Emotional Approaches to GCE

UNESCO's socio-emotional dimension of GCE places great emphasis on identity, attitudes and values. The socio-emotional dimension relates to "the learners' sense of belonging to a common humanity, sharing values and responsibilities, empathy, solidarity and respect for differences and diversity" (UNESCO 2015). Both UNESCO and Oxfam, among others, identify global citizens as those who "have a sense of their own role as world citizens, and respect diversity" and the Oxfam model, in particular, emphasises the value of "empathy", "outrage" and "self-esteem" (Oxfam 2015).

Similarly, Oxley and Morris (2013) have defined spiritual GC/GCE as emphasising the connections between spirituality and faith and our relationship to the world, which can be found within character education and religious education. In character education, Danesh (1997, p. 81) and Golmohamad (2004, p. 140) conceive spiritual GC/GCE as "combining altruism, empathy and maturity, leading towards an integrative attitude". In religious education, the "Golden Rule" ("treat others as you would like them to treat you") becomes a foundation for many faith-based manifestations of GC/GCE, which tend to "emphasise humility, empathy and charity towards all humanity and focus on the pursuit of global social justice" (Oxley and Morris 2013).

UNESCO's socio-emotional conceptual dimensions of citizenship education recognise the attitude of empathy. "The state of empathy, or being empathic, is to perceive the internal frame of reference of another with accuracy and with the emotional components and meanings which pertain thereto as if one were the person, but without ever losing the 'as if' condition" (Rogers 1975). Being empathic means that "for the time being you lay aside the views and values you hold for yourself in order to enter another's world without prejudice" (Rogers 1975). There are two main components to the process known as empathy: affective and cognitive. Affective empathy is the ability to respond appropriately to another person's emotions, i.e. the emotional process of feelings with or feelings for someone/something else (Zillmann 1991). Cognitive empathy is the capacity to understand another's perspective, the process perspective-taking (Nathanson 2003), imagining oneself in the place of another (Hoffman 2000), and making the differences between the self and the other less distinct (Hodges and Klein 2001). Our morality is based on the cognitive evaluation and emotional assessments to



which empathy leads; moral principles meanwhile stabilise our empathetic response, this ensures a reduced likelihood of an inappropriate or disproportionate emotional response (Hoffman 2000, p. 239). Duan and Hill (1996) believe that affective empathy is able to mediate altruistic behaviour.

Furthermore, UNESCO's socio-emotional conceptual dimensions of citizenship education reflect the idea of cosmopolitanism. The term "cosmopolitanism" is derived from the Ancient Greek, stemming from the idea that the "cosmos" (world) is one's "city" (living place). There are three types of cosmopolitan citizenship identified by Peters, Blee and Britton (2008): political, moral and economic. A further kind (aesthetic-cultural) has been identified by Waks (2008, p. 204). The use of "cosmopolitanism" has increased in popularity because of scholars such as Nussbaum (2002), Osler and Starkey (2008) and Appiah (2006). The universalist perspective that states all humans share common fundamental values has led some scholars to advocate a new imperial form of global citizenship, but these values are rooted in a series of Western-centric institutions and practices (Arneil 2007). However, some like Humes (2008) takes a positive view of cosmopolitanism: he acknowledges that political globalisation is able to bring universal values of democracy, rule of law, and freedom of speech to oppressive regimes, giving hope to those who suffer from political persecution.

UNESCO's own conception of socio-emotional global citizenship rejects both the idea of a "world state" and anarchy, adopting instead a less radical form of political cosmopolitanism. UNESCO recognises the importance of global governance, which means strengthening current international institutions such as the United Nations, the World Trade Organisation and the World Bank into a well-ordered world society. Self-identified cosmopolitans see themselves as belonging to a global community as global citizens, sharing a common humanity. Both Nussbaum (2002) and Appiah (2006) have claimed "a global identity is as important as one's national identity". Cosmopolitans "are allegiant to the worldwide community of human beings", and they "are ready to broaden the definition of public, extending their loyalty beyond far and near" (Parker 2002).

These socio-emotional conceptions also have an important moral dimension, which can be said to derive from the Greek Stoics. The oneness of the universe and people's dual identities as a member of one's state and of humanity as a whole formed a key part of the Stoic philosophy (Heater 2002). Immanuel Kant is quoted as saying "human beings belong to a single moral community" (Peters et al. 2008, p. 3), and according to him, "the idea of a global ethic is necessarily universal, while moral values would need to be accepted by all human beings in order to be truly effective". Waks (2008) identifies two forms of moral cosmopolitan: the "*strong cosmopolitans*" and the "*new cosmopolitans*". "*strong cosmopolitans*" implies: "special obligations are morally arbitrary and that patriotism, for example, is an unacceptable moral position" (Waks 2008). For the "*new cosmopolitans*", their sense of global moral ethics are drawn from a "synthesis of liberal universalism and communitarianism" (Waks 2008, p. 209) in which special obligations are inescapable components of a moral life. Papastephanou (2008, p. 179) argues that "particularity is not the opposite of universality, as is usually theorised, but rather a subset of it": this, for example,

means that patriotism as a moral particularity can easily coexist with a globalised ethic system. UNESCO's socio-emotional conceptual dimension of GCED is compatible with these new cosmopolitans' communitarian ideals, since these ideals can be situated in local and national contexts.

The aesthetic-cultural cosmopolitan dimension of global citizenship provides a theoretical foundation for UNESCO's principles of respecting differences and diversity. Mill (1867), in his works on education for cultural aesthetics, is the starting point for the concept of aesthetic-cultural cosmopolitan global citizenship. It is further described by Waks (2008):

To be cosmopolitan in this sense is to be open to those from other places, take an interest in their cultural practices, learn about these practices through reading, travel and personal contact, and even to shape a personal identity as a cosmopolitan through such experiences. (Waks 2008, p. 204)

Furthermore, De Ruyter and Spiecker (2008) describe a global citizen as "a culturally and intellectually well-developed person" who "actively plays a modest part in the cultural flourishing of the society" (De Ruyter and Spiecker 2008, pp. 354; 355). The global citizens not only live in a "genre-rich society" (De Ruyter and Spiecker 2008, p. 359), but actively widen access to a variety of cultures. Global citizen education should teach the learners to "respect the rights of others and evaluate the political, social and moral qualities of societies" (De Ruyter and Spiecker 2008, p. 360).

## 15.8 The Behavioural Approaches to GCE

UNESCO's behavioural dimension emphasises participation, engagement and responsibility. UNESCO defines global citizens as individuals who can "act effectively and responsibly at local, national and global levels for a more peaceful and sustainable world" (UNESCO 2015). Similarly, Oxfam's (2015) GCE curriculum identifies Global Citizens as "individuals who are willing to act to make the world a more equitable and sustainable place, take responsibility for their actions and participate in the community from the local to the global levels". Oxfam (2015) claims that young people's learning, thinking and actions are critical for "contributing to a more just, peaceful and sustainable world". Therefore, alongside having a critical understanding of global issues, GCE must instil in young people the power to develop their own skills to act as agents for change, while also being able to reflect critically on how they are global citizens (Oxfam 2015).

UNESCO's behavioural dimension of GCE recognises Gaventa's theory on citizenship engagement. Globalisation has caused power to change forms; transnational social movements are creating new opportunities in which citizens can engage. These opportunities to participate in global governance are more easily found which causes participants to have new sense of global citizenship and solidarity (Gaventa and Tandon 2010). This multidimensional power structure transcends the nation state as sole

custodian and arbitrator of citizenship; instead, it emphasises non-state participants to actively engage in claiming, monitoring and enforcing rights (Gaventa and Tandon 2010). Global engagement requires interconnected global, national and local participants reshaping forms of power.

UNESCO's behavioural dimension of GCE shows a more active definition of citizenship: citizens are not "users and choosers" but rather "makers and shapers" (Cornwall and Gaventa 2000). Dower (2000, p. 559, 2008, p. 39) emphasises the importance of "active commitment" and "active engagement"; and Dei (2008, p. 489) puts forward ideas of "collective and community action". Furthermore, Temple and Laycock (2008, p. 104) identify global citizenship education as a metaphorical "journey" of acting on our global responsibilities from a "passive status" to a "full, active status". The idea of action necessitates treating the student as a present citizen, rather than as a future citizen "on the waiting list" for adult life (Dewey 1916, p. 27).

UNESCO's behavioural dimension of global citizenship education reflects Banks' transformative citizenship education. Banks developed the theories of transformative citizenship education based on cosmopolitan values (Banks 2008). On the cosmopolitans' accounts, global citizenship education should play a fundamental role in helping learners to develop an identity and attachment to the global community. Transformative citizenship education must provide learners with knowledge about both their home community and global society. It should help learners to develop skills needed to solve global problems: critical thinking, decision-making and problem-solving skills (Banks 2008). Active and transformative citizenship differ in that active citizens are limited by existing laws, customs and conventions, and transformative citizens challenge existing laws and beliefs through promoting values and moral principles (Banks 2008).

Civil society organisations are highly active in GCE by placing great emphasis on engagement, responsibility and participation. Many development NGOs have adopted a critical and advocacy-based approach to GCE (Bourn 2016). An example of this is the DEEEP Projects, which focus on creating a global movement of citizens who work together for change (Bourn 2016). However, the lack of funding for long-term projects and the uncritical engagement can result in a lack of sustained engagement (Bourn 2016). The advocacy-based approach can only facilitate effective and responsible participation, alongside with the critical engagement with global issues and teacher's support in delivering these projects (Bourn 2016).

## 15.9 Conclusion

UNESCO's framework has clarified the conceptual basis of GCE, and this presents practical ways to integrate GCE into Member State's national curriculum. UNESCO's conception of global citizens is not as strongly linked to the ideas of legal rights and responsibilities, while "global citizenship can be understood as the outcome of an educational trajectory" (ibid., p. 72). In applying this framework, global citizenship is perceived as an identity (a sense of belonging to a global community and

a common humanity), a set of values and attitudes (empathy, solidarity, respect for difference and diversity), a set of competences (intercultural communication, critical and creative thinking, problem-solving and decision-making skills), and as a kind of active behaviour (participation, responsibility and engagement). It is therefore clear that UNESCO's conceptual framework has already laid the basis for GCE and has provided much guidance for developing GCE curriculum frameworks.

Furthermore, UNESCO's conceptual framework can be seen as a useful reference model for learners' different stages of learning, and it fits in UNESCO's transformative approach to GCE. UNESCO provides a strong normative vision of GCE by focusing on and advancing the cognitive, socio-emotional and behavioural dimensions of GCE. UNESCO's conceptual framework is progressive, based on three domains of learning, namely cognitive (intellectual capability, i.e. knowledge or think), affective (feelings, values and attitudes) and psychomotor (skills and behaviours). These three conceptual dimensions are compatible with the four pillars of learning: Learning to know, Learning to do, Learning to be and Learning to live together. Each of these domains' six stages' chart the learner's growth and progress as their knowledge, attitudes and skills development. The key learner attributes, topics' and learning objectives suggested in this UNESCO's guidance are based on the three dimensions mentioned above. They are interlinked and integrated into the learning process and can be seen as a useful reference model for learners' different stages of learning.

UNESCO's conceptual framework of GCE has provided guidance for Member States on how to "ensure learners can become informed, critically literate, socially connected, ethical and engaged global citizens" (UNESCO 2015). UNESCO's cognitive dimension concerns learners' acquisition of knowledge and critical thinking (UNESCO 2015). With critical engagement with global issues, GCE empowers learners to investigate underlying assumptions and power dynamics and to develop skills for critical thinking and critical literacy. Furthermore, the socio-emotional dimension emphasises "the learners' sense of belonging to a common humanity, sharing values and responsibilities, empathy, solidarity and respect for differences and diversity" (UNESCO 2015), which leads to learners' ethical and altruistic behaviour. Moreover, UNESCO's behavioural dimension places great emphasis on participation, engagement and responsibility. With a more active notion of citizenship, GCE would empower young people to develop practical skills as agents of change for a more peaceful and sustainable world. Each dimension as more detailed points of reference to aid in curriculum design and development presents practical help to integrate GCE into age-specific topics and objectives.

However, it would not be possible to adopt the conceptual framework into local contexts by simply translating it into local languages. It is also required to meet the culturally specific needs of Member States and locate "global citizen education" into local context.

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# Chapter 16

## Comparative Research on Tutors Management in Open and Distance Education between UK and China



Xiaoqian Liu

**Abstract** In modern distance education, the role and status of teachers are different from that of traditional teachers. With the development of modern distance education, a new career, distance education tutors, appears. There are five different kinds of teachers in the Open University of China: course-charging teachers who are responsible for the course construction; course lecturers who are lecturing the course online in the course construction process; course coordinators who coordinate the relationship between course-charging teachers and tutors; class advisors who are in charge of students and are also called tutors. Tutors are teachers who are predominant between course-charging teachers and students. They instruct, guide and supervise students, and help them complete their learning tasks online and offline. Tutors are now taking a different approach to creating a rich learning environment by using problem-based instructional strategies to build critical-thinking and problem-solving skills in learners (Baran et al. 2011). They are changing the traditional teaching methods, teaching ideas, and attitudes to teaching while establishing new perspectives of learning (peer collaboration, guidance, and problem-based learning), which play an important role of improving the quality of distance education and promoting the development of distance education. However, most Chinese distance education institutions find it challenging to define and unify the standards of the roles, jobs and responsibilities of tutors so as to evaluate what the tutors do, and measure their workloads and train them better. This paper presents research carried out to identify the jobs and responsibilities, and competence of tutors of distance education institutions in the UK, their training and managing the tutors. The paper presents findings based on a comparison between Chinese and UK approaches to distance education with a view to offer guidance on good practice for the management of tutors of distance education in China.

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## 16.1 Introduction

The research was conducted, when the author who is working for distance education at the Open University of China was visiting the University of Leicester in 2016, which was selected as a significant example and whose tutors are most of the interviewees. The University of Leicester is a public research-led university and was previously ranked among the top 20 universities in the UK. Although the University of Leicester is a traditional comprehensive university, Leicester is one of the biggest suppliers of higher education distance learning courses in the UK. It has more than 25 years of experience in distance education, and more than 25,000 graduated from Leicester through distance learning. (Data from <https://le.ac.uk/student-life/distance-learners/benefits>, 28th, Mar, 2017.) Tutors in the distance education program are from professors and lecturers on the job or retired professors from universities, who have abundant of academic and teaching achievement in their areas.

The Open University of China is the only one distance education university in China, which is directly under the supervision of the Ministry of Education. It has 44 provincial radio and television universities in China and the implement of teaching in every branch universities mainly depends on the tutors' instruction. So how to manage the tutors effectively and efficiently is very important to guarantee the teaching quality.

In terms of this research, it is conducted through literature review to review Chinese and foreign literatures on tutors management and classify the literature; semi-structured interviews with ten tutors in the University of Leicester and the Open University in UK to identify the roles, jobs, competence of tutors, how to train and evaluate their workload and ten distance learners in the University of Leicester and the Open University in UK to identify the value of tutors; unstructured observations of five modules of different tutors' about tutors and learners' performance in the F2F tutorials and online platform; comparative research between tutors' jobs, responsibilities, training, and evaluation between Chinese and English.

## 16.2 Literature Review on Tutors' Jobs and Competence Required

Before starting research, I read around 30 literatures and developed a classification system to identify tutors' jobs and responsibilities, and competence they need as tutors in distance education in UK and in China through literature review.

### ***16.2.1 Research on Tutors' Jobs and Responsibilities***

Through tutors' management of distance education review, researchers define the jobs and responsibilities of tutors and summarize all jobs tutors take. All the jobs come from professional level, teaching level, teaching management level, evaluation, social communication level, and technical level. It lists jobs and responsibilities of tutors in distance education in Table 16.1.

As we can see from Table 16.1, most researchers suggest that jobs and responsibilities are surrounded by academic support activities (correspondence tuition, monitoring the progress of students on their module, giving module-related and study-related advice, assessing students' work, helping with the development of study skills, and answering questions and solving problems students face in learning), and non-academic support activities (making contact with all students and helping solving technical problems).

### ***16.2.2 Research on Tutors' Competence Required***

According to the jobs and responsibilities of tutors of distance education, the researchers also studied the competence required of tutors. After sorting out the abilities tutors need in distance education, the researchers mainly conduct research on tutors' abilities from teaching, social, organizational, and technical dimensions. It lists tutors' competence required details in Table 16.2.

As is shown in Table 16.2, tutors' abilities and competence focus on teaching abilities (an appreciation of how adults learn and study skills, the ability and willingness to promote the learning of adults through correspondence), social abilities (good written and oral communication skills, coordination and communication skills), and ICT use abilities (the ability to use information and communication technology in teaching and supporting students and communicating with other areas).

## **16.3 Comparative Research on Tutors' Jobs, Responsibilities, Training and Evaluation Between Chinese and English**

The investigation is conducted by action research through interviews, observations, and visits in UK after amount of literature review. The data from small-scale study will show the difference on tutors' jobs, responsibilities, training and evaluation between the Open University of China and the distance institutions in UK like the University of Leicester and the Open University of UK.

The University of Leicester has over 25 years experience of offering high-quality distance learning courses with over 25,000 graduates from these courses. As one of

**Table 16.1** Jobs and responsibilities of tutors in distance education

Jobs and responsibilities	Correspondence tutor	Monitoring the process of students on their module	Giving module- related and study- related advice	Assessing student's work	Helping with the develop- ment of study skills	Answering questions and solving problems students face in learning	Making contact with all students	Developing learning resources	Designing teaching activities	Helping solving technical problems
Salmon (2012)						✓				
Wen et al. (2012)		✓	✓	✓			✓			
Zhao (2015)	✓		✓		✓	✓				
Li (2013)	✓	✓	✓	✓	✓	✓	✓			
Chen (2014)	✓	✓	✓	✓	✓	✓	✓			✓
Zhang (2015)	✓	✓						✓	✓	
Chen (2012)	✓	✓	✓	✓	✓	✓	✓			✓
Yuan (2015)	✓	✓	✓	✓	✓	✓	✓			
IBSTPI	✓	✓	✓	✓	✓	✓	✓			✓

**Table 16.2** Tutors' competence required in distance education

Abilities and competence	An appreciation of adults learn and study skills	The ability and willingness to promote the learning of adults through correspondence	The ability to use the information and communication technology in teaching and supporting students and communicating with other areas	Good written and oral communication skills	Teaching ability	Research ability	Instructional design ability	Coordination and organization skills
Berge (1995)	✓	✓	✓	✓	✓			✓
Shepherd (2003)			✓		✓			✓
Chen (2012)	✓	✓		✓	✓			✓
Lu (2011)	✓	✓		✓	✓	✓		
Chen (2014)	✓	✓		✓	✓		✓	✓
Liu (2015)	✓	✓	✓	✓	✓		✓	✓
Huang et al. (2015)	✓	✓	✓	✓	✓		✓	✓

**Table 16.3** Difference on basic background between OUC and universities in UK

Comparative research on basic background	OUC	UK
Learning courses can be accessed online from anywhere in the world	Mainly in China	✓
Some of the majors or courses are campus-based counterparts study	OUC doesn't have campus-based majors	✓

the UK's largest providers of distance learning education, they can combine high-quality teaching with a vast choice of subjects and consistent value for money. Their online degrees have been specifically designed to be studied at a distance, giving students the flexibility to study from any location within a structured and supportive framework. Teaching for their distance learning courses is facilitated through their virtual learning environment Blackboard, which can be accessed online from anywhere in the world. Their distance learning courses have been designed to benefit a student as an individual and enable a student to contribute to the success of his/her organization. Some of the majors are also offered via full-time study. The campus-based counterparts study exactly the same curriculum and receive exactly the same qualification. The only difference is the mode of study. While the University of China is China's only university dedicated to distance learning with around 200,000 students located in China. Teaching for their distance learning courses is facilitated through their virtual learning environment Moodle. There are no majors offered via full-time study in the OUC. So there are some differences between the universities in UK and the University of China (Table 16.3).

Through semi-structured interviews with ten tutors in the University of Leicester and the Open University in UK and unstructured observations of five modules of different tutors' about tutors and learners' performance in the F2F tutorials and online platform in the University of Leicester. We can see research findings and analysis as follows.

### ***16.3.1 Tutors' Jobs, Responsibilities and Competence Required Between China and UK***

Most of majors and courses are taught by blended learning and some of them are totally online learning in the University of Leicester while most of majors in China are blended learning. So the two universities focus on different jobs and abilities of tutors.

As we can see from Table 16.4, tutors in the University of Leicester mostly assess the students' homework, monitor the progress of the students' learning and personalized individual counseling. Some of the activities are carried out by e-learning via the Leicester's virtual learning environment (VLE ) and some other tools are used too, like email, phone call, social software such as Facebook, Skype, and so on. While

**Table 16.4** Comparative analysis of tutors' jobs between OUC and Leicester

Jobs of tutors	OUC	Leicester
Explaining the course content	✓	Course material
Correspondence tuition	✓	Course material
Personalized individual counseling		✓
Facilitating the students' learning of the course content through discussion, problem-solving, questions and answers and other methods	✓	Course material
Enriching the course from time to time by appropriate outside experience from either the tutors' experience or students' experience	✓	Course material
Giving feedback for both understanding and assessment	✓	✓
Helping students develop appropriate skills	✓	Course material
Monitoring and encouraging students' progress	✓	✓

Chinese tutors have to pay attention to course content explanation, correspondence tuition, facilitate the students' learning of the course content through discussion, problem-solving, questions and answers, and other methods, enrich the course from time to time by appropriate outside experience from either the tutors' experience or students' experience, give feedback for both understanding and assessment, help students develop appropriate skills, monitor and encourage students' progress. There are several reasons for the differences above.

- (i) The students in the University of Leicester distance learning program are post-graduate students or above.

The distance education program in Leicester and other universities except OU in UK are conducted for postgraduate students or above, while the Open University of China serves for undergraduate students and junior college students. Students in Leicester are independent learners and know what kind of knowledge they need clearly. Most of the students undertake related work with their majors. Tutors just monitor their progress, assess their homework, and answer their personal different questions. "Basically, students don't contact with me and ask questions. They accomplish their course independently through the course material and guidance" (Male tutor, 51–60 years old). While tutors in OUC offer face-to-face and online tutorial to do correspondence tuition to students about the course content, tests preparation, and so on.

- (ii) Courses are designed by core team who are also tutors in Leicester.

The course designers are lecturers in Leicester. They are responsible for course design, teaching in campus, and tutoring online. There are two tests in every course, one is in the middle of semester and the other one is at the end. The two tests are based on all the materials in every module. So students have to complete all the material study such as video, audio, and text material, and then they can manage to do their tasks. Course materials are easy to find and direct students to learn more effectively.

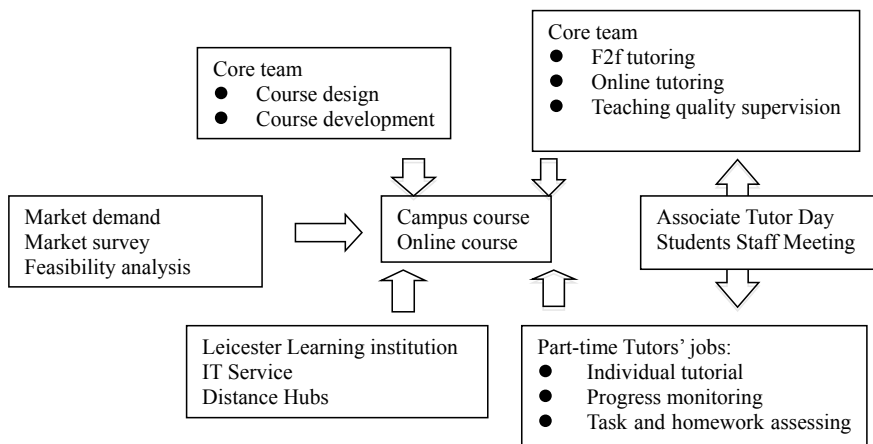
They have standard course design template and learning guide on every course. In addition, some of the courses are campus-based courses which have been taught on campus for many years. The design of the courses has been proved to be accepted by students effectively and efficiently, which just change the mode of learning to distance education. While in China, there are too many different roles of teachers in the University of China. Course designers, course lecturers, and tutors are different people in the university. There is no courses design standard, tutoring standard, and even learning guide in some courses. Besides, the irrelevance of teaching, learning materials, tests, and homework makes students cannot accomplish their learning online independently. So most students claim to have face-to-face tutorials to help them pass the exams.

### ***16.3.2 Tutors' Training and Evaluation in China and UK***

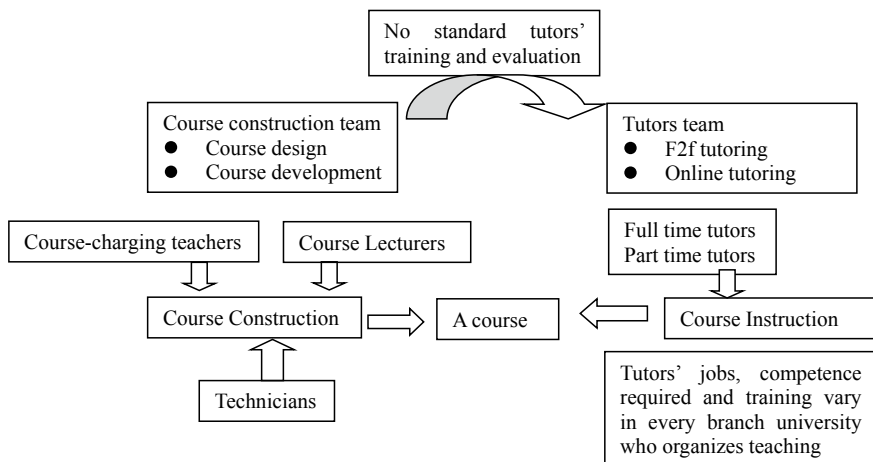
Tutors in Leicester are mostly from the academic staff on the job and retired in universities. "Actually, we do not often train the tutors. Most of our tutors are retired lecturers or professors from universities. They are subject specialists and can answer the students' questions and assess their tasks in a professional way. What we do is to choose a day as an associate tutor day to solve the problems tutors confront in their tutoring." (Female distance education program administrative, 31–40) "We evaluate tutors through questionnaires students do on their perception of the tutors and monitoring small samples of tutors' assignment at random." (Female distance education program administrative, 41–50).

While in China, distance learning universities do not have the tutors' centralism standard trainings, and it depends on different branch universities and learning centers. Most of the branch universities and learning centers who conduct teaching often gather the tutors to learn technical and teaching skills in a day before a new semester begins. The evaluation is made through tutorial visits when the tutors are tutoring online or offline, questionnaires students rating tutors, assignments tutors assessing, and so on (Charts 16.1 and 16.2).

Through visiting in the University of Leicester and interview with their tutors and teaching administrative staff, a chart was drawn according to their jobs. As we can see from the chart above, the University of Leicester opens a distance education program through market research and feasibility analysis. The core team is responsible for the course design and development and Leicester Learning Institution assists in course design, while IT services and distance hub provide technical support. The team sometimes designs courses base on the campus courses. Members of core team teach, supervise teaching quality, and answer students' questions in campus and distance learning. They hire part-time and retired professors and lecturers as tutors in some program. Tutors mainly answer the students' personal and individual questions through learning, assess the students' tasks and homework, and monitor the students' learning progress. They solve the tutors' problems and train the tutors in associate tutor day and evaluate the tutors through questionnaires and assignments



**Chart 16.1** Jobs of core team and tutors in Leicester



**Chart 16.2** Jobs of different roles in OUC

they assessed. The abilities of tutors in the University of Leicester focuses on are implementing, coordination, and communication.

While in the Open University of China, the course construction team including course-charge teachers, course lecturers, and technicians are just responsible for the course building, whereas the course instruction is conducted by the tutors of different universities who have students to teach. There are a few trainings for tutors' but no standard tutors' jobs, responsibilities, competence required, training and evaluation, etc. So from comparison, we can see that core team who is responsible for the course



construction undertakes instruction and tutoring is beneficial for the teaching quality and making teaching team of different teacher roles in OUC.

## 16.4 Conclusion and Suggestion

From the literature review and the whole research process, I summarize conclusion and suggestion from two aspects.

### 16.4.1 *Experience Gained from Leicester*

(i) The teachers' team structure is flat.

As mentioned before, all the core team who design and develop the courses are from academic staff of the University of Leicester and they are also in charge of the courses and responsible for the course teaching. Some of the academic staff who is also the administrators of the distance education program supervise the tutors to ensure the teaching quality. There are not so many roles in the teaching team except academic staff and tutors.

Although it is a small-scale sample and there are ten to a hundred students in a course, flattening teachers' team structure facilitates communication, which makes academic staff in the team have a good grasp of every course content and teaching implementation. The tutors are in the charge of course designers so that they can communicate with the academic staff very well and guarantee monitoring the learning progress and teaching quality.

(ii) Tutors' jobs and responsibilities are specific and clear.

It is clear that "part-time tutors are retired and on the job lecturers and professors in universities and 50% of them are professors" (Female administrator, 31–40). The jobs and responsibilities are facilitating the students' learning of the course in various ways, helping them consolidate it, answering their questions during their learning, assessing students' homework and tasks and monitoring and encouraging their progress. All the tasks and responsibilities implementation will be reflected from the students' questionnaires and academic administrators' supervision assessment.

In terms of the workload and payment, "we calculate how many workloads to guide a student including the students' assessment, tracking students' learning progress, answering students' questions and communication with students, etc. We pay for their performance by the number of students if tutors accomplish their jobs and students are satisfied" (Female administrator, 41–50). "Actually, I don't care about the payment and I really don't know how much they pay me. I just like lecturing and staying with students" (Male tutor, 61–70). So, although there are not a huge

amount of students, the jobs and responsibilities and measurement are clear. Above all, tutors love their jobs and have sense of responsibility without considering the payment. They make the distance education program better and better.

(iii) The courses have been developed with the professionals in mind and offer students many opportunities for career enhancement.

“Every course is designed and developed by a core team including at least six academic staff.” (Female program administrator, 31–40) “We have to do market investigation and feasibility analysis before building a course.” (Male tutor and member of core team, 41–50) “Members of core team are responsible for different tasks. Basically, every member takes charge of a subject including all teaching contents in a subject. We confirm how to design the courses online according to a lot of discussions and with the help of Leicester Learning Institute” (Female program administrator, 31–40).

As I observed five modules of different tutors’ about tutors and learners’ performance in the F2F tutorials and online platform, I found out the learning guide makes the students clear about what and how they will learn; there are short videos and text materials in every module, which enlighten the students to learn and to unearth academic truth. The tasks are not choices, closes or short answers, but always an essay more than 4000 words to discuss what you find or questions during learning. They do not consolidate the knowledge in book through repeating, but to provide a great many related literature to support or demonstrate a standpoint or knowledge. They aim to foster students’ critical-thinking, problem-solving, and independent learning capacity.

### ***16.4.2 Suggestions for Tutors’ Management of OUC***

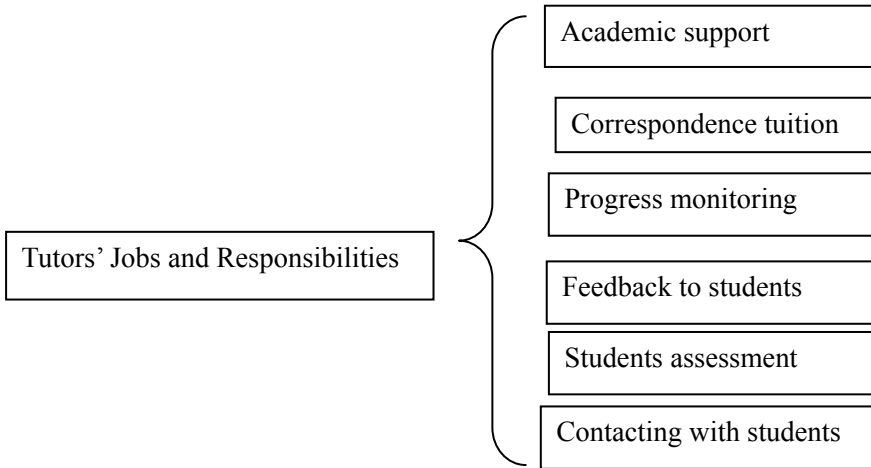
(i) Making standard, specific and clear tutors’ jobs and responsibilities.

As headquarter of 44 provincial branch universities, OUC should make some booklets to guide the tutors. From the interviews and observations, I sort out the basic jobs and responsibilities of tutors as below (Table 16.5).

1. Providing academic support through face-to-face, telephone or electronic teaching methods.
2. Providing correspondence tuition.
3. Assessing students’ work.
4. Giving feedback to students.
5. Monitoring the progress of students on their module.
6. Making contact with all students.

It is better to form booklets to guide tutors to work, such as every step during work as follows. Before the beginning of the course, there should be a students’ name list available electronically where tutors can have a good idea of the information about

**Table 16.5** Tutors' jobs and responsibilities

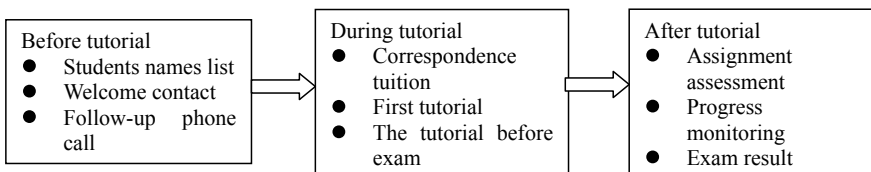


the students. Then the tutors should contact their students to introduce themselves, which can be by email or letter including a personal greeting, a welcome to their course from tutors, tutors contact details, anything else tutors would like to remind or add. It would be helpful to make follow-up phone call to students before the first class. Let the tutors know if the tutorial is face-to-face or online. Tutors should monitor students' assignment submitting and assess them. It is necessary for tutors to keep an eye on students' progress to ensure their study. There is a tutorial before the exam because most students haven't attended exams for a very long time. Finally, tutors will be informed about the students' scores.

So we can see standardization jobs and responsibilities of tutors will help tutors know what to do in every step and administrators to manage the tutors well (Chart 16.3).

(ii) Optimizing course design.

From several years being a tutor and browsing the course materials online, I find that it is paramount important to optimize the course design. Every course should be task-driven design so that students will learn what you show in the course. Except the explanation of every chapter through video or text material, the tasks after every



**Chart 16.3** Process of tutoring refinement

module should be specific, measurable, attainable, being relevant to the course and have clear time-bound. So we have to select the materials, optimize the structure and combine the knowledge scientifically. Formative assessment should occur during learning process to monitor students' learning progress rather than at the end of it. From the clear course design, tutors may accomplish good instructing.

(iii) Building flattening teaching teams.

Flattening teaching team helps tutors understand the course design better because it can be accessible to communicate with course designers. Most course designers or course-charging teachers just coordinate the course design and communicate with the course lecturers who are always famous professors in an area. They have no real teaching experience, approaching students and even communicating with tutors, which makes the course design deviates from the students' needs. The flattening teaching teams will help the course designers or course-charging teachers have a better understanding of students, course teaching and tutors' jobs to help standardize the tutors' jobs, training and evaluation. They make a vital contribution to the quality of teaching and learning and support students by making contact at key points in their study, marking, and providing feedback on assignments, helping students understand the module material and helping them prepare for an examination or end of module assessment.

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# Chapter 17

## Transnational Professional Development for Chinese University Leaders: Case Studies from China and Finland



Xin Xing

**Abstract** Globalization exacerbates motilities of ideas, people, and technologies. China is reforming her education in terms of equality, equity, and quality by learning from others. Professional development, especially overseas training, is a prime strategy used by the Chinese government to develop leadership capacities of university presidents. An overseas training project was launched in 2012 to address this issue: *Dispatching 1000 university leaders from Chinese central and western regions for overseas training (2012–2016)* (MOE 2012). Finland, a small Nordic country, was chosen as one destination due to its relevance to Chinese regional university transformation. This study explores Chinese university leaders' (CULs) experiences of transnational professional development (TPD) in the Finnish context. The aim is to investigate CULs' reflections and usefulness of TPD and their perceptions of effective TPD. Two different Finnish training programs (FTPs) for CULs are included in the study: one took place in 2014 in China and one in 2015 in Finland, respectively. Data collection methods include interviews, learning reports, and minutes of summary meetings after completing these trainings. Data is analyzed by thematic analysis. Taken together, CULs have critical reflections of FTPs. They were positively surprised by discourses on principles of the Finnish education system; education and learning environments. Meanwhile, they saw challenges in Finnish education in terms of balancing 'equality and marketization' in Finnish higher education and insufficient resources. Nevertheless, they notified the context differences when applying the Finnish experience in China. CULs, thereby, identified four key features of ETPD: contents, methods, formats, and social aspects. The findings imply that TPD can play a positive role in enhancing CULs' leadership capacities. Such form of people nobilities has practical implications for training institutions to develop programs in transnational contexts, for both Chinese and Finnish policymakers. Future study is needed to examine long-term impact of TPD and how to build qualified TPD.

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Strand selected: Mobilities of People

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**Keywords** Finnish training programs · Chinese university leaders · Academic mobility · Transnational professional development · Perceptions

## 17.1 Introduction

Internationalization of education is a growing but not new phenomenon worldwide. It's been existing since ancient times, with different dimensions.

*One dimension* is academic mobility. Leung (2013, p. 312) defined academic mobility as 'the academically motivated geographical movements of students, faculty and researchers, generally in higher education, from their home institution to another one, either inside or outside of their home country, to study, teach or take part in research for a period of time.'

The Chinese Ministry of Education (MOE) has paid a great deal of attention to academic mobility, especially university leaders' mobility in recent years. Overseas training, a type of academic mobility is regarded as a useful tool to promote leadership capacities. In 2012, MOE launched an overseas training project named *Dispatching 1000 university leaders from Chinese central and western regions for overseas training (2012–2016)* (MOE 2012). The main countries offering such training included Australia, Canada, Finland, Germany, Ireland, the Netherlands, the United Kingdom, and the United States. Despite the fact that large-scale training programs have conducted in many countries, little research has done to see the impact of such overseas training programs.

*The other dimension* is transnational education (TNE). Knight and Liu (2017, p. 15) defined TNE as 'the mobility of higher education programs and institutions/providers across international borders.' In another study, Knight (2016, p. 38) divided TNE in two major categories: collaborative and independent (foreign) TNE provision. According to this categorization (Knight and Liu 2017, pp. 39–44), locally supported distance education programs belong to collaborative TNE and franchise programs belong to independent TNE provision.

Finland has promoted education export since the 2010s. Education export is a relatively new phenomenon in this country. Although there has been a long time of debates on this issue, the Finnish government has decided to do this business and given autonomy to individual institutions. China has been regarded by its targeting countries and one form of education export is training programs for university professionals. This study focuses on the Finnish training programs for Chinese university leaders (CULs) in the context of TNE. Despite the growing education export activities, very little research has done to understand the impact of such training programs from receiving country's (China) perspectives.

Therefore, the aim of the research is to explore the impact of Finnish training programs for CULs in order to better organize and design similar training/mobility programs in future. The focus of this research is people's perceptions, not actions, although some actions were mentioned. The overall research question is: What is

the impact of Finnish training programs on CULs' leadership capacities? The sub-research questions (RQs) are formulated as the following:

RQ1. How do CULs perceive effective training programs?

RQ2. How do CULs perceive Finnish education system as potential support for their work within the framework of training programs?

## 17.2 Theoretical Framework

### 17.2.1 Academic Mobility

Different definitions have been given to academic mobility. For the purpose of this study, I understand academic mobility through two definitions. One is by a researcher who published on the topic recently and the other one is from an international and influential organization the UNESCO. Leung (2013, p. 312) defines academic mobility as 'the academically motivated geographical movements of students, faculty and researchers, generally in higher education, from their home institution to another one, either inside or outside of their home country, to study, teach or take part in research for a period of time.' Meanwhile, UNESCO (2017) defines academic mobility as such:

'Academic Mobility' implies a period of study, teaching and/or research in a country other than a student's or academic staff member's country of residence ('the home country'). This period is of limited duration, and it is envisaged that the student or staff member returns to his or her home country upon completion of the designated period.

These two definitions share commonalities as well as differences, which are relevant to this study. They acknowledge the fact that people are the core of academic mobility and three areas (study, teach, and research) during mobility. However, they have different scopes. The former definition includes mobility inside or outside one's home country, while the latter only contains mobility outside one's home country. While the former does not mention what will happen after mobility, the latter clearly states that people will return to the home country after mobility. The current study is a combination and extension of elements from these two definitions. It focuses on faculty/staff mobility, especially university leaders' mobility. Such type of academic mobility has three key elements: (1) move across borders (inside or outside of their home country), (2) study for a certain period of time (short-term), and (iii) return to their home country after mobility. I am interested in the impact of academic mobility, i.e., does the academic mobility make a difference to CULs' work? My *focus* is on people's perceptions, i.e., how do CULs perceive the impact of academic mobility in relation to their own work?

Welch (2008) proposes seven myths on academic mobility and two of them are relevant to this study: (i) it is not limited to the 'West' and (ii) it does not mean that it



is only students who travel. Dervin (2011) clarifies different categories of mobile academics for exchange students versus international degree students. Other researches (Dervin 2011, p. 3; Kim 2010, p. 579) argue that academic mobility for staff should include academic intellectuals (theoretical skills), academic experts ('researchers'), or manager-academics (management skills). Kim (2010, p. 579) further argues that manager-academics possess transferable management skills instead of traditional academic leadership. While these researchers extend the research context and body of academic mobility, they do not go further to study academic mobility for university leaders. This chapter aims to the research gap by exploring CULs' perceptions on the impact of academic mobility.

## 17.2.2 *Transnational Education*

Internationalization of higher education (IHE) has become a major trend for developing higher education in most countries around the world. This brought a new but increasing phenomenon—transnational education (TNE). Knight and Liu (2017, p. 15) defined TNE as 'the mobility of higher education programs and institutions/providers across international borders.' In another study, Knight (2016, p. 38) divides TNE in two major categories: collaborative and independent (foreign) TNE provision. The former means collaboration exists between local and foreign providers while the latter means foreign sending provider operates without any formalized academic collaboration with local higher education institutions (Knight 2016, p. 39). According to this categorization, locally supported distance education programs belong to collaborative TNE and franchise programs belong to independent TNE provision.

Four general approaches to transnational higher education were discussed: mutual understanding, skilled migration, revenue generation, and capacity building (Gu 2009; OECD 2006). The capacity-building approach views TNE as a tool to meet an unmet demand and help build capacity for quality higher education (OECD 2006). While the research on the transnational provision of degree program (e.g., Yang 2008; Montgomery 2016) is a well-established and increasing character of higher education in China, the transnational provision of short-term training program is a novel and underresearched research area.

In this study, TNE refers to the provision of two Finnish training programs for CULs. The first one (taking place in China) somehow belongs to collaborative TNE provision in the mode of locally supported distance education programs, while the second one (taking place in Finland) belongs to independent TNE provision in the mode of franchise programs (export programs from sending countries). I am interested in examining the impact of TNE from receiving country's (China) perspectives, namely CULs' perspectives.

## **17.3 Research Methodology**

This section includes two Finnish training programs, the participants, data collection, and analysis.

### ***17.3.1 Case Studies: Two Finnish Training Programs for Chinese University Leaders***

In this study, academic mobility and TNE refer to two Finnish training programs for CULs. The first training is a three-day training seminar for 100 CULs from the Chinese central and western regions, taking place in Kunming, China in November 2014 (referred as Training 1 hereafter); and the second training is a 21-day Finnish training program for 20 CULs in Finland from May to June 2015 (referred as Training 2 hereafter). Training 1 was jointly organized by National Academy of Education Administration (NAEA), Cultural and Education Section of British Embassy, Tampere University, and Yunnan Normal University (YNNU). The NAEA invited the British and Finnish representatives to share their experience on university transformation with CULs at its training base, located at YNNU. The British representatives only attended the first-day seminar while the Finnish representatives joined the whole seminar. Training 2 was jointly organized by the UTA, University of Helsinki, Häme University of Applied Sciences (HAMK), Tampere University of Applied Sciences (TAMK), and Haaga-Helia University of Applied Sciences (HAAGA-HELIA). The NAEA led the CULs to attend Training 2 in Finland.

There are similarities and differences between the two training programs. Firstly, there is always a main actor in each side. From the Chinese side, the NAEA is the main training organizer. From the Finnish side, The UTA is the main training provider. Meanwhile, it cooperated with other Finnish universities to offer the training. Secondly, Training 1 and Training 2 are correlating to each other. Both training programs are parts of MOE's training project to develop university leadership capacities mentioned in introduction. They tackle the same issue of university transformation. Training 1 is a kind of pilot testing and preparation for Training 2. Training 2 is the continuation and extension of Training 1. The universities face the similar challenges and are under the Chinese government's agenda of university transformation.

### ***17.3.2 Participants of the Training Programs***

The participants in the study are all CULs from central and western China, less developed regions in China. Participants voluntarily sign up for Training 1 while participants are selected by the MOE in Training 2. There is no homework for participants in Training 1 while participants have to write learning reports for Chinese

authority after Training 2. In Training 1, there is no participation fee and all participants (including foreign participants) cover their own costs. In Training 2, there is fee to be charged and the costs are covered by Chinese sponsors. In both trainings, all participants were male, aged 46–50, and held certain year working experience as university leaders in China. Prior to training, they had little knowledge of Finland and Finnish education, and none of them had been to Finland.

### ***17.3.3 Data Collection***

The data collection took place at different years. In November 2014, I conducted interviews with six CULs in Yunnan during Training 1. In June 2015, I conducted interviews with four CULs and attended two minutes of summary meetings in Beijing immediately after completing Training 2. Learning reports were also collected after two weeks of completing Training 2. In the end, I managed to collect data from 12 CULs who represent 12 different Chinese universities. All the participants were male, as female participants were unavailable then. Among them, there are six vice presidents, two presidents, two chairmen, and two vice-chairmen (see Table 17.1). All the data was carried out in Chinese. The data was transcribed and translated into English afterward.

Different types of data were collected to answer different RQs (see Table 17.1). RQ1 consists of 10 interviews (six from Training 1 and four from Training 2) and six learning reports from Training 2. RQ2 includes six learning reports, four interviews, and two minutes of summary meetings from Training 2. It can be seen the data collection methods are becoming more complex. The multiple data sources were chosen to enhance the validity and reliability of research.

Ethical issues were taken into consideration during the research. Firstly, I obtained the permission from my supervisors and Chinese authority. Before collecting data from the participants, a written consent form was signed with everyone participating in the study. Issues such as research aims and questions, data usage, publications were clarified in the form. This means that the participants were aware that their data would be used for this study. In Training 2, permission to use the learning reports was also gained from the Chinese authority organizing the training.

### ***17.3.4 Data Analysis***

The data was analyzed in keeping with data-driven qualitative approaches, employing thematic analysis. These analytical methods were selected as appropriate because I was interested in CULs' individual perceptions, rather than in testing some theories or hypotheses.

Thematic analysis is a qualitative research method 'for identifying, analyzing and reporting patterns (themes) within data' (Braun and Clarke 2006, p. 79). It is

**Table 17.1** Profile of the participants, data, and coding

No.	Role	Main responsibilities	Training program	Learning report	Interview	Minutes of summary session	Coding
1	Vice president	Budgeting and research	Training 1	N/A	Yes	N/A	T1-VP1
2		Teaching					T1-VP2
3		Budgeting and teaching					T1-VP3
4		Budgeting and students' affairs					T1-VP4
5	Chairman	Party					T1-C
6	Vice chairman	Audit					T1-VC
7	Vice president	Teaching	Training 2	Submitted	Yes	N/A	T2-VP1
8							T2-VP2
9	President				N/A	Presented	T2-P1
10					Yes	N/A	T2-P2
11	Vice chairman	Students' affairs			N/A	Presented	T2-VC
12	Chairman	Party			Yes	N/A	T2-C

compatible with both essentialist and constructionist paradigms (Braun and Clarke 2006). The purpose of the analysis was to reflect reality to be able to report on the participants' perceptions of effective training program as well as perceptions of Finnish education through the training program (Braun and Clarke 2006, p. 81). Coding system was developed based on training program and participants' roles (see Table 18.1). For instance, T1-VP1 refers to the vice president in Training 1.

## 17.4 Findings

The following section presents CULs' perceived impact through two different levels: program level (academic mobility) and contextual level (education system). Different data was utilized to answer different subresearch questions. I will elaborate more in details.

### 17.4.1 Program Level: Perceptions of Academic Mobility

Participants identified four themes of effective training programs: contents, methods, formats, and social aspects.

The **contents** include *targeted group and needs, clear aims, and competent trainers*. Participants reported that the same type of university should be arranged in the same training program as they were in the similar boat and understand each other better. Such arrangement would allow them to discuss the common issues, including concerns, challenges, achievements, and experiences on university transformation and draw lessons from each other. They indicated that meeting and satisfying presidents' specific needs were the core part of effective training programs. The higher satisfaction degree of needs, the more effective training programs. They considered the trainers should be the experts in their field and prepare well for the training in advance. As T1-VP3 said, 'I am happy with all the trainers in Training 1. The works they have presented during the seminar represent the latest research on regional university transformation. Their views are fresh, insightful and inspiring. I can see that they did their homework very well'.

In addition, they preferred to include more practitioners in TPD. Unfortunately, this is not fully realized in Training 2, T2-C complained some poor Finnish teaching:

- (1) In general, we do not like the general academic teaching by some Finnish lectures. They spoke too much basis on Finnish education which can be easily found from books and website. We are coming to Finland to learn new things, not to listen to the repeated stories. And we are much more interested in communicating with Finnish university leaders than academics. (T2-C, interview)

The **methods** include *activities, peer learning, and materials delivery*. Participants agreed that seeing is believing. Different activities were organized in Training 2,

such as attending 27 lectures at five different Finnish universities, visiting university campus, libraries, research centers, laboratories, student entrepreneurship center, industries, and City of Tampere. In addition, they had opportunities to visit Chinese Embassy in Finland and meet Chinese researchers and students at Finnish universities.

Peer learning consists of peer sharing, peer teaching, and peer dialogs. T2-P2 acknowledged the importance of sharing thoughts among trainees after training. He regarded this as an effective way to promote mutual learning and emphasized how useful such reflection experience was: 'After returning back to China, we continued with another day summary session. Everyone was asked to share their thoughts on training abroad. The discussions were active and everyone loved it! One day was too short and we would like to have more time.'

The involvement of experienced and highly successful university leaders in the training programmes contributed to effective training programs, because they possessed first-hand knowledge of university context, better understand their needs, and were in a position to share their practical experience. Unfortunately, this was not achieved in Training 1. T1-VC put:

- (2) It was a pity that the right regional university presidents were not invited. The issues presented by trainers from the NAEA were useful at macrolevel. Nevertheless, Training given by the experienced university leaders was missing at microlevel. (T1-VC, interview)

The **formats** include *theory and practice* and *duration*. Participants considered that thorough university cases must be integrated into training to help CULs understand governance systems of foreign universities. Comments such as 'Only national policy was covered, but no appropriate university cases were provided in Training 1' (T1-VC), and 'The cases were superficial in Training 2 and I would like to see how the curriculum is exactly conducted in a specific program' (T2-VP1) indicate the drawback of case studies in both trainings. They claimed that innovative university philosophy was an indispensable element for effective training programs. One said:

- (3) The first issue UTA president shared with us was strategic planning and university mission. Many Chinese university presidents would start with university introduction: How big is the university? How many students and staff? How many key laboratories and research centers does the university have? ...Few of them would consider: Why do we run university? Whom do we run for? What kind of university do we aim for? How to run university? (T2-C, interview)

The **social aspects** include *networking and cooperating beyond training* and *logistics*. During Training 2, on behalf of their own universities, three participants signed cooperation agreements with Finnish universities. Although it was not planned, they were satisfied with such extra and positive achievement. In Training 1, T1-VP4 expressed his strong willingness to develop networking with Finnish universities, 'my university would like to establish a formal relationship with a Finnish university and explore deeper cooperation for staff training. We could invite the Finnish trainers to train Chinese teachers in China or send Chinese teachers to attend training in Finland. Participants were satisfied with excellent service in both trainings. The

training schedule was rich and time was well utilized'. T1-VP3 said: 'Although Training 1 is only three days, the service is excellent, including transport, training rooms, accommodation, and food. Everything is inside one campus and easy to access.' T2-P1 echoed: 'The training schedule is rich and full in Finland. Everything is detailed and well-organized. Almost every working day we start from 8:30 to 17:00. Although there is no time to take a nap, like what we have in China, no one complains.' However, T2-VP2 was unsatisfied with the inappropriate training time: 'It was a pity that we did not have the chance to have discussions with Finnish students, who were on holiday in May.'

### ***17.4.2 Contextual Level: Perceptions of Education System***

It is worthwhile mentioning that participants reported aspects of Finnish basic and secondary education although they come from higher education sector. In addition, more findings are reported by participants in Training 2, as they have the real experience of Finnish education in Finland.

#### **17.4.2.1 Equality and Equity**

All the participants highlighted equality and equity of the Finnish education system in general. These two terms appear to be used interchangeably by the participants, although they have a different meaning. In the data, equality is discussed from three perspectives.

Firstly, education is free for all in Finland. The participants were told that equal access to education was a basic human right defined in Finnish Constitution. T2-VP1 and T3-VP2 were surprised by the fact that every student (including foreign students) is entitled to receive free education from preprimary school to university regardless of their social and economic background.<sup>1</sup>

Secondly, the participants note that education resources are equally allocated in Finland. They reported that the Finnish government allocates equal university resources to schools to minimize the gap between different regions and to ensure that students can study in the nearest schools to their homes. T2-C commented on this aspect, while toning it down by using the phrase 'almost the same amount,' which could denote uncertainty about the fact:

- (4) There is no distinction between elite and normal schools in Finland. All schools receive almost the same amount of resources from the government and all students receive the same high quality of education. (T2-C, learning report)

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<sup>1</sup>NB: From 2017, non-EU/EEA students were charged fees for English-taught Bachelor's and Master's degree programs in Finland.

Although equal allocation of education resources for universities was not mentioned, T2-VP2 and T2-P2 favoured the fact that universities were distributed throughout Finland, which was interpreted as providing equal learning opportunities for students.

Thirdly, Finnish universities of applied sciences (UAS) have an equal status to Finnish traditional universities. The participants learnt that the Finnish higher education system had a dual structure: traditional universities and UAS. The law defined equal status but different missions for two types of universities and set rules for each type to achieve its own excellence. They felt the Finnish experience of 'equal but different' is a good lesson for China, since Chinese higher education is more hierarchical: Universities are categorized into different levels and those at the top usually get the most resources. One participant reflected:

- (5) In China, we do not have clear rules. More than 2600 universities and colleges compete for funding and recognition. Sometimes we see vicious competition among universities. (T2-VC, minutes of session)

In terms of equity, participants highlighted the inclusive education in the Finnish system. They found that inclusive education was well embedded in the Finnish system and regarded it as a smart and cost-effective approach to build the welfare society. Two participants put:

- (6) I am deeply touched by Finnish efforts to 'no one left behind'. Students with learning difficulties and disabilities are so lucky in Finland. They are not abandoned by society and teachers. Instead, they enjoy more educational resources and social care. (T2-C, learning report)
- (7) One important role of Finnish teachers' in class is to identify the weak students and try to help them as early as possible. Talented students can learn more by themselves. (T2-P2, interview)

#### 17.4.2.2 Autonomy

The majority of participants compared autonomy in Finland and in China from institutional and individual levels.

At the institutional level, they were impressed by the fact that Finnish UASs seemed to enjoy extensive autonomy in organizing their own administration, building infrastructure, deciding on staff recruitment, student admission, and designing the contents of degree programs. However, they did see the other side of autonomy in Finland. They wrote in the learning reports that the implementation of University Act of 2010 in Finland gave universities more autonomy. This means that universities have to engage with society more broadly, increase fundraising, improve efficiency, and take more risks. The university could go bankrupt if not running well. Autonomy also meant university staff was no longer civil servants with permanent job contracts, since the university became their new employer.

At the individual level, the CULs admired most the Finnish peers' autonomy to recruit university staff. This is a feature they do not have. In principles, CULs can recruit university staff. Nevertheless, they have to negotiate the recruitment numbers



with local education government, which is the main sponsor of regional universities. Having been a university leader for ten years, one president shared his views on autonomy:

- (8) Where does the university autonomy go? We have called it since 1980s. In areas of curriculum reform and design, students training models, university mission, university-government relationship, and selections of university leaders, Chinese universities have even less autonomies compared with the period of 1980s. It is so difficult or impossible to operate a good university if everything is controlled by government. (T2-P1, minutes of summary)

Some participants seemed to give answers for the above puzzles. The answer was transparent system. In the Finnish context, they found that Finland was a very transparent society, and Finnish university leaders could act autonomy freely given by law. This can assure the social justice.

In the Chinese context, one participant pointed out that the Chinese system was not ready for autonomy, since, he argued, the system is not transparent enough. He was worried about the possible corruption if the Chinese government gave the university autonomy without adequate preparation. In his viewpoint, not giving autonomy to CULs was actually a kind of protection for university staff. This is how he questioned autonomy in China:

- (9) Are Chinese universities really ready for taking autonomy? Can CULs recruit staff transparently with autonomy? If I have autonomy, I will become more careful. Autonomy not only means power but also responsibility... (T2-P2, interview)

One participant noted that students in Finland seem to take initiative for their own studies, including individual work, group work, and internship. He compared me as a doctoral student in Finland and his master students in China:

- (10) You take the initiative to your study. You travel far away to Beijing and make a research request to me. I accept, since I feel your research is meaningful and you are a professional researcher... My master students heavily rely on me and have not taken such initiatives. (T2-C, interview)

## 17.5 Discussions and Conclusions

The study has explored CULs' perceptions of the Finnish training programs. It focuses on their experiences and reflections, and yields fresh findings and perspectives on academic mobility and TNE.

The participants stress the importance of 'seeing is believing' and 'doing homework' for effective TPD. In other words, TPD can become more effective when CULs are located in a different educational environment. The positive shock in a new context could change CULs' mind-set and enhance their responsibilities.

The significance of the study can be seen from two levels. At theoretical level, the study addresses a new type of academic mobility (university leaders' mobility)

with its distinct features: (1) move across borders (inside or outside of their home country), (2) study for a certain period of time, and (3) return back to their jobs after mobility. It has particularly extended existing knowledge on the impact of academic mobility in the contexts of China and Finland. Meanwhile, the study has addressed TNE in the mode of locally supported distance education programs (collaborative TNE) and franchise programs (independent TNE provision) that focus on receiving country's (China) perspective. It has enriched our understanding of TNE from participants' perspectives. At practical level, the study burdens our understanding of Finnish education export related to China. When exporting education from one context from another, foreign training providers must learn and understand the local (receiving country's) context in order to see what they can offer and what they cannot.

In conclusion, the Finnish training programs play a positive role in enhancing CULs' leadership capacities. The training programs will become dramatically more effective when the trainees' perspectives are carefully heard and understood. Transnational professional development will also become more effective when the foreign institutions collaborate with locally supported partners. Such form of people mobilities has practical implications for training institutions to develop programs in transnational contexts, for both Chinese and Finnish policymakers. Future research is needed to investigate what CULs have implemented after the Finnish training programs and how to build a quality assurance system for these training programs.

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# Chapter 18

## How to Improve Undergraduate Students' Critical Thinking in the Classroom: From the Perspective of Critical Theory



Ying Zhang

**Abstract** A large quantity of research found that Chinese college students are still weak at critical thinking. The essay mainly wants to discuss the following questions from the perspective of critical theory: what is critical thinking? Why does critical thinking matter? Why is Chinese undergraduate students' critical thinking weaker and how to improve their critical thinking in the classroom? Rather than cultural background, the essay argues that students' previous study experience would influence their critical thinking. University faculty evaluation system and students' evaluation system would make a difference as well. Given those Chinese existing situation, university faculty evaluation system and students' evaluation system are strongly recommended to have a change. What's more, problem-based teaching and dialogue teaching also would be effective.

**Keywords** Undergraduate · Critical thinking · Critical theory

### 18.1 Background

It has been recognized that one of the aims of higher education is to foster students' critical thinking, making them think independently (McMillan 1987). While a large quantity of research found that Chinese college students are still weak at critical thinking, Ip et al. (2000) investigated 122 Chinese students in Chinese university of Hong Kong, finding that students showed a negative disposition toward critical thinking. McBride et al. (2002) compared 218 American and 234 Chinese preservice physical education teachers. Results revealed that critical thinking scores from the US sample were systematically higher than Chinese. Tiwari et al. (2003) compared 384 students from Hong Kong and Australia, detecting that Hong Kong Chinese students failing to show a positive disposition toward critical thinking while the Austrian students showed a positive disposition. Liu and Zhao (2010) investigated 679 students in mainland China, demonstrating that university students lack in critical thinking as a whole. Based on existing empirical studies in critical thinking of Chinese

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university students, we could conclude that Chinese students are still weak at critical thinking.

Hence, the essay mainly wants to discuss the following questions: Why does Chinese university students weak at critical thinking and how to improve their critical thinking? In order to solve these questions, it is better to figure out the definition of critical thinking and its necessity.

## 18.2 The Definition of Critical Thinking

Although critical thinking is widely used in western country, defining it is not so easy. Critical thinking can be traced to Socrates and Aristotle who develop logic, while they have not referred to the term of critical thinking. Since critical theory plays an important role in critical thinking that we cannot avoid it. Critical theorists, from Marxist, hope to awaken the social mass potential critical self-awareness (Held 1980). Quoting from Marx and Engels (2006, p. 9), “the class which is ruling material force of society is at the same time its ruling intellectual force.” Hence, in order to emancipate themselves, the ruled class has to develop their own self-consciousness and think independently. Though Marx & Engels have mentioned the importance of critical thinking, while until Freire, who established the critical pedagogy, critical thinking finally come into the field of education. Critical pedagogy involves the “praxis of freedom” (Freire 1998), aiming at enable individuals to pursue more self-aware and self-determined ways of life and challenging unquestionable validity of habitual routines of daily life, widespread ways of thinking, certainties of common sense and self-evident ideas (Scherr 2005), in others words, aiming at nurturing individuals critical thinking.

Afterward, increasingly more scholars, including psychologist, educationalist, and sociologist, devoted themselves to studying critical thinking. As for the definition of critical thinking, some of them may share commonalities, while others are obviously various from others. Ennis, one contributor of critical thinking movement in United States, defined critical thinking as “reasonable, reflective thinking that is focused on deciding what to believe or do (1987, p. 10).” Ennis (1984) also argued that critical thinking is interdisciplinary, not belonging to any subjects. Pascarella and Terenzini (1991) note that critical thinking, kind comprehensive and multi-dimensional skills, can be defined as:

identify central issues and assumptions in an argument, recognize important relationships, make correct inferences from data, deduce conclusions from information or data provided, interpret whether conclusions are warranted on the basis of the data given, and evaluate evidence or authority (p. 118).

Paul and Elder (2013) hold the opinion that the standard of thinking should include clarity, relevance, logicalness, accuracy, depth, significance, precision, breadth, and fairness. Moore (2013) interviewed 17 undergraduates found that critical thinking has seven definitions: judgement, skepticism, a simple originality, sensitive readings,

rationality, an activist engagement with knowledge, and self-reflexivity. Chen (2017) interviewed 46 Chinese students, finding that critical thinking should be understood in Chinese cultural context, can be defined as *cognitive thinking skills, intellectual autonomy* and the *omnipresence of positive and negative aspects*.

### 18.3 Why Does Critical Thinking Matter?

Since we have already known what critical thinking is, the importance of critical thinking is apparent.

For individuals, especially college students, the knowledge they learnt in university could be forgotten after they leave the university. Even though the content of knowledge is not forgotten, it may soon be dated in their occupational areas (Terenzini et al. 1995). Thus, cultivating university students' abilities to learn new things and to think independently could benefit them perpetually. According to Qi's research (2011), choosing to be conformity with the social mass is extremely frequent when university students choose their majors or decide whether to study further or find jobs. Quantities of students still feel confused they are facing their career plan. What's more, in modern society filled with extensive information on the Internet, some easily believe what occurs on the Internet and be misguided to believe some opinions with logical mistakes. An adult not only means the mature in the body but also in the mental which requires to be self-aware and self-determined.

For society, critical thinking can help to nurture innovative talents which are scarce in China. The number of Chinese scientific talents is up to 32 million which is the first in the world and the research funding in China ranked sixth in the world. However, the innovation index ranked 28th in the world which is much lower compared to the input (Sui 2006). In 2005, when Prime Minister Wen visited sick Xuesen Qian, one of the most outstanding scientists in the world, the famous question was asked by Xuesen Qian—"Why can't our universities cultivate innovative and outstanding talents"? Premier Wen argued that one important reason is that no colleges nurture their students following the standard of fostering innovative and outstanding talents (Jiabao Wen: the question of Qian is a painful sting to me, 2010). When Qian past away, the question became the hot focus of discussions in the field of education and how to cultivate innovative talents in university was discussed fiercely by scholars. Critical thinking, giving one a comprehensive view of how the mind functions in its pursuit of meaning and truth (Elder and Paul 1998), became the hotspot of the topic and has been attached more and more importance.

Another aspect is that developing students' critical thinking is beneficial to promote students' social and political participation (Apple and Au 2009). According to Zhang's research (2014), a lot of college students care little about participating in political activities. In their opinions, political activities belonging to the government have nothing to do with themselves and they cannot make a difference. What's more, some of them have little understanding about political events even show some doubts about Marxism belief which is the guiding thought of Chinese characteristic

socialist. According to Li's research (2008), there are 51.8% college students do not care about current news, 42.4% college students never take part in campus activities organized by their professional teachers, and 60.2% college students have not taken part in any after-school activities.

In conclusion, critical thinking can make a difference to both person and society. On the one hand, we can be more confident and understand more about the world so that we can have a right to choose in our life. On the other hand, participating in more social, political courses and activities, we can suggest to our government and try to make the world better.

## 18.4 Why Is Chinese Undergraduate's Critical Thinking Weaker?

As for reasons about why Chinese students' critical thinking is weaker, there are mainly two answers: one is the cultural background and the other is the students' previous study experience. The former holds the opinion that critical thinking is the western individualistic cultural product, which is incompatible to Chinese traditional culture stressing collective and authority (Atkinson 1997). The latter hold the opinion that students' previous study experience, which is passive and unwilling to participate in classroom talk, make students accustom to accepting knowledge without any critique (Clark and Gieve 2006).

Admittedly, the culture background could have profound influence to students' behaviors, while there are still some opposite opinions toward whether critical thinking is incompatible to Chinese traditional culture. For example, Kim (2003) holds the opinion that Confucius strongly emphasizes that learning cannot be separated from thinking and thinking proceeds learning independently, which means that thinking independently benefits learn profoundly.

More and more researches demonstrate that study experiences have significant correlations with their critical thinking. Dressel (1955) and Smith (1977) found that teaching strategies could make a difference to critical thinking. McKeachie (1970) concludes that: (1) small class is more effective for developing critical thinking than large class; (2) discussion classes are more effective than lecture classes in promoting critical thinking; (3) student-centered classes are better than instructor-centered classes in developing critical thinking. Rimiene (2002) found that educators in different academical areas could guide students to make use of their critical thinking effectively and become more motivated to critical thinking. What's more, cooperative learning could help to develop students' critical thinking skills and dispositions. Ory and Braskamp (1988) find students' interaction with their peers and faculty members could positively make a difference in critical thinking.

Tsui (2001) investigated four universities via 55 interviews and one-time observation found that faculty attitude could influence students' critical thinking. Specifically, whether faculty believe in that student have capability to grapple higher-order

thinking could make a difference to students' critical thinking. Faculty perception of teaching as a mutual learning can influence the development of students' critical thinking. In other words, if teachers still take teaching as unidirectional input of knowledge and students still be accustomed to taking notes on the class with little talk with peers and teachers, it is hard to cultivate their critical thinking. Just like Freire said:

Education thus becomes an act of depositing, in which the students are the depositories and the teacher is the depositor. Instead of communicating, the teacher issues communiques and makes deposits which the students patiently receive, memorize, and repeat. This is the "banking" concept of education. . . . The more students work at storing the deposits entrusted to them, the less they develop the critical consciousness. (Freire 2005, pp. 72–73)

What Freire said, *banking education*, reflected the real situation in Chinese university. According to Ren (2010) research, traditional large-class lecture method still takes over 60% proportion in Chinese university and 68.6% university students consider that college teachers teaching methods are lacking in artistic and thought-provoking. In Chinese university classroom, teachers are still the center of the class, controlling all the teaching content and whole classroom. Because of previous study experience, Chinese students have been habituated to studying by memorization and over-reliance on their teachers, lacking in active engagement (Pierson 1996). It is popular in China that university students come to classroom with reading no pre-class materials and hope to accept knowledge from their teachers, just like what they did in primary schools. Every time before final examinations, most university teachers would highlight the focus of examination, what students need to do is just to memorize them in short time which would be forgotten easily after examinations.

As for why *bank education* is so popular in Chinese university, there are various answers. Some hold the opinion that it is related to the large student number in China. Since 1999, a rapid expansive enrollment of university happened in China, which means the number of enrollment every year has increased from 1.8 million in 1999 to 7 million in 2015 ("The university enrollment expansion in 1999: the public education takes the place of elite education," 2009; "In 2015 the university and college enrollment plan, a total of 7 million," 2015). With the increase of the student number in every classroom, teachers do not have enough time to treat every student equally so that it is convenient and time saving to teach them by traditional large-class lecture method (Gao and Zhang 2006).

While what matters is the teaching ability regardless of the student number. According to Bie (2009), most of university teachers have not received any training about how to teach, how to manage classroom, and so on. They can be university teachers only after they get their philosophy degree. According to Lu and Yan (2008), college teachers would get some pre-job training which are inclined toward how to do research instead of how to teach after they are employed. Thus, for teachers, it is easier to maintain the safe classroom because it is simpler to "demand that students cultivate an atmosphere of seamless harmony in the classroom and harder to teach them how to engage in meaningful critical dialogue" (Hooks 2010, p. 88). It is easier and time saving for teachers to manage a quiet classroom than dialogue classroom



because developing critical thinking requires faculty enthusiasm for teaching which calls for additional efforts (Tsui 2001). While attaching great importance to doing research is popular phenomenon in Chinese university. If a university teacher hopes to get promotion, doing research takes an extremely large proportion (Tian et al. 2006). Therefore, most university teachers focus more on doing research than teaching. Taking feedback which influence students' academic performance and achievement profoundly (Hattie and Timperley 2007) as an example, only 25% students reported that they received feedback from faculty very often, and 22% never got feedback from faculty at all (Guo and Shi 2016). As for term paper, most students just get score without any comments. How can they make progress without any feedback from university teachers?

In addition to the faculty evaluation system, students' evaluation system is another reason. According to Tian and Low (2011), critical thinking skills were not tested in traditional exams and students were happy to avoid critical thinking unless the examination system required it. Exam-oriented education makes students only study for examination content and ignore others. What's more, in Chinese current system, it is easier to graduate from university than being admitted by university. After Gaokao, the university entrance examination, large quantities of students started to addicted in computer games and other recreational activities because they know most of them could graduate from the university.

## 18.5 How to Improve Students' Critical Thinking in the Classroom?

Just as what we discussed before, since university teachers play so important role in cultivating students' critical thinking, encouraging teachers' devotion to teaching is definitely effective method. In current situation, on the one hand, as teaching only can bring extremely modest income which is not coordinated with status of intellectual, most teachers especially those in research university could not lead a decent life without doing research (Li and Xu 2006). Only by doing more research projects, could they be richer and richer. On the other hand, in order to compete with other universities, most Chinese universities evaluate teachers according to their research performance instead of their teaching performance. As we all know, teaching and doing research are the most important functions of university. Without teaching, universities have no difference in research institutes. Without researches, universities have no difference to primary schools. In consequence, it is urgent to handle the relationship between teaching and doing research. In order to promote students' critical thinking, investing more resources to teaching and increasing teaching's proportion in evaluation would be effective ways.

Second, students' evaluation system should change as well. Traditional examinations methods—recitation and memorization—cannot satisfy the requirement for modern talents. As the development of social technological, knowledge can be acces-

sible on the Internet easily. Since the artificial intelligence—AlphaGo created by Google defeated human being in the Go tournament in 2016, people started to realize the powerful energy of artificial intelligence. Hence, just as stated above, the material content students learn in university would be forgotten and be dated after they graduate, cultivating university students' abilities to learn new things and to think independently should be the focus. Therefore, what should be evaluated is students' critical thinking rather than the knowledge they can recite. Writing and rewriting assignment could contribute to students' critical thinking (Tsui 2002).

Third, using effective teaching methods could make a difference. Dialogue teaching, also called Socratic teaching, should be encouraged in the university. Though large-class lecture method is time saving and can impart knowledge directly, while thinking is driven by questions (Elder and Paul 1998). As technology impacts profoundly on education (Arnové 1980), massive open online courses and materials are available easily so that students can learn more outside the classroom. Students are not the depositories any more (Freire 2005) and they can be ready to read materials before class. Only when students are prepared, could they be ready to talk with their peer and teachers, and then make progress. In order to popularize dialogue teaching, university faculty should accept professional training about to how to ask Socratic questions. Problem-based learning is also encouraged in the university. Ozturket al. (2008) investigated 147 senior students and found that there is a significant difference between critical thinking disposition in the problem-based learning school and those in the school implementing the traditional model. Sternberg (1985) also stressed that intelligence applied solution to teach students with problems in real life. Students could learn much more by the process of finding problem in real life and trying to solve it according to the strict logic than traditional large-class teaching method.

## 18.6 Limitation

To be honest, it is my first time to write academic paper in English. Because of my limited English writing ability, there must be some mistakes. The essay is the term paper, without doing any research and data, which is the disadvantage as well. This is a good chance to make me study further about critical thinking.

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# Chapter 19

## Global Citizenship and General Education in Chinese Research University—Based on the Case Study of Sociology Course



**Yunxia Han**

**Abstract** Citizenship is the key issue of national civic education. The traditional citizen education is challenged in the era of globalization, showing the dual identity of national citizenship and global citizenship. Facing this new challenge, the universities around the world have made the global citizenship education as the commission of the twenty-first century. They intended to cultivate the students with global consciousness, international perspective, and action ability through different modes of education practice. Because the liberal education and global citizenship education have many in common, many universities cultivate the global citizen by the way of liberal education, and the Chinese universities are also included.

**Keywords** General education · Sociology course · Global citizenship

### 19.1 Background

The contemporary human society is already in the era of globalization. Internationalization has also become a key issue in the development of higher education. On the one hand, internationalization has expanded the functions of higher education, expanded the geographical scope of higher education, and promoted the innovation of higher education. On the other hand, internationalization has also made requests to the core functions of higher education, the cultivation of talents, which means the higher education should cultivate students with international vision and global consciousness, with the inclusive mind of multicultural values and master the knowledge and skills needed in the era of globalization.

Some studies believe that Chinese universities are still focus on project development, which aims to seek foreign investment, and has not given sufficient attention to the quality of talent training in the internationalization process. Therefore, the universities are keen to introduce foreign advanced technical professional courses in the curriculum reform, but pay less attention to the fundamental and substantive aspects

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of educational reform, the general education courses. With the further development of internationalization of higher education, the Chinese government promulgated overall plan for coordinately advancing the construction of world first-class universities and first-class disciplines in 2015. Which is to rationalize higher education, to build a group of world-class universities and first-class disciplines and to enhance the overall quality of students and their international perspective. As a result, we want to know the implementation status of citizen education in the process of internationalization of higher education, especially the cultivation of global citizenship. In this paper, I conduct a case study on the sociology liberal education in Chinese research universities and try to explore and respond to the global citizen education in Chinese research universities in the process of internationalization of higher education. In the following, this article will review the relevant literature on the value orientation of national citizens and global citizens and general education.

## **19.2 Global Citizenship: Mission of Internationalization of Higher Education**

### ***19.2.1 Internationalization of Higher Education***

The impact of globalization on the transnational flow of people and material circulation has broken through the traditional national boundaries and promoted the rapid development of the global economy. The application of information technology has brought great convenience to the exchanges between different countries and regions. The world today is more closely linked than ever before. Globalization has also contributed to the formation and development of global civil society that is concerned with the common interests of mankind and destiny, making it possible to solve common problems facing human society. The essence of globalization is that it is an objective historical process and trend, which breaks and transcends various boundaries and borders, such as territory, country, nation and field; the globalization demonstrates human beings are increasingly interdependent and as a class of subjects to seek survival and development (Cai 2017).

The internationalization of higher education as the countries' response to the wave of globalization, on the one hand, it has expanded the functions of higher education and expanded the geographical scope of higher education, and on the other hand, it has promoted the innovation of higher education. As a response to globalization, the universities have made their international development strategies, and implemented global education programs. In the era of globalization, citizens only with national identities are no longer able to adapt to new realities, and responsible citizens need to have an international identity, that is, global citizenship. Global citizen is also known as world citizen, which means new requirement to the citizenship in the era of globalization. Global citizens should transcend national interests and defend the universal interests of mankind, based on the universal rights of mankind, not

the sovereignty of the state. They need to have global view, the inclusive attitude of multicultural values, with the knowledge and skills needed in the era of globalization.

### ***19.2.2 Citizen and Global Citizenship***

Citizen is a relative conception to the law, especially to the concept of a country's constitution. Derelf Heater believes that citizenship is the institutionalization of individual and political relations, which manifests itself as the membership of the individual in the political order and the rights and obligations associated with this qualification (Derek 2007). Article 33 of Chinese Constitution stipulates that any person who has the nationality of the People's Republic of China is a citizen of the People's Republic of China, having the corresponding rights, requiring citizens to fulfill their constitutional obligations. The expression of the citizen reflects the changes in history and the fate of the country. After the reform and opening up of China, with the process of rule of law, everyone has become a citizen, enjoy the legal rights and obligations, which is the national identity of citizens.

Global citizens are a new understanding of the connotation and function of citizens in the process of facing the challenge of globalization. Global citizen first manifests itself as a citizen of the nation-state, and there is no global citizen out of the country. In the era of globalization, people around the world have an unprecedented contact and communication, environmental pollution beyond the limits of the nation-state, and the fight against terrorism requires the cooperation from the countries in the world. In such a new era, the citizens need not give up national identity, but beyond the country recognition, to integrate the global consciousness and human interests into the national identity and form a global identity. Therefore, the citizens are not only aware of their own national citizenship, but also the global citizen of the world. The citizens need to complete a dual task, which means they need to construct nation-state consciousness and to integrate themselves into a global society at the same time. As Danny Rodrigo says, global citizenship is often just a metaphor; there will never be a world government to manage the world's political community. National government still retains major roles in the era of globalization.

Hans Schattle hold the idea that global citizen could have compassion for others, understand the interconnection of the world and the impact of a local action on people and society in another area; could have the awareness of the responsibility to individuals outside the nation-state, and could change habits of individual (Schattle 2009). Andrew Linklater believes that the primary stage of global citizenship consists of three elements, which include the universality of individual rights in international metropolis, a series of global responsibilities, an emerging public sphere of global democracy, the global civil society (Linklater 2002). The Chinese scholar Jianjun Feng believes that the global citizen is the nation citizen who has global vision, human feelings, international awareness, world responsibility and obligation, and active participation in global governance (Feng 2014). It can be seen that global citizenship is a multi-dimensional concept, that is, a person has the cross-cultural

competence, global competence, social responsibility, and civic engagement in the era of globalization.

### ***19.2.3 Global Citizenship Education***

With the formation of multiple citizenship, the national civic education need to address the relationship between nation-state citizenship and the global citizenship in a proper way. In 2012, the UN Secretary-General Ban Ki-moon mentioned in the Global Education Initiative that global citizenship education will contribute to a sustainable future and a better world, will promote peace, mutual understanding and environmental protection. Global citizens stressed the cultivation of citizens, who will actively pay attention to the world, work together to address the global problems, and be active participants in a more inclusive and peaceful world. In 2015, Education 2030 mentions that countries need to pursue the global civic education and raise students' global citizenship awareness continuously. Global citizen education aims to shape citizens' values and patterns of behavior based on the impact of globalization. Cultivating global citizenship is also an important part in the process of internationalization of American higher education. The American International Education Association believes that the future of the USA depends on citizens with global capability, and the USA needs to develop more people to understand of others' thinking, culture and society. The Japan Interim Education Council points out that only through the excellent internationalization could they become remarkable Japanese in its recommendations on the internationalization of higher education. In order to survive in the international community, in addition to firmly grasp the Japanese culture, but also should be on the country's culture and tradition to be understood. In the recommendations of internationalization of higher education, the Japanese Temporary Education Council believes that the students act as good international person, then they could be a good Japanese. In order to survive in the international community, the students should firmly grasp other countries' culture and tradition in addition to master the Japanese culture and tradition.

## **19.3 International Practice of Global Citizenship Education**

### ***19.3.1 The Content of Global Citizenship Education***

Evans believes that global citizen education includes learning about global issues, outcomes and systems, world identities and qualifications, rights and responsibilities in the global wide, diverse beliefs and values, critical citizenship competence, management and understanding of conflicts, basic human rights, fair and social justice, and social action (Evans 2009). In 2015, the UNESCO's Global Citizen Education



Issues and Learning Objectives report in 2015 defines the content of global citizenship education from three dimension: cognition, social sentiment, behavior. In other words, students need to master the knowledge, ability and critical thinking of global, regional, national and local issues; to connect with different countries and people; to have the sense of belonging with a community of human destiny, the common value and responsibility, the sympathy and unity; to respect differences and diversity; to participate in national and global affairs actively and effectively; to commit to maintain world peace and sustainable development.

### ***19.3.2 Implementation Way of Global Citizenship Education***

At present, there are two kinds of the implementation ways of global citizenship education. One is to establish an independent global citizenship education program which is long term or short term school activity or overseas learning program to cultivate students to have global awareness. Another way is to include global citizen education as a part of general education curriculum.

First, the implementation of global citizen education program

In 2016, the University of London implemented the Active Citizenship Project for the first time for the sophomore and graduate students, which aims to provide graduates with global competencies and the ability to change the world. Duke University implemented the Globalization of Duke: improve the students' ability to become a citizen of the world. This program which includes winter forum, global overseas semester and global consulting program aims to respond to the global challenges and to improve students' world citizenship attitude and values.

Second, World Citizen: A New Orientation of the General Education in the twenty-first Century

The goal of general education is to improve the overall coordinated development of students' mind and body. The general education emphasizes the development of students' interest in knowledge learning, to broad the horizon of students, to develop students ability to apply knowledge to practice, to promote students' humanistic quality, to help students' have the ability to think prudently and possess sense of social responsibility.

As an important part of the internationalization of higher education, the general education curriculum needs to respond to the internationalization of personnel training. The value orientation embodies the concept goal of general education in different periods and has a great effect on the development of education and even human development. The Yale report 1828 argues that in a rapidly changing society, the student's profession is like an item in his head that is of little value in the long run. If students want to be successful in academic, commercial or medical fields, they have to develop and enrich their mind, and have the ability to deal with the complex problems. The twenty-first century general education must cultivate students with

a global awareness, so that they could analyze domestic and international changes from a global perspective and have the critical vision and problem-solving ability; to understand the interrelationships in the process of globalization from the country, regional society, industry, culture and life Changes; and thus become responsible citizens who can actively involved in local, national and international community.

Stanford University has always regarded general education as an important part of undergraduate education. In the general education program in 2013, Stanford University focus on cultivate the students' thinking ability, which not only reflects in the curriculum objectives, but also runs through the general education curriculum design and teaching process. The self-shaping courses in this program include the content of global citizenship education. Through effective thinking about some long-term, important issues from multiple perspectives, this course helps students develop the ability to find and express problems. American Association of Colleges and Universities initiates the Liberal Education and America's Promise program is the largest global citizenship education program in the US higher education system. This action believes that the graduates are facing global issues, such as the problems in environment and technology, health and disease, conflict and insecurity, poverty and development. Likewise, the goal of democracy, equality, justice, and peace on a global scale requires a deep understanding from multiple perspectives. Global interlinkages and interdependence have been reflected in the growing interdisciplinary research on campus. In order to develop students become responsible citizen both at home and abroad in the global economy, many universities have endeavoured to take reforms in general education.

## **19.4 Global Citizenship Education in Chinese Universities**

With the development of the internationalization of higher education in our country, the university further consummates the goal of personnel training and promotes the internationalization of the curriculum to cultivate students' corresponding values and behavioral habits to meet the challenge of global society. Harvard Liberal Education Red Book declared the purpose of education is to cultivate complete people and describes four abilities of college students that the general education need cultivate, and they are effective thinking ability, communication ability, the ability of appropriate judgments, and the ability to perceive the value. In China, even though we have no clear global citizenship concept in policy and practice, the education emphasizes to prepare student to have international understanding and intercultural competence. In the twenty-first century, Chinese general education has reformed from the aspects of training objectives, teaching contents and teaching methods, cultivated students'

international vision, paid attention to the local, national and global development issues, and actively assumed the responsibility of global society to create a sustainable world.

### ***19.4.1 Global Awareness***

In the course of the global history, we must cultivate a generation that can enter the world history and promote the development of world history in a cosmopolitan and century-old mind. Inclusively, open attitude is not only the basis of knowledge and ability, but also the key competence in the era of globalization students need to have. Chinese education cultivates the students to analyze problems from multiple perspectives so that students can seize the complex problems of our time and foster students to pursue cross-cultural learning and personal development, to understand differences, multiculturalism, social equity, and justice.

We learn the impact of globalization on international migration and population movements, such as the global movement of IT workers and women's labor, not only sees the advantages of going abroad, but also the globalization that creates new identities and status inequality. Understand the dual role of globalization. (A student said)

### ***19.4.2 Include the Content of the Global Issues in General Education***

The internationalization content is an important part of internationalization of curriculum. Especially, in the era of popularization of higher education, how to involve international factors into curriculum content to cultivate international talent is an important reform for college. In order to cultivate students' overall vision and international perspective, the teachers choose some international issues to redesign traditional general courses. Traditional general education is centered on knowledge and lecture method, which pays less attention on students' learning motivation and participation. Therefore, the traditional general education is difficult to penetrate into students' mind.

In our class, we will talk about globalization, such as the causes of globalization; modernization theory; the world economy inequality, Chinese study abroad, international tourism, the teachers give us chances to analyze these phenomena from international perspective. (A Student said)

### ***19.4.3 Participatory Teaching for the Critical Thinking Ability***

Traditional general education is centered on knowledge and lecture method, which pays less attention on students learning motivation and participation. Therefore, the traditional general education curriculum is difficult to penetrate into the students mind. As the content of the international curriculum the same as the internationalization, will inevitably bring cultural conflict, integration and transformation (Zhang 2007). The most sensible and effective way to deal with this contradiction is to use critical teaching method. And participatory teaching can stimulate students to learn initiatively. The general curriculum emphasizes students' participation awareness by the way of case study and the social problems survey to prepare them to participate in local, national, and global affairs, to maintain world peace and sustainable development and become an independent citizen.

In our general class, we talked about the migrant workers, left-behind children and their education, the ordinary people's life in the process of China's industry. we analyze the current social problems from the global perspective. We put the Chinese manufacturing industry to the global industrial chain, which means when we analyze the industrial workers who also need pay attention to the phenomenon of globalization, could see the interrelationship between Chinese industrial workers, farmers and the global market. (A Student said)

## **19.5 Conclusion and Discussion**

The globalization and the internationalization of education have had a profound impact on the curriculum of general education in Chinese university. Integrating globalization issues into general education courses, so that students could have international vision and understanding of different cultures. The teaching pays more attention to the critical ability by the way of participatory method.

With the rapid development of society and the update of knowledge, the form of curriculum and teaching methods in universities need to be improved in order to internalize valuable knowledge as part of the young people's mind. General education is of great significance in cultivating these competencies. In the process of internationalization of higher education, the research universities still need to pay more attention to the reform of general education. For college students, they need to have excellent knowledge and skills for the global competition. The high quality of general education is not only effective for cultivating the leaders, but also plays an important role in enhancing the country's core competitiveness. In the face of the new world culture based on global consensus, the Chinese universities need to rethink the value of citizen's education. Some research universities have made effort to respond to challenges of globalization. For example, the Tsinghua University has established Su Shi Ming Scholar program in 2013. This program aims to develop ability of global future leaders, so that they could solve problems in global society

and respect variety, have mutual understanding and cooperation among different cultures. In the process of internationalization of higher education, there will be more attention put on the general education reform.

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# Chapter 20

## The Mobility of Educational Ideas: Across the Cultural Borders



Zhongying Shi

**Abstract** In this era of globalization, the mobility of educational elements, including ideas, people, and technology, has become the norm and thus an important research subject. The mobility of ideas is different from that of people and technology; however, despite its association with or even reliance on the latter. As a product of humanity, ideas bear the imprint of culture, which is imbued with value and very different from Plato's abstract conception of ideas. From this perspective, the mobility of ideas will inevitably lead to cultural or value conflicts; therefore, when looking into the mobility of ideas against the background of globalization, educators should always show cultural sensitivity, consciousness of cultural criticism, and cultural confidence, rather than simply treating or understanding ideas as culturally independent abstractions.

**Keywords** Mobility of ideas · Educational globalization · Cultural sensitivity · Cultural analysis · Cultural confidence

### 20.1 Introduction

The conference theme “Education and Mobility” covers a wide range of topics. Three major elements are listed on the forum, namely ideas, technology, and people. In fact, in this age of accelerated globalization, there are far more educational elements that involve global mobility. Massive Open Online Courses (MOOCs) have been promoted during the past few years and have consequently been taken by undergraduates as their selective courses all around the world. This is a manifestation of the mobility of courses. Recently, it was reported that the British government has introduced mathematics textbooks published by the Shanghai Education Press and hired some Chinese teachers for a demonstration teaching model to improve the basic education of primary and middle school students, which is a reflection of the mobility of textbooks and teachers. In Beijing and Shanghai, as well as other cities in China, many high schools have established international divisions and introduced

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the international curriculum and original textbooks in order to satisfy some students' desire to study abroad. As a result, these high schools are providing curricula recognized by foreign universities and hiring a growing number of foreign teachers, an embodiment of the mobility of ideas, textbooks, and people. Thus, "education and mobility" have become an important education research field, calling for long-term study by researchers in different fields aimed at a comprehensive description and analysis of the phenomenon, motivation, approach, and mechanism. I have been devoted to the philosophy of education and to critical reflection on issues of ideology in educational practice. With regard to the theme of "education and mobility," I am thus more interested in the mobility of ideas than in that of people, information, or technology. Although inseparable from or even based on the latter, the mobility of ideas is different in nature, significance, motive, approach, and mechanism. Critical reflection on the mobility of ideas should be an important task for philosophical inquiry at the present.

## 20.2 The Conception of Idea: From Plato to Present

Before discussing the mobility and particularity of educational ideas, we must first consider the connotations and nature of an education idea and its relationship with educational practice. Only if these issues are addressed, we can further examine the significant problems concerning the mobility of ideas in education.

In the history of philosophy, there is an old question about what an idea is. As a lack of space forbids further review of the discussions of philosophers on ideas, a brief explanation is presented in this section. Generally, an idea refers to a thought, perception, or proposition about something, event, or activity. However, not all thoughts, perceptions, and propositions can be referred to as ideas. It is, in essence, the fundamental, substantial, or dominant part of a thought, perception, or proposition. This understanding comes from the ancient Greek philosopher Plato. As we all know, in *The Republic*, Plato defines the world as having two levels, namely the visible world and the intelligible world. According to this definition, the intelligible world is constant, objective, pure, and good, while the visible world is changing and illusory. Accordingly, Plato also divides the world of knowledge into two parts, namely the world of ideas and the world of opinion. The former is derived from an understanding of the intelligible world that is objective, universal, and in line with goodness, while the latter is derived from the visible world and is subjective, particular, and flawed. Thus, Plato argues that an idea is the result of objective, universal, and flawless knowledge, which is a priori and *gestalt* in nature. Essentially, empirical and concrete knowledge involves the imitation and sharing of ideas. In Plato's view, an idea is not only the result but also the cause of knowledge. "Then what gives the objects of knowledge their truth and the knower's mind the power of knowing is the idea (form) of the good. It is the cause of knowledge and truth, and you will be right to think of it as being itself known, and yet as being something other than, and even more splendid than, knowledge and truth, splendid as they are." (*The Republic*, Book

6, pp. 308–309). Besides, Plato believes that an idea has substance or even is itself substantial. In such a way, ideas are understood from the perspective of ontology, adding heavy colors of mysticism.

Few people now fully agree with Plato's views about ideas, especially those about transcendentalism, mysticism, and absolutism. However, his views are not completely rejected. In particular, it is commonly accepted that Plato has a universal, objective, and complete understanding of substance, and ideas play a positive role in the course of cognition and action. Traditional Chinese philosophy proposes some concepts similar to Plato's "ideas," which Confucius and Lao Zi refer to as "name," while Zhu Xi and Zhang Zai of the Song Dynasty call them "reason." Although named in different ways, these conceptions refer to the objective, constant, and universal knowledge and value principles that reflect global changes, social development, and human life. Although many people do not understand Confucius' and Lao Zi's "debate on name and reality" or the philosophers of the Song Dynasty's "debate on justice and desire," there is always a pursuit of consensus with certain ideas or reasons, which is to say a desire to live a life in line with such ideas or reasons.

On the basis of the above analysis, we may say that ideas are always understood as universal, general, fundamental, and prerequisite principles that act as a guide in our social life. As Hansen (2007) points out,

Ideas have consequences. This truism holds for educational ideas as much as for ideas about government, science, and health. The notion that children should learn to read, write, and numerate; the idea that places named schools should be organized for educating; the claim that men and women called teachers ought to play leading roles in the process—these ideas and countless others like them have had profound, enduring effects on educational policy and practice the world over. (*Ethical Visions of Education*, p. 1)

However, where does the idea of living daily life (including education) come from? As David Hansen states,

Ideas do not spring from a vacuum, and they are never inevitable. They are not like the wind, the tide, or the rising and setting of the sun. They do not derive from nature's inexorable course. Rather, ideas take form through the initiative of individual persons who seek to respond to particular concerns, problems, fears, and hopes. Ideas originate with human beings, not impersonal forces. The cliché that ideas have consequences harbors a truth that is all too easy to overlook as they go about their daily affairs: What individual persons think and do can make a genuine difference in the course of events. (*Ethical Visions of Education*, p. 1)

He is right. There is no idea in the sky. Each idea is an artifact created by a human individual in a specific social context on the basis of others' ideas, and the purpose of idea creation is to act more effectively or, in other words, to base individual or collective actions on common, reliable, and explicit knowledge.



### 20.3 Ideas of/About Education and Culture

Analytic philosophers of education distinguish the theory of education from theories about education. Similarly, we can also distinguish between the idea of education and ideas about education. The former directly expresses people's ideas and knowledge of education, such as the ideas of a university, learning, or the purpose of education, while the latter is based on an understanding and ideas about education, such as ideas about human beings, society, knowledge, and democracy. The proposal or defense of the idea of education relies on ideas about education. This is why education research always refers to a variety of concepts or theories from other disciplines. After all, there is an intrinsic consistency between them.

For example, Peters (1977) from University College London's Institute of Education proposed three criteria for an "educated man": first, an educated man is not only informed or knowledgeable but also, and more importantly, possesses in-depth knowledge and understanding; second, an educated man is not narrowly specialized but knowledgeable on a wide range of topics; and third, an educated man should not merely focus on the instrumental aspect of his engagement, but also possess knowledge of goodness. This not only involves certain cognitive conditions but also reflects a specific sense of worth. Solely from the perspective of cognition, we can never thoroughly understand Peters's idea of an "educated man"; furthermore, we need to dive into his more generic ideas about knowledge, learning, culture, the ideal way of life, and so on. In fact, Peters frequently talked about British culture (even as an argument) during his presentation, making his cultural preference self-evident.

The concept of ideas is frequently employed in educational cognition and practice. However, our understanding of this concept has been quite different from Plato's. In our view, ideas are not a priori but the result of experience; not mysterious, but artificial; not universal, but specific; not objective, but subjective; not value-neutral, but value-laden; not culture-free, but grown from the soil of culture, a response to the cultural dilemmas of the time. In other words, there are no universal or absolute ideas without any cultural mark. In this sense, to understand the idea of education, we should be rooted in the soil of culture and understand its consistency with cultural ideals, as well as the restrictive and productive role played by cultural ideals. Culture is always diverse, just like natural creatures. This is an indisputable fact. Diverse cultures developed in different natural and historical environments breed diverse ideas or ideals of education, which always contain their own historical rationality. These diverse ideas or ideals of education evolve constantly along with time in order to adapt better to the requirements of people and social development.

### 20.4 Mobility of Ideas and Cultural Sensitivity

Since human ideas (including those about education) are artificial products with cultural marks, the cross-cultural mobility of such ideas will inevitably encounter cultural resistance or even bring about cultural conflict. This issue should be properly

recognized during the input and output of ideas in the era of globalization. Cultural conflicts induced by the introduction of ideas may vary in scope and severity, including nationwide conflicts (e.g., the Sino-Western debate caused by the introduction of Western natural and social sciences into the late Qing Dynasty, which remains to this day) and local social maladjustment (e.g., the revolution of traditional classroom teaching modes caused by the idea of the “flipped classroom”). On the surface, the Sino-Western debate appears to concern reform of the education system of the late Qing Dynasty; however, it is in essence about culture, politics, China’s developmental direction and path, and management of the global trend for self-innovation. This debate involves contentions from a hundred schools of thought, including theories of wholesale Westernization, and Sino-Western reconciliation. In these propositions, there is uniformly a deliberation on how to understand the Western ideas of freedom, democracy, science, constitutionalism, and so on. Those in favor of Chinese culture in Western use or complete Westernization attempt to understand these ideas from the perspectives of particularism and instrumentalist theory or universalism and axiology, respectively, whereas the theory of Sino-Western reconciliation takes a middle course between them. Sun Yat-sen and Mao Zedong belong to the third school, advocating a combination of Western democracy, Marxism, and consideration of China’s actual situation in order to address domestic issues better and promote the progress of Chinese society. The theory of Sino-Western reconciliation open-mindedly advocates studying but not passively or mechanically accepting foreign ideas in order to avoid any universalism, absolutism, or dogmatism-based mistakes. The middle course attempts to combine foreign ideas and domestic practice in order to give foreign ideas new contents and forms.

Historically, it is not easy to promote Sino-Western reconciliation with respect to the mobility of ideas. There has been always a tendency toward either complete Westernization or cultural conservatism. From the perspective of epistemology, the artificiality, situatedness, and cultural nature of ideas should be recognized properly in order to prevent such extreme phenomena. On the basis of this understanding, “cultural sensitivity” to a certain idea can be generated, and people are less likely to treat ideas as facts, information, and technology or get swamped in a priori, absolutist, and universal Platonism when studying and drawing lessons from these ideas. With an adequate understanding of ideas and cultural sensitivity, a more in-depth cultural analysis will be possible for the purpose of learning from and understanding foreign ideas. In a nutshell, the so-called cultural analysis is aimed at analyzing the correlation of an idea with its cultural background and the cultural basis of the advocated and dominated education practice, then further considering what will happen when the idea is introduced into or spread to another cultural system, including the difficulties to be addressed. Methodologically, this approach is characterized by historicism and holism and focuses on a systematic analysis of the history of a particular idea, rather than a static understanding of isolation.

The Chinese have advocated learning since ancient times. *The Analects* opens with Confucius’ rhetorical question “Is it not a pleasure, having learned something, to try it out at due intervals?” (*The Analects*, p. 59). The work attaches great importance to the role of studying cultural inheritance in national governance and the perfection of

personality. Confucius himself is also a model of life-long learning. In recent history, China lagged behind and became a colony or semicolony against a background of Western industrialization and modernization. In order to erase their national humiliation and its predicaments, the modern Chinese have been constantly learning from Western countries and have introduced various social, political, economic, cultural, and educational ideas during the past 170 years or more. These Western theories have violently collided with traditional Chinese ideas and have helped to build a broader horizon, open minds, and refresh wisdom, bringing a new look to Chinese society. However, the ideas introduced, including Dewey's democratic philosophy of education (1920s) and the Soviet socialist ideas of education (1950s), have always been observed from a perspective of universalism and practiced dogmatically, due to an inadequate understanding of cultural background and a severe lack of cultural self-confidence, leading to serious historical and social consequences. The situation has improved significantly, but the issue has not been completely addressed. Some teachers and students in China are still lacking in cultural sensitivity and critical awareness of foreign ideas of education, leading to blind imitation or transplantation. Thus, an urgent solution to this issue is needed.

In addition, it is important to build cultural and educational confidence in order to truly and fundamentally address this situation, which means not cultural or educational superiority but a positive affirmation of cultural and educational diversity, characteristics, and rationality. This is of great significance against the background of educational globalization. The Program for International Student Assessment (PISA) and countless other international education assessment projects are springing up, and various forces from the political, professional, and even capital fields are engaged in an attempt at educational assessment on a global scale under standard frameworks. Although conducive to promoting mutual understanding and learning in the field of education, such international assessment projects pose a great risk to the cultural and educational diversity, uniqueness, and historicity of all countries. This is not a simple objection or rejection of such projects but an attempt to remind educators around the world to treat the projects and results carefully, using their own unique cultural and educational traditions, and to conduct cultural analysis on the basis of a profound understanding of those traditions' dominant ideas.

## **20.5 Conclusion**

All in all, in the era of globalization, the flow of ideas is inevitable, and the study of diversified ideas can help educators to reflect on and reconstruct their own ideas. However, the mobility of ideas is quite different from that of people, technology, and information. Ideas carry the imprint of culture, flow across cultural boundaries, and are exposed to cultural criticism. The mobility of ideas is aimed at enlightening, rather than imprisoning, human minds; at generating ideas that offer greater explanatory power and guidance at a higher level, rather than suppressing or rejecting the original

local ideas; and at laying a more solid foundation for understanding and values for future education, rather than blindly basing it on outdated traditional beliefs.

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# Chapter 21

## Education Ecosystem in the Information Era



Zongkai Yang

**Abstract** As human society enters the 21st century, education has been facing with unprecedented challenges. The traditional education ecosystem could not meet the needs of the information age, which is characterized with informatization, internationalization, and knowledge economy. This chapter describes the education ecosystem in the information era, aiming to promote the reform and development of education in the information age.

Information and communication technology has the most far-reaching impact on the economy and social industries, which not only drives industry transformation, but also triggers reform in the whole education sector.

Society has evolved from the agricultural age to the industrial age and then to the information age. Education ecosystem endured two significant conflicts in the process of social transformation.

The first conflict took place when the education ecosystem in the agricultural age could not meet the needs of industrial society. After a period of adjustment, the education ecology in the industrial era was formed. Modern education system was set up and modern schools prospered.

The second conflict exists between the educational supply and social demand in the information age. Information technology is widely used in the social sectors as social productivity develops and has a profound impact on education. The industrialization of education ecosystem cannot meet the needs of education in the information age, which calls for the readjustment of the education ecosystem. Education innovation powered by ICT should be encouraged to construct a new education ecosystem to nurture innovative talents in the information era.

Future education must infuse ICT in traditional education and reconstruct education ecosystem under the empowerment of the Internet, which calls for the innovation of teaching environment, teaching resources, teaching methods, teaching evaluation, teachers' capabilities and education governance.

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**Reconstruct teaching environment.** The future teaching environment must be Internet-based. The information technology equipments and facilities will no longer be special, but a natural part of school teaching environments. Class boundary will be gradually blurred. The physical learning space and cyber learning space will be seamlessly connected, and the integration of online and offline learning activities will support teaching process.

**Reorganize teaching resources.** Paper textbooks will no longer be the main teaching materials. The proportion of digital resources will increase, and the resources are intelligent, personalized and diversified. Online smart textbooks will gradually be popular. They are interdisciplinary and will create a strong connection to the readers. Richer, more targeted and better constructed teaching materials will be offered to improve educational services and better support teaching and learning.

**Redesign teaching methods.** Future schools will focus on reinventing teaching methods to make them more diversified. Lecture-based teaching methods will be used less often in the classrooms. Web-based inquiry learning, discussion-based learning, engaging learning, collaborative learning, hybrid teaching and immersive teaching will be widely implemented. Student-centered teaching methods will accommodate individual differences and foster personality growth.

**Reform teaching evaluation.** The aim of evaluation will be shifted from the selection of talents to the improvement of learning performance. The content of evaluation will be changed from the mastery of knowledge to the comprehensive evaluation of knowledge, ability and literacy. The evaluation methods will be diversified, intelligent, personalized and data-based, and the evaluation results will be more accurate, comprehensive and objective. Process-oriented evaluation is becoming increasingly important. The result-oriented evaluation will be replaced by the evaluation of both result and process in the future.

**Reshape teachers' roles.** Teachers will no longer be the absolute center of teaching, and teacher-centered teaching will be replaced by student-centered teaching. Students will have diverse ways to acquire knowledge, and the relationship between teachers and students will be reconstructed. Teachers will not only be the knowledge dispensers, but also directly participate in students' learning activities and act as guiders, organizers and collaborators.

**Optimize the educational management system and governance.** The management framework of future schools will not be the traditional hierarchical structure. The organizational structure and administrative processes will be reconstructed. New schools that nurture innovative talents in the information age will emerge. Polycentric and flat educational governance structure will be popular. Delicacy management and intelligent decision-making process supported by big data will be adopted. Non-traditional schools with different structures and classrooms will emerge. Schools' education quality and service will be substantially improved.

The innovation of educational system supported by information technology will reconstruct the education ecosystem. New education ecosystem in the information society will be gradually formed and improve the internal quality of education.



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