University of Reading

‘It’s like kindling a fire’:

Training student teachers about special educational needs and inclusive education at a university in China

PhD thesis

Institute of Education

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DECLARATION

I confirm that this is my own work and the use of all material from other sources has been properly and fully acknowledged.

Sufang Li Brassington

Table of Contents

Table of Tables

Table of Figures

Abbreviations

ADD	Attention Deficit Disorder
ADHD	Attention Deficit Hyperactivity Disorder
ASD	Autism Spectrum Disorder
BESD	Behavioural, emotional and social difficulties
CERNET	China Education and Research Network
CDPF	China Disabled Person's Federation
CHINADP	China Disabled Persons (the official magazine published by CDPF)
CPC	Communist Party of China
DfE	Department for Education in England
LRC	Learning in Regular Classrooms
MoE	Ministry of Education of China
NBS	National Bureau of Statistics of China
NCES	National Centre for Education Statistics of the United States of America
NPC	National People's Congress
NWCCW	National Working Committee on Children and Women under the State Council of China
OECD	Organisation for Economic Co-operation and Development
SEN	Special Educational Needs
SLCN	Speech, Language and Communication Needs
UK	United Kingdom of Great Britain and Northern Ireland
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNICEF	United Nations Children's Fund
USA	United States of America
WHO	World Health Organisation

Glossary of Chinese Terms

班主任	*ban-zhu-ren*	Form tutor
编制	*bian-zhi*	Manning quota (e.g. of a school or government body)
残废	*can-fei*	Disabled and useless
残疾	*can-ji*	Disabled with impairments
残障	*can-zhang*	Disabled with barriers
高考	*gao-kao*	National University Entrance Examination
户口	*hu-kou*	Household registration
教育实习	*jiao-yu- shi-xi*	School experience (or ‘teaching practice’ used in China)
全纳教育	*quan-na-jiao-yu*	Inclusive education
融合教育	*rong-he-jiao-yu*	Inclusive education
随班就读	*sui-ban-jiu-du*	‘Learning in Regular Classrooms’
素质教育	*su-zhi-Jiao-yu*	Quality education
因材施教	*yin-cai-shi-jiao*	Teach according to students’ individual abilities
有教无类	*you-jiao-wu-lei*	Teach without prejudice
指导教师	*zhi-dao-jiao-shi*	Supervisoring teacher

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Abstract

By law, all school-age children and adolescents in Mainland China are entitled to nine years' compulsory education, and for nearly 30 years a national policy that is called 'Learning in Regular Classrooms' (LRC) has been in existence to accommodate special educational needs (SEN) in mainstream schools. However, the policy and its relevant legislation is hardly known in China even among teacher educators at top universities, and the everyday practice of inclusion in China is less covered in the literature than from some other parts of the world. With its distinctly separated systems of 'special education' versus mainstream education, SEN training in China is, by default, not included in the mainstream teacher education programmes despite the legislation for LRC. There is a considerable amount of literature in Chinese; however, the majority is review literature. Empirical studies are scarce, and even scarcer are about teacher education for inclusive education. With regard to the preparation of teachers for mainstream education in China, very little is known in the empirical literature in terms of how SEN training impacts on student teachers' understanding of inclusive education and how it affects their practice.

The PhD study incorporated intervention training on inclusion and SEN, and provided the training as a blended-learning course to a group of 135 student teachers at a university in China. A mixed methods research design was adopted for the study: a repeated measures design survey before and after the intervention training, plus the participants' reflections of the training sessions throughout the intervention, and live-chat interviews with 20 volunteers after the participants finished their teaching practice. Results from the quantitative data are consistent with those from the qualitative data, which proved the validity and reliability of the study. The findings evidenced the literature and contributed empirically to the research of inclusive education in China.

Firstly, before the intervention training, the student teachers had very limited understanding of SEN and little awareness of inclusive education. Data from later stages of the study, and from their perspective, indicated that it was because SEN or inclusion was not included in their teacher education programme. Although a few of them took some courses on special needs, which were provided by the Department of Special Education in their university, the courses were on braille reading or sign language for special schools only. The participants also manifested little knowledge, or even an opposite understanding, of the legislation for inclusive education in China.

Secondly, before the intervention, the student teachers manifested positive attitudes towards equal rights for all children, including those with SEN; however, their attitudes were more for providing special education for children with SEN, rather than inclusion and quality education for the disadvantaged in the mainstream setting. A substantial number of participants regarded SEN irrelevant to them. The overwhelming majority of the student teachers disagreed with mainstreaming children with SEN, and a considerable number of the participants saw SEN training as irrelevant to them.

Thirdly, the findings demonstrated, during the process of and after the intervention training, a significant increase in the participants' understanding of inclusive education and a more inclusive attitude with an enhanced readiness to take action. Their increased understanding and raised awareness was reflected in the strong empathy they displayed with the children with SEN they saw in the video clips both during the intervention and in their school observations afterwards. It was also reflected in their perceived retrospective experience with disability and SEN, as well as their refreshed perception of the provision in local schools. The differences in the participants confirmed a transformative process before, during and after the intervention training.

Last but not the least, the qualitative results, which was the core data, proved the practicability of the approaches adopted in the study, including the blended-learning course as intervention, use of social media as easy and reliable platforms for training and data collection, critical reflection as a transformative process, and use of video clips as a form of virtue environment. In addition to the original contributions to knowledge, these characteristics are unique to the study, which also provide valuable recommendations for future work both in research about inclusive education, and in practice of teacher education as well. Limitations of the study were also discussed in the thesis.

Chapter 1 Introduction

This PhD thesis presents a mixed-methods case study to explore student teachers' journey of understanding of inclusive education in China, as well as the impact of the journey in terms of impacting established views and habitual practice. The concept of 'inclusive education' refers to the inclusion of children with disabilities or other special educational needs (SEN)[1] in mainstream settings in order to provide quality education for all, as advocated by the United Nations in the Salamanca Statement (United Nations Educational, Scientific and Cultural Organisation [UNESCO], 1994). In the global trend for inclusive education, the practice in China is less documented in research literature than in many other parts of the world. My previous study (originally conducted for my MA dissertation) found a lack of awareness and understanding of inclusive education in teacher educators in China (S. Li, 2013). The present study therefore sets out to provide a blended-learning training course about SEN and inclusive education to a group of student teachers in a university in China, and to look at their journey to increased understanding as well as the impact of the journey from their perspective.

This introductory chapter aims to give a brief account of the research context of the thesis, the background to the study, the objectives of the study, as well as an outline of all the chapters that make up the thesis.

1.1 Inclusive education and SEN

Doing research in inclusive education is challenging and sometimes a disputed calling. As 'a new modernity' (Armstrong, Armstrong, & Spandagou, 2011, p.29), inclusive education has provoked heated debate over its connotation and significant scrutiny over its implementation (e.g. Barton, 2005; Miles & Singal, 2010; Slee, 2011; Warnock, 2005). Nevertheless, the core of the concept, i.e. equal rights and opportunities for all children, is not in doubt, and the outcomes of inclusive practice are, not surprisingly, positive according to research literature (Choi, Meisenheimer, McCart, & Sailor, 2017; Cosier, Causton-Theoharis, & Theoharis,

[1] Although the acronym SEND is becoming frequently used for 'special educational needs and

2013; McLeskey, Waldron, & Redd, 2014; O'Rourke, 2015; Ruijs, Van der Veen, & Peetsma, 2010; Sermier Dessemontet & Bless, 2013).

Following increasing concerns about providing quality education for children with disabilities, the term "special educational needs" suggested by Warnock (1978) was brought to light to refer to this group of children. The notion of SEN became acknowledged as, instead of stressing the child's disability, the emphasis is placed on adapting the environment to meet the special needs the child has through education. In this process, the United Nations has played an important role in promoting the significance of catering for the SEN of children around the world, including China.

Although the practice of inclusive education was pioneered much earlier in some countries, in the broader context, the concept was internationally established by the United Nations in the late twentieth century (e.g. UNESCO, 1994; United Nations, 1989). The basic messages of the concept were conveyed in the United Nations initiatives such as:

> … regular schools with [an] inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all (UNESCO, 1994, p.ix)

Initially for children with disabilities, inclusive education was enshrined as a right in the Convention on the Rights of Persons with Disabilities (United Nations, 2006). Now the notion of the principle has extended to all children, with a specific emphasis on those who are subject to marginalization and exclusion:

> Inclusive education is a process that involves the transformation of schools and other centres of learning to cater for all children – including boys and girls, students from ethnic and linguistic minorities, rural populations, those affected by HIV and AIDS, and those with disabilities and difficulties in learning, and to provide learning opportunities for all youth and adults as well. Its aim is to eliminate exclusion that is a consequence of negative attitudes and a lack of response to diversity in race, economic status, social class, ethnicity, language, religion, gender, sexual orientation and ability. (UNESCO, 2009, p.4)

This thesis therefore focuses on the inclusion and equal rights of children with SEN in China, and more specifically, how we train teachers to achieve inclusive education with the focus on the education of student teachers.

1.2 Background to the study

What inspired me to carry out the PhD study in inclusive education in China was, to a great extent, what I learned when I was completing my MA dissertation, which encouraged me to carry on probing into the area of inclusive education. Behind that, there was also a personal

reason for me to delve into the topic in greater depth, one completely unknown to me at the time.[2]

1.2.1 The starting point: my MA study

In the first week of my MA study at the University of Reading, I came across a course called Learners with Special Educational Needs (led by Dr Cathy Tissot, who later became my supervisor). I thought it was something exclusively related to special education schools, and I considered it irrelevant to either my area of study or my day-to-day life. Purely out of curiosity, I attended the first session. However, that first session came as a shock to me. I had always been confident in my knowledge about education – I was trained for four years as a student teacher in a most influential Normal University[3] in China and I had worked for 14 years in the field of education. Apparently, however, my knowledge of SEN was limited.

My inadequate understanding at that time came from both my own educational experience and my years of work experience in China. Throughout my school years I had never seen any of my peers identified as having any SEN. Later when I was trained as a student teacher, there was nothing about inclusion or SEN in the curriculum. I was unaware of either the connotation or the implication of 'special educational needs', although I heard about the existence of such terms as 'special education' and 'special education schools'. However, in my experience, those terms were completely disassociated with mainstream education. Therefore, the related term 'special educational needs' (although unheard of) would naturally similarly imply, to me at the time, a close association with individuals who go to special education schools, rather than attending mainstream education.

My understanding of 'disability', at the time, was one that saw disability only as noticeable physical impairments or severe intellectual impairments. My reflection was that individuals with disabilities would either shy away or be excluded from mainstream life in China. They seemed to be invisible most of the time in the society - at least it seemed like this to the majority of people. My impression was that society did not seem to be supporting their needs, one exceptional occasion being during the Beijing Olympic and Paralympic Games in the

[2] In the following sections such as 1.2.1 and 1.3.3, I am giving information about my personal journey because it is important to explain how I came to the understanding and knowledge of the subject and because it would be interesting to parallel it with that of the participants in my study.

[3] The term 'Normal University' does not indicate that other universities are not normal; it is used in China to refer to a prestigious higher education institution that specialises in the education of student teachers.

year 2008. That single exception enabled wheelchair users to access public transport and toilet facilities in public premises, but only for the short period of time during the Games. Unaware of the needs of individuals with disabilities, I did not question it at the time, although I took notice of the contrast.

Moreover, I had never reflected on how individuals who probably had a SEN (in its broadest sense) were catered for in the mainstream education system in China. Another revelation came when I found that one of my fellow UK course-mates was dyslexic and always had a support worker who helped her with note-taking. I doubted this would take place in classrooms in China. I had never associated SEN (and therefore additional care and support) with the seemingly typical conditions in children, for instance, what some would consider minor physical disorders (e.g. albino or amblyopia), behavioural or social communication difficulties (e.g. attention deficit hyperactivity disorder [ADHD] or Asperger's syndrome), or learning difficulties (e.g. dyslexia or dyscalculia). I knew from my years of experience that such symptoms in children had always been simply judged as 'unlucky', 'naughty', 'geeky', 'lazy' or 'dull' not only by teachers but also parents in China.

As soon as I realised my ignorance about inclusive education and SEN, I checked with my friends and former colleagues in China for their views, as well as with academic visitors from China who were studying in the UK. Their understanding was no better than mine. Like myself, they marked SEN as applicable only for special education schools, had never heard about the concept of inclusive education, and were surprised at the concept (except one academic visitor whose daughter Momo[4] I will mention later in Section 1.3.3).

As my MA study went on, I became increasingly reflective, and I began to question: Was it just me and the ones that I approached that had such a limited understanding, or was it the case in the whole country of China? Was there any inclusive education in China at all (although my assumption was highly negative)? Bearing these questions in mind, I started to search for relevant literature.

1.2.2 Initial investigation

At the beginning, my initial investigation appeared to be quite consistent with my assumptions about inclusive education in China. There appeared to be a great number of young persons with SEN who were not diagnosed and thus not supported. For instance, the

[4] This is a pseudonym given by the researcher, in order to conceal the identifying details.

published statistics on the prevalence of childhood autism in China were strikingly low, with the median at 10 per 10,000 (as reviewed in Sun & Allison, 2010)[5], approximately 10 times lower than those in other parts of the world (e.g. in Baron-Cohen et al., 2009; Blumberg et al., 2013; Kim et al., 2011 to mention just a few). Table 1.1 below is a comparison of some of the more recent findings.

Table 1.1 Prevalence of childhood autism in different countries

Sample country	Sample size	Prevalence (per 10,000)	Source[6]
China	616,940	2	2006 China National Sample Survey on Disability (N. Li, Chen, Song, Du, & Zheng, 2011)
USA	78,037	110	2007 National Survey of Children's Health (Kogan et al., 2009)
UK	56,946	116	All children born between July 1, 1990, and Dec 31, 1991, in 12 districts in South Thames, UK (Baird et al., 2006)
UK	8,824	157	All schools within the county of Cambridgeshire, UK (Baron-Cohen et al., 2009)
Japan	12,589	181	All children born between Jan 1994 and Dec 1996 in Toyota, Japan (Kawamura, Takahashi, & Ishii, 2008)
USA	95,677	200	The 2011-2012 National Survey of Children's Health (Blumberg et al., 2013)
Korea	55,266	264	All children aged 7-12 in a South Korean community (Kim et al., 2011)

Taking into account the different diagnostic criteria as listed in Sun and Allison (2010), the disparity indicated that a substantial number of children in China with SEN might have not been recognised as such. Elsabbagh et al. (2012) noted in research literature that all cases of autism identified in China had intellectual disabilities, which, according to X. Zhang and Ji (2005), indicates that children with high functioning autism are neglected due to lack of awareness of autism in both the public and investigators in China.

[5] According to Sun and Allison (2010), the reported prevalence of childhood autism in China from 1987 to 2008 ranged from 0.3 per 10,000 (in Tao, 1987) to 17.9 per 10,000 (in W. Wang et al., 2002).

[6] The sources here, although in different years, are from the most recent studies of childhood autism prevalence in some of the East Asian countries such as China, Japan and Korea compared with those of the UK and the USA.

Furthermore, those recognised as having a disability were hardly receiving adequate support (Shang, Fisher, & Xie, 2011). Provision seemed to be far from adequate for those having a declared disability, not even on the level of basic needs for living conveniences such as public transport and public facilities (Zheng, 2008, 2013; P. Zhou, 2016). A striking number of school-age children with a diagnosis were not receiving any form of formal education in China (Yan Wang & Mu, 2014; Yin & Pang, 2010).

Meanwhile, a surprising finding to me was that China instigated the process of inclusive education in the 1980s (e.g. in State Council of China, 1989) and the term "随班就读" (*sui-ban-jiu-du*), meaning 'learning in regular classrooms' (LRC), was used for this purpose. Although the literature also showed that LRC practice appeared to be far from optimistic (e.g. in Deng & Poon-McBrayer, 2012; Q. Xiong & Wang, 2012), the fact that legislation for inclusive education did exist in China was therefore a revelation to me, as I had never known of its existence (for more than 25 years!).

1.2.3 Initial findings in my MA dissertation

I then decided to enquire into the problem and investigate teacher educators' understanding of inclusive education in China. My hypothesis was that if the literature was true about LRC practice, then how the teachers came to lack an understanding of inclusion might be related to how they were trained, and how they were trained might be decided by the views and attitudes of teacher educators.

The participants of my MA study were 776 teacher educators from six Normal Universities that are under the direct supervision of the Ministry of Education of China (MoE). This meant that the participants were from the most prestigious, most funded and most influential teacher education universities in the whole country. My data collection tool was an online survey with mostly five-point Likert-scale closed questions, with comment boxes for participants to elaborate on their choice of answers or to give feedback. Full ethical clearance was obtained from the University of Reading and all ethical procedures and guidelines were complied with. A total number of 235 responses were collected (response rate around 30 per cent).

The findings indicated that, on the whole, the teacher educators from the six most influential teacher education universities in China had very limited knowledge about the legislation on inclusive education, although it had been there for more than 25 years, nor were they training their student teachers about SEN. These were both in line with my own experience as a former educator and a trainee teacher. The results also showed that, like myself and the ones I had previously approached (see Section 1.2.1), the teacher educators investigated had no

personal experience with inclusion, limited resources or facilities available in their universities for students with disabilities, and they themselves had had little training about inclusive education.

I felt drawn to continue examining the problem and hence started the PhD study. The plan was to continue focusing on teacher education, reflecting what is indicated in Barber and Mourshed (2007) in their McKinsey Report, i.e. the quality of education is determined by the quality of the teachers. Teachers are the key factor in the implementation of educational reform and the development of a country, and this applies especially to the context of China, as education has been extremely highly valued by every member of society throughout most of Chinese history.

1.3 The Chinese culture

Chinese culture is strongly influenced by Confucianism, an 'ethical-moral system set up by Confucius (551-479 BC)' (Hyun, 2001, p.205). With Confucius being regarded as the most influential teacher in Chinese history, Confucianism highlights the role of education in society. Among its core values, 'respect for teaching and learning' and 'social harmony' are completely consistent with that of inclusive education. However, the application of Confucian values to the Chinese culture has been twofold: 1) Great priority is placed on intellectual pursuit, and teachers are highly revered; 2) The education system has become extremely exam-orientated, which in return moulded the way of teaching and learning.

1.3.1 Emphasis on teaching and learning

The love for learning and sharing knowledge, and the respect for teaching and learning, are characteristics of cultures under the influence of Confucianism, such as China, Japan, and Korea, where hard work in learning is highly valued, and teachers are revered. The Confucian value of respect for teaching and learning is reflected in Confucius' quotes about knowledge, such as the following:

> 'Never tire of studying, and teaching others.' (“学而不厌，诲人不倦”)

The reverence for teachers and scholars continued through the change of dynasties and was captured, for example, in a poem by a later Confucian scholar that soon became a household word over generations and dynasties and is still well-known today:

> ‘All pursuits are low; only the study of books is of high value.’ （“万般皆下品，唯有读书高”）[7]

Accordingly, Chinese students for thousands of years have been required to revere their teachers. The Chinese word for teacher educator is ‘teacher (师) + model (范)’, and the goal of teacher education is regarded as educating teachers to be the ‘paragon of virtue and learning’ (Z. Xu, 2006, p.67).

In Chinese culture, the teacher is regarded as a respectable father figure, as reflected in the Chinese saying “My teacher for a day is my father for a lifetime” (“一日为师，终身为父”). In such a culture that stresses filial piety, the role of teaching and teachers is held extremely high, as traditionally teachers in China were respected even more than parents and heaven and earth (“明师之恩，诚为过于天地，重于父母多矣”), and reverence for teachers was regarded as the key to learning (“师道既尊，学风自善”). In line with long-established culture, a recent study in China suggests that for students from working-class family backgrounds their teachers influence them more than anyone else when making decisions about their postgraduate education (D. Liu & Morgan, 2016). The significance of the role of teachers therefore has to be taken into account when looking at individual children with special educational needs and disabilities in China.

In this culture, even the emperors worked hard to inspire their people to devote themselves to learning, a good example being Emperor Zhenzong (968-1022) of the Song Dynasty who wrote a poem ‘Urge to Study’ (《劝学诗》). The following verses from this poem have been recited by generations of Chinese children as they start their education:

> ‘Through learning, you will have tons of food’（“书中自有千钟粟”）
>
> ‘Through learning, you will live in mansions of gold’（“书中自有黄金屋”）
>
> ‘Through learning, you will marry a fair lady, beautiful as jade’（“书中自有颜如玉”）

The influence of such popular maxims has been long lasting and is still evident in China today. Mainstream Chinese society has evolved into advocating the materialistic purpose of learning and overemphasising the importance of academic excellence.

[7] This is from the *Anthology of Child Prodigy* (《神童诗》), written by Wang Zhu between the 11th and 12th centuries in China.

1.3.2 Exam-orientated ideology

As Confucianism became the official ideology, emphasis on examinations also started when Emperor Wudi (140-87 BC) of the Han Dynasty began selecting officials with examinations on knowledge of the Confucian classics, their ability to write, etc. The Imperial Examinations (or *keju*, 科举) were later systemised in the Sui Dynasty in the 6th century as an imperial method for recruiting government officials, and remained an essential part of the Chinese government administration until it was abolished in 1905 as a result of the government's endeavours for modernisation. To a certain extent, the system ensured that the appointment of government officials was based on merit rather than heredity or favouritism. Theoretically, any male adult in China, regardless of his wealth or social status, could become a high-ranking government official by passing the Imperial Examinations, which were given at different stages and from local to provincial, and then to the national level[8]. The Imperial Examinations are viewed as having played a key role in maintaining the cultural unity throughout the change of dynasties in China and exerted a profound influence on the goals and values of the Chinese people (e.g. Haifeng Liu, 2000; Pepper, 2000).

The influence of the Imperial Examinations system is far-reaching not only in China, but also in the East Asian world (Haifeng Liu, 2000). Although abolished a century ago, its legacy still remains in the mind-set of the Chinese people, as well as in the current Chinese educational system. The National Higher Education Entrance Examination (or *gao-kao*, 高考) is a similar way of improving the socioeconomic status of individuals in China and their families. All students have to pass this nation-wide *gao-kao* in order to pursue their higher education at any university in China.

Another similarity between *gao-kao* and the Imperial Examinations is the fact that there are different thresholds set according to different provinces, even though it is a national examination. Students must take the examination in the province where their household (or *hu-kou*, 户口) is registered (as the Chinese government is still enforcing this policy) and candidates must be shortlisted first within their province before being selected by a national university. Once selected, the individuals then have the opportunity to move their *hu-kou* to the place where their university is situated, and then settle their *hu-kou* in a place where they secure a job after graduation. This is important for the Chinese individuals because *hu-kou* in

[8] This hierarchical structure of examinations evolved through the different dynasties in China and reached its final form during the Ming Dynasty (1368-1644). From then on until its abolition in 1905 it remained basically unchanged.

a big city means not only more job opportunities but also better education for their children (plus a bigger chance in *gao-kao*, if it is the capital city of either a province or the country).

Therefore, for many Chinese people, *gao-kao* is a life-changing opportunity, and thus great importance is attached to it, as well as immense pressure in schools (Davey, Chuan, & Higgins, 2007). The day-to-day teaching practice in the classrooms, especially in secondary schools, is orientated towards *gao-kao* (C. Zhang, 1995), and this exam-driven ideology in China has caused many unforeseen and serious problems (Lan Yu & Suen, 2005).

Held annually for students at the end of their last year of high school, *gao-kao* was created by the Communist government in 1952, removed for about two decades for political reasons, resumed in 1977, and now continues to this day. This restart in 1977 has indicated "a movement back to acceptance of Confucian values" (Ralston, Egri, Stewart, Terpstra, & Yu, 1999, p.417) in contemporary China.

Throughout history, teaching and learning has been highly valued in Chinese society, and teachers are still given the traditional high regard by that society. On the one hand, Confucius himself (and his disciples) considered it vitally important to create harmony, to respect diversity, to love without discrimination, and to teach without prejudice:

> 'The gentleman aims at harmony, and not at uniformity.' ("君子和而不同")
>
> 'Teach without prejudice.' ("有教无类")
>
> 'Teach according to students' individual abilities.' ("因材施教")

On the other hand, however, the highly exam-orientated education system has dominated mainstream society for centuries. The well-intentioned Confucian values about encouraging learning can in some situations even act in opposition to learning. When families and schools place excessive emphasis on academic excellence and competition for materialistic success and fortune, other aspects of education may be neglected (H. Li & Armstrong, 2009). When the education system is too exam-driven, children with special educational needs or disabilities and those from other disadvantaged family backgrounds may be left behind or even excluded.

1.3.3 My personal experience[9]

Apart from the academic experience and cultural factors stated above, there were also personal reasons for wanting to choose the area of inclusive education and to continue this course of direction, one of which was my role as a mother.

As a mother, I have always wished my son John to be a happy boy more than anything else, with a sunny personality and a good character. Ever since he was a toddler, I had been striving for his development in social communication and interaction, but to little avail. At the age of seven, John was already appearing to be 'rude' and 'naughty' especially on social occasions. His way of speaking, responding, or interacting with people, as well as his behaviour problems, all seemed to be exactly what I had always been trying hard to avoid in him. Later when I was in a lecture about Asperger's Syndrome, it suddenly dawned on me that John might have a disability. I found the source of my puzzlement and concern: John seemed to conform to almost every single item listed as typical symptoms of Asperger's. However, back in China, no one would picture him as having SEN; all his teachers seemed to be extremely happy about his attainment and equally tolerant of all his fidgeting, yawning, and inattentiveness in class. That society seemed to be tolerant as long as a child was doing well at school – conforming to the Confucian verse of 'To be a scholar is to be at the top of society'.

In that sense, John was lucky, but not many other children were. Take the son of one of my former colleagues as an example. That boy was as inattentive and fidgety as John, but his teachers did not tolerate his problem, because he was not doing well in his studies in his first years of primary education. He was regarded as a problem student, frequently punished by his teachers, and his parents were repeatedly given notices of warning from the school. The child

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[9] Apart from an account of how my MA study became the starting point of my PhD research (see Section 1.2.1), here I am giving further information about my personal journey as a mother of a child who is found to be on the autism spectrum.

I am doing this because this is exactly my journey to the understanding of inclusion and SEN – I came to that understanding because I moved to a different environment (i.e. to the UK), which has already made that change, so I had the experience (and knowledge and support) of changing personally because of the supportive environment.

Therefore, it is important and relevant to see how I may take that knowledge to support the others in China who are not in such an environment that is supporting that change, although the very recent government policy in 2017 means that they are starting to try to make changes.

What can be argued is that what I provided the participants with in the study through my training course (e.g. online and face-to-face communication) could also count as an environment that is supportive of the change (see Chapter 4 for detailed information).

(and also his parents) gradually became stigmatised, and school became an unpleasant place for him.

It seemed that in China, any child with Autism, ADHD or any other SEN condition that is not identified as a disability would not be handled with care, as someone who needs professional assessment or diagnosis. There appeared to be a lack of awareness of SEN in mainstream society. Such was my personal experience as well as that of all my contacts in and from China, except in one case: a six-year-old child named Momo, who was diagnosed in China as having Asperger's Syndrome. Seeking for a diagnosis is a pioneering act in China, which for the parents is a step towards solving the problem; however, Momo was refused entry to the local primary school precisely because of her diagnosis. Their answer was: Children with SEN should go to a special school. She was excluded instead of being accepted without discrimination.

From the perspective of a parent, there are also political factors that have an impact on this issue. The one-child policy (which was replaced with the two-child policy only in late 2015) is, in a sense, focusing parents' attention on their only child and amplifying their senses if they see the possibility of the child being ill-treated or excluded. Therefore, as a parent, the more I learned about SEN and good practices of inclusive education in different parts of the world, the more concerned I became about the difficulties my son and other children with SEN would have to face in China. This personal sense of responsibility for making a difference, together with the findings from my MA study, motivated me to continue my studies in this area.

In summary, in a society where the role of teachers has been held especially high and exam-orientated elitism has been prevalent, and where the legislation for inclusion does not seem to be known even by teacher educators, it is important to examine the education of student teachers about SEN and inclusive education.

1.4 Research aims and objectives

Newby (2010) listed three answers to the question of why we do educational research:

1. To explore issues
2. To shape policy
3. To improve practice

As mentioned earlier (see Section 1.2), my previous knowledge and experience appeared to be revealing a gap in the legislation and practice of inclusive education in China (also see

Section 3.2 for more details about relevant legislation). Despite the fact that inclusive education was legitimised nearly 30 years ago, academics that are providing teacher education in China have a very limited understanding of SEN, and they are not training student teachers about SEN in children. SEN in children are still invisible and unaddressed in schools, and children with a diagnosis are often excluded from mainstream education.

Meanwhile, my previous MA study had found a lack of original research, especially in the training of student teachers on inclusive education in China. Accordingly, the present study aimed to explore the question further, to collect data in order to find out how the policies had been or could be implemented regarding teacher education for mainstream schools in China.

1.4.1 Aims of the study

Specifically, the two aims of the present PhD study were to look into the student teachers' journey to increased understanding (after some intervention training on SEN and inclusion), and to see how this journey could have an impact in terms of changing their views that were shaped by long-established traditional culture in China. As a result, a 16-session blended-learning training course (see Appendices 1 and 2) was designed as the core component of the study, accompanied by a repeated-measures online survey (see Appendix 3) before and after the training course. The training was intended to generate in the student teachers, to some extent, an experience (via watching video clips) of inclusive education and an understanding of what the notion entailed. The majority of the data was collected online throughout the training, i.e. after each session of the training course, as well as six months later following the completion of the SEN training, immediately after they finished their school experience in local schools.

For the above aims, the first objective of the study was to discover how much difference would be made, after intervention, to the student teachers' awareness and understanding of inclusion and SEN. Secondly, the purpose was to find out the extent to which the training course (i.e. the knowledge and the experience generated by the training course) would contribute to the difference, explored from the perspective of the student teachers. Thirdly, it was to examine the impact that the increased understanding would have on the student teachers' teaching practice, which in the context of the study was on their school experience. This was also explored from the perspective of the student teachers. The fourth objective was to communicate to the readers the findings of the study, and to shed new light on education policy and the practice of inclusive education in China.

In a word, the purpose of the study is to explore and provide a practical example of training teachers in SEN as the first step towards improving inclusive practice in China. Details of the research questions, i.e. how I set out to explore the phenomenon, will be given in Chapter 4 of the thesis.

1.4.2 Potential significance of the study

First of all, the present study itself, i.e. what was carried out in the study, was not found in the literature. Therefore, it is hoped that the study contributes to the field of research with its originality.

Very few studies provide empirical evidence of the practice of inclusive education in Mainland China[10], although the legislation has been there in support of inclusion for nearly three decades (e.g. State Council of China, 1989, 1994). Empirical research into this issue from the perspective of teacher education has been even scarcer. Therefore, it is necessary to probe into the issue and provide empirical evidence to complement the abundance of research in other parts of the world. This study is important in this sense as well.

The study may also contribute to the practice of inclusive education, especially in cases where the promotion of inclusion is hindered by a shortage of human resources or geographical barriers. The blended-learning intervention training, as well as the means by which the sea of data was collected (i.e. via the Internet) in the study, may shed new light on traditional ways of SEN training and awareness raising.

In addition, the findings of the study may be beneficial to policy-makers. If the training course provided by the researcher proved to be effective in raising the awareness in student teachers in one university in China and having a positive impact on their practice of inclusive education, then it would definitely be of help for educators and policy-makers in this area. It should contribute to the exploration of more effective approaches to the implementation of legislation, which will exert a farther-reaching influence on education not just in China, but in other less developed parts of the world as well.

[10] Due to the political disputes over legitimacy and differences in their education systems, research about inclusive education in regions other than Mainland China is not included in the thesis (see Footnote 11 in Section 2.1 for more information). The notion of 'Mainland China' also generally excludes Hong Kong and Macau, although they became Special Administrative Regions of China in 1997 and 1999 respectively.

1.5 Outline of the thesis

The first part of the thesis (Chapters 1-4) includes this introduction, a context chapter, a literature review chapter and a methodology chapter.

Chapter 2 sets the scene for the study and focuses on a broader picture of education in China. It gives an overview of the education system, with a focus on China's compulsory education, covering both special education and mainstream education in China. The chapter continues with an introduction into the teacher education system, including the education of student teachers, the process of becoming a teacher, continuing professional development, and quality control in education.

Chapter 3 reviews existing literature relating to inclusive education in China. Disability in China – and hence the study both the traditional background and the current context – is presented, as well as legislation and national guidelines for inclusive education. The chapter then looks in further detail at the practice of LRC as the Chinese form of inclusive education, the provision, teachers' attitudes, and outcomes of LRC in research literature. Based on the set context, the practice of inclusive education in teacher education is reviewed in literature and the research questions are presented.

Chapter 4 justifies the methodological choice of research methods, including the paradigm rationale, research design, research process, case context, participants, data collection, and data analysis methods. Reliability and validity, and ethical issues are also covered in this chapter.

The second part of the thesis (Chapters 5-6) describes how each research method was actually carried out by following the research design. The two chapters also present the data from each method, i.e. questionnaire surveys, online focus groups, and interviews, in the form of threads and themes.

Chapter 5 presents findings from the quantitative data collected in the study, i.e. results from the repeated measures surveys before the participants started the intervention training and immediately after their completion of the training. Detailed reports include demographic distribution, factor analysis and canonical correlation analysis, as well as the statistical significance of the differences between the repeated measures survey results.

Chapter 6 presents findings from the qualitative data collected in the study, namely the online focus groups (i.e. participants' reflections on each session of the intervention training), as well as the interviews (i.e. live chats after the participants finished their school experience).

Themes emerged from the qualitative data were presented and analysed in this chapter, following the natural process of their journey of understanding of SEN and inclusion, and how their theoretical understanding was put into practice, all from the perspectives of the participants.

The third part of the thesis (Chapters 7 and 8) interprets and describes the significance of the findings in the light of what has already been presented in the literature regarding the research questions, and explains new understanding and insights after a careful examination of the key findings. The thesis then ends with conclusions from the previous chapters and a critique of the study, as well as implications and recommendations for future studies and the practice of inclusive education training in China.

Chapter 2 The Context: Compulsory Education in China

This chapter will set the stage and provide a broader picture of education in China. It starts with a description of the education system in China. As the focus of the study is located in China, the purpose of this overall picture is to help to understand the specific context of the study, therefore it is important to have a clear understanding of the Chinese education system. The chapter will give an introduction to its general structure, with an emphasis on the nine-year compulsory education and some of its main features. An introduction to the mainstream and special education systems, as well as the teacher education system for compulsory education in China, will also be presented here in this chapter for the same purpose. As the focus is on compulsory education in China, i.e. six years of primary education and three years of junior secondary education, the cases of early years education, senior secondary education, higher education, or private education, are not covered in the chapter.

The literature source utilised in this chapter includes academic journal articles, academic books, government databases and even reports from newspapers, namely a 'synthesis' of the literature on the topic as viewed by some researchers (e.g. Pan, 2009).

2.1 China's education system and compulsory education

Education in Mainland China is a nationally centralised system of public education under the administration of the MoE (Ministry of Education, formerly the State Education Commission between 1985 and 1998). Its educational policies have been changing frequently, especially during the second half of the 20th century due to political upheavals.

From the beginning of the People's Republic of China[11], the education system remained strongly supportive of students with academic and scientific aptitude, which seemed to be in a

[11] For thousands of years, China's political system was based on hereditary dynasties, until in 1912, the Republic of China (ROC) replaced the last dynasty and ruled the Chinese mainland until 1949. In 1949, the Communist Party won the civil war and established the People's Republic of China (PRC), whereas the ROC government retreated to Taiwan. Both the ROC and PRC continue to claim to be the legitimate government of all China, though the latter controls more territory, and in 1971 the PRC

sense an inheritance from the traditional emphasis on learning and scholarship (see Section 1.3.2). The education system was damaged during the Great Leap Forward[12] and dismantled during the Cultural Revolution[13] (Treiman, 2013), and was restored along with the changes in China's political environment after 1978 (Pepper, 2000). The legacy of the two decades' of disruption and destruction still remains in education, for example the "eagerness for quick success and immediate profits" (Gao, 2009, p.66) and the fierce competitiveness in the post-1978 educational system, even legitimising 'the values of student rivalry and personal advancement' (as in Hannum, 1999, p.202).

There have been tremendous developments and advancements especially during the past nearly 40 years; however, the discussion of education in China should take into account its long-established Confucian tradition as well as the dramatic political and societal changes in the last few decades. In other words, the competitive and meritocratic ideologies are still prevalent in the current education system.

Despite this highly selective and competitive nature, China's policy-makers have also been concerned about equality and educational access and provision, and have undergone major reforms. The Compulsory Education Law of the People's Republic of China (the Compulsory Education Law for short) was promulgated in 1986, revised in 2006 and amended in 2015, affirming the entitlement of 'all children who have reached the age of six' in China to nine years of school education (NPC, 1986, Article 5; 2006, Article 11; 2015, Article 11). In

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replaced the ROC as a permanent member of the United Nations Security Council and ever since has attracted more recognition in the world. Also see Footnote 10 in Section 1.4.2.

[12] The Great Leap Forward (大跃进) of China was an economic and social campaign from 1958 to 1962. The campaign was led by Mao, then Chairman of the Communist Party of China, and aimed to rapidly transform the country from a traditionally agricultural civilisation into a socialist society through rapid industrialisation and collectivisation. The campaign ended as a catastrophe and is widely considered to have caused the Great Chinese Famine. Slogans such as "Surpass the UK and catch up with the US (超英赶美)", "to build socialism faster, better and cheaper (多快好省地建设社会主义)", initiated by Mao, were typical of the campaign and its impact is still relevant to Chinese society (Gao, 2009).

[13] The Cultural Revolution (文革) was a socio-political movement that took place throughout China from 1966 to 1976. Set into motion by Mao, it swept the whole county by removing any remnants of capitalist and traditional elements from Chinese society, and establishing Mao as the supreme power in China. The Revolution marked the return of Mao Zedong to a position of power after the Great Leap Forward. The Cultural Revolution paralysed China politically, and negatively affected the country's economy and society to a significant degree. It brought China's education system to a virtual halt. Schools and universities were closed. The university entrance exams were cancelled. Intellectuals were sent to rural labour camps. Academics, scientists, and educators were persecuted and many died. Young people were made into Red Guards (红卫兵) and were encouraged or forced to take part in violent destruction nationwide.

2006, compulsory education was made free of all fees all over the country (NPC, 2006, Article 2). Table 2.1 below illustrates the educational system and compulsory education in China.

Table 2.1 Layers of the education system in China

Age	Formal education	Level	Compulsory or not
18+	Higher education	Doctor's: 3+ years Master's: 3 years Bachelor's: 4 years Diploma: 3 years	No
15-18	Senior middle school or Vocational school	Year 12 Year 11 Year 10	No
12-15	Junior middle school	Year 9 Year 8 Year 7	Yes
6-12	Primary school	Year 6 Year 5 Year 4 Year 3 Year 2 Year 1	Yes
3-6	Preschool	Senior Inter Junior	No

Regarding children with SEN, the Compulsory Education Law specified that the government should provide compulsory education to 'children and adolescents with visual, hearing and mental impairments' (NPC, 1986, Article 9; 2006, Article 19; 2015, Article 19).

After the Compulsory Education Law, legislative guidelines for inclusive education were also established in a series of laws (e.g. State Council of China, 1989, 1994, 2013), declaring that children with disabilities were entitled to equal rights in education as their peers, as part of the compulsory education initiative.

2.1.1 Compulsory education

After economic reforms and the opening-up policy[14], remarkable advances in education have taken place in China along with its economic growth (Pepper, 2000). Starting from December 1978, the reform and opening-up policy has resulted in immense changes in Chinese society in contrast to the aftermath of the 'Cultural Revolution'. As a result, there has been a long-term overall development in its compulsory education (see Tables 2.2 and 2.3 in this section for statistics published on the official websites of the central government departments in China). As stated by the MoE (2014), the enrolment rate of primary school students has remained at a high level (above 99 per cent) for more than 10 consecutive years, more students continue schooling after compulsory education, and more are receiving higher education than in the past. The World Bank (2014) also reported a 100 per cent youth literacy rate in China[15].

As illustrated in Table 2.2 on the following page, all these statistics seem to indicate that for the past thirty years, more (and almost all) children in China have received an education. A remarkably high proportion (more than 90 per cent in the last few years) of children are even able to move on to higher education (see Table 2.3 that follows). However, in terms of the quality of education, it seems to be problematic especially regarding differentiated teaching and meeting SEN in individuals, which is the focus of the following sections.

[14] The reform and opening-up policy refers to China's economic reform that was started in December 1978.

[15] The report also warns that 'data should be used cautiously' as 'definitions and methods of data collection differ across countries: 'Many countries estimate the number of literate people from self-reported data. Some use educational attainment data as a proxy but apply different lengths of school attendance or levels of completion' (World Bank, 2014, p. 36).

Table 2.2 Net enrolment rate of school-age children in primary schools

Year	Total number of school-age children (Unit: million)	Number of school-age children enrolled (Unit: million)	Net enrolment rate[16] (per cent)
2016	95.84	95.76	99.9
2015	93.68	93.57	99.9
2014	91.07	90.90	99.8
2013	89.62	89.36	99.7
2012	92.97	92.83	99.9
2011	95.22	95.03	99.8
2010	95.02	94.73	99.7
2009	96.07	95.49	99.4
2008	97.72	97.27	99.5
2007	99.48	98.97	99.5
2006	100.76	100.02	99.3
2005	102.07	101.20	99.2
2004	105.48	104.37	98.9
2003	109.08	107.62	98.7
2002	113.10	111.50	98.6
2001	117.66	115.61	99.1
2000	124.45	123.34	99.1
1999	129.91	128.73	99.1
1990	97.41	95.30	97.8
1985	103.62	99.43	95.9
1980	122.20	114.78	93.0

Source: http://www.stats.gov.cn/tjsj/ndsj/2016/indexch.htm;
http://www.moe.gov.cn/s78/A03/moe_560/jytjsj_2016/2016_qg/201708/t20170822_311607.html

http://www.moe.gov.cn/s78/A03/moe_560/jytjsj_2015/2015_qg/201610/t20161012_284487.html

[16] According to the MoE website (as indicated in Table 2.2), the enrolment ratio of school-age children before 1991 was calculated on the basis of primary school pupils aged 7-11 enrolled; from 1991 onward the calculation has taken account of the age of entry and the length of schooling prevailing.

Table 2.3 Promotion rate of primary and secondary school graduates

Year	Primary to secondary school	Junior middle to senior middle school	Secondary school to higher education[17]
2016	98.7	93.7	94.5
2015	98.2	94.1	92.5
2014	98.0	95.1	90.2
2013	98.3	91.2	87.6
2012	98.3	88.4	87.0
2011	98.3	88.9	86.5
2010	98.7	87.5	83.3
2009	99.1	85.6	77.6
2008	99.7	82.1	72.7
2007	99.9	80.5	70.3
2006	100.0	75.7	75.1
2005	98.4	69.7	76.3
2004	98.1	63.8	82.5
2003	97.9	59.6	83.4
2002	97.0	58.3	83.5
2001	95.5	52.9	78.8
2000	94.9	51.2	73.2
1999	94.4	50	63.8
1998	94.3	50.7	46.1
1997	93.7	51.5	48.6
1996	92.6	49.8	51.0
1995	90.8	50.3	49.9
1994	86.6	47.8	46.7

Source：

http://www.moe.gov.cn/s78/A03/moe_560/jytjsj_2016/2016_qg/201708/t20170822_311606.html;
http://www.moe.gov.cn/s78/A03/moe_560/jytjsj_2015/2015_qg/201610/t20161012_284485.html

[17] According to MoE (2017b), this is the proportion of the number of students enrolled in higher education against the number of graduates from senior secondary schools in China.

2.1.2 Class size and pupil-teacher ratio

If China has a population of more than 1.38 billion (NBS, 2017) and more than 99.9 per cent of school-aged children are in school (MoE, 2017a), how does the country accommodate all these individuals? Data from the MoE have indicated that, despite the fluctuation of the number of students enrolled, over the past 30 years in China the number of primary schools have dropped considerably and continuously (CERNET, 2016).

A prominent issue with China's education is therefore the prevalence of 'large classes' and 'super-large classes' (Y. Ma, 2009, p.45), in addition to the fact that there are no support staff in classrooms (Hua, 2012). Here in the Chinese context, the prevalent 'large' and 'super-large' classes refer to more than 50 students or even 100 students in one classroom (which is explained later in the section). The only adult in any classroom is the class teacher, normally with a different teacher teaching a different subject, although in some remote areas it might be a teacher teaching all subjects (or even all year groups in the same classroom).

This is an issue firstly because there is wide agreement (e.g. in Blatchford, Bassett, & Brown, 2011) on individualised learning in smaller classes of 15 students, and how lower-achieving students in particular can be affected in large classes of 30 students in one classroom. Generally speaking, smaller class sizes lead to higher-quality instruction and greater ease in engaging students in academic activities (Hattie, 2005). There are longitudinal studies about long-term effects of class size in primary school, confirming that smaller classes have positive effects even after the completion of education and in the individuals' economic status (e.g. Fredriksson, Öckert, & Oosterbeek, 2013; Konstantopoulos & Sun, 2014; Schanzenbach, 2014; Zyngier, 2014).

Regarding this issue, the MoE has stipulated that the maximum class size is 45 for primary schools and 50 for junior middle schools[18] (e.g. in MoE, 2002b). Theoretically, 45 students in any one grade level in a primary school will yield one class, while 46 students will yield two classes, and so on. In addition to the Maximum Class Size Rule, there is also stipulation about pupil-teacher ratio in schools, as shown in Table 2.4 (State Council of China, 2001).

[18] In some rural areas in China where the number of school-age children is not big enough, an external teaching site takes the place of a primary school, where the size of classes can be much smaller.

Table 2.4 National standard for pupil-teacher ratio[19]

Type and location of school		Standard ratio until 2014	Standard ratio after 2014
Primary school (Years 1-6)	City	19	19
	Town	21	
	Village	23	
Junior middle school (Years 7-9)	City	13.5	13.5
	Town	16	
	Village	18	

Source :

http://www.gov.cn/gongbao/content/2001/content_61159.htm;
http://old.moe.gov.cn/publicfiles/business/htmlfiles/moe/s7027/201412/181014.html

In theory, as shown in Table 2.4, the stipulated national standard class size does not appear to indicate a problem. However, regarding this stipulated number, the MoE has stated that all personnel working in the school are counted as 'teaching staff', which includes teachers, administrative personnel, supporting staff, workers, and even employees in school-run factories and farms (e.g. in MoE, 2016a, 2017a). The admitted inaccuracy (although consistent in all the statistics from the MoE over the years) might be because of the *bian-zhi* (编制, i.e. the staffing of a school and appropriation provided by the government according to the total number of staff). This appears to indicate a much higher pupil-teacher ratio and larger class sizes in the actual classroom settings in China.

In practice, the actual class sizes in schools are somewhat different. According to MoE statistics, 56 per cent of primary school classes in China's cities had more than 45 students (Malinen, Savolainen, & Xu, 2012). In research literature, although in Mainland China there is very limited coverage about the correlation between actual class size and attainment (G. Liang & Wu, 2006), large classes are a persisting concern for schools and parents, with even more than 100 students in one classroom in some places (Y. Ma, 2009). This is also

[19] The Standard was updated in 2014 by the Central Government, and therefore the old and new standards are both listed here in this table.

consistent with recent newspaper reports (e.g. F. Li, 2015a; Xinling Li, 2017)[20] about over-crowded classrooms with more than 100 students per classroom in urban schools in China. There are even cases of 160 students per regular classroom in a junior secondary school, and an average class size of 133 in a key primary school in the province of Henan (where some children are without any space even to sit during a typical school day)[21] (S. Chen, 2016). This phenomenon has been interpreted as the damaging result of the broadening urban-rural discrepancy in China (e.g. Yang, 2017), which will be covered in the following section.

Therefore in China, cases of 45 students in one classroom in primary schools (or of 50 students in one classroom in junior secondary schools) are classified as just the stipulated size, whereas overcrowded classrooms are prevalent in cities and towns all over the country. This fact has to be taken into consideration concerning inclusive education in China and the individual learning needs of the children in the classrooms. This then prompts the following question: With as many as 45 or 50 students and only one teacher (still not exceeding the maximum class size stipulated by MoE (2002b), how likely is it that each student receives individualised attention from the teacher?

2.1.3 Paradoxical urban-rural discrepancy

The contrast between the stipulated pupil-teacher ratio and the actual class size reported (e.g. Xinling Li, 2017) has been noted by F. Feng (2014, p.36) as 'an irrationally peculiar phenomenon'. Contradictory to the steady drop in pupil-teacher ratio, there has been a steady growth in the national average class size. The peculiar contrast between the seemingly favorable decline in pupil-teacher ratio and the alarmingly huge increase in class size is a result of the arithmetic mean of two extreme sets of statistics between the urban and rural areas in China (B. Xiong, 2016).

The polarised urban-rural gap is especially an issue considering the demographic distribution of China's population. First of all, the competitive model in education is increasingly and implicitly favouring urban areas, especially in the educational infrastructure and education programmes provided (Hannum, 1999). In addition, teachers from rural schools are drawn to towns and cities, which jeopardises the existing huge discrepancy, forcing some parents to

[20] Source: http://news.iqilu.com/shandong/yaowen/2015/0921/2553161.shtml (Official news website of Shandong Provincial Government in China), and http://news.xinhuanet.com/politics/2017-04/19/c_129550716.htm (Official news website of the Central Government of China).

[21] Source: http://www.jyb.cn/basc/sd/201604/t20160413_657168.html (Official website of the official newspaper of the MoE)

'migrate' with their child from their village to near a town school and to squeeze in with the hope of a comparatively better educational opportunity for their child (S. Chen, 2016). Consequently and as a result of the deliberate policy of urbanisation (H. Liang & Qi, 2014), the situation is deteriorating: Village schools are vanishing and educational opportunities are becoming even scarcer for children in rural areas in China; urban schools are faced with far more students than they can cope with (Yang, 2017).

Therefore the situation is that, in cities and towns in China, especially in schools with better facilities and a better reputation, the class size far exceeds the Maximum Class Size Rule, with for example cases (mentioned in Section 2.1.2) of more than 100 children in one classroom (also see Han & Wang, 2007). However, in contrast, rural primary schools have been faced with a continual sharp decrease in the number of students (Weili Fu & Zhang, 2014).

This contrast between the drop in the number of rural schools and the class sizes of urban schools, according to researchers, is a result of China's one-child policy, socioeconomic development, and its fast pace of urbanisation (e.g. Cai & Kong, 2014; Weili Fu & Zhang, 2014). In China's centrally controlled education system, the number of staff in any school is decided by the government and according to the stipulated pupil-teacher ratio (see Table 2.4 in Section 2.1.2). As a result, in rural areas, there is actually a severe shortage of teachers, as is the case in Chongqing[22], where approximately 27 per cent of the village schools in the local authority have one teacher per school only (Mei, 2007). This (i.e. one teacher per school) might be even more difficult than the cases of super-large classes in cities, especially when it comes to inclusive education, where children with SEN are in need of additional support from the teacher and from additional adults in the educational settings, as for example evidenced in Alborz, Pearson, Farrell, and Howes (2009). This urban-rural discrepancy in China is distinct from many OECD countries such as the USA and the UK (F. Feng, 2014; G. Liang & Wu, 2006). This leads to the following question: To what extent are the needs of children with SEN in China's schools catered for?

With extra-large class sizes prevailing (especially in key 'good' schools) and external support and resources being scarce, how will the individual teachers (as the only adults in the classroom) manage to cater for the educational needs of so many students at the same time?

[22] Chongqing, a city in Southwest China, is one of China's four direct-controlled municipalities (the other three are Beijing, Shanghai and Tianjin) and is the only such municipality in inland China.

Will the students all automatically behave? How will the individual children cope in an over-crowded classroom? How will they manage to learn if they do not even have anywhere to sit down in the classroom, day after day? What if, in a primary school where the average class size is 133 children (as in S. Chen, 2016), one child is on the autism spectrum and simply cannot cope with being jammed in a small space with 132 other children? What are the everyday experiences that children with SEN have in such a mainstream classroom?

There are so many questions regarding the quality of education a child will receive in the situation described above. It is therefore necessary to take a look at the collective aspirations in education, to see where the limited teaching resources might most probably be directed to in the classrooms in China.

2.1.4 Collective aspirations for education

As was mentioned earlier (see section 1.3.2), education in China has been deeply rooted in competitiveness and elitism, not only in its education system but also in the Chinese culture and in the values held by society.

Admittedly, recent educational reforms in China have been moving towards 'quality education' in compulsory education (State Council of China, 1999), 'liberal education' and 'mass education' in higher education (Xinhua News, 2009), with 92.5 per cent[23] of secondary school graduates entering higher education (MoE, 2016a, 2017b). Despite such reforms, however, the majority of people are still more inclined to the traditional meritocratic ideology. The rapid growth in China's social and economic development has caused parents to be competitive, wanting to 'secure a winning position from the start' for their child, thus making primary education (and even preschool years in many cases) highly pressurised and immensely exam-orientated (J. Chen, 2013, p.113).

This mentality has led to another hotly debated phenomenon in China: sky-rocketing prices parents are willing to pay for a home in the catchment area of a good school for their child (CERNET, 2016). Otherwise parents have to pay a significant amount in 'sponsorship fees', which have become a source of income that schools cannot resist (Xiangping Li, 2008; X. Li, 2011). For example, the city of Beijing still runs a highly selective education system starting from primary school or even from early years, where education is supposed to be the fairest in China (Yuexin Zhang, 2016). Similarly, in rural areas parents from villages pay high prices

[23] See Footnote 17 and Table 2.3.

to move their children to urban schools for better education, which also contributes to the large class sizes (S. Chen, 2016).

Researchers have noted that, on the one hand, children in overcrowded classrooms in China are forced to work harder outside of school (J. Hu, 2012), while on the other hand, the teacher is expected to ensure overall attainment no matter how many students there are in class (G. Liang & Wu, 2006; Yuexin Zhang, 2016). The Chinese parents' pursuit for competitive advantage is also evidenced by the exponential growth in annual revenue in major extracurricular academic training providers in China (Yang, 2017). W. Zhang (2014) reported a high percentage of junior secondary school students receiving private tutoring, mainly provided by mainstream school teachers, which has been referred to as a form of corruption and a demonstration of the power of teachers. This highly challenging situation is squeezing the fun out of learning and is making school an increasingly difficult experience. At the same time, the collective aspiration for better exam results is highly likely to direct the teachers' attention towards exam-orientated practice (Qu, 2014; Q. Tan, 2014).

Therefore, how the teacher is capable of meeting the individual educational needs of children, especially children with SEN, in the exam-orientated large classes has become an issue for further consideration. One important aspect is how teachers are selected and trained, which is explored in the next section.

2.2 Teacher education in China

As opposed to many parts of the world, teacher education in China is carried out in separated institutions from in-service training: The former is carried out in Normal Universities and the latter in teacher training branches of local authorities, which are not higher education institutions (X. Zhu, 2009). Both these areas will be covered in this section; however, as the subject matter of the study is inclusive education, the introduction of teacher education in China is given with a focus on SEN.

Although both the terms of 'teacher education' and 'teacher training' are commonly used internationally to refer to the procedures and provision of preparing teachers for what is required for the role of teaching, the term 'teacher education' has been deliberately chosen for the purpose of consistency in the thesis, regarding the education of student teachers in China. The deliberation is because of the difference in the connotation of the two words: Training tends to refer to a particular skill or type of behaviour, i.e. more to do with the mind, whereas education implies an outcome not only in the mind, but also in the heart of those involved.

2.2.1 Teacher education system

Teacher education in China is a dualistic system, i.e., teachers for special education schools are trained in special education teacher colleges[24], while teachers for mainstream schools are trained in mainstream Normal Universities or mainstream teacher colleges. Although LRC students (i.e. students with disabilities who are educated in mainstream schools) are counted in the 'special education' statistics in government surveys, the two are quite distinct from each other.

With 'special schools representing the most typical segregated special education services and LRC being widely acknowledged as the Chinese model of inclusive education' (Deng & Zhu, 2016, p.995), teacher education systems for the two sets of schools are also parallel. Some researchers suggest that this type of training yields specialist teachers that are incapable of teaching in mainstream schools, because teacher education for special education takes no account of what is needed for inclusive mainstream education, which, according to (L. Li, 2011, p.24), is 'segregation in itself' (also see Deng, 2009; Jian Wang & Quan, 2016).

2.2.2 Teacher education for special education schools

Teachers for special schools in China are mainly trained in special education departments or institutes in some of the Normal Universities as well as secondary special education teacher colleges (Yin & Pang, 2010). The latter train their students on more practical skills according to 'the three categories' of disability[25], although there are no such divisions in special education departments or institutes in Normal Universities (Y. Liu & Xiao, 2005; Juan Wang & Wang, 2009).

In practice, however, the qualification of teachers in special schools is not specialised. Statistics reveal that three per cent of teachers in Beijing special schools have systematic training about SEN (Hui Wang & Gu, 2006; Yin & Pang, 2010), and 39 per cent had no knowledge of SEN (L. Zhu & Sun, 2011). Some researchers suggest that this is the result of a lack of educational resources in the special education sector (Xiao, 2007).

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[24] There are a few Special Education Departments in Normal Universities in China, but they are not involved in teacher education for mainstream schools.

[25] 'The three categories' are (1) visual impairments, (2) hearing and speech impairments, (3) intellectual impairments. For more information about SEN in China, see Section 3.2 in Chapter 3 of the thesis.

2.2.3 Teacher education for mainstream schools

Since the late 1980s in China, teacher education has been unprecedentedly emphasised by the government (B. Wang, 1997), and has been mainly via higher education teacher education institutions, although historically there were a greater number of tertiary level teacher education institutions all over the country. In 1949 the total numbers were 12 at the higher education level and 610 at the tertiary level. In 1997 the numbers increased to 260 and 1,050 respectively. China's emphasis on teacher education is, to some extent, reflected in the number of student teachers in higher education, which accounted for a quarter of the entire number of students in higher education in China (B. Wang, 1997). It is also self-evident in the welcoming policies towards student teachers in the six top Normal Universities, namely full scholarship covering the four years of undergraduate study for every single student teacher (e.g. MoE, 2016b).

Some of the characteristics are worth noting regarding initial teacher education for mainstream schools in China.

The first is a notable hierarchy in the teacher education institutions, both historically and at present. Historically there was a three-tier differentiation in these institutions, namely 1) tertiary teacher training schools (for early years teacher preparation), 2) local teachers' colleges (for primary teacher preparation), and 3) Normal Universities (for secondary teacher preparation) (X. Zhu, 2009). Such differentiation has long been obsolete, as tertiary teacher training schools no longer exist, and more and more graduates from Normal Universities go to teach in nursery schools (e.g. in Kan, 2017). However, similarly, the current teacher preparation institutions are classified into four different tiers, i.e. 1) the top six Normal Universities (directly funded by the MoE), 2) provincial Normal Universities (funded by local provincial government), 3) provincial teachers' colleges (funded by local provincial government), and 4) other teachers' colleges (funded by lower-level local authorities). These education teacher preparation institutions vary a lot according to the different tiers they fall into (Ding & Li, 2014).

The second characteristic is a lack of attention to teacher preparation (teaching pedagogy) in the curricula. In tune with the traditional emphasis placed on academic achievement, there is in the teacher education system in China a great emphasis on subject speciality, rather than learning theory and pedagogy for the year/grade (Dai, 2011). For example, Year-1 primary school students in China normally have different teachers for each different subject instead of one teacher teaching all the subjects (which is common in the UK and US). In China, there is a compulsory teacher-education component centring on three areas: Theory of Education,

Theory of Psychology, and Pedagogy (of the subject they are going to teach); however, priority is regardlessly given to subject speciality (Ding & Li, 2014; Hongyu Ma, Tang, & Zheng, 2013). Subsequently, student teachers are trained heavily in the subject they have chosen and are going to teach[26].

The third characteristic is the lack of emphasis on school experience or teaching practice (Hongyu Ma et al., 2013). In their entire period of four years' undergraduate study, student teachers have a maximum of about 10 weeks' school experience, which is called 'teaching practice' (e.g. Beijing Normal University, 2013, 2017; East China Normal University, 2013; Northeast Normal University, 2014). According to Ding and Li (2014), the length of school experience for student teachers is significantly related to the tiers of the universities, where a maximum of 10 weeks are arranged in the top six, eight weeks in provincial Normal Universities, and less than six weeks in teacher colleges. Student teachers in Shanghai Normal University are found to have just four weeks in the four years of undergraduate study (Jiao, 2016). This does not seem to be adequate in comparison to the amount of time student teachers in the UK or USA spend in schools, especially in the light of Mutton and Butcher (2008) about clear perceived advantages of school experience in the education of student teachers.

Another distinct characteristic is a gender imbalance in student teachers. Researchers suggested a 35:65 male-female gender ratio, indicating a lack of male student teachers in China (Ding & Li, 2014). The biggest gender disproportion is found in English-majoring student teachers (R. Xu, 2014). Newspaper reports are even more striking regarding the female dominance, for example with a male-female ratio of 1:13 in Chinese majors or even 1:17 in English majors in Shandong Normal University (F. Li, 2015b).

Regarding SEN, mainstream teacher education programmes are far from optimal for training future teachers about inclusive education (Zuo & Wang, 2008). Neither the concept of inclusive education nor the connotation of SEN is given much attention in the mainstream teacher education system (Xiu Li, 2016). Researchers attribute the issue to the disconnect with SEN in the mainstream teacher education system (L. Li, 2011; X. Peng, 2012; Juan Wang & Wang, 2009). Even in the compulsory teacher-education component, there is

[26] Their subject, often called their 'major of study', is normally either Chinese, Mathematics, English, or any other subject stipulated in the national curriculum. The participants of the study, for example, are English majors in a Normal University in China, i.e. they chose to study English as their major for the four undergraduate years, and would teach English in primary or secondary schools (see Section 4.5).

nothing specific about SEN or inclusion except for very occasional discussions relating to educational equality (Juan Wang & Wang, 2009). Even in a rare case of SEN training for mainstream student teachers, results indicate no significance of the effect of training (Xiu Li, 2012).

Findings in S. Li (2013) reveal that teacher educators who facilitate mainstream teacher education in China have very little understanding of inclusive education or SEN. This might possibly explain why SEN content and inclusion is missing in China's teacher education system for mainstream schools.

To sum up, there are two separate systems for training teachers. Those who decide to focus on special needs have a curriculum which is remarkably different from those who choose mainstream teaching, and are trained for special schools rather than mainstream education. The latter focus on the knowledge of the student teachers' chosen subject only, and spend very little time on issues related to meeting the needs of all learners.

2.2.4 The process of becoming a teacher

Becoming a teacher in China is, in a sense, a highly selective process. The first step is to get enrolled in higher education, as most schools (except village ones, which are called 'teaching points' rather than schools) in China require a Bachelor's degree (or higher) from the applicants (Mei, 2007).

Normal Universities and teachers' colleges have been the dominant source of teachers ever since the 1950s (Beijing Normal University, 1994), although recently a small number of graduates from other universities have also been allowed to become teachers if they have been able to acquire a Certificate for Teaching, which is mandated for a teaching position (Liao, 2009). In general, in the last year of their undergraduate study, qualified student teachers will be issued a Certificate for Teaching, and they may begin applying for a job in a school. After a successful trilateral agreement (between the student, the university/college, and the school), graduates become teachers.[27]

However, there are unusually strict requirements for enrolment at university in teacher education programmes. In addition to academic excellence, applicants must reach specific

[27] In some cases, graduates from other higher education institutions may also be recruited by some private (or independent) schools if they acquire a Certificate for Teaching. However, in most cases teachers in China are prepared via teacher education institutions, namely Normal Universities and teachers' colleges.

physical standards. For example, the MoE in 1984 specified the rejection of applicants with such features as having limited hearing or having facial scars or moles, not to mention visible physical disabilities (in Y. Hu, 2007; MoE, 2002a; see also Pan, 2009)[28]. Its replacement in 2003 is much softer and stresses certain physical features as 'not suitable' (rather than 'not applicable' in the 1984 guidelines) for students to be trainee teacher candidates (MoE, 2003). However, this is still discrimination, and the influence of the 1984 guidelines still persists. Such discrimination is also found in the literature, where some authors think it is 'disastrous' to admit applicants 'with inappropriate physical appearance like ugly face or unpleasant voice' (Y. Hu, 2007, p.33). Some Chinese authors claim that teachers must be perfect without any physical or psychological defects and without 'having abnormal looks', as otherwise it 'may cause harm in children's sensitive hearts' (Pan, 2009, p.61).

What is more challenging for applicants is the physical requirements from the workplace. Regulations from local authorities are generally much more stringent than for university enrolment with regard to physical examination standards (Fang & Qi, 2011). Graduates from Normal Universities or teachers' colleges may still be rejected for their physical features (Q. Tan, 2014). Once recruited, however, the graduate automatically acquires security of tenure (except for teaching in private schools), which, according to Pan (2009), might lead to poor performance in some teachers.

Recruitment into the teaching profession in China does not appear to be inclusive, and therefore, recruitment to teacher education programmes reflects the selective nature of the occupation. If job and financial security are based on getting a good education from a university and then finding a suitable school to be employed in, the system is selective already. Students at normal universities are already similar in ability and physical attributes, and therefore it is difficult for them to grow up with the experience of being educated with people who are different, or have a difficulty or disability. In short, this system produces teachers who have very little understanding of people who are different from themselves. How, then, can they educate children with SEN?

2.2.5 On-going training for teachers

If the education of student teachers does not cover inclusive education and meeting SENs in the children, and if the student teachers grow up with no experience of inclusion, the question

[28] That MoE rule was contradictory to the United Nations charter on equal opportunities. It was in effect in China until 2003 and the discrimination has become rooted in people's minds.

is then whether they can get any training on this topic once they move into schools. However, the answer is not optimistic vis-à-vis either special education schools or the mainstream setting in China.

In special education schools, opportunities for in-service training are very limited for most teachers, and 39 per cent of teachers in special education schools have never received any SEN training throughout their teaching career (as reviewed in Yin & Pang, 2010). Yan Wang and Mu (2014) surveyed special education schools in Yunnan province and indicated similar findings.

In mainstream schools with LRC students in the classroom, training about SEN should, in theory, be provided for the LRC teachers. This is usually a short-term 10-day programme after they become LRC teachers (Z. Li, 2010) .

In practice, however, such training is regarded as a compensatory makeshift approach and LRC teachers get very little in-service training on SEN (Xiu Li, 2016; Q. Tan, 2014). Take the city of Shanghai, for example, which has been pioneering training for mainstream preschool, primary and secondary school teachers to promote inclusion (C. Liu, Du, & Yao, 2000). However, studies suggest that training opportunities for LRC teachers in Shanghai are still far from adequate, with more than 2/3 of the LRC teachers untrained about SEN (Hongying Ma & Tan, 2010; H. Tan & Ma, 2012). In the coastal province of Zhejiang, very few LRC teachers get in-service training regardless of the SEN in their LRC students (Z. Zhu, Zhang, Chai, & Xu, 2015). Related empirical studies in west China reveal even less training for LRC teachers (e.g. Hua, 2003), and in some of the provinces, for example in the Xinjiang Uyghur Autonomous Region (Jian, 2009) and the province of Gansu (G. Wang & Huang, 2017), no training is given about SEN at all.

Although a thorough exploration of the whole of China was not done, a general snapshot shows that teachers in mainstream schools have no pre-service training about inclusion and SEN, nor do they experience such in-service training (X. Peng, 2012). According to G. Wang and Huang (2017), the limited exposure of children with disabilities in their own school is their sole source of awareness or understanding. This again contradicts the legislation for inclusive education, which has been in existence for nearly 30 years in China. Some researchers attribute the problem to insufficient funding from county-level local authorities, as well as limited resources for continuing professional training (F. Wang, 2008).

If there is no adequate on-going in-service training for teachers, then the provision for student teachers in their teacher education programme is essential in implementing the existing legislation regarding meeting the diverse needs in children. When preparation for SEN is

lacking in both initial and on-going teacher training, it raises questions about the enforcement of legal regulations, as well as the practice of inclusive education in China's education system.

A detailed review of the literature about the practice of inclusive education in China will be provided in Chapter 3.

2.3 Summary of the context of the study

This chapter has set the scene for the thesis of the study, i.e. the broader picture of inclusive education in China.

It started from an overview of the education system and the existing compulsory education system, including paradoxes in the education development that might affect the quality of education. It examined the paradoxical urban-rural discrepancy in education: fewer and fewer schools for children in the vast areas of rural China, and more and more oversized schools and overcrowded classrooms in China's cities and towns. This is also evidenced by reports from some major government newspapers in China about the prevailing super-large classes of more than 100 children in one classroom.

The collective aspirations for education in China have also been mentioned in this chapter. High expectations from the whole society for academic performance, and the competitive mentality regarding exam results, have added to the problems of overcrowded classrooms in 'good' schools. It has inevitably led to the question of how teachers in China can cope with such problems, i.e. how teachers are selected and trained.

The second part of the chapter was then about the teacher education system in China regarding SEN and disability, which consists of two systems completely separate from each other: special education teacher education for special education schools, and mainstream teacher education for mainstream schools. Teachers trained for special education are not supposed to teach in mainstream schools, and teachers trained for mainstream schools are not trained how to meet children's special educational needs

It then examined how mainstream student teachers are enrolled and how teachers are recruited in China, both of which indicate selectiveness and exclusion of those who fail to meet certain physical requirements, not to mention having an obvious disability. Both of these existing 'standards' mean that teachers in China grow up with peers with similar capacity and physical conditions, without the experience of inclusion or involvement in SEN. Despite the legislation

for inclusive education that has been in effect for nearly 30 years, coverage of SEN in children is still lacking in either pre-service or in-service training of teachers in China.

Chapter 3 Literature Review of Inclusive Education in China

This chapter will review the literature and give a contextual framework for the study, i.e. inclusive education in China. It will start with a look at disability and SEN, followed by a review of inclusive education, including legislation and implementation, teachers' understanding of inclusion and attitudes towards having students with SEN, as well as whether and how quality is insured in schools.

Despite the increasing attention both policy-makers and researchers in China have given to inclusive education and equal rights of children, there is a dearth of research literature published in English to address these issues. The majority of scholarship published is in the Chinese language, most of which are reviews, rather than empirical studies conducted in Mainland China. As a result, any literature that is broadly relevant to the topic of inclusive education in China is reviewed, with a focus in particular on PhD studies that are similar to my own, i.e. studies on inclusive education in Mainland China. Literature on inclusive practice in other parts of the world is deliberately excluded, as that is not the focus of the study. For the same reason, some of the sources about Mainland China are intensively used in this chapter. Some historical sources are also used in an attempt to provide a comprehensive picture of the issues. As Savin-Baden and Major (2013) point out, the aim of a literature review is to help develop research questions, and to provide the basis of the study and a starting point for the later chapters of the thesis. Therefore this approach is justified.

The last part of the chapter will then conclude with the research questions of the study.

3.1 Children with SEN in China

Equality in education is the key to social justice, as the bidirectional interconnection between disability and poverty become extensively recognised (UNICEF, 2008). Before examining the education of children with SEN, it is important to have a look at the prevalence of disability in China, the concept of disability and the scope of SEN, as well as the traditional views of difference and diversity in China.

3.1.1 Prevalence of disability in China

According to the World Health Organisation (WHO) and World Bank (2011), about one in seven of all human beings – 14.28 per cent of the world's population – live with some form of disability.

In China, however, the officially published prevalence is far different from this world average. According to the NBS (2017), only 6.18 per cent (85.02 million out of the total population of 1,374.62 million) are formally recognised as having some form of disability. Regarding prevalence of disability in school-age children, there is no definite figure in the literature except for a reported 1.6 per cent (UNICEF, NWCCW, & NBS, 2014). The NBS (2017) also reported a total of 442,223 children with SEN, out of all 140,483,554 students in compulsory education (i.e. primary and junior secondary schools) in China in 2016, the calculated prevalence in compulsory education being 0.31 per cent[29].

In other words, in contrast to the world average disability ratio of 1:7 (WHO & World Bank, 2011), data from the NBS (2017) suggest a ratio of 1:16 of the general population in China and 1:323 of school-age children. The reasons for this significant difference are beyond the focus of this dissertation, but it is important to be clear that this lack of awareness or recognition may be contributing to the key reason for the thesis. It is not that there are far fewer individuals with disabilities in China; it is that society is less aware of difference and therefore the infrastructure to diagnose and support these individuals is also lacking. Lack of awareness of teachers is seen as a key element of this phenomenon.

In order to understand this dramatic difference in prevalence between China and the rest of the world, it is necessary to distinguish the case in China from what is more widely perceived in literature in other parts of the world.

3.1.2 Concept of disability in China

Although there is no universally agreed definition of "disability", the World Report on Disability (WHO & World Bank, 2011) advocated a diversified model of understanding disability, i.e. the "bio-psycho-social model". However, in China, stereotypical perceptions

[29] This is not the accurate prevalence of school-age disability in China. To the researcher's knowledge, there is no definite first-hand figure published in the literature. The calculated prevalence (i.e. 0.31 per cent) is the result of the total number of children with SEN receiving compulsory education in both special education and mainstream education, divided by the total number of students in compulsory education in China. The calculation does not take into account the school-age children with disabilities who are not at school.

are still prominent, taking into account only those with physical disabilities (such as wheelchair users) and a few other 'classic' groups such as people with visual, hearing (and speech), or intellectual impairments as having a disability (e.g. in NPC, 2015).

In accordance with this stereotypical, rather than diverse, model of understanding, a 'classic' categorisation of disabilities has been evident in the education system in China. For decades, in the legal documents and official publications in China, disability falls into one of only three categories, namely (1) visual impairments, (2) hearing and speech impairments, and (3) intellectual impairments. Such categorisation was reflected for example in the Compulsory Education Law in the 1980s and other laws ever since:

> Local authorities at the county level and above should set up special education schools (or classes) if needed, to implement compulsory education for school-age children and adolescents who are with visual, hearing and speech, or intellectual impairments. (NPC, 1986, Article 9)

> Local authorities at the county level and above should set up special education schools (or classes) if needed, to implement compulsory education for school-age children and adolescents who are with visual, hearing and speech, or intellectual impairments. (NPC, 2015, Article 19)

In 1995, a new categorization of 'the six categories' was put in place, namely (1) visual impairments, (2) hearing impairments, (3) speech impairments, (4) intellectual impairments, (5) physical impairments, and (6) psychiatric impairments (CDPF, 1995). This change, however, was not reflected in any legislation about the education of children and young persons with SEN, and 'the three categories' still dominated the categorisation (e.g. in NPC, 2006, Article 19; 2015, Article 19), until 2017 when the proposed Amendment to the Regulations on the Education of Persons with Disabilities in China was approved. In the Amendment (State Council of China, 2017), 'the six categories' officially replaced 'the three':

> The education of persons with disabilities cater for persons who fall into the following categories of disabilities such as visual impairments, hearing impairments, speech impairments, intellectual impairments, physical impairments, and psychiatric impairments, or who are with multiple impairments. (State Council of China, 2017, Article 2)

The impact of this very recent update in the legislation has yet to be seen, considering the implementation of the existing legislation for inclusive education, i.e. the practice of inclusive education in China, which will be reviewed later in the chapter (see Section 3.3).

Neither 'the three categories' nor 'the six categories' in China incorporate the diverse understanding of disability, i.e. the "bio-psycho-social model" that the WHO and World Bank

(2011) advocate. As some researchers point out, other types of disabilities, such as learning difficulties, are not recognized in Chinese society (e.g. Deng & Harris, 2008)

3.1.3 Scope of SEN in China

As mentioned earlier in the thesis (see Section 1.1), the notion of the principle of inclusive education has expanded and so has the scope of SEN – covering not only children with physical or learning disabilities, but all children exposed to exclusion caused by negative attitudes and a lack of response to diversity (UNESCO, 2009).

Unlike the practice in many other parts of the world (e.g. DfE, 2017; NCES, 2017), China still adheres to its traditional perception of 'disability'. The latest Amendment to the Regulations on the Education of Persons with Disabilities in China (State Council of China, 2017) still follows 'the six categories' that was proposed by the CDPF (1995) and specifies meeting the SEN in students from the six categories only. It fails to cover the social aspect of disability and there is no coverage of developmental disorders in children, such as high-functioning autism, ADHD, or any other learning difficulties in any relevant legal documents or official publications.

Although far from perfect, however, the Amendment (State Council of China, 2017) was a step forward, and however limited 'the six categories' are (or 'the three categories" were), 442,223 children identified as such were receiving compulsory education in China (NBS, 2017).

This, in the light of findings about teacher educators' limited understanding of inclusion or even the existence of the legislation (S. Li, 2013), leads to a question: Why is there such a gap between theory and practice? Why did the teacher educators in China's top universities claim that there is no need for them to train their students to cater for SEN in children? Could this be related to the long-established views and attitudes held in China as part of its traditional culture?

3.1.4 Societal views of difference and diversity

The influence of traditional culture, in the context of Mainland China, has been long lasting and far reaching, with some fluctuation especially during the Mao era (see Section 2.1 and also Footnotes 12 and 13). A careful examination of the cultural influence on the societal views of difference and diversity, therefore, has to take into consideration the dramatic political upheavals and economic development that have taken place during the past few decades in China.

China used to be immersed in Confucianism, with its core values being humaneness (仁, *ren*), justice (义, *yi*), rites (礼, *li*), knowledge (智, *zhi*), and integrity (信, *xin*) (also see Section 1.3.1). However, China also has a long tradition of a less positive attitude towards individuals with disabilities – addressing individuals with disabilities as 'disabled and useless (残废, *can-fei*)' (Hao, 2013), despite the fact that Confucian humanistic ideals such as taking care of the disabled (as well as the widowed, orphaned and the sick) started more than 2,000 years ago in the *Book of Rites: Conveyance of Rites* (or 《礼记·礼运》, *Liji Liyun*).

In contrast with egalitarian beliefs held by a few elite scholars, the majority of the population maintained a negative attitude that is common even today, without much empathy, respect, care or support for individuals with disability (Hao, 2013). Although there has always been an ideal for a harmonious society, China also has a long tradition of a hierarchal pyramid of social order, in which equality is not a priority (Kritzer, 2012). Many perceived disabilities as a consequence of evil deeds done by ancestors (Dang & Chang, 2005; Holroyd, 2003), influenced by the longstanding Buddhist notion of reincarnation, i.e. disability as the outcome of karmic retribution (Xi, 2013; Zürcher, 2007). Elitism, which stemmed from Confucianism, intensified and even celebrated discrimination against people with disabilities (Ellsworth & Zhang, 2007; Yan Wang & Mu, 2014).

During the Mao era, i.e. from the 1950s to the late 1970s, Confucian traditions were severely challenged and their legitimacy was reduced, with loud advocacy for 'humanitarianism' and 'egalitarianism'. However, at the same time, individualism, or anything at variance with the Maoist thought or collectivism, was considered as 'reactionary', and consequently, emphasis was forbidden on individual needs or differences, e.g. SEN or disabilities (as reviewed in Potts, 2000). The case in Mainland China is consistent with the broader movements in disability politics. For example, Meyer (2010) shows that, comparing individualist and collectivist societies, individualistic cultures seem to exhibit higher reported rates of disability. He suggests that marginalisation of disabled people within 20th century USSR and China was perhaps a result of socialist/collectivist thinking: Disability was meant to be the creation of capitalism treating people like machines, so disabled people embarrassed the revolutionary system. This USSR legacy, on top of the Buddhist influence on the traditional culture, led to an even more negative attitude towards disability in China.

From the 1980s after the Mao era, the living conditions and education of individuals with disabilities has improved substantially in China. However, discrimination and social stigma against disability still exist although the recent economic reforms and opening-up policy have helped to dampen them down (Campbell & Uren, 2011; W. Chen, 2016; He, 2016; Yan Wang

& Mu, 2014). Traditional misbeliefs are still deeply ingrained in the populace; many perceive disabilities as a consequence of evil deeds done by ancestors (Dang & Chang, 2005; Holroyd, 2003). Consequently, having a disability or having a child with a disability is still regarded by some as a disgrace and something to be kept hidden from the public (Fong & Hung, 2002). Moreover, even the humanistic Confucian ideal of an inclusive world (“大同世界”) was expressed in a prejudiced way, as in the verse “鳏寡孤独废疾者皆有所养”[30] (*guan-gua-gu-du-fei-ji-zhe-jie-you-suo-yang*), meaning ‘Those who are widowed, orphaned, childless, handicapped and diseased are all taken care of’. However, the word choice here, namely the word “废” (*fei*), meaning ‘useless’, self-contradictorily indicated discrimination against disability and difference.

In line with the ‘new’ ‘traditional’ concepts, individuals with disabilities are still somewhat restrained from full engagement in society. The majority of Chinese society still consider the welfare of people with disability as ‘an act of kindness’ (“爱心”), ‘an act of favour’ (“恩惠”), ‘an act of patronage’ (“救济”) (L. Lei & Wang, 2015, p.10), rather than equal rights and social justice.

Regarding the official term used for persons with disabilities, in the 1980s the Chinese government switched from *can-fei* (残废, ‘disabled and useless’) to *can-ji* (残疾, ‘disabled with impairments’, such as the Chinese name of the government organisation CDPF[31]). Although disability rights activists prefer the term *can-zhang* (残障, ‘disabled with barriers’), which, according to (Dauncey, 2017) captures the real sense of disability, i.e. caused by societal “barriers” (*zhang*, 障), the current accepted term by the government and in research published in Chinese is still *can-ji*.

Regarding day-to-day life, Parmenter (2008, p.s126) states that people with disabilities are ‘often neglected and consigned to a life in poorly managed segregated institutions, as is the case in China’. Ignorance and discrimination is still prevalent (Mak & Kwok, 2010; McCabe, 2008) and ‘the disabled are still largely invisible in public spaces’ in China (Campbell & Uren, 2011, p.12). This is also consistent with reports from social media in China: discrimination and ill-treatment from within the family (e.g. CHINADP, 2016a), and attitudinal and physical barriers to participation in mainstream social life (e.g. CHINADP,

[30] This is from the *Book of Rites: Conveyance of Rites* (《礼记·礼运》), one of the Confucian classics.

[31] China Disabled Persons’ Federation (中国残疾人联合会, known as the CDPF) is a national organisation founded in 1988 in China, and it functions on behalf of the Chinese government regarding affairs relating to people with disabilities in China.

2013; CHINADP, 2016b, to name just a few) as published on the CDPF official media website. If this is the case in practice, what does the law say?

3.2 Legislation for inclusive education in China

By law, children with disabilities in China are entitled to equal rights in education, as was mandated in the 1982 revised version of the Constitution (Deng & Harris, 2008). According to Deng and Poon-McBrayer (2012), the Constitution was the first legislation for the education of individuals with disabilities in China. However, as was mentioned in Section 2.1, there was no specific stipulation in the legal system for children with disabilities to be educated until 1986, when the Compulsory Education Law of the People's Republic of China (Compulsory Education Law) was promulgated (Pang & Richey, 2006). This section will provide a very brief history of the legislation.

3.2.1 Laws and legislation for inclusive education

The Compulsory Education Law (NPC, 1986, 2006), the first law for compulsory school attendance, stipulated that special schools or classes have to be established for school-age children with 'the three categories' of disabilities, namely children with visual, hearing, or intellectual impairments (Deng & Harris, 2008; Deng & Poon-McBrayer, 2012).

Following this, the State Council of China (1989) issued Suggestions on Developing Special Education, which specified different options for children with disabilities to receive compulsory education, including both mainstream and special education schools. This national guideline clearly stated that children with disabilities in China can have the choice of 'learning in regular classrooms in regular schools' (State Council of China, 1989, Article 17), i.e. inclusive education, or LRC for short.

A series of relevant laws and legislation has followed, including the Law of the People's Republic of China on Protection of Disabled Persons (NPC, 1990), the Regulations on the Education for Persons with Disabilities (the Regulations for short) (State Council of China, 1994, 2017), and Suggestions on Improving the Enterprise of the Disabled (CPC Central Committee & State Council of China, 2008). There has also been repeated issuing of regulations from different departments of the central government, such as the Suggestions on Speeding up Special Education Development (MoE et al., 2009) and Forwarding the Suggestions on Speeding up Special Education Development Issued (State Council of China, 2009). This has, to a considerable extent, promoted the provision of education for children with disabilities at the national level (Deng & Poon-McBrayer, 2012).

An important piece of legislation is the Regulations (State Council of China, 1994, 2017). Directly addressing the educational needs for the population with disabilities, the original version of the Regulations (State Council of China, 1994) specified the provision for individuals with disabilities at all levels of education. It mandated three ways for children with disabilities to receive compulsory education, namely: 1) regular classes in mainstream schools, 2) special education classes attached to mainstream schools, and 3) special education schools (State Council of China, 1994, Article 17). The concept of inclusive education is stated clearly as a means of providing compulsory education for children with disabilities (as shown in the following excerpts):

> The education of persons with disabilities shall be carried out in compliance with the state's educational policies to raise in an all-round way the quality of persons with disabilities according to their physical and mental needs, and to create conditions for their equal participation in social life. (State Council of China, 1994, Article 2)

The recent Amendment to the Regulations (State Council of China, 2017) specified inclusive education as the prime right for children with disability. Further, it put much greater stress on the legal liability of local authorities (e.g. Articles 10, 13, 15 and 39) and the responsibility of mainstream schools for rejecting children with disabilities (e.g. Article 14).

> Authorities at all levels should improve the provision in mainstream preschools and schools for inclusive education, and should ensure that children with disabilities can go to mainstream institutions for education. (State Council of China, 2017, Article 14)

> Mainstream schools must not reject school-age children with disabilities who wish to receive mainstream education. If the school is not qualified to cater for their educational needs, the local authority should arrange for another mainstream school and should acquire consent from the parents of the child in question. (State Council of China, 2017, Article 14)

Compared to the 1994 version of the Regulations, the 2017 Amendment showed a high regard for the right of children with disabilities to be educated in mainstream institutions. What is also noteworthy is that the Amendment, for the first time in China's legislation, officially used the term "inclusive education" – "融合教育" (*rong-he-jiao-yu*)[32] – in the document (State Council of China, 2017). Although the term "随班就读" (LRC) is still in use in the legislation

[32] There are two different translations for the term 'inclusive education' in the Chinese language. The term "融合教育" (*rong-he-jiao-yu*) is widely used in Hong Kong and Taiwan, whereas in Mainland China, the term "全纳教育" (*quan-na-jiao-yu*) has been widely used in the literature. Researchers in China have debated on which of the two translations to use, and some prefer to use the same term "融合教育" that is used in Hong Kong and Taiwan, to avoid confusion at international conferences.

at the same time, this first official acknowledgement of the concept in legal terminology signals a remarkable advance in the development of inclusive education in China.

Because of the dominant use of LRC for inclusive education in China, this term LRC is also used in the thesis to refer to inclusive education in China, as it is widely reflected in both legislation and the literature. Before reviewing the literature about the practice of inclusive education, or LRC in the context of China, the following section will briefly look at special education schools.

3.2.2 Schooling of children with SEN

The official term used by the Chinese government for the schooling of children with disabilities has been 'special education' ("特殊教育") (e.g. in MoE, 2017a; MoE, 2017b; NBS, 2017). The legitimate provision of special education services started off in special education schools, as indicated by the name.

Historically during the Mao era, special education was provided for children with hearing and visual impairments in special education schools only, and in the late 1970s children with intellectual disabilities began to be included in the provision (Deng & Poon-McBrayer, 2012). Hence 'the three categories' were established as the focus of special education in China (also see Section 3.1.2).

Since the end of the 1970s, special education has substantially improved when China began its reform and opening-up policy (Ellsworth & Zhang, 2007; Worrell & Taber, 2009), with special education schools as its primary official channel for implementation. The total number of special education schools in the country increased from 269 in 1976[33] (Ye & Piao, 1995) to 2,080 in 2016 (MoE, 2017a). Table 3.1 illustrates the latest development in the total number of special education schools in China.

Table 3.1 Number of special education schools in China

Year	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Special education schools	2,080	2,053	2,000	1,933	1,853	1,767	1,706	1,672	1,640	1,618

Source:
http://www.moe.gov.cn/jyb_sjzl/sjzl_fztjgb/201707/t20170710_309042.html;
http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/moe_571/index.html

[33] That was when the Cultural Revolution officially ended.

As mentioned earlier, special education schools in China mainly cater for 'the three categories' of students, i.e. those with hearing, visual and intellectual impairments, which were the only (and still are the major) types of SENs officially recognised and accommodated (Y Wang et al., 2013).

However, even with the significant development of special education schools, and even for these three limited categories of SEN, the majority of children still have no access to special education schools. Following the implementation of the Compulsory Education Law in 1986, the number of school-age children with disabilities receiving compulsory education was one per cent in 1987 and the figure became 4.8 per cent 20 years later in 2006 (CDPF, 2008). However, even with steady progress, the CDPF's 2013 data still reported that 35 per cent of school-age children with disabilities have no schooling. Among these children, about 60 per cent never went to school, 26 per cent did not complete their education in primary school, and 14 per cent failed to move from primary to junior secondary school (Hou, 2015).

This is largely due to the great difference between the number of special education schools (see Table 3.1) and the number of children with disabilities, with the current ratio being 2,080 schools which are supposed to be serving 5,000,000 children with disabilities[34] in the whole country of China (MoE, 2017a).

The quality of provision in special education schools follows a pattern of huge disparity between urban and rural areas, in addition to very limited places in general and a shortage of qualified teachers (Lizhong Yu, Su, & Liu, 2011; L. Zhu & Sun, 2011). However, even in large cities where the provision is supposed to be far better than the national average, there is still a severe shortage. A typical example of such is in the megacity of Shenzhen, where there is only one special education school (with the capacity for 480 children with SEN) for the 2,800 children with a Shenzhen *hu-kou* who hold a 'disability certificate' issued by the government[35] (W. Zhang, 2013). For those children who are educated in special education schools, the quality of education that they receive is significantly hampered by the very high pupil-teacher ratio (Yin & Pang, 2010).

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[34] This number of children with disabilities in China is from CDPF (2008). (Source: UNICEF, 2015 http://www.unicef.cn/cn/index.php?m=content&c=index&a=show&catid=204&id=944). There is no official update of the total number of children with disabilities in China ever since.

[35] *Hu-kou* is of vital importance in China regarding eligibility to education. In the case of special education in Shenzhen, only children with Shenzhen *hu-kou* are eligible to the only special education school in that megacity, thus excluding all other children with disabilities.

Consequently, and also as a result of China's participation in world efforts towards inclusion (Worrell & Taber, 2009), the majority of children with SEN receive their education in mainstream schools, 'learning in regular classrooms' (LRC, see Section 3.3 for more information). According to CDPF (2008), of all the school-age children in China who are identified with a disability, less than five per cent have access to special education schools, 37.9 per cent are without any schooling, and 53.9 per cent go to mainstream schools. Although the proportion of children with SEN not having schooling is still strikingly high (as mentioned in Yan Wang & Mu, 2014, also see Table 3.2 below), the majority of the children with disabilities are in mainstream education. From the late 1980s, LRC has become the major channel of education for children with disabilities in China (Deng & Harris, 2008; Deng & Zhu, 2016).

Table 3.2 Basic statistics of special education in China[36]

Year	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Children with SEN at school (rounded to thousands) [37]	368	379	399	426	428	417	419	363	364	372
Children with SEN without schooling (rounded to thousands) [38]	84	91	126	145	211	220	227	223	244	275

Source:

http://www.cdpf.org.cn/sjzx/tjgb/;
http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/moe_1398/index.html

What is illustrated in Table 3.2 are the numbers of children with disabilities in China that were receiving compulsory education as well as those that were not between the years of 2004 and 2013[39]. The statistics were gathered from two different sources: the official publications

[36] All the numbers have been rounded to thousands, as the statistics from the China Disabled Persons' Federation had already been rounded that way. The education of children with disabilities is called 'special education' in China, which refers to individuals in mainstream schools as well as in special education schools.

[37] The numbers of children with disabilities at school included all year groups from Year 1 to Year 10 in both mainstream schools and special education schools.

[38] Source: http://www.cdpf.org.cn/sjzx/tjgb/ although it is unclear on what basis the numbers are calculated.

[39] There is no update available since 2013 about the number of children with disabilities who are without schooling.

from the official website of the MoE, and official reports from the China Disabled Persons' Federation, published on its website. Regarding the children with disabilities who are not at school, as shown in Table 3.2, it is unclear where these children are and on what basis this number is calculated. The lack of detailed information about these children leads to a conclusion that these children with disabilities are 'invisible' from mainstream society in China.

This high percentage of children with disabilities without schooling is unusual, especially in the light of the enrolment rate of school-age children in primary education being nearly 100 per cent for more than 10 consecutive years (MoE, 2017a). This indicates a drastic difference in the education of children with SEN. Now that compulsory education and the LRC policy have been practised for nearly 30 years in China, the phenomenon shown in (Hou, 2015) and Table 3.2 highlights the importance of looking into the practice of LRC in schools, which is the focus of the literature review in the next section.

3.3 LRC: The Chinese form of inclusive education

Some researchers see LRC as the Chinese version of inclusive education and the major form of education for children with SEN (Deng & Zhu, 2016; Yan & Deng, 2013) and "an innovative form of inclusion" (Gan, 2010, p.84; Yu et al., 2011, p.356), as a result of the reform and opening up policy in the late 1970s (Carrington et al, 2015). Other researchers argue that it emerged as early as the 1950s in China, rather than a more recent innovation introduced from Western countries (Deng & Zhu, 2007). Inclusive as it is, LRC is still viewed as a form of 'special education', which is reflected in all the official publication about children with disabilities. For example, the MoE statistics (1999-2017) made it clear that the number of students in special education (in contrast to mainstream education) includes those who are learning in regular classrooms in mainstream schools (MoE, 2017a). In terms of the number of children involved, LRC has become the major channel of education for children with disabilities (Carrington et al., 2015; X. Peng, 2012). The latest update of the number of LRC students in 2016 is 270,800 in mainstream primary and junior secondary schools, which accounts for about 55.1 per cent of all school-age children identified with disabilities that are receiving compulsory education in China (MoE, 2017a).

3.3.1 Accessibility and provision of LRC

However, not every child with a disability can have access to LRC in mainstream schools in China, despite the legal obligations such as specified in the Compulsory Education Law

(National People's Congress of China, 1986, 2006, Articles 19 and 57). Special education schools in China are mainly for children with a disability from 'the three categories', i.e. hearing impairment, visual impairment and intellectual impairment (also see Section 3.1.1) and places are limited (see Section 3.2.2). However, LRC provision in China is also focused only on children with the three mandated types of disabilities, although 'the six categories' were included in the domain of SEN (Deng & Guo, 2007). In addition, schools are selective in admitting LRC students, i.e. accepting only those with considerable academic abilities, and these children, although with disabilities of the three mandated categories, are still rarely accommodated for their SEN (Jing & Deng, 2013).

As a result, children with other impairments, especially those with mobility impairments, which fall into 'the six categories', are 'left excluded from compulsory education if they are not accepted as LRC students and catered for in a mainstream school'(Hou, 2015, p.56). Statistics show that children with mobility impairments (but without other impairments) are the largest group without schooling, eight times the number of visually impaired children and six times that of the hearing impaired (CDPF & MOE, 2014). Hou (2015) also referred to her personal experience as evidence of children with mobility impairments being excluded from school, her missed 12 years of the entire primary and secondary education, due to the lack of disability access, which corresponds with Table 3.2 (in Section 3.2.2).

According to researchers, even though with LRC children in the classroom, the focus of mainstream school education is on more 'able' students achieving better results in the various examinations, whereas the SEN in the LRC students is very seldom taken into consideration and often overlooked (Deng & Zhu, 2016). This disregard for the SEN in the LRC students might be related to the very insignificant proportion of LRC students in mainstream schools. The current number of LRC students in mainstream education classrooms makes up 0.19 per cent of the total number of students receiving compulsory education according to statistics published by the MoE (2017a). In other words, the chance of a teacher having an LRC student in a regular school classroom is as rare as one LRC in every 526 students in the year 2016. If the figure is 0.19 per cent (or 1:526) after 35 years of steady and rapid development, it is not difficult to imagine how unusual it is to spot a child identified with a disability in a mainstream classroom five or ten years ago in China.

Some researchers in special education in China point out that there is no clear specification of qualifications of LRC teachers and requirement of SEN provision in schools (J. Lei & Yao, 2005), which might be an explanation for the above phenomena. If the existence of such students is rare and specific standards or requirements are missing, how the SEN in these

children are accommodated will be largely dependent on the personal understanding of the individual teachers. Therefore, it is important to review the literature regarding the awareness of inclusive education among mainstream teachers in China, as well as their attitudes towards having SEN students in the classroom.

3.3.2 Teachers' views and attitudes towards LRC students

Successful implementation of any inclusive policy is largely dependent on educators being positive about it (Avramidis & Norwich, 2002), and teachers are regarded as key persons in the development and implementation of inclusive education (de Boer, Pijl, & Minnaert, 2011). Therefore, it is important to look at the views and attitudes teachers have regarding inclusive education in China.

As was mentioned earlier, there is no SEN training in mainstream teacher education; teacher preparation in China is highly selective, and in-service training is also lacking (see Section 2.2). (Juan Wang & Wang, 2009) interview with third-year and final-year undergraduate student teachers suggested little knowledge of inclusive education, or any courses or contents about SEN in their teacher education. This lack of awareness is also found in the lack of coverage in the existing literature about LRC teachers in China. Compared to the robust research on an international stage (e.g. Croll & Moses, 2000; Evans & Lunt, 2002), there is less coverage in current research literature in Mainland China, and most of the literature available is in Chinese.

Most of the empirical studies were conducted in mainstream primary or junior secondary schools in a certain city, or a certain province in China, but barely any nationwide investigations. More of the studies were in areas with better economic development and more educational resources, such as Beijing (Yunying Chen, Chen, & Peng, 1994; Malinen et al., 2012; Hongxia Wang, Peng, & Wang, 2011; Wei & Yuan, 2000; Yuexin Zhang, 2016), and Shanghai (C. Liu et al., 2000; Hongying Ma & Tan, 2010; S. Yu, 2004). Deng (2004) compared the attitudes of LRC teachers in the city of Wuhan and a rural county in the south-central province of Hubei. Recently more studies were conducted in other areas of China (e.g. Xiu Li, 2016; Xiujin Li, Xie, Sun, Wu, & Wang, 2014; Wu, Lv, & Lv, 2015; Yuhong Zhang & Gao, 2014).

Regarding teachers' awareness of SEN and inclusion, Hongying Ma and Tan (2010) reported a lack of understanding in LRC teachers, and results from more recent studies also indicated the same (Xiujin Li et al., 2014; Hongxia Wang et al., 2011; Yuexin Zhang, 2016).

Regarding teachers' attitudes towards inclusive education, Yunying Chen et al. (1994, p.2) reported a prevailing negative attitude towards inclusion in LRC teachers, where participants expressed strong emphasis on academic achievement of top students, rather than 'wasting time and effort' on children with SEN. While researchers have been concerned that prejudice and discrimination still prevail among teachers in the mainstream sector (Yan Zhang, 2003), recent empirical studies in China suggest mixed attitudes from comparatively positive to neutral to negative.

As researchers pointed out (e.g. Q. Xiong & Wang, 2012), there are huge disparities in the development of LRC (just like special education schools in China) between urban and rural areas, and between east China and the rest of the country. Therefore, this section of the review of the literature about teachers' attitudes towards LRC will be presented in a similar order, from the cities of Beijing and Shanghai in the east, to other parts of China.

In the city of Beijing, Wei and Yuan (2000) indicated a largely negative attitude towards LRC in mainstream teachers, and the majority of mainstream teachers disagreed with the rights of children for mainstream education. Hongxia Wang et al. (2011) reported a very interesting 'neutral' attitude towards inclusion in the LRC teachers and leaders of schools that enrol LRC students, despite their acknowledgement of their LRC students getting along with non-SEN students. Similarly, Malinen et al. (2012) reported no clear positive attitudes towards inclusive education in teachers in Beijing. In Yuexin Zhang (2016), mainstream school teachers acknowledged that there is open discrimination and wilful neglect of LRC children, especially those with intellectual impairment.

In the city of Shanghai, C. Liu et al. (2000) reported a generally positive attitude in mainstream school teachers towards inclusive education and at the same time a lack of self-confidence in catering for SEN. Hongying Ma and Tan (2010) indicates a similar attitude in LRC teachers towards children with disabilities, with a preference for those with physical disabilities rather than with interruptive behaviours. S. Yu (2004) reported a clear discrimination in teachers at a mainstream school in Shanghai against the less academically capable.

Other studies indicate an unfavourable attitude towards inclusive education in mainstream teachers from other parts of China, e.g. limited understanding and negative attitudes in the province of Fujian (Xiu Li, 2016; Zeng, 2007) and the province of Zhejiang (Z. Zhu et al., 2015) in southeast China. A study of 400 LRC teachers in Anhui Province indicated very negative attitudes from the teachers, with less than one per cent having any SEN training, and a quarter of the teachers investigated stated that the LRC should be banned (Wu et al., 2015).

Studies from the northwest of China also suggested widespread negative attitudes towards inclusive education (Xiujin Li et al., 2014; G. Wang & Huang, 2017; Yuhong Zhang & Gao, 2014).

Deng's (2004) comparison in south central China reported more positive attitudes in rural LRC teachers than their urban counterparts, and pointed out the non-existence of any correlation between more resources and more favourable attitudes towards inclusive education.

In general, the majority of LRC teachers investigated in these studies were found to have mixed feelings towards inclusion: positive attitudes towards equal rights of children, but doubts about the practice of LRC, and their attitudes vary according to the types and severity of the specific disability in the child (G. Chen, Zhang, Shi, Wang, & Wu, 2006; Deng, 2004; Xiujin Li et al., 2014; C. Liu et al., 2000; Hongying Ma & Tan, 2010; Hongxia Wang et al., 2011; Zeng, 2007; B. Zhao, Xu, & Ma, 2016).

There are also empirical studies about early years practitioners' attitudes towards inclusion, although only children with SEN in compulsory education (i.e. primary and junior secondary schools) are counted in government LRC statistics (e.g. MoE, 2017a). These studies are included here in order to give a bigger picture of what children with SEN in China may encounter in their educational experience. The overwhelming majority (94%) of nursery teachers disagree that children with SEN may be included in mainstream nurseries and have doubt about early years inclusion (N. Zhou, 2006). Results from other studies are also consistent (e.g. Li Zhang, 2006; Yan Zhang, 2003; as reviewed in Zuo & Wang, 2008). A recent study by Y. Feng, Deng, and Zhou (2015) in a LRC nursery reported mixed attitudes from the LRC teachers. According to Zuo and Wang (2008, p.9), most nursery school teachers see children with SEN as 'troublesome', and such negative attitudes in return have an unfavourable impact on the teachers' way of working with the children and how they meet the needs of children with disabilities and SEN.

3.3.3 Outcomes of inclusive education in China

The existing research literature about the outcome of inclusive education is exclusively about the education of children with mandated types of disabilities that are in mainstream education, i.e. those who are accepted by mainstream schools as LRC students, and the findings are predominantly adverse reports and negative comments.

Researchers commented on the end result of children with disabilities 'learning in regular classrooms' as far from optimistic. The outcome of '*sui-ban-jiu-du*' ("随班就读" , meaning

'learning in regular classrooms') is often alliterated and sarcastically referred to as '*sui-ban-jiu-zuo*' ("随班就坐", 'sitting in regular classrooms') or '*sui-ban-jiu-hun*' ("随班就混", 'wasting time in regular classrooms') (Yanqin Chen & Lan, 2014, p.62; X. Peng, 2014, p.3; Yan & Deng, 2013, p.5).

For those LRC children in mainstream classrooms, the investigation by S. Yu (2004) indicated a lack of respect, lack of care and a lack of attention to the LRC student, which correlates exactly with the comments made by Yan and Deng (2013) in their review of the literature. Researchers also reported cases of LRC children having to go back to special education school because in the mainstream schools they were isolated and kept as outsiders (Wangqian Fu & Xiao, 2016).

Moreover, as the focus of LRC is on 'the three categories' of disabilities, children with other disabilities or SEN are merely neglected (Zuo & Wang, 2008). This focus on the mandated types of disabilities indicates that LRC is far from serving all children with SEN (Deng & Guo, 2007), not to mention the selectiveness of LRC schools and the exclusion of children with eligible types of disabilities (as in W. Chen, 2016; Hou, 2015; Q. Tan, 2014).

In summary, as a national policy for inclusion, LRC is far from the essence of inclusive education and adequate implementation (Deng & Su, 2012). Instead of aiming at ensuring equal rights, social justice, diversity, individual needs and high-quality education, LRC is rather a 'pragmatic model' as a response to challenges from social and economic underdevelopment (Deng & Poon-McBrayer, 2012, p.118), an improvised approach to reality in China (Deng & Xiao, 2008; F. Li & Deng, 2010). Teachers' prevailing lack of understanding and their less than positive attitudes, plus a lack of necessary skills to cater for SEN in students, are adding to the difficulties and failure that LRC children are encountering in their attainments and social development (Yan & Deng, 2013). In a word, the practice of LRC in China is not matching the optimistic rhetoric that the legislation promotes. The day-to-day experience appears focused on exam-orientated education, rather than quality education for all (Deng & Zhu, 2016; Q. Tan, 2014).

3.3.4 Accountability in inclusive education in China

So far the review of the literature in both Chapter 2 and this chapter indicates a gap between the ideal in legislation and national policies and the practice of inclusive education in China. This section will review some potential reasons for this phenomenon.

First, in general, there is a lack of accountability in education in China (X. Zhu, 2009). There is no organisation equivalent to Ofsted in England, for example, which monitors standards

through regular unannounced inspections. Instead, schools are evaluated solely according to their students' achievements in exams (Deng & Guo, 2007). Consequently, schools and teachers, rather than meeting the SEN in LRC children, put their emphasis on academic performance and learning ability and this results in neglect and exclusion (W. Chen, 2016; Wangqian Fu & Xiao, 2016; Q. Tan, 2014; Yuchen Wang, 2016).

Second, regarding education for students with SEN, there are the Special Education Division (established in 1980 as part of the MoE) and the State Council Steering Committee for the Disabled (established in 1993 as part of the State Council). However, these two administrative units seem to be symbolic, without much authority of executive power to enforce best practice at the province, city or county level (Deng & Poon-McBrayer, 2012). Deng's (2004) investigation indicated a lack of knowledge of the legislation for inclusive education even on the part of local authority officials in charge of special education and head teachers in China. In other words, the administrative structure of accountability has been set up for special education, yet there is no related execution of the supervision of inclusive education at the local level (Deng & Poon-McBrayer, 2012).

Regarding the LRC, although there are requirements for local authorities and schools in terms of the minimum proportion of school-age children with disabilities receiving compulsory education, there is limited accountability about how the children's SENs are met. A provincial government special education official stated that they inspect the quality of special education schools but not LRC in mainstream schools (Deng, 2004). Head teachers stated that the local authority 'just give the order, place the child in our school, and we have to accept, and that is all' (N. Zhang & Chen, 2002, p.5). Researchers point out that LRC is not given the same attention as special schools in national policies for special education (X. Peng, 2014), although it is counted as 'special education' and although LRC students constitutes the majority of the total number of school-age children identified with disabilities receiving compulsory education (see Section 3.2.2). Without accountability at all levels, the legislation for inclusive education lacks executive power and efficacy at all levels (Gan, 2010; X. Peng, 2012). This might be an explanation of why the legislation has been in practice for more than 30 years while the provision of inclusive education in China has failed to keep pace with Western countries.

The review of the literature suggests that, despite all the development in education and in legislation in the post-Mao era in China, the practice of inclusive education has faced great challenges, with stereotypical understanding of SEN and traditional attitudes towards disability in schools and the wider society. This is at odds with the core of education equality,

which cannot be achieved without a positive and open environment in the first place (Avramidis & Norwich, 2002), and what is important is the knowledge and experience that teachers have in their training before they get to the classroom (e.g. in de Boer et al., 2011). Teachers in China appear to have grown up in an exclusive society, they were trained without much awareness of diversity and difference, and they teach in the classrooms with a limited understanding of SEN, and this seems to have become an on-going cycle.

3.4 Research questions

With reflections on both the literature review and personal educational experience in the UK (see Section 1.2.1), the researcher started to consider what could work to break the cycle in China. The researcher wanted to make an original contribution to the issue of inclusive education and wondered whether the experience and awareness that changed her views and course of action could also make the difference in others. However, because of the lack of literature about this, there was no confirmation of whether this would happen.

Therefore, in this study regarding the training of student teachers, the researcher set out to find answers to the following two research questions:

- What is the journey for student teachers in China towards an increased understanding of SEN and inclusion?
- What is the impact of the journey in terms of changing views that are shaped by long-established traditional culture in China?

The hypothesis was that training should inevitably increase some knowledge in the participants. The researcher then set out to prepare a training course about SEN and inclusive education, with student teachers in China as her target audience, and the intention was to examine the participants' journey, before and after the training course, even before and after each session, and before and after their school experience. It is the first research to look at the phenomenon of inclusive practice by providing a training course to student teachers in order to explore the process of how the training will make any difference. The following are the research sub-questions:

1. How do student teachers perceive SEN and inclusive education?
2. What are student teachers' attitudes towards inclusive education?
3. How much difference will be made, after the SEN training, in their views and attitudes?
4. How much will the training course contribute to the difference?
5. How will the training impact the student teachers' practice?

The theoretical underpinning of the study and details of the research design will be given in the next chapter.

3.5 Summary of the literature review

This chapter has reviewed the literature on inclusive education in China.

The review of literature started from a brief comparison between the prevalence of disability reported by the (WHO & World Bank, 2011), and the statistics in China, especially the proportion of school-age children with disabilities versus the total number of children receiving compulsory education in China. The contrast led to an examination of the concept of disability and the scope of SEN in China, where a limited and stereotypical categorisation of disability and SEN is prevalent. The mixed societal views of disability were also examined, which is shaped by the traditional Chinese culture and influenced by the abrupt political changes in the past decades. Individuals with disabilities are still far from being fully integrated into Chinese society.

It then moved to the legislation for inclusive education in China, its legislative foundation in the 1980s, a series of laws and national guidelines for the education of individuals with disabilities in China in the 1990s, as well as new laws and amendments in the new millennium. The review of the literature also covered the schooling of children with the mandated SENs in China, namely segregated special education schools and LRC in mainstream schools. In spite of the significant development of special education schools in China, a considerable number of school-age children with the mandated SENs are without any schooling. For those who are receiving compulsory education, the majority are in mainstream schools, with LRC regarded as the Chinese form of inclusive education.

The chapter then examined the practice of inclusive education in China, i.e. LRC, especially the accessibility and provision of LRC, the teachers' attitudes towards children with disabilities, outcomes of LRC, and accountability of inclusive education in China. Although the mandated categories of disability are not as inclusive as the internationally accepted types of SEN, especially what is in practice in the West, for the mandated types of SENs in children, mainstream schools are still selective and the provision is not individualised according to the educational needs of the LRC children. Teachers in mainstream schools are very positive about equal rights of children to be educated, but in general they have a very limited understanding of inclusive education, and in general their attitudes towards having LRC students are not positive. LRC students in mainstream schools are reported to be neglected and isolated. The literature also suggested an emphasis on special education schools

from the authorities in China and a lack of accountability especially at local level for LRC in mainstream schools.

While the review of the literature indicated a mixed picture of inclusive education in China, the synthesis pointed to an on-going cycle with a lack of inclusion in China's mainstream education system, which then led to the research questions of the study.

The next chapter will start from the research questions, and will present a detailed explanation of the methodological considerations.

Chapter 4 Methodology

Based on a careful review of the literature surrounding inclusive education in China, the research question was developed, the research methodology of the study was thoughtfully considered, the research design and data collection methods were decided and the fieldwork was carried out (see Figure 4.1 below for the different stages and how they related to each other). Details of the research methodology will be explained in this chapter.

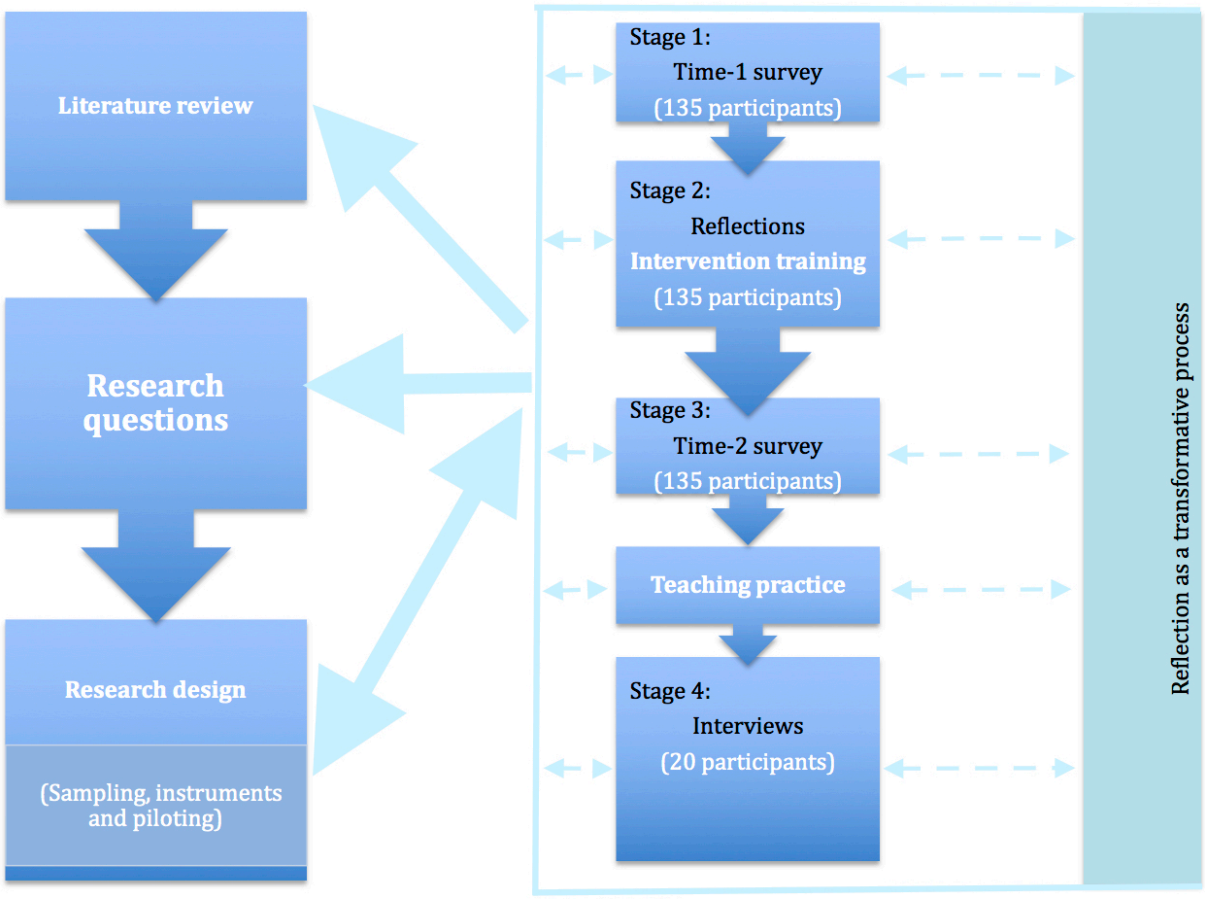


Figure 4.1 Flow chart of research stages

4.1 Paradigm rationale

The particular research methodology used for a piece of research is determined by the nature of specific research questions, and the methodology chosen for a study is closely associated with what is perceived as the best way to answer those questions (Bryman, 2012; Cohen,

Manion, & Morrison, 2011; Creswell, 2014; Punch, 2009; Thomas, 2013). As Hitchcock and Hughes (1995) describe, and also as cited in Cohen et al. (2011), the methodology, which decides on the instrumentation and data collection process of a study, is decided by the ontology and epistemology (i.e. the researcher's theory of knowledge and view of reality). Therefore, the methodology is not simply a technical exercise, but something underpinned by theoretical concerns on the basis of the research questions. Such theoretical concerns are firstly the ontological and epistemological bases of the study, and secondly, they are theories that connect the research with the wider social scientific enterprise (Bryman, 2012). Therefore, in this study, the methodology was determined by the research questions and the theoretical concerns related to the research questions.

4.1.1 Research questions and theoretical underpinning

As was presented earlier (see Section 3.4), the present study started from the following research questions:

- What is the journey for student teachers in China to increased understanding of SEN and inclusion?
- What is the impact of the journey in terms of changing their views that are shaped by long-established traditional culture in China?

The theoretical underpinning for this study is based on part of Parsons' theory, which perceives social action as essentially associated with a normative orientation ('the point of view of the actor') and their experience (Parsons, 1968, p. 49). Evolutionary change will never take place without value generalisation or the experience that triggers the generation of the normative orientation, i.e. unless there emerges a 'breakthrough' in the value system of the society (Parsons, 1966). In other words, social action is dependent on the values held by the general public and the experience that they have.

Although the legislation regarding inclusive education have already been in existence in China (NPC, 1986, 1996, 1998, 2006, 2015; State Council of China, 1989, 2017) – the normative orientation for the changes to take place still do not seem to be established. The social normative perceptions regarding inclusive education and SEN are still vague and unclear (Parmenter, 2008).

Therefore, theoretically, in order to make a social change in the case of inclusive education, it is important to break the cycle and bring some changes in the experience and values that trainee teachers have about inclusive education. In this way, one can explore possible effective approaches for making a greater difference in the provision and practice of inclusive

education in China. This study corresponded to Parsons' (1968) social action theory in that 'experience', by definition, means '(the process of getting) knowledge or skill from doing, seeing or feeling things, or something that happens which has an effect on you'(Cambridge Academic Content Dictionary, 2014). Based on Parsons' theory, the training course was developed precisely with the ambition to provide a 'process of getting knowledge' for student teachers to get knowledge from the training course, which will involve them 'doing, seeing or feeling things', namely, to provide them with an 'experience'. The rationale was that, by so doing, according to Parsons' theory (Parsons, 1968), the experience, along with changes in values (that these trainee teachers hold about inclusion and SEN), would cause a breakthrough in their action in society and, particularly, a difference in their teaching practice in the classrooms, which theoretically would improve the quality of education for the children involved.

4.1.2 Ontological and epistemological considerations

Considering which research design should be adopted for a particular study, there are two main paradigms of thinking about social research that are centred on two contrasting sets of ontological and epistemological beliefs.

At the ontological level (i.e., regarding the nature of social reality), there are two different positions that are referred to respectively as objectivism and constructionism. Objectivism sees the social world as 'external facts that are beyond our reach or influence' (Bryman, 2012, p. 32), 'being real and external to the individual' and waiting to be uncovered by researchers (Cohen et al., 2011, p. 6). Constructionism (often also referred to as constructivism), on the other hand, sees the social world as 'being of a much more personal and humanly created kind' (Cohen et al., 2011, p. 6) and 'continually being accomplished by social actors' (Bryman, 2012, p. 33). The major distinction between the two ontological positions is therefore whether what the researcher presents can be regarded as the definitive, or just a specific, version of social reality.

Accordingly, at the epistemological level (i.e., regarding the nature of the knowledge about reality and how it can be achieved), there is a contrast between positivism and interpretivism.

Positivism is a natural science epistemology that is often adopted by social science researchers to treat the social reality with an objective approach like natural phenomena, 'existing beyond human interpretation' (Denscombe, 2010; Nilsen, 2008, p. 86). It aims to test theories and to provide evidence for the development of laws by analysing the relationships and patterns between variables (Bryman, 2012; Cohen et al., 2011), to logically

derive laws from empirical evidence (Gomm, 2009), and to investigate phenomena with empirical methodologies that are usually adopted in the natural sciences (Berg, 2009; Denscombe, 2010). Researchers following this epistemology emphasise objectivity, using quantitative data analysis, and usually choose surveys or experiments for investigation (Gomm, 2009).

Interpretivism, on the other hand, is an epistemology that is adopted in social science with a more subjective approach that treats the social reality as being distinctive of humans instead of the natural order, to 'grasp the subjective meaning of social action' (Bryman, 2012, p. 30). It focuses on the interpretive understanding of social action and considers the actions and their meanings as reflecting the experiences and interpretations the social actors have of their social worlds (Pole & Lampard, 2002). Researchers following this epistemology usually choose accounts, qualitative interviewing, participant observations, and personal constructs such as action research (Gomm, 2009).

Despite debates over the differentiation between paradigms, there exists a consensus among social researchers regarding the main difference. Objectivism and positivism try to look at variables decided in advance of fieldwork and to develop or test hypotheses on the basis of objective studies, from the perspective of an independent outsider, aiming to know the single objective reality (Bryaman, 2012). On the other hand, constructionism and interpretivism try to look at emergent patterns from the perspective of an insider interacting with participants, and focus more on understanding 'the particular' and giving in-depth interpretation of 'multiple realities' rather than generalising from carefully selected samples (Thomas, 2009, p. 78).

In the case of the present study, the maim research question is to investigate the student teachers' perspectives of the impact of training on their practice. The purpose is to understand each individual participant and give in-depth interpretation of their particular realities. The ontological and epistemological stance for this research question is in accordance with constructionism and interpretivism. It is therefore appropriate for the researcher to choose a more constructionism-and-interpretivism-focused paradigm as well as corresponding methods, which will be discussed in detail in the following sections.

4.1.3 Research strategy: Quantitative vs. qualitative

Based on the two contrasting philosophical positions of objectivism and constructionism and the paradigms of positivism and interpretivism, there are the strategies of quantitative research and qualitative research.

As reviewed by, for example, Denscombe (2010), quantitative research is a strategy that stresses quantification in data collection and data analysis and entails mainly a deductive approach, where theory is tested by measurement of concepts and causal inference. On the other hand, qualitative research stresses words (in talk and text) rather than quantification in data collection and analysis, and pays most attention to an inductive approach where theory is generated by analysis of the subjective (Bryman, 2012). Qualitative research focuses more attention on understanding the particular and giving in-depth interpretation of multiple realities, while quantitative research focuses on generalising from carefully selected samples (Thomas, 2009, p. 78). Consequently, the two strategies also differ in terms of measurements: narrative data and analyses in qualitative research, whereas numerical data and analyses in quantitative research (Teddlie & Tashakkori, 2009; Williams & Vogt, 2011).

However, there is no absolute distinction between the two strategies, and the approaches of quantitative research and qualitative research can complement each other rather than being incompatible with each other (Bryman, 2008, 2012; Cohen et al., 2011; Lichtman, 2013; Punch, 2009; Thomas, 2009, 2013). Hence there is increasing debate on a third research strategy: mixed methods research, which 'combines elements of quantitative and qualitative research approaches (e.g. use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the purpose of breadth of understanding or corroboration' (Johnson, Onwuegbuzie, & Turner, 2007, p. 123; Lichtman, 2013; Williams & Vogt, 2011). The emphasis of mixed methods research is the combination of research methods that cross the two research strategies of quantitative and qualitative research: It employs both deductive and inductive logic (Teddlie & Tashakkori, 2009) and involves 'collecting both quantitative and qualitative data, integrating the two forms of data, and using distinct designs that may involve philosophical assumptions and theoretical frameworks' (Creswell, 2014, p. 4).

The philosophical orientation most often associated with mixed methods research is different from the two main paradigms of thinking – neither objectivism nor constructivism– but rather pragmatism, which 'debunks concepts such as "truth" and "reality" and focuses instead on "what works" as the truth regarding the research questions under investigation' (Teddlie & Tashakkori, 2003, p. 713). Mixed methods research in social science, to many researchers, is an approach that 'is to be applauded' (Thomas, 2009, p. 140), a budding research paradigm (Cohen et al., 2011; Johnson & Onwuegbuzie, 2004; Johnson et al., 2007) that is becoming widely used in the research field of education (Lichtman, 2011, 2013), as it might result in 'more generative, insightful understanding' (Greene & Caracelli, 2003, p. 107), 'with

different perspectives that enable us to best answer individual questions' (Morse, 2003, p. 189).

Despite all the different strategies and no matter what strategy is adopted, research design should always serve the research questions, rather than the other way round (Bryman, 2012; Teddlie & Tashakkori, 2003, 2009; Thomas, 2009). Therefore the research design of this study was decided by focusing on the research questions. As the research questions were focused on both measuring beliefs and attitudes of the student teachers and exploring their particular reflections on or interpretations of their individual experience, a pragmatic approach was adopted for the study, as discussed in detail in the following section.

4.2 Research design adopted for the study

This study adopted mixed methods research, although with an emphasis on qualitative strategy. The form of mixed methods research was used in the study in order to be able to gain a full understanding of the perspectives of the participants – to allow them to answer in their own words. It is important to answer the different research questions in the most appropriate method to allow free disclosure of views from the participants. By adopting the combination of qualitative and quantitative approaches, a more comprehensive understanding may be achieved than by exclusively using either approach (Creswell, 2014; Gorard & Taylor, 2004). More detail on this point is presented in the next section.

4.2.1 A mixed methods approach

The reason for adopting a mixed methods approach was determined by the nature of the research questions (see Section 3.1.1). Sub-questions One and Two involved the measurement of concepts and possible causal inference (Denscombe, 2010). It involved an attempt to estimate a description for a large population of approximately 100 trainee teachers (see Section 3.3 for additional details), which appeared more typical of quantitative research.

At the same time, however, the focus and the nature of the main research question involved an attempt to examine deeper the interpretation of social reality by its participants (Thomas, 2009). The study aimed to find out multiple realities from the perception of each individual student teachers (i.e. their personal beliefs, attitudes, perceptions and interpretations of their personal experiences). It also aimed to find out the interactions between individuals that were involved in its construction (whether/how student teachers influenced each other in their understanding via interactions during the intervention, and whether/how the intervention

influenced their individual understanding of inclusion and their action in teaching practice). These would be better suited for qualitative research strategies.

4.2.2 Qualitatively driven

Although both quantitative and qualitative strategies were used in the study, they were not given equal emphasis, nor was it intended to be mixed in such a way that qualitative data acts only as secondary or auxiliary to quantitative data. Instead, the study adopted a qualitatively-driven mixed methods approach, with a focus on the richness of experiences and meanings in individual micro-contexts (Hall & Ryan, 2011; Hesse-Biber, 2010; Lichtman, 2013).

In summary, this study took on a constructionist and interpretivist perspective, trying to give a specific constructed interpretation of social reality and to look for in-depth understanding of multiple realities as being distinctive of individuals, despite the fact that some of the research questions were of a more objectivist and positivist stance. The purpose was to carry out objective studies to uncover 'external reality' and to test hypotheses (e.g. research sub-questions 1 & 2, see Section 3.4). However, even this objectivist and positivist aspect in research sub-questions 1 & 2 might also be considered as constructionist and interpretivist, as the 'reality' uncovered was only one version of interpretation, considering the sample of the study which was one specific group of students in one specific university, details of which will be found in Section 4.5. Furthermore, what the richness of the qualitative data of the study revealed was an in-depth interpretation of multiple realities (Thomas, 2013) – in this case to the same seemingly objectivist and positivist questions. The overall focus on qualitative strategies will also be illustrated in Figures 4.1 and 4.2 in Section 4.3.

4.2.3 A case study

Following the justification above, a case study approach was chosen, which is, again, often associated with qualitative research (Bryman, 2012; Denscombe, 2010; Hancock & Algozzine, 2006), as it entailed detailed and in-depth analysis in one particular university in China (for further details, see Section 4.5), rather than a national sample of many universities. The findings in this chosen university were unique to the participants involved in this particular university, and might not necessarily be representative of all the other universities in China.

Another defining factor of this case study was the purposeful (or purposive) choice of the case and the subjects, i.e., convenience sampling, where the participants were not chosen for their representativeness of a larger population 'but are more likely to be chosen for their

informativeness' (Gillham, 2000; Mabry, 2008, p. 223). The purposive choice of the sample will be justified in Section 4.5 of the thesis.

4.2.4 Reflection as a transformative process

The design of the study also followed part of the theory of transformative learning, i.e. reflection as a transformative process, which was exactly what the researcher herself had experienced in the UK regarding her understanding of inclusive education. The taken-for-granted frames of reference were made more inclusive, open, and reflective, so that they may generate new beliefs and opinions that will prove more accurate (Mezirow, 1990, 1991, 1997, 2003, 2009).

As was mentioned in Section 3.4, the participants were made to upload their reflections after each session of the intervention training course. This deliberate requirement was intended to foster transformative learning in the student teachers, to challenge their original taken-for-granted views of SEN, and to stimulate critical reflection for transformed new opinions in them.

The theory of critical reflection and transformative learning has been widely applied (Taylor, 2007), for example in studies with pre-service teachers (Carrington & Selva, 2010), which is similar to the case of this study.

4.3 Research process and purpose

The study consisted of a blended-learning training course as intervention on SEN and inclusion, as well as data collection before, during, and after the intervention.

4.3.1 Process of the fieldwork

As shown in Figures 4.2 and 4.3 on the following pages, the four stages of the study were:

- A preliminary survey prior to the intervention training, conducted online via SurveyMonkey;
- A blended-learning course as intervention (75% online distance learning and 25% face-to-face taught sessions);
- A follow-up survey on the same population with the same questionnaire, after the intervention training;
- Follow-up live-chat interviews after the participants' teaching practice.

Stage	Participants	Data collection	Data analysis
1	135 student teachers (majoring in English, in their second year of undergraduate study[40])	Time-1 online questionnaire	Mostly SPSS
2		Online reflections (altogether 16 for each participant)	NVivo
3		Time-2 online questionnaire (same as in Stage 1)	Mostly SPSS
4	20 student teachers (having participated in all three previous stages)	Live-chat interviews [41] (via Tencent QQ[42])	NVivo

Figure 4.2 Four stages of the fieldwork of the study

[40] Originally the researcher chose third-year student teachers as participants. However, circumstances changed beyond the control of this researcher and second-year English majors ended up taking part in the study.

[41] Originally the researcher planned to interview participants in English in Stage 4 via Skype. However, during the first three stages, the researcher increasingly realised the potential advantage of communicating in Chinese for the case of Stage 4, and how much at ease the participants would feel about 'live chatting' (typing) via Tencent QQ rather than talking over Skype (see also Section 4.5.4).

[42] Tecent QQ is a social networking and micro-blogging service (similar to Facebook and Twitter) that is most popularly used in China, with very convenient group chat features and no word limit to its blogs. Also see Footnotes 48 and 58.

<table>
<tr><th>Time</th><th>Mar 2015</th><th>Apr 2015</th><th>May 2015</th><th>Jun 2015</th><th>Jul 2015</th><th>Aug--Dec 2015</th><th>Jan 2016</th></tr>
<tr><td>Stage 1</td><td>Time-1 questionnaire</td><td></td><td></td><td></td><td></td><td rowspan="4">Online communication continued, before teaching practice[43]</td><td></td></tr>
<tr><td>Stage 2</td><td colspan="5">16-session intervention training, and online reflections collected for each session</td><td></td></tr>
<tr><td>Stage 3</td><td></td><td></td><td></td><td></td><td>Time-2 questionnaire</td><td></td></tr>
<tr><td>Stage 4</td><td></td><td></td><td></td><td></td><td></td><td>Live-chat interviews</td></tr>
</table>

Figure 4.3 Time scale of the fieldwork

There was also an extra period of online communication between the researcher and participants (see the column shaded in light grey in Figure 4.3 above) for the purpose of keeping the participants warmed up for their participation in Stage 4 as well.

4.3.2 Purpose of the study

The study was designed with the hope of answering the research questions. The purposes of each stage of the study were as follows:

The first stage set out to test the hypothesis that trainee teachers in China did not have much knowledge about SEN and inclusive education, which was drawn from a review of the literature as well as from the researcher's personal experience and previous study for her MA dissertation.

Stage 2 of the study was based on the findings of the first stage as well as on the findings from previous research about teacher educators in China's six top universities (S. Li, 2013), i.e. little was previously taught to student teachers about inclusive education in mainstream

[43] As explained earlier, 'teaching practice' is the equivalent term for 'school experience' in China. In this university (and most of the Normal Universities), student teachers normally go to local schools for teaching practice in the first term of their fourth year. However, the teaching practice for participants of this study was arranged differently (see Section 4.4.1 and Footnote 45).

Normal Universities in China, little was known about inclusive education, and training was welcomed. The purpose was to provide an intervention course to student teachers, an opportunity of critical reflection for transformative learning, to find out the participants' journey of understanding of inclusion and SEN as well as how their understanding would be transformed, which would be an answer to Research Question One (see Section 4.1.1). It also aimed to discover what the participants would find effective in changing their attitudes and awareness, so as to provide some implications for future study and intervention. All the potential findings for this stage were expected to be recorded in the participants' online reflection logs throughout the intervention training.

Stage 3 aimed to measure how much the training would help raise awareness and understanding of inclusive education in the participants, i.e. how much difference there would be before and after the intervention training course, as would be evidenced by the repeated measures survey.

The fourth stage, as the core of the study, which was conducted after the participants finished their teaching practice, was looking at what impact, from the student teachers' perspectives, the training had on their teaching practice in the local schools. The purpose was also to answer Research Question 2 as stated in Section 4.1.1.

4.4 Participants

Participants were chosen by adopting the strategy of convenience sampling (also called 'opportunity sampling' or 'availability sampling'), i.e. choosing the individuals that are conveniently available and accessible (Gray, 2009).

Student teachers who were majoring in English, whose Dean consented for the researcher to carry out the research, i.e. for the blended-learning intervention training to be offered as an optional module for the students, were chosen as participants in the study.

The following sections will give detailed information of the process.

4.4.1 Context of the case

The context of the study, i.e. the locating of a data-collection site and population is usually decided by the research question as well as accessibility (Berg & Lune, 2014). As mentioned earlier, the study would involve student teachers in China and how they would perceive their journey of understanding inclusive education and the impact of their journey. According to the teacher education system in China, student teachers that are going to teach in mainstream

schools are trained in Normal Universities or teachers colleges in China (see Sections 2.2.1 and 2.2.3). Therefore, the research needed to be carried out in such institutions.

The institution where the participants of the case study were from was a university that provides pre-service teacher education for mainstream schools. Undergraduate students were trained to become teachers according to the different subjects as their respective majors, e.g., Chinese, maths, English, science, music, arts, physical education, etc. It was a medium-sized university located in a city in southwest China, and the number of students was 14,800 in total in 2014 when the study started.

What is worth noting here is the establishment of a Department of Special Education in that university in late 2014[44], with the purpose of preparing teachers for special education schools, as a result of the central government's strategic plan of having one special education school per county where its population reaches 300,000 (CPC Central Committee & State council of China, 2010). This had an impact on the study, because just before the start of the intervention training, the researcher learned from the Normal University about unexpected changes to the arrangement of the intervention training course. The original agreement for the training course was for third-year student teachers from the Foreign Languages Department who were majoring in teaching English to start their three-month teaching practice in local schools immediately after the intervention training (see Footnote 43 in Section 4.3.1). However, upon the establishment of their new Department of Special Education, the university automatically changed the arrangement and allocated students from the new Department of Special Education as participants of the intervention training. The rationale for this change was because the university took for granted that the study and the training about SEN would be more relevant to future special education school teachers than their English majors, who instead would teach in mainstream schools and therefore would have nothing to do with SEN[45].

Such a change would not suit the purpose of the study, however, as was reviewed in Chapters 2 and 3, because student teachers from the Department of Special Education in a teacher

[44] Originally it was a pathway in the Department of Education in that Normal University. The upgrade from a pathway to a department in this case was part of the effort of the central government of China to improve 'special education', and graduates from this department would work in the special education sector, rather than in mainstream education.

[45] This was the explanation the researcher was given by the Normal University about the short-notice, unexpected changes in the arrangement, although the purpose and rationale of the study had been made very clear to them in the Chinese language in the initial proposal as well as later communication.

education institution in China would be trained for special education schools only, and their teaching practice would not be in a mainstream school.

This problem was soon remedied by the Normal University, but at the time it was only possible for their second-year English majors to participate (instead of the third-years), who would normally have no teaching practice until their third year, which would be 18 months later. This, again, would be a problem for the researcher, due to the limited time span of the PhD study. The planned time span of the fieldwork was approximately one year (see Figure 4.3 in Section 4.3.1). Specifically, it was supposed be one term (i.e. 16 weeks over a four to five month time period) of intervention training course (followed by a summer holiday) approximately three months before the participants started their formal teaching practice, and then immediately after their three-month teaching practice in local primary and secondary schools.

The unexpected change of the starting participants, however, significantly affected the length of teaching practice the participants would have as part of the study. The general rule in Normal Universities in China has been a three-month teaching practice during the autumn term of the fourth undergraduate year only (also see Footnote 43). Under the changed circumstances, the university made it into an improvised one-week 'teaching practice' for the actual participants, some of whom were given the opportunity to teach a 40-minute session in some primary schools. Therefore the actual starting participants of the study were second-year English majors in that Normal University.

4.4.2 Convenience sampling

Convenience sampling was adopted for the research. Regarded as 'an excellent means of obtaining preliminary information about some research questions quickly and inexpensively' (Berg & Lune, 2014), convenience sampling suited the researcher as a PhD student. The purpose of the research was to explore the in-depth pluralist realities and to understand the views of individual student teachers. The selection of the sample was determined by the research questions, which directed the research to investigate the journey of understanding in the student teachers from their own perspectives. This was the best fit for their informativeness rather than representativeness (also see Section 4.2.3) as the researcher did not intend to generalise about the wider population in China.

The choice over student teachers in that particular university instead of from other (or more) universities was because of their accessibility, as the Dean from that particular university (out of many that were approached) had agreed to support the study. The reason why the many

other universities were not selected for the study was because the researcher failed to acquire consent from the Deans of those universities. The proposal was declined because the Deans felt that the study about SEN would be irrelevant to their student teachers, who would become mainstream school teachers and would not have children with SEN in the classroom. This response is highly consistent with the literature about teacher educators in China (S. Li 2013). The significance of this, plus the unexpected change about participants (see Section 4.4.1, especially Footnotes 44 and 45), indicates a problem in the Chinese educational culture, and will be addressed later in the Conclusion of the thesis (see Section 8.3.1). The decision over English majors in that chosen university was because the training course would be given in English[46] and therefore would require considerable knowledge of the English language in the participants.

At the same time, the original choice over third-year students as the starting participants of the study was for the purpose of the study. In the following term (after the SEN training course provided in the study), they would become fourth-year students and would be placed in local schools for a three-month teaching practice. However, as was explained earlier in Section 4.4.1, the circumstances changed and the starting participants were second-year students. The remedy plan of an improvised one-week teaching practice was not expected, but to a certain extent it somewhat served the purpose. After all, on the one hand, for the participants, it was still possible for them to reflect on their teaching practice with a relatively fresh memory of what they had learned from the intervention training. On the other hand, the time-scale of the study was still workable for the researcher, although not ideal.

The unexpected advantage of having second-year students as starting participants, however, was that they would experience less pressure or anxiety about securing a job than third-year students, which might counteract the benefit of training, especially during their teaching practice and the live-chat interviews at Stage 4 of the study.

4.4.3 The sample

In Stages 1, 2, and 3, participants were the same 135 English-majoring student teachers (all aged 20-21) at the Normal University. Among them, male students constituted a tiny proportion (4%, n=6) in contrast to female (96%, n=129).

[46] The main reason for this was because most of the large volume of teaching resources prepared for the course were in English, e.g., articles, books, films, video clips, audio clips, resources from government websites, etc., and it was beyond the researcher's reach to offer everything in the Chinese language.

This gender imbalance is not unusual, as female dominance in the teaching profession has been a global phenomenon (Drudy, 2008). Richardson and Watt (2006), for example, reported a similar imbalance in student teachers in Australia, who were almost exclusively female, especially in early years and primary teacher education. However, compared to the reported typical gender imbalance in student teachers in China (e.g. in Ding & Li, 2014; F. Li, 2015b; R. Xu, 2014, see Section 2.2.3), the gender distribution in the sample of the study is remarkably higher than other teacher preparation institutions in China.

As was explained in Section 4.4.2, the sampling method was convenience sampling. Specifically, the sample was in the second half of their second academic year at the start of the data collection. This was the case because all the second-year English majors were required by their university to participate in the blended-learning course (i.e. Stage 2) and therefore the cohort enrolled in the course became the sample for the surveys (i.e., Stages 1 and 3) as well (also see Figure 4.2 and Section 4.3.1).

In Stage 4, however, participants were 20 volunteers out of the 116 (out of the total 135), who participated in all the three previous stages and who gave consent to take part in the final stage of the study, and they were at the end of the first term of their third year of university by the time that they were interviewed. Here a reduced sample size was decided due to practical considerations, such as time and effort involved in carrying out the live-chat interviews, as well as the feasibility of what would be involved in data collection, analysis and writing up of the thesis. The decision to choose 20 was also made because of the nature of the study: It was not intended to generalise or seek a breadth of opinion, but rather to gain in-depth responses distinct to each individual (Savin-Baden & Major, 2013).

The selection of the 20 participants for Stage 4 was the result of careful consideration after data from the first three stages were collected. By then there were 116 out of the 135, who stated that they were happy to continue with the study. The decision was made after comparing Time-1 and Time-2 quantitative data, and two groups of potential participants were chosen: those with big changes after the intervention and those without. Within the little-change group, those with high awareness and those with low awareness of SEN were also considered. In case there were unexpected circumstances, a larger sample size of about 55 was approached before the live-chat interviews in order to secure 20 final participants.

4.5 Data collection

4.5.1 Stage 1: Time-1 survey before intervention

An online questionnaire was adopted as the data collection instrument for Stage 1, based on the following considerations:

- It would be a cost-effective way of collecting large amounts of information from a large number of participants in a short period of time, especially when the researcher was based in the UK and the participants were in China.
- Results of questionnaires could be easily quantified and quickly analysed by using software packages.
- It could be used to compare and contrast other investigation and could be used to measure change, i.e. the repeated measure design, which would meet the need of this study to examine the impact of the intervention training course.
- Quantitative data collected from questionnaires could be used to test existing hypotheses, and in the case of this investigation, to test whether the hypothesis was true that student teachers in the university under study did not have much understanding of inclusive education prior to the intervention training.
- A self-administered online questionnaire would free the researcher from physically being there at the research location to conduct the survey and the participants would feel at ease giving their answers, thus avoiding any negative effect on its validity and reliability.

All of the 135 trainee teachers answered the same questionnaire about their understanding of and attitudes towards inclusive education, as well as their experience of inclusion in China. The first 30 questions of the questionnaire are based on a six-point Likert scale, where Point One stands for "Strongly Disagree" and Point Six for "Strongly Agree". The six-point Likert scale was adopted so that participants did not have the opportunity to select a neutral position (Boyle, Topping, & Jindal-Snape, 2013; Varcoe & Boyle, 2013)[47], and that the interrelation of the variables may be better pre-coded, thus making the data analysis an easier task (Bryman, 2012). There were also comment boxes under each Likert-scale question with a further open-ended question for participants to elaborate, to avoid any researcher imposition

[47] One of the sections of the questionnaire in the present study was adapted from Boyle et al's (2013) Teacher Attitudes to Inclusion Scale (Adapted).

and to reduce the level of subjectivity due to the participants' different interpretation of the questions.

Although the participants were all English majors, the questionnaire was still translated into Chinese and provided in a bilingual version, piloted (see Section 4.7.3 for details) and then administered with the participants. The purpose was to reduce ambiguity in the questions. The bilingual questionnaire was conducted online through SurveyMonkey for both the pilot and the study.

4.5.2 Stage 2: Online reflections during intervention

All the participants were enrolled in a one-term blended learning course on inclusive education and SEN throughout a period of approximately four months (see Appendices 1 and 2 for information about the blended-learning course). It was a combination of taught and distance-learning sessions (approximately 75% distance-learning and 25% face-to-face taught sessions), with an emphasis on the use of online forums as interactive tasks for each session provided through Tencent QQ[48] blogs, similar to the form of Massive Open Online Courses (MOOCs).

The decision for the intervention to be blended-learning was a careful consideration after the review of the literature. As a matter of fact, the researcher's own journey of understanding of SEN and inclusive education was a result of both her new knowledge gained from training and her new experience of inclusion in the UK setting (see Sections 1.2.1 and 1.3.3). The researcher therefore wanted to explore what the journeys of student teachers in China would be if they were provided with the training as well as the experience. As was mentioned earlier, student teachers in China are not trained about SEN, the main access of education for children with disabilities in China is the regular classroom in mainstream schools, but the ratio of children with SEN in mainstream compulsory education is 1:323 (NBS, 2017, see Section 3.1.1). Moreover, the limited concept of disability and scope of SEN in China means that many forms of SEN are not recognised as such. For teachers who do have SEN students, namely the LRC children with a mandated form of disability, they are not trained about accommodating such needs. Thus, the cycle goes on, and according to Parsons' (1966, 1968) social action theory, this cycle is not likely to stop unless there is a breakthrough in teachers' knowledge about inclusion or their experience of inclusion. In summary, the rationale of the study was to develop an intervention-training course that would not only provide the

[48] See also Footnotes 42 and 58. The Tecent QQ blogs are also called Qzone.

knowledge, but also create an environment of inclusion in China. In that case, a blended-learning training course was a good fit for the research design.

The design was to provide online resources for each of the 16 sessions of the blended-learning course, in order to enable the participants to learn about inclusion and SEN and to revisit what they learned without limit. Therefore, all the learning materials were designed to be online, including supplementary resources – even for the face-to-face taught sessions. In fact, the whole course was rich with a massive amount of information and multiple types of materials (e.g. written documents or books, audio clips, and video clips or films), open online on the researcher's Tencent QQ blog, entirely free, without restrictions. The final decision was made after confirmation from the Dean that all participants would have access to the course on Tencent Qzone via both the university computers and their smart phones (for a better idea of the intervention course, click http://user.qzone.qq.com/914661753/main).

There was also much deliberation over the types of materials for the training course and what tasks to set for students after each session. On the one hand, the assorted materials were intended to construct a multi-layer realm of knowledge for the participants about SEN and inclusion, especially from the perspective of individuals with SEN. A huge amount of video material was gathered from open resources such as YouTube and various government (UK and US) or professional websites about SEN and inclusion, and each session of the training course consisted of a number of such clips as either in-class or after-class materials. On the other hand, the participants were asked to reflect on every session of the training course and to share their reflections online in a designated forum. Their reflections on each session was focused on their past experience of SEN (or possible existence of any SEN) in retrospect and how those children were accommodated. The underpinning rationale for the design was the theory of transformative learning and that new beliefs and opinions were formed in the process of reflection (Mezirow, 1990, see Section 4.2.4).

The online forums for the participants to upload their reflections were designed as typical online focus group studies, as they offered in-depth exploration of specific topics and emphasised 'interaction within the group and joint construction of meaning' (Berg, 2009; Bryman, 2012, p. 502; Punch, 2009). All the 135 student teachers were required to enrol in the training course, all of the activities were conducted in the English language (for practical reasons, see Footnote 46), and their reflections were uploaded into designated online forums as assignments for each session (see Section 4.8 for ethical considerations).

4.5.3 Stage 3: Time-2 survey after intervention

Participants in Stage 3 answered the same SurveyMonkey questionnaire as that of Stage 1, although there was a time difference of approximately five months, at the end of the intervention.

It was by deliberate choice that both Stages 1 and 3 used the same data collection instrument, i.e. repeated measures survey questionnaire, so that results could be compared in order to illustrate the difference between Time 1 and Time 2, i.e. before and after the 16-session SEN training course.

4.5.4 Stage 4: Live-chat interviews after teaching practice

As the focus of the study, Stage 4 set out to explore the impact of the student teachers' learning journey in terms of changing their views in the context of their teaching practice. The data collection instrument for this stage was therefore the result of evaluation of prior investigations conducted in the earlier stages of the study. The findings and implications of prior investigations were carefully evaluated and semi-structured interviews were deliberately selected.

The following aspects were thoroughly considered before deciding on the specific instrument, i.e. semi-structured interviews (see Appendix 4):

- The concept of 'impact' was something complex and therefore rich and detailed data were needed for the study to be both reliable and valid.
- This would be at the end of a one-year data collection period with lots of prior stages; hence the repeated nature would require the instrument to be different rather than repetitive.
- The impact and changes of perceptions were processes that involve the revisiting of participants' statements and answers, and therefore the instrument needed to be flexible, to allow room for changes in both the format and the form of questioning, for better probing and clarification purposes.
- The student teachers to be interviewed might be busy and exhausted at the time of Stage 4. Therefore, the instrument needed to be user-friendly and should not be unduly burdensome for the participants.
- The instrument should also suit the researcher's practical constraints. As the researcher was based in the UK during the course of the study, budget and time constraints would limit her visits to and length of stay at the research location in China.

After evaluating all the above aspects, the device of semi-structured live-chat interviews via Tencent QQ was selected as a feasible data collection instrument for this stage, an approach that has been used in web-based education (e.g. Ferguson & DeFelice, 2010; M. Wang, 2007; M. Wang, Sierra, & Folger, 2003; Woods & Ebersole, 2003). The deliberate choice of live-chat interviews over face-to-face interviews was also out of the consideration that by writing down in words what was in their mind, participants could be more precise about what they wanted to express, and this process in return could enhance their understanding of the topic. It is also due to the consideration that some individuals who are normally quiet in face-to-face communication tend to be more interactive in live chats (Murphy, Drabier, & Epps, 1998).

Unlike in the previous three stages, data in Stage 4 were collected in the Chinese language. This was because from the first three stages, the researcher realised that most of the participants' mastery of the English language was hindering them from expressing their views without restriction, and thus it would be better to conduct the live-chat interviews with them in their mother tongue (see Footnote 41 in Section 4.3.1).

There were also options of 'asynchronous discussion' such as interviews via email. However, as indicated in Simonds and Brock (2014), live interactive methods of communication are regarded as more valuable by younger generation students. Moreover, live chat proved to be far more effective for the researcher to identify problems such as ambiguity or misunderstanding in the participants' writing and therefore to ask for clarification instantly, and to dig deeper at interesting points. The interactive communication of the live-chat interviews also allowed the participants to feel easy and comfortable and not stressed about long and formal email writing, even in their native language.

4.6 Data analysis

The qualitative data analysis software package NVivo, and the Statistical Package for the Social Sciences (SPSS) were used for the data analysis in the study.

4.6.1 Quantitative data analysis

As is shown in Appendix 3, the survey questionnaire (for both Stages 1 and 3) mainly looked at three areas: (1) experience with inclusion, (2) knowledge about inclusion and SEN, and (3) attitudes towards inclusive education.

As the design of the questionnaire could be such that the variables might be pre-coded to make the data analysis an easier task (Bryman, 2012), for every closed question, items were pre-coded so that it was easier in the data analysis process to see the correlation between the

variables that were in the three areas, i.e. experience, knowledge, and attitudes. As was mentioned earlier, SurveyMonkey was used for data collection, which means that the results were automatically generated in Microsoft Excel format, which were then imported to SPSS, analysed and presented by using SPSS. For those six-point Likert-scale questions, each had a score with the highest at six and the lowest at one, and where the questions were asked negatively, the scores were reverse coded in SPSS, so that a score above four indicated a positive answer in respect of all questions. The correlation between variables was presented in the form of figures, tables, charts, graphs, diagrams and summaries. Any emerging relationships between the variables were also examined in an attempt at factor analysis, for example, whether the participants had been taught about inclusion (e.g. Q3, Q4, Q5), or how willing the participants were to take action (e.g. Q17, Q18) (see Section 5.4.1). Canonical correlation was analysed in SPSS for the purpose of investigating the relationship between different sets of variables, for instance, between the differences in the participants' perceived prior experience with SEN (e.g. Q1diff, Q2diff) and the differences in their stated understanding of inclusive education (e.g. Q6diff) and changes in their attitudes (e.g. Q15diff, Q16diff, etc.) (see Section 5.4.2).

The data analysis also involved a comparison of the responses from the same individual participants between Time 1 and Time 2 and it was made both across categories and between variables within each category. The first step was to create an SPSS dataset in the stacked format, with the responses to the Time-1 survey on top of those Time-2 ones for each individual participant. The second step is then to subtract each participant's Time-1 score from their Time-2 score, to present the difference. The calculated differences were then transformed into new variables, each indicating the differences only, to illustrate the changes in every single participant (see Section 5.4.1 for more information). Based on the differences between Time 1 and Time 2, ANOVA was used to examine the statistical significance of the differences made after the intervention training (see Section 5.5.2).

For the open-ended questions, by contrast, a 'qualitative' approach to analysis was adopted. Responses about insights and attitudes were coded so that it would be easier to search or compare data, or to identify patterns. They were then analysed in relation to the research questions. The analysis involved contextualising data in relation to research questions, identifying and grouping on the basis of connections or contradictions and complementarities as well (Pole & Lampard, 2002). Details of the analysis of the data will be reported in Section 6.1 of the thesis.

4.6.2 Qualitative data analysis

As pointed out by Richards and Morse (2012), qualitative research involves a huge volume of data. The qualitative data in the study were indeed enormous, mainly composed of two sub-sets of data from Stages 2 and 4 respectively:

- The 132 (out of 135) participants' answers to Q31 of the mostly-quantitative survey questionnaire, namely a paragraph written in their own words of their individual definition of inclusive education (see Section 6.2).
- Online reflections for 16 sessions of the intervention training, from 116 (out of 135) participants (Stage 2: involving all the participants, one 200-word reflection per session of the training course, see Section 6.3).
- In-depth live-chat interviews with 20 participants (Stage 4: semi-structured live-chat interviews via Tencent QQ, reorganised and translated as the medium for this stage was the Chinese language, see Section 6.4)

The qualitative data collected were coded in a similar way to the coding of quantitative data (e.g. previous knowledge, pervious experience, perceived experience in retrospect, raised awareness, etc.). They were grouped into categories, formed into themes, and the collection and analysis was repeated until themes were analysed and possible relationships were explored. The software of NVivo was used for data analysis (see Figure 4.4 on the following page).

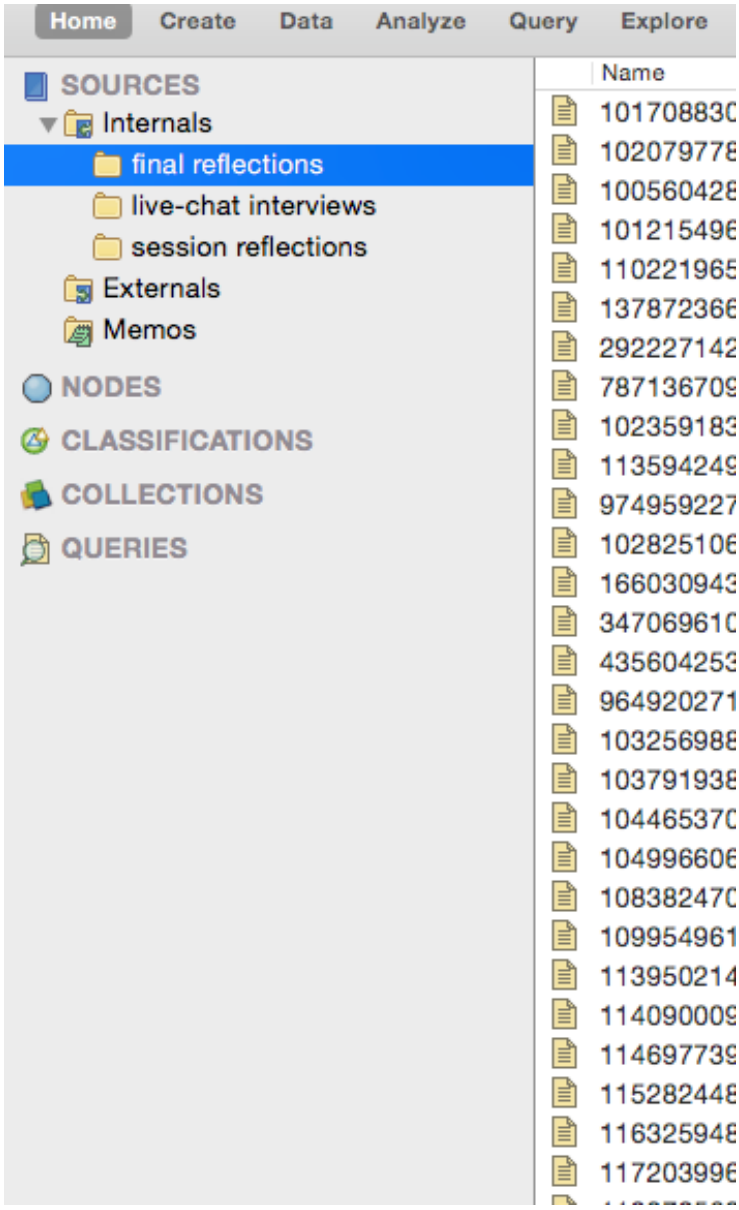


Figure 4.4 Screenshot of NVivo for the analysis of qualitative data

Thematic analysis was employed in the interpretation of all the qualitative data. Different categories were identified and were developed into several emerging dimensions such as attitudes, experiences, understanding, school, university, tradition and society. In the cases of the live-chats interviews, the data were reorganised and translated. This was useful in identifying patterns, causations and degrees of correlation between data sets, and all these were essential in understanding the perspectives of student teachers in the study regarding their journey of understanding of SEN and inclusion, as well as the impact of the journey in terms of changing their views that are shaped by the long-established traditional culture in China.

4.7 Reliability and validity

Reliability and validity are often used to measure the quality of research. Regarding quantitative research, some researchers such as Savin-Baden and Major (2013, p. 473) define validity as 'ensuring that the experiment is designed effectively to measure the subject variables' and reliability as 'ensuring that the experiment can repeatedly measure these variables accurately'. Regarding qualitative research, there are no such agreed statements, as researchers debate about the applicability of reliability and validity.

This study adopted the mixed-methods research design, and thus conformed to the respective criteria for each of the methods. Reliability and validity were addressed by following the guidance given by Cohen et al (2011, p. 198), such as keeping to an appropriate timescale, making full use of all resources available for the required research to be undertaken, deciding on the best possible methodology for answering the research questions, selecting suitable instruments for data collection, and acquiring a good sample. Specifically, the piloting processes, the approach of mixed-methods research as well as the triangulation of different data sources, all contributed to the reliability and validity of the study.

4.7.1 Data triangulation[49]

In order to explore similarities from findings from the different methods used, triangulation of the findings was made in the data analysis, where various data sources (e.g. data from survey questionnaires, different online focus groups and the live-chat interviews) were used to crosscheck the findings, and to attempt to answer the research questions. With triangulation, possible problems of construct validity were addressed as the multiple sources of evidence provide multiple measures of the same phenomenon (Leech & Onwuegbuzie, 2007).

Such evidence from various sources made the case study more reliable and of higher quality. Instead of relying on a single source of information, the study involved information gathered from multiple sources and multiple methods, thus providing a kind of counterbalance of multiple perspectives for the interpretation of the social phenomena (Thomas, 2013).

[49] Here in this chapter, the term 'triangulation' was used only as a way of crosschecking findings. The researcher did not intend to get involved in methodological debates over triangulation (as in S. Chen, 2016) and crystallisation (e.g. initiated by Denzin, 1970).

In this study, findings from the survey questionnaires and 16 online focus groups administered to a larger sample (116 out of 135 student teachers) were used to confirm, support or prove the findings from a smaller number of 20 in-depth interviews, and vice versa.

4.7.2 Design of the instruments

As explained earlier (see Section 4.5 for details), the study involved a five-month intervention training course with pre-and-post tests, i.e. Time-1 and Time-2 questionnaire surveys, online reflections during the intervention, and live-chat interviews after the participants' teaching practice.

The design of the questionnaire intentionally took into account the following considerations in order to improve reliability and validity:

- The use of a six-point Likert scale avoided simply choosing the neutral position.
- Open-ended questions offered more perspectives from the participants to the investigation and added to the richness and depth of the data.
- Some of the perspectives provided by participants from the open-ended questions were a good supplement for the researcher to modify her next stages.

The design of the semi-structured interview was carefully tailored according to initial findings from the prior investigations, namely the questionnaire findings and analysis of the online focus groups. Therefore, anything interesting that emerged from the prior investigations was built into the semi-structured interview, for a more profound and complete understanding built on prior stages of the study, which contributed to the reliability and validity of the study.

During the piloting and before the administration of the survey, the researcher used a seven-step approach provided by Banville et al. (2000) in Cohen et al. (2011, p.193) to ensure the quality of the survey questionnaire. Special attention was paid to the following steps.

- Prepare a preliminary version of the instrument using the back-translation technique.
- Evaluate the preliminary versions and prepare an experimental version of the instrument using a committee of experts (three to five persons) to conduct such a review, thereby avoiding possible bias by a single researcher.
- Pre-test the experimental version using a random survey approach, to check the clarity of the instructions and the appropriateness of the instrument.

- Evaluate the content and concurrent validity of the instrument using bilingual participants to check whether they are answering both versions in the same way, and to check the appropriateness of the instrument.

4.7.3 Piloting

The aim of piloting is to help improve the effectiveness of the data collection instruments, to test whether the data collected will be able to answer the research questions, to avoid problems that are likely to appear during the fieldwork, and to test reliability and validity (Bryman, 2012; Creswell, 2014). After ethical approval, each stage of the study was carefully piloted before the actual administration of the data collection.

The piloting of Stages 1 to 3 was conducted as one pilot study. First, two distance-learning sessions of the blended-learning training course was made ready online. Then 10 postgraduate students and academic visitors from China who were studying in the researcher's university were approached for the questionnaire. They were all competent in both English and Chinese, therefore meeting the criteria illustrated in the 'seven-step approach'.

It should be noted that the survey of these pilot participants was administered individually, with the researcher sitting close to the individual pilot participants and observing them answering the questions. This was out of the consideration that where these pilot participants paused, there must be some problems in the questions like ambiguous wording or other flaws regarding the design of the questionnaire. The researcher took notes and asked for feedback and the questionnaire was revised and improved with the 10 participants. After the Time-1 questionnaire, the 10 participants were sent links to the two distance-learning sessions and were given two weeks to learn the course and write their reflections on designated online forums. Then the 10 participants answered the same questionnaire a second time but with the improved version.

The piloting of Stage 4 (i.e. the live-chat interviews) was done differently due to the long timespan of the study. During the course of the intervention training and communication with the participants, three volunteers from the student teachers took part in the piloting of the semi-structured interview, and this was conducted two days after they started their teaching practice.

The piloting process helped the researcher to identify the strengths and weaknesses of the study, and to see whether the methodology adopted and the results gathered agree or conform to what was expected.

4.8 Ethical considerations

Ethical considerations have always been an important issue for social researchers, a matter of 'what is proper and improper in the conduct of scientific inquiry' (Babbie, 2013, p. 111). For any subject involved in research, the rights of privacy, anonymity, and confidentiality should be protected, and all researchers should follow the ethical codes and articles of the professional organisations (Cohen et al., 2011).

The study strictly followed the published ethical guidelines of the American Educational Research Association by observing the core principles: 1) Professional Competence, 2) Integrity, 3) Professional, Scientific, and Scholarly Responsibility, 4) Respect for People's Rights, Dignity, and Diversity, and 5) Social Responsibility (AERA, 2011, pp. 146-147). Ethical approval was obtained from the University Ethics Committee prior to conducting the fieldwork. However, the ethical approval in the study was secured in two separate steps (see Appendix 6):

- Step One: application for ethical approval of the Time-1 and Time-2 questionnaires and the online focus groups, i.e. Stages 1, 2, and 3 of the study (the application was submitted in mid-June 2014 and was approved in early August 2014).
- Step Two: application for ethical approval of the semi-structured interviews, namely 'live chats' with individual volunteers, i.e. Stage 4 of the study (the application was submitted in early October 2015, and was approved in mid-October 2015).

The deliberate gap between the two steps was for the purpose of identifying emerging themes from prior investigations. The Step-2 application was submitted in early October 2015, after all the data from prior stages were collected and initially analysed, which enabled the researcher to incorporate the emerging themes into the interview questions. After allowing enough time for the approval, there was still adequate time for the researcher to pilot and improve on the interview outline before the administration.

As for the whole process of the fieldwork, initial attempts of negotiation for access were made with various Normal Universities in China. Strong support was obtained from the target university, where eventually all second-year student teachers who were majoring in English language teaching were enrolled in the training course provided by the researcher (but not required to participate in the research study). Required enrolment for the training course contributed to the data collection, as most participants consented to take part in most stages of the study.

However, despite the required enrolment, consent was strictly obtained for the collection of data at every step. Informed consent was secured from both the university and the individual student teachers before every stage of the data collection (see Appendix 6 for informed consent forms).

The researcher strictly followed all ethical principles such as privacy, anonymity, and confidentiality, and especially paid attention to ethical issues in online research. Although the Time-1 and Time-2 questionnaires required some form of student identification for the purpose of measuring change over a period of time, their student ID number and QQ ID were collected instead of their names. Their preferred pseudonyms were used in place of their names in any communication with/between them throughout the study and thesis. Their participation in the study was anonymous to anyone but the researcher herself (even in online focus groups, as pseudonyms were used), and was kept strictly confidential.

Meanwhile, the name of the Normal University and the location were kept anonymous as well, in order to protect the participants from being identifiable. Furthermore, any other personal information provided by the participants, including the names of the local schools where they did their teaching practice or the names of children they encountered in the settings, was also strictly kept anonymous and confidential.

At each stage of the data collection process, the students were reassured that the research would not influence the assessment for either that course or their teaching practice, and this message was repeated many times throughout the process. Arrangements were made in advance for an assistant lecturer from the university to conduct the assessment (and consequently that assistant lecturer participated in every session of the training). The information was also made clear in all the information sheets and consent forms (see Appendix 6). Therefore, the student teachers understood very well before and throughout the data collection process that their grades would not be affected to the smallest extent by whether or how they would participate in the study.

Taking into consideration that the participants might possibly try to look good (when most of their answers were actually negative) or be nice (so as not to upset the researcher) in the context of the Chinese culture, the researcher kept encouraging and requiring students to give honest answers all the time, before and throughout the data collection process. In this way, the risk of students trying to please the researcher or feeling guilty about giving critical but true answers was reduced to the minimum in the study. The fact that 19 out of the 135 student teachers asked for their data not to be used in the research also indicted the freedom of choice given to the participants.

4.9 Summary

This chapter outlined the philosophical basis of social research and justified the ontological and epistemological considerations of the study in relation to the nature of the investigation and the research questions. The theoretical underpinning was based on part of Parson' social action theory. A qualitatively-driven case study with a mixed-methods approach for a more comprehensive understanding was justified as being appropriate for the study. The fieldwork of the study was conducted in a university in China, and all second-year English-major student teachers participated in the study, although they moved into their third year at the later stage of the data collection. The fieldwork comprised four stages: The first three were before, during, and after a blended-learning intervention training course on SEN and inclusion, and the last stage was after the participants finished their teaching practice (i.e. school experience) in local primary and secondary schools.

The study also adopted the theory of transformative learning, and reflection as a transformative process was applied to the fieldwork of the study. Participants were made to reflect on each session of the intervention and to upload their reflections to the designated online forum.

Quantitative research strategies, i.e. repeated measures design survey questionnaires, were used in order to investigate the participants' views and attitudes towards inclusive education in China, and to measure any differences before and after the intervention.

Qualitative research strategies, such as online focus groups throughout the intervention training and semi-structured interviews, were adopted in order to explore the process and to gain insight into the student teachers' perspectives of their journey of understanding of SEN and inclusion as well as the impact of their journey of understanding regarding changing their views that are shaped by the long-established Chinese culture.

The purpose of the study, sampling, data collection in different stages and data analysis were outlined in this chapter. Ethical issues regarding this study were explained, and reliability and validity of the study were discussed to demonstrate the logic of the research.

In summary, the research was designed in the Chinese context depicted in Chapter 2, in order to meet the research objectives raised in Chapter 1, while taking into consideration methodological issues and concerns that arose in the review of previous studies as given in Chapter 3. The choice of research strategy and relevant methods was mainly to reflect the constructivism or interpretivism approach; data analysis was accordingly largely qualitative, in spite of the quantitative analysis used for the questionnaires.

The next two chapters (Chapters 5-6) will present the findings from the quantitative and qualitative datasets collected across the different stages of the study: data collected during the SEN training, as well as data collected after the participants' school experience.

Chapter 5 Results from Quantitative Data

This chapter presents the results of the Time-1 and Time-2 surveys about the awareness, understanding and attitudes of the student teachers at a university in China towards inclusive education before and after intervention training about SEN. The respondents were second-year student teachers at the time of the training as well as at the time of both the surveys.

As mentioned in the previous chapter, a repeated measures design was used for both Time-1 and Time-2 surveys. The survey questionnaire consists of five parts: 1) experience with inclusive education; 2) views and knowledge about inclusion and SEN; 3) attitude towards inclusion; 4) their definition of inclusive education; 5) further information about the respondents (see Appendix 3).

All the quantitative data were analysed by using SPSS. The statistical analysis in this chapter will begin with a demographic distribution of results in Time-1 and Time-2 surveys according to the major parts of the survey questionnaire. Then the data will be grouped into different dimensions and presented accordingly for factor analysis, which was conducted by using canonical correlation analysis in SPSS. Repeated-measures ANOVA tests were also conducted using SPSS to look at the statistical significance between the surveys. An overall review of the findings will be given at the end of the chapter, with a focus on the differences.

A total of 135 student teachers were enrolled in the intervention training, the vast majority of the participants were female (95.5% at Time 1 and 98.3% at Time 2), and none saw themselves as having any disability.

For the core parts of the questionnaire (i.e. Questions 1 to 30), there was a six-point Likert scale indicating the degree of agreement to each statement in the question, with Point 1 for "Strongly Disagree" and Point 6 for "Strongly Agree". For Questions 2 and 4, there was an additional choice of Point 0, meaning "Not Applicable", which was decided in both the previous study (S. Li, 2013) and piloting of the questionnaires. The way the two surveys were conducted is as follows.

5.1 Time-1 survey

Out of the 135 participants, 132 in the Time-1 survey stated that they were happy for their data to be used in the research.

5.1.1 Brief account of Time-1 survey

Prior to the start of the intervention, the questionnaire was activated at SurveyMonkey and was hyperlinked to the preliminary session of the course as the preceding task for the participants before they started taking the first session. The hyperlinks of the survey and Session One of the training were sent to the Dean, who then gathered all the second-year English-majoring student teachers in a lecture hall to illustrate how to take the blended-learning training course. Both the Dean's demonstration and the specifications before the start of Session One (see Figure 5.1 below) encouraged the completion of the Time-1 survey.

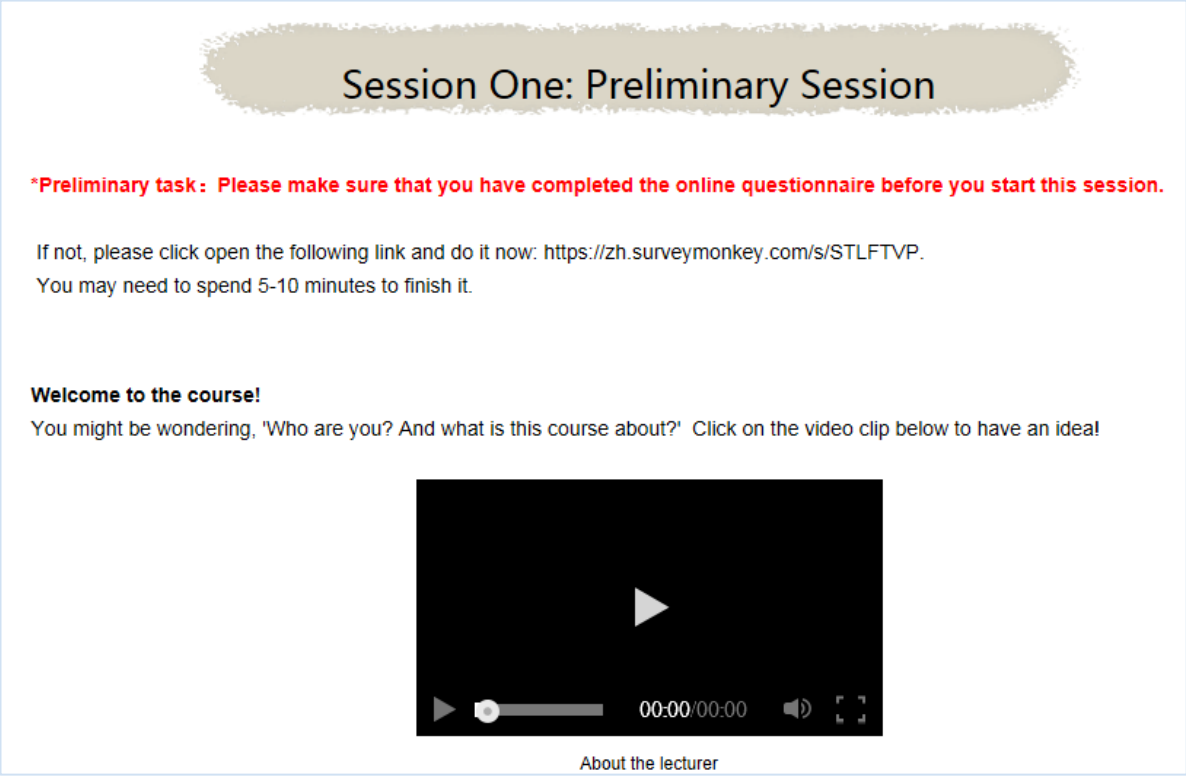


Figure 5.1 Screenshot of Time-1 survey as preliminary task before intervention

The hyperlink to the online questionnaire would direct participants to the SurveyMonkey webpage for the questionnaire. Figures 5.2 below and 5.3 on the following page are an illustration of the Time-1 survey, with rubric in Chinese and the survey questions in bilingual version. As was mentioned in Chapter 4, the data collection of Time-1 survey was carried out in March 2015, after ethical approval and piloting of the questionnaire. A total of 135 student teachers were encouraged to participate in the training course and the two surveys[50].

Figure 5.2 Screenshot of Time-1 survey information page

[50] All the 135 second-year English-major student teachers were required by their Dean to take part in the training course provided by the researcher; however, they had the choice of whether they would like their data to be used by the researcher (see Section 4.8).

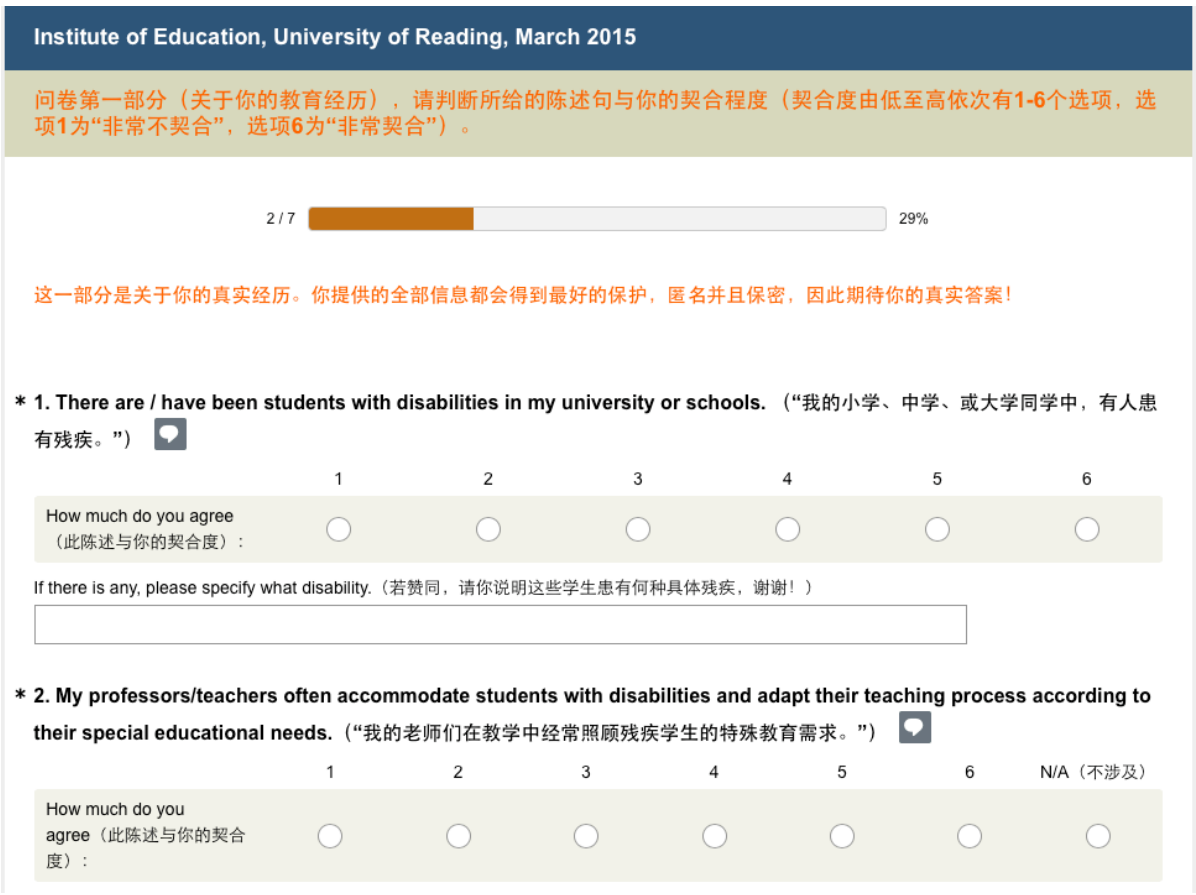


Figure 5.3 Screenshot of Time-1 survey questionnaire page

5.1.2 Major findings of Time-1 survey

Of all the 132 participants who gave consent for their data to be used in the study, 126 (95.5%) were female student teachers, and 6 (4.5%) were male. None of the participants considered themselves as having any form of disability. More than a third (37.9%, n=50, N=132) reported having personal contacts with someone who had a disability.

Regarding their education experience with disability, 116 (87.9%) stated that they had never had any fellow student with any form of disability in their primary and secondary schools or their university. Of the 16 (12.1%) who had previous experiences with fellow students with disabilities, all 16 cases were obvious physical disabilities or intellectual disabilities as indicated in the comment box following the question. Discussion of this phenomenon will be given in Section 7.1.1.2 of the thesis.

Another 87.9 per cent (n=116, N=132) stated that they did not know what inclusive education was.

Six (4.5%) of the 132 participants rightly stated that they had received previous training about disability, although another 23 wrongly gave positive answers[51]. Of the six who did take courses about disability, their prior training were optional courses about Braille or sign language, offered by the Department of Special Education of their university (see Section 4.4.1 and Footnote 44).

More than three quarters (77.3%, n=102, N=132) of the student teachers disagreed that their professors or teachers had been catering for the SEN in their students, and more than a quarter (26.5%, n=35, N=132) regarded this question as "Not Applicable". Regarding whether they had been taught by their professors to cater for the individual needs of the children, nearly a half (47.0%, n=62) disagreed. Regarding whether they were taught about catering for the SEN in children, nearly two thirds (65.2%, n=86) of the participants chose a negative answer, and 20.5% (n=27) regarded this as "Not Applicable".

The findings in the Time-1 survey also indicate that the participants had very limited (or even wrong) knowledge of legislation for inclusive education in China, although in general their attitudes towards children with SEN are highly positive. A vast majority (81.8%, n=108, N=132) of the participants stated that they would try to cater for the SEN in children in their future teaching, although more than two thirds (67.4%, n=89) of all participants disagreed that children with SEN should have access to mainstream schools. Again, more than two thirds (68.9%, n=91, N=132) of the participants disagreed that their teacher-training programme was preparing them for catering for SEN.

5.2 Time-2 survey

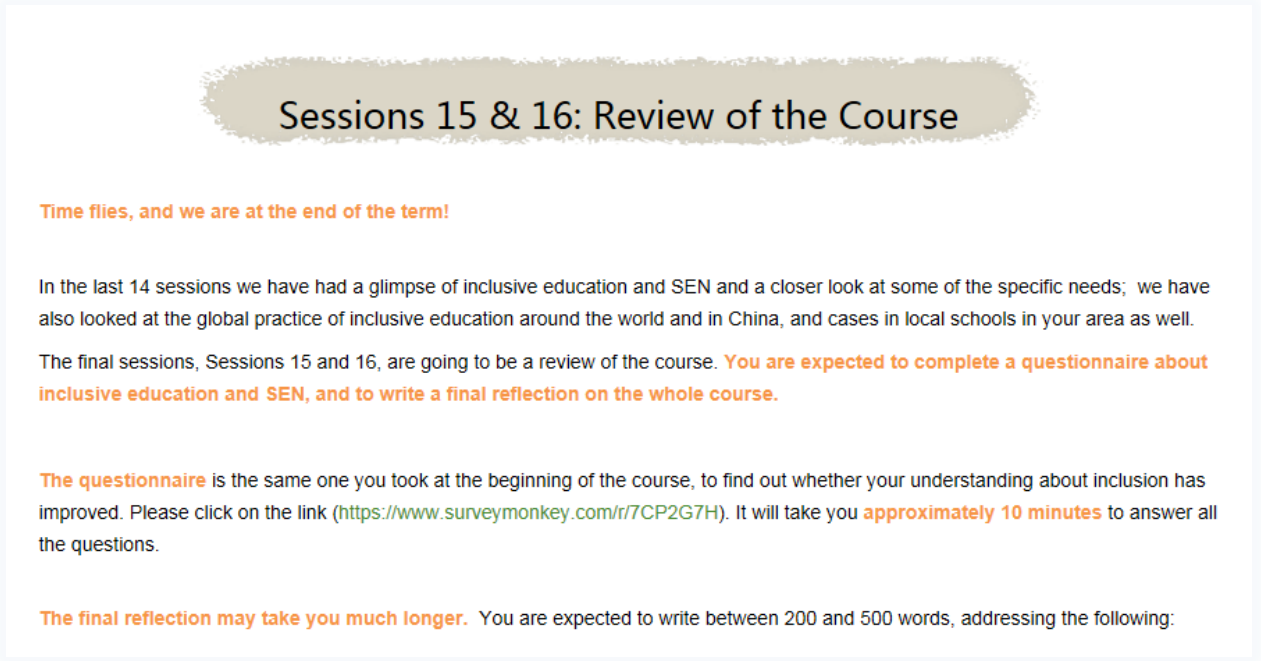
Out of the 135 participants, 116 participants in the Time-2 survey gave consent for their data to be used in the research.

5.2.1 Brief account of Time-2 survey

At the end of the intervention training, the students were asked to complete the Time-2 survey along with their final reflection on the SEN course (see Figure 5.4 on the following page). However, data collected from the participants' reflections will be presented in Chapter 6 of

[51] The 23 participants could not be calculated as having had previous training experience, because the information they provided in the comment box for that question indicated a misunderstanding: They counted the intervention training, which was provided by the researcher, as the training they had received.

the thesis, which will be the qualitative results of the study. [52] The same 135 student teachers were encouraged to participate in the Time-2 survey after the intervention training. Figure 5.5 on the following page is an illustration of the Time-2 survey at the time (i.e. end of June 2015).



Sessions 15 & 16: Review of the Course

Time flies, and we are at the end of the term!

In the last 14 sessions we have had a glimpse of inclusive education and SEN and a closer look at some of the specific needs; we have also looked at the global practice of inclusive education around the world and in China, and cases in local schools in your area as well.

The final sessions, Sessions 15 and 16, are going to be a review of the course. **You are expected to complete a questionnaire about inclusive education and SEN, and to write a final reflection on the whole course.**

The questionnaire is the same one you took at the beginning of the course, to find out whether your understanding about inclusion has improved. Please click on the link (https://www.surveymonkey.com/r/7CP2G7H). It will take you **approximately 10 minutes** to answer all the questions.

The final reflection may take you much longer. You are expected to write between 200 and 500 words, addressing the following:

Figure 5.4 Screenshot of Time-2 survey as the end-of-intervention task

[52] The participants were required to reflect on each of the 16 sessions of the intervention training, which was their assignment for taking the course and part of the qualitative data collected for the study. However, again, the participants were given the choice of whether they would like their data to be used by the researcher.

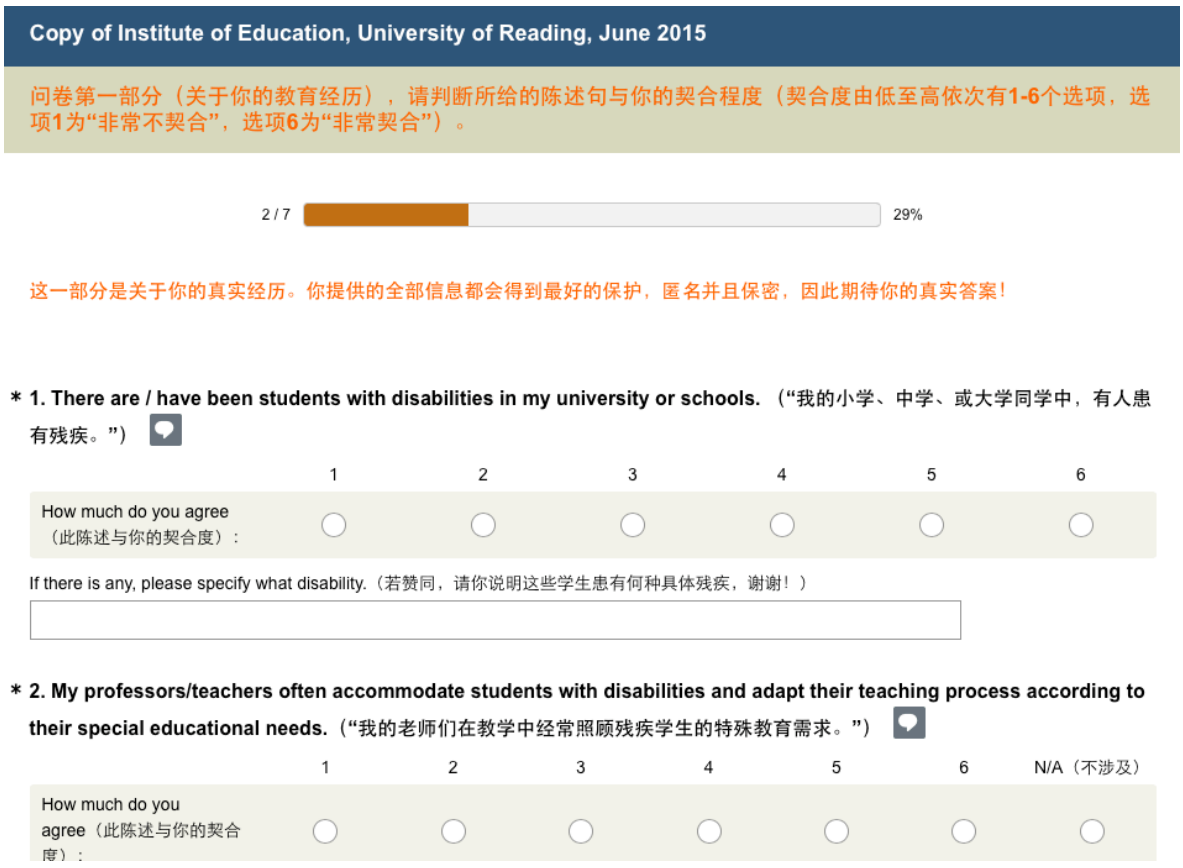


Figure 5.5 Screenshot of Time-2 survey questionnaire page

5.2.2 Major findings of Time-2 survey

Of the 116 participants who consented at Time 2 for their data to be used in the study, 114 (98.3%) were female student teachers, and 2 (1.7%) were male. None of the participants considered themselves as having any form of disability. Nearly half (43.1%, n=50, N=116) reported having personal contacts that had a disability.

Regarding their education experiences with disability, over two thirds of the participants (70.7%, n=82, N=116) stated that they had never had any fellow student with any form of disability in their primary and secondary schools or their university.

Of the rest (29.3%, n=34, N=116) who stated that they had previous experiences with fellow students with disabilities, nearly a half (n=15) indicated learning difficulties (instead of the obvious physical disabilities or intellectual disabilities as indicated in the Time-1 survey) such as autism, dyslexia, ADHD, BESD and so on. This is significant, as the difference in the participants' responses to the Time-1 and Time-2 surveys indicated increased perceived

experiences with SEN, which will be examined in the qualitative data as well (see Section 6.3.3).

At Time 2, the majority of the participants (76.7%, n=89, N=116) stated that they understood the concept of inclusive education.

Half (50.0%, n=58, N=116) of the participants clearly stated that they had received previous training about disability. Again, the information they added in the comment box indicated confusion as to whether the intervention training provided by the researcher should be counted in their answer to the question (see Footnote 51 in Section 5.1.2).

Nearly three quarters (72.4%, n=84, N=116) of the student teachers disagreed that their professors or teachers had been catering for the SEN in their students, and still 18 regarded this question as "Not Applicable". Regarding whether they had been taught by their professors to cater for the individual needs of the children, half (50.0%) disagreed. Regarding whether they had been taught about catering for the SEN in children, the majority (55.2%, n=64, N=116) chose a negative answer, and 6.0% (n=7) regarded this question as "Not Applicable".

The findings in the Time-2 survey also indicate that the participants did not know much about the legislation for inclusive education in China, whereas their attitudes towards children with SEN were even more favourable. The vast majority (86.2%, n=100, N=116) of the participants stated that they would try to cater for the SEN in children in their future teaching, and about two thirds (66.4%, n=77, N=116) agreed with mainstreaming children with SEN. Again, the majority (62.1%, n=72) disagreed that their teacher-training programme was preparing them for catering for SEN.

In the data analysis process, respondents with incomplete answers to the surveys were not included as their identity information was missing at the end of the survey questionnaires, which was also their confirmation of consent for taking part in the next stage of the research (see Appendix 3). Likewise, according to their identity information, repeatedly submitted questionnaire results were taken out before the analysis.

5.3 Stacked comparison between survey results

A stacked comparison of the data indicated noticeable differences between the results of the Time-1 and Time-2 surveys, which indicated a considerable increase in the participants' understanding of and attitudes towards inclusive education.

Demographic statistics of the two surveys will be presented part by part, with Time-1 and Time-2 results stacked according to each question (e.g. in Table 5.1 in the following section).

5.3.1 Experiences with inclusive education

For the first five questions, i.e. about previous experiences of inclusion, the participants' answers showed a distinct lack of experience to almost all the questions both at Time 1 and Time 2, which indicated that the participants experienced very little inclusive education, as was presented in Sections 5.1.2 and 5.2.2 respectively. In other words, before and after the intervention, most of the participants reported having no experiences of SEN in their university or schools, no experiences of inclusive practice in their education experience, and no SEN training in their teacher education programme (see the following chapter for qualitative findings regarding this).

Despite the overall lack of inclusion experiences as reflected in both survey findings, there are, however, considerable differences between the two sets of data. A stacked format table was therefore produced in order to give a direct comparison of the Time-1 and Time-2 survey results regarding the demographic distribution of the mean, median, mode, standard deviation and range of the answers to Questions 1 to 5 (see Table 5.1 below).

Table 5.1 Demographic distribution of results: Experiences with SEN

Questions in the survey	Time of study	Mean	Median	Mode	SD	Range
1. There definitely are/have been students with disabilities in my university or schools.	T 1	**1.86**	**1.00**	1.00	1.44	5.00
	T 2	**2.79**	**2.00**	1.00	1.77	5.00
2. My professors/teachers always accommodate students with disabilities and adapt their teaching process according to their special educational needs.	T 1	2.03	2.00	**0.00**	1.81	6.00
	T 2	2.47	2.00	**3.00**	1.65	6.00
3. I have often been taught to cater for the individual needs of children.	T 1	**3.88**	**4.00**	3.00	1.54	5.00
	T 2	**3.38**	**3.00**	4.00	1.48	5.00
4. I have often been taught to cater for the needs of children with disabilities.	T 1	2.81	3.00	3.00	1.97	6.00
	T 2	3.22	3.00	3.00	1.52	6.00
5. I have definitely had courses at university about disability and special educational needs.	T 1	2.19	1.00	1.00	1.75	5.00
	T 2	3.53	3.00	6.00	1.99	5.00

As is shown in Table 5.1, at Time 2 (i.e. after the intervention training), more participants stated that they had actually had fellow students with disabilities in their school years or university. The participants' responses to Question 1 averaged 1.86 (SD=1.44) before the intervention, but then increased to an average of 2.79 (SD=1.77) after the intervention. Similarly, the median (i.e. the number separating the higher half of the data sample from the lower half) moved from 1 to 2 although the mode (i.e. the most frequent answer) remained the same at 1, indicating that the participants' most frequent responses had been 1 (i.e. "strongly disagree") at both times regarding previous experience with SEN.

Table 5.1 also indicated interesting findings in the participants' responses to Question 2, about whether their professors or teachers accommodate SEN in their teaching. Although there seemed to be little change in the mean and median, there appeared a big jump in the mode after the intervention training. The Time-1 mode (mode=0) meant that the most frequent response to the question was "Not Applicable"; however, the Time-2 mode (mode=3) meant that the participants became far less certain about their answer. The reason for this phenomenon might be both the lack of inclusive practice in mainstream education and the lack of SEN training in mainstream education, both of which will be discussed in Section 7.1 of the thesis.

Equally interesting is a drop in the mean (from 3.88 to 3.38, as shown in Table 5.1) in Question 3, i.e. the participants' responses to whether they had been trained to cater for the individual needs of children. Similarly, a shift in the median (from 4 to 3) indicated that the student teachers became less sure about their teacher-training programme regarding accommodating the needs of children. One possible explanation is their increased awareness of the variety of needs in existence in the classroom, which they were unaware of before the intervention training. This is evidenced in the qualitative data, which will be presented in Section 6.3 and further discussed in Section 7.1.

A comparison of the demographic distribution of results between different groups of the sample was also carried out, where the correlation between the variables will be presented in Section 5.4 and statistical significances between the two times will be presented in Section 5.5.

5.3.2 Knowledge about inclusive education and SEN

The findings indicated an increase in the participants' knowledge about inclusive education as well as legislative guidelines regarding inclusion in China.

Table 5.2 on the following page shows the demographic distribution of the mean, median, mode, standard deviation and range of the answers to Questions 6 to 14 at the two times. The participants' increased knowledge was reflected especially in the case of Question 6, i.e. on their perception of their understanding about the concept of inclusive education. What was presented in Sections 5.1.2 and 5.2.2 was more explicitly illustrated in Table 5.2 and Figure 5.6 that follows. As is shown in Table 5.2, the average responses to Question 6 rose from 1.94 to 4.35 on the six-point Likert scale, alongside the same dramatic rise from 1 to 5 in the median and mode, which is also distinctly shown in Figure 5.6.

Certain questions in the surveys were presented as a negative statement (see the highlighted parts in bold capitalised letters in Table 5.2 in this section and Table 5.3 in Section 5.3.3). However, in later analysis of the data, all those questions expressed in negative statements were recoded so that all the values in comparison are consistent (Bryman, 2012), as shown in Figure 5.6 here in this section and Figure 5.7 in Section 5.3.3.

More than two-thirds of the participants (67.4%, n=89, N=132) at Time 1 wrongly felt that the law excludes children with disabilities from mainstream settings in China, although around three quarters of the same sample (72.7%, n=96, N=132) were confident that they knew that the law ensures equal opportunities for individuals with disabilities in higher education enrolment. This contrast is consistent with what is shown in Table 5.2 and Figure 5.6 on the following pages, as the responses to Questions 9, 10, 13 and 14 (i.e. all very positive understanding) versus Questions 6 and 8 (i.e. very negative understanding) at Time 1 were at opposite extremes of the six-point Likert scale.

Table 5.2 Demographic distribution of results: Knowledge about inclusion

Questions in the survey	Time of study	Mean	Median	Mode	SD	Range
6. I understand what "inclusive education" means.	T 1	**1.94**	**1.00**	**1.00**	1.37	5.00
	T 2	**4.35**	**5.00**	**5.00**	1.28	5.00
7. I am aware that the law states that pre-school and school teachers are obliged to be constantly alert to potential childhood disabilities in their students.	T 1	3.75	4.00	3.00	1.61	5.00
	T 2	3.78	4.00	3.00	1.59	5.00
8. I am aware that the law states that children and adolescents with disabilities should be educated in special education schools, or in special education classes attached to ordinary schools, **RATHER THAN** [53] in mainstream classes of mainstream schools.	T 1	4.08	4.00	6.00	1.72	5.00
	T 2	3.47	3.00	4.00	1.51	5.00
9. I am aware that the law states that universities must enrol students with disabilities who meet the State's admission requirements and should not deny them enrolment on account of their disabilities.	T 1	4.53	5.00	**6.00**	1.55	5.00
	T 2	4.43	5.00	**6.00**	1.51	5.00
10. I am aware that the law states that trainee teachers in special education teachers colleges should be trained for teaching children with disabilities.	T 1	4.69	5.00	**6.00**	1.54	5.00
	T 2	4.74	5.00	**6.00**	1.47	5.00
11. I am aware that the law states that all trainee teachers in normal universities should be offered courses of special education.	T 1	3.16	3.00	2.00	1.66	5.00
	T 2	3.45	3.00	2.00	1.45	5.00
12. I am aware that the law states that **ONLY** those children with a diagnosis have a disability.	T 1	3.19	3.00	3.00	1.63	5.00
	T 2	3.13	3.00	2.00	1.61	5.00
13. I am aware that the law states that it is **NOT** right to give extra time in exams for those with disabilities.	T 1	3.07	3.00	**1.00**	1.68	5.00
	T 2	2.56	2.00	**1.00**	1.50	5.00
14. I am aware that the law states that mainstream schools do **NOT** need to provide facilities or support for disabilities.	T 1	2.05	1.00	**1.00**	1.40	5.00
	T 2	1.95	2.00	**1.00**	1.11	5.00

[53] The parts of the questions marked in bold capitalised letters here in Tables 5.2 and 5.3 indicate that the questions were presented in a negative statement in the questionnaire, which therefore needs to be taken into account in the interpretation of the results.

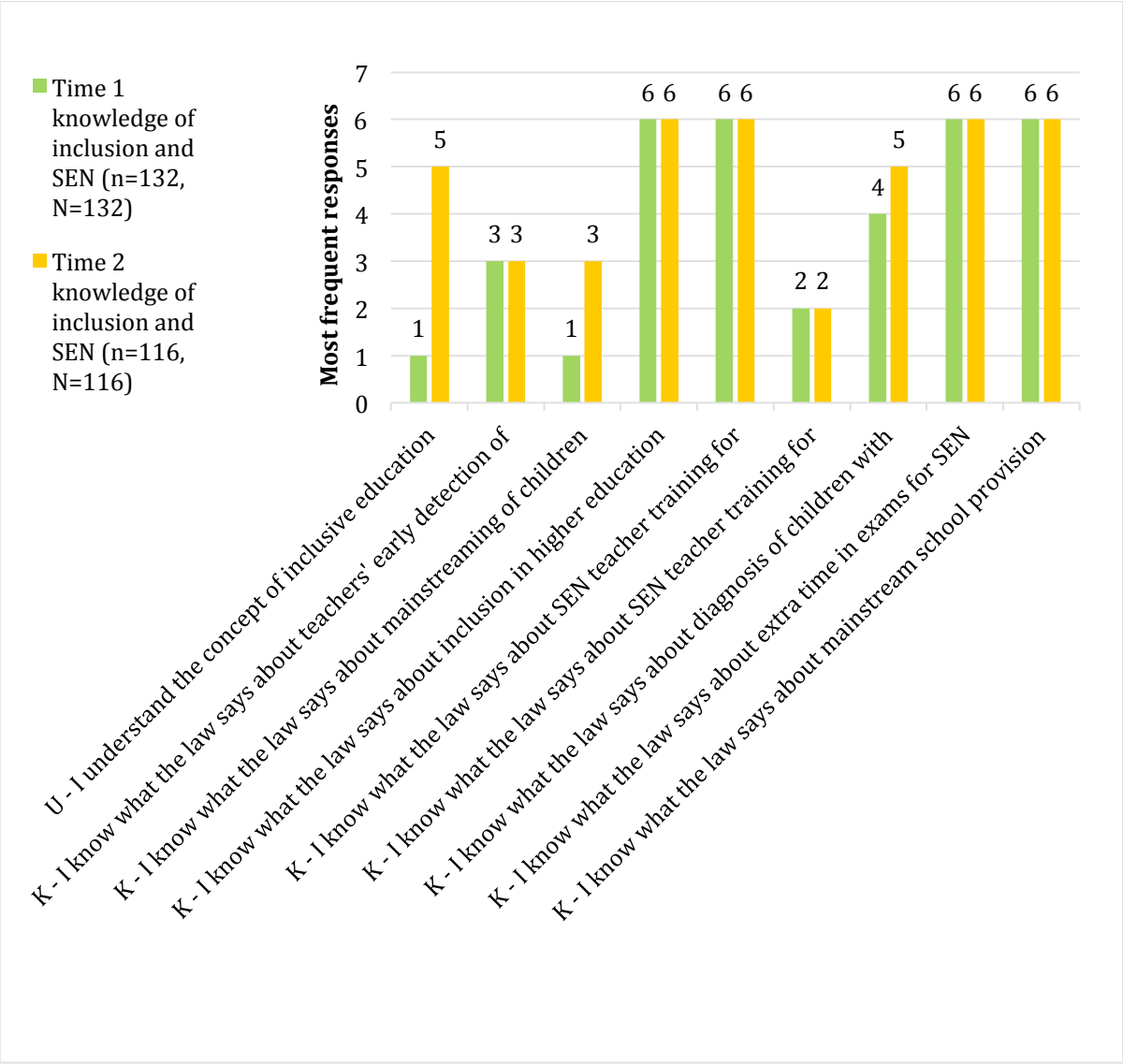


Figure 5.6 Bar chart comparison of mode: Knowledge about inclusion

This then indicates a gap in their knowledge about legislation between the goodwill in general terms, which can be theoretical and abstract, and the everyday practice of specific implementation of the policy, which needs to be definitive and tangible. The reasons behind all this will be discussed in Section 7.1.3.

5.3.3 Attitude towards inclusive education

As was mentioned in Section 4.5.1 of the thesis, Section C of the repeated measures design survey questionnaire was adapted from Boyle et al. (2013), with 16 questions about the student teachers' attitudes towards inclusion in China.

In both Time-1 and Time-2 surveys, answers to the 16 questions were highly positive (see Table 5.3 below), except for Questions 20, 21 and 27, where participants expressed less confidence about the implementation of inclusion in China's education settings.

As is shown in Table 5.3, the mean (i.e. the average answer to the questionnaire) is as high as around 5 on the six-point Likert scale, regarding equal rights in children (Q15), willingness to cater for individual learning needs (Q17), sense of responsibility in catering for SEN in the classroom (Q18 and Q25), as well as importance of on-going training about SEN (Q19). For these questions at both Time 1 and Time 2, the mode was 6, meaning "Strongly Agree".

Table 5.3 Demographic distribution of results: Attitudes towards inclusion[54]

Questions in the survey	Time of study	Mean	Median	Mode	SD	Range
15. All children, disabled or not, should be entitled to the same educational services.	T 1	5.34	6.00	6.00	1.23	5.00
	T 2	5.43	6.00	6.00	1.173	5.00
16. It is important for student teachers to be trained to cater for children with special educational needs.	T 1	4.26	4.00	6.00	1.49	5.00
	T 2	4.58	5.00	6.00	1.44	5.00
17. I will try to cater for the educational needs of every single student in my class.	T 1	4.94	5.00	6.00	1.27	5.00
	T 2	4.92	5.00	6.00	1.33	5.00
18. It will be my responsibility as a teacher to cater for the educational needs of every student in my class, including students with disabilities.	T 1	4.90	5.00	6.00	1.34	5.00
	T 2	5.03	6.00	6.00	1.30	5.00
19. It is important to have on-going training programmes regarding students' special educational needs.	T 1	4.99	5.00	6.00	1.20	5.00
	T 2	5.09	6.00	6.00	1.22	5.00
20. Children with special educational needs should be educated in a mainstream school.	T 1	2.91	3.00	1.00	1.63	5.00
	T 2	3.43	3.00	3.00	1.47	5.00
21. I feel that my teacher-training programme is preparing me adequately for working with all children irrespective of disability.	T 1	2.93	3.00	3.00	1.56	5.00
	T 2	3.15	3.00	3.00	1.44	5.00

[54] As shown in this table, certain questions were presented in a negative statement on the questionnaire, and therefore the results were reverse coded. That is to say, for Questions 22, 23, 24 and 28, with the most frequent answer (i.e. the mode) being 1, meaning that they "Strongly Disagree" to the negatively stated questions, the participants' attitude towards inclusive education were highly affirmative.

22. Educating children with additional support needs in mainstream classes has a **NEGATIVE** effect on the other children in the class.	T 1	2.36	2.00	1.00	1.44	5.00
	T 2	2.41	2.00	1.00	1.27	5.00
23. I do **NOT** support the policy of inclusion no matter how much extra support the teacher is given in the class.	T 1	2.14	2.00	1.00	1.33	5.00
	T 2	1.64	1.00	1.00	1.14	5.00
24. Including children with special educational needs in the classroom can **ADVERSELY** affect the learning environment of the class.	T 1	2.30	2.00	1.00	1.32	5.00
	T 2	2.13	2.00	2.00	1.13	5.00
25. The teacher should usually attempt to ensure that all the children in the class, irrespective of levels of difficulty or ability, are able to participate in the class as much as possible.	T 1	4.82	6.00	6.00	1.48	5.00
	T 2	4.83	5.00	6.00	1.36	5.00
26. I am confident that I will be able to make a positive educational difference to children with special educational needs in my classroom.	T 1	4.07	4.00	4.00	1.43	5.00
	T 2	4.08	4.00	4.00[a]	1.33	5.00
27. Student peers will **REJECT** children with special educational needs in their classroom.	T 1	3.04	3.00	3.00	1.30	5.00
	T 2	3.11	3.00	3.00	1.28	5.00
28. Some children have difficulties that mean that they should **NOT** be educated in mainstream schools.	T 1	3.12	3.00	1.00	1.67	5.00
	T 2	2.86	3.00	2.00	1.47	5.00
29. A teacher, if given what are regarded to be appropriate resources, could teach the vast majority of children with special educational needs.	T 1	4.39	5.00	6.00	1.48	5.00
	T 2	4.63	5.00	5.00	1.29	5.00
30. I feel confident to work with students who have varying levels of difficulties.	T 1	3.19	3.00	3.00	1.28	5.00
	T 2	3.52	3.00	3.00	1.30	5.00

Figure 5.7 on the following page presents the recoded distribution of the participants' responses to this part of the questionnaire, which means that all values in comparison conform to the same criteria.[55] The mode, which means the most frequent response, is displayed here for a more explicit interpretation.

As is shown in Figure 5.7, the participants' attitudes towards inclusive education were generally highly positive, with the majority of the most frequent responses being 6 on the six-

[55] For a detailed comparison between Time 1 and Time 2 attitudes, please see Appendix 7, which also presents the recoded results in order to give a more consistent consideration of the similarities and dissimilarities.

point Likert scale, which stands for "Strongly Agree". However, in contrast to most questions in this section, answers to Questions 20, 21 and 30 were much less enthusiastic.

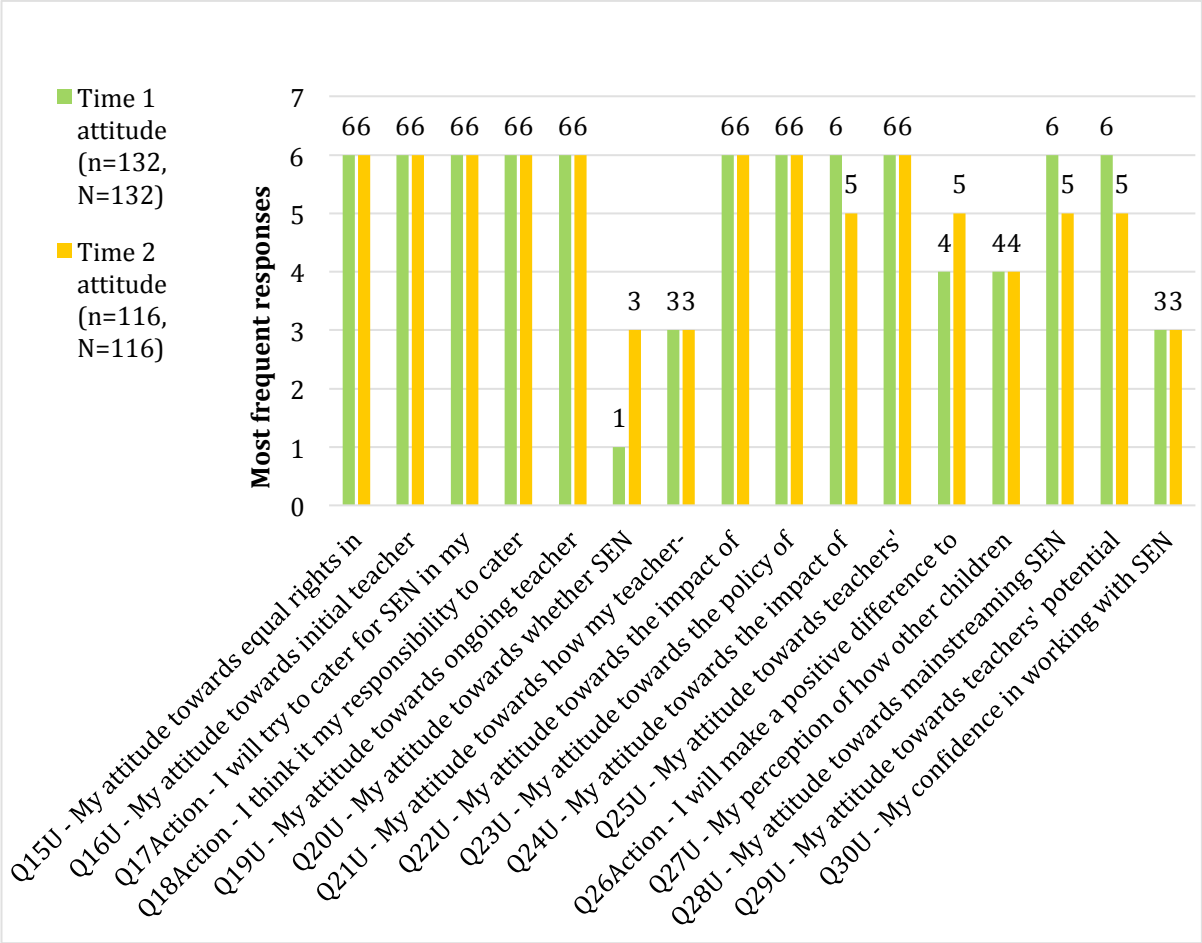


Figure 5.7 Bar chart comparison of mode: Attitudes towards inclusion

A striking difference in the Time 1 survey findings is the participants' attitudes towards whether children with SEN should go to mainstream schools in the light of their very favourable attitudes towards the equal rights of children in educational services. More than two-thirds (67.4%) of the participants in Time 1 disagreed that children with SEN should be educated in mainstream schools, and in Time 2 this was reduced to 56 per cent. With the mode at Time 1 being 1 (out of 6), i.e. "Strongly disagree", their attitudes did not improve much at Time 2 (mode=3, see Figure 5.4). Although improved, this is an interesting finding that is in tune with what was found about the participants' knowledge about inclusive legislation in China (see Section 5.2.2).

This interesting negative attitude towards placing children with SEN in mainstream settings might be because of the participants' lack of confidence in the current teacher education programme regarding SEN training. This is reflected in Question 21, where the majority (68.9% in Time 1 and 62.1% in Time 2) felt inadequately prepared from their teacher education programme in working with children with SEN. A further exploration of this phenomenon will be presented in the Discussions chapter.

Meanwhile, there is not much difference for Question 27, where nearly two-thirds of the participants (65.9% in Time 1, and 65.5% in Time 2) believed that student peers would reject children with SEN in the classroom. Furthermore, there is a slight drop in the responses to Questions 24, 28 and 29 after the intervention training (mode declining from 6 to 5 on the six-point Likert scale, see Figure 5.7 on the previous page). Part of the reasons for this might be related to the countrywide existence of a lack of understanding of SEN in the classrooms even among teachers and students. This is frequently mentioned in participants' online reflections after each session of the SEN training provided in the study, as well as in the interviews ('live chats') conducted after participants completed their teaching practice. These qualitative findings will be presented in the next chapter of the thesis.

In summary, the quantitative results from the two surveys indicate mostly greater awareness and better understanding of SEN and inclusion, as well as more positive attitudes on the whole towards inclusive education in China. Possible relationships between the changes made will be discussed in the following section.

5.4 Factor analysis

As presented in the previous section, after the training course provided as part of the study, participants generally demonstrated increased awareness and better understanding as well as more positive attitudes towards inclusive education in China.

5.4.1 Factor analysis of Time 1 and Time 2 survey results

The aim of factor analysis is to assess the factorial validity of the questions by examining to what extent they seem to be measuring the same concepts (Bryman & Cramer, 2011), and to find out whether the variables are linked together to factors by looking at their correlation coefficients (Field, 2013).

Canonical correlation analysis[56], which was first introduced by Harold Hotelling, is a way of investigating the relationships between two sets of variables (Hotelling, 1936), and was carried out in the data analysis for this purpose.

In order to do so, variables in the repeated-measures data were grouped into four sets, i.e. four dimensions: knowledge about inclusive education in China (Questions 7-14 in the survey questionnaires), understanding of inclusion and SEN (Q1, Q2, Q6, Q15, Q16, Q19, Q21-Q25, Q27- Q30), whether participants were taught about inclusion (Q3-Q5), and willingness to take action for inclusive education (Q17, Q18, Q26). Canonical correlation analysis was therefore conducted between the four sets of variables in order to understand the association between knowledge, understanding, action and taught aspects.

As mentioned in Section 4.6.1, the stacked format of the repeated-measures data in SPSS was first of all transformed into additional variables that indicate the differences each individual participant had made before and after the intervention training. These new variables were labelled as "Q1diff", "Q2diff", "Q3diff" and so on. Factor analysis was then conducted between the DIFF variables to find out possible relationships between the differences in different dimensions.

5.4.2 Canonical correlation analysis

Canonical correlation analysis of the four dimensions demonstrated a very high correlation between the sets of variables. Regardless of the high correlation on the whole, for a closer look at the relationship of the variables to the construct created, canonical loadings (which are also called "structure coefficients") were examined to help determine variable contributions in the correlation.

For example, Table 5.4 on the following page presents the canonical loadings between the two dimensions of difference in whether the participants were taught about inclusive education and the difference in their perception and understanding about inclusion and SEN.

[56]SPSS performs canonical correlation using the 'manova' command with the 'discrim' option. The 'manova' command is one of the SPSS commands that can only be accessed via syntax; there is not a sequence of pull-down menus or point-and-clicks that could arrive at this analysis.

Table 5.4 Analysis of variance: Canonical correlations

Canonical Loadings for Set-1

	1	2	3
Q1diff	.015	-.132	-.021
Q2diff	-.634*	-.282	-.339
Q6diff	-.147	.268	-.151
Q15diff	-.313*	.318	.350
Q16diff	-.417*	.376	.018
Q19diff	-.394*	.232	.034
Q20diff	-.076	.044	-.035
Q21diff	-.186	-.052	-.290
Q22diff	-.156	-.261	.339
Q23diff	.033	-.094	-.318
Q24diff	.272	.298	-.078
Q25diff	-.328*	.322	-.024
Q27diff	.187	.139	.454
Q28diff	-.042	-.114	-.258
Q29diff	-.204	.082	-.078
Q30diff	-.316*	.464	-.031

Canonical Loadings for Set-2

	1	2	3
Q3diff	-.451*	.157	-.879
Q4diff	-.643*	-.760	-.098
Q5diff	-.740*	.579	.343

In canonical correlation analysis, any correlation value which is greater than .3 indicates a highly correlated relationship, and vice versa. As is shown in Table 5.4, the participants' perception of how well their professors or teachers had been catering for SEN (Q2diff) is very highly correlated to the difference in how much training these participants had received. Similarly correlated are Q15diff (i.e. their belief in equal rights in children), Q16diff (i.e. the importance of teacher education programmes on SEN), Q19diff (i.e. the importance of on-going teacher training on SEN), Q25diff (i.e. their belief in teachers' responsibility for catering for SEN), and Q30diff (i.e. their confidence in catering for SEN in children).

On the other hand, there are canonical loadings with insignificant magnitude as shown in Table 5.4, which is again consistent with findings presented in previous sections. Not much correlation was found between training and the participants' perception of implementing the

mainstreaming of children with SEN in China (Q20diff, Q21diff, Q22diff, Q23diff, and Q24diff) (see Section 5.3.3). The same is true in their attitudes to the difference in Questions 27 to 29 (also see Section 5.3.3). The complication involved will be discussed in the next chapter in the light of qualitative data collected from the participants, as well as in the Discussions chapter.

5.5 Statistical differences

In order to better understand the significance of difference between Time 1 and Time 2 survey results, ANOVA on repeated-measures data was conducted on SPSS. Survey results from the 116 participants (out of the 132 at Time 1) who confirmed that both their Time 1 and Time 2 data could be used in the study were imported to SPSS to form a stacked-format dataset.

5.5.1 ANOVA analysis

Four one-way repeated-measures ANOVA tests were performed using SPSS to look at the statistical differences between Time 1 and Time 2, i.e. before and after the training course provided as part of the study.

As mentioned in Section 5.4.1, variables in the repeated-measures dataset were grouped into different dimensions (i.e. 'factors' in ANOVA):

- Knowledge about inclusive education in China (Questions 7-14 in the survey questionnaires);
- Understanding of inclusion and SEN (Q1, Q2, Q6, Q15, Q16, Q19, Q21-Q25, and Q27-Q30);
- Whether participants were taught about inclusion (Q3-Q5);
- Willingness to take action for inclusive education (Q17, Q18, Q26).

5.5.2 Statistical significance of the differences

Complete sets of results of the ANOVA for the within-subject variables could be helpful, illustrating the statistical differences after the intervention training course, regarding the four dimensions respectively (see Section 5.4.1). However, as this study has two repeated-measures conditions (i.e. Time 1 and Time 2), rather than three or more conditions, the

assumption of sphericity[57] does not need to be considered. Therefore, the main result of the ANOVA analysis should be the tables labelled Tests of Within-Subjects Effects (Field, 2013), which have been combined into one table as shown in Appendix 5.

This table demonstrates that the *p*-value is .000 (*p* is less than .05) in every single test throughout the ANOVA Tests of Within-Subjects Effects, which indicates that the differences between the Time 1 and Time 2 surveys have only a 0.000 per cent probability of occurring by chance alone. In other words, the differences between Time 1 and Time 2 repeated-measures data are statistically hugely significant.

In a repeated-measures design, differences between the two different time points (in the case of the study, before and after the training) "can be caused by only two things: (1) the manipulation that was carried out on the participants, or (2) any other factor that might affect the way in which an entity performs from one time to the next" (Field, 2013, p. 17). According to Field (2013), the former factor, i.e. the intervention that was carried out between the surveys, is likely to be the major influence on the differences.

Therefore, judging from the quantitative data collected, the SEN training provided by the researcher might very probably be the major factor that generated the great changes in the participants. However, a final conclusion cannot be made without having a look at the qualitative data, i.e. the online reflections and live chats, which will be the focus of the next chapter.

5.6 Summary of the quantitative results

The analysis of quantitative data is presented in this chapter in the following order: a detailed account of the two surveys, demographic distribution of results from Time 1 and Time 2, investigation into possible relationships between groups of variables, and statistical significance of the differences in the repeated-measures dataset.

The two surveys were conducted online, strictly before (i.e. Time 1) and after (i.e. Time 2) an intervention training course on inclusive education and SEN. Comparison between the Time 1 and Time 2 results indicated the following:

[57] Sphericity is an important assumption of a repeated-measures ANOVA. It refers to the condition where the variances of the differences between all possible pairs of groups (i.e., levels of the independent variable) are equal.

1) The participants in general hardly had any understanding of SEN and inclusive education before the intervention training (see Section 6.2 for more details).
2) The participants had very little experience with inclusive education and very limited knowledge about relevant legal guidelines in mainland China both before and after the training, although with considerable increases after the training.
3) There were highly positive attitudes towards inclusive education both before and after the training course, with post-intervention attitudes even more favourable towards inclusion.

The major findings from the quantitative data collected in the study was the student teachers' remarkably increased understanding of SEN and inclusion after the intervention training. Canonical correlation analysis in SPSS indicated that the increased knowledge was significantly correlated to increased taught aspects (i.e. the blended-learning course). Furthermore, ANOVA analysis in SPSS indicated that all the differences between the repeated-measures dataset were statistically significant.

So far, the quantitative findings of the study suggest that the overwhelming majority of the student teachers in the sample university in the study had no prior knowledge about SEN, or any previous experience with inclusion. In addition to their markedly enhanced understanding of SEN, their attitudes towards inclusive education were even more favourable after the intervention training.

However, a thorough understanding of the matter required intensive and in-depth study of the participants' online reflections during the course of the intervention training, as well as the researcher's live chats with them after their teaching practice in local schools. This will be presented in the next chapter.

Chapter 6 Results from Qualitative Data

The previous chapter presented the quantitative data collected from a repeat design survey questionnaire. This chapter will focus on the three sources of qualitative data: the qualitative data from the survey, the participants' online reflections that followed each session of the training, as well as the live chat interviews via Tencent QQ[58]. The research question focuses on the student journey (see Section 4.1.1 for additional details). Therefore, the data will be presented consistent with the student journey, which follows the order of the research sub-questions. It will start by looking at the qualitative data from the surveys about the participants' definition of inclusive education (see Section 6.2), which is the first sub-question (i.e. "How do student teachers understand the general concept of inclusive education and SEN?"). It will move on to exploring the participants' online reflections after each training session, which relates to the next three sub-questions (see Section 6.3). Then it will focus on the live chat interviews, i.e., the in-depth investigations of the participants' perspectives of the impact of training on their teaching practice (see Section 6.4), which is the last sub-question. Qualitative findings in this chapter will be presented in the form of themes that emerged in the data collection and analysis process, which happened to be in accordance with the research sub-questions. The chapter will then end with a conclusion of key findings from the qualitative data.

6.1 Brief account of the qualitative data

As was mentioned earlier, the qualitative data in the study came from three sources, but in terms of the volume and size of the data, mainly from two sources, i.e. the student teachers' online reflections from 116 participants (114 female and 2 male) and the live chat interviews from 20 volunteer participants (all female).

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[58] Tecent QQ is a social networking and microblogging service (similar to Facebook and Twitter) that is most popularly used in China, with very convenient group chat features and no word limit to its blogs. The participants' QQ ID was used in every step of the study, from the surveys before and after the intervention training, throughout the online training, to the live-chat interviews (also see Footnotes 42 and 48).

6.1.1 Online reflections

As was mentioned earlier, 116 (including both male students) out of the 135 participants in the end gave consent for their data to be used in the study. Reflections on their new knowledge and their previous experience were uploaded after each session to designated online forums during the blended learning intervention training. Figure 6.1 on the following page is a screenshot of a part of the Group Qzone on Tencent QQ. As shown in the top ribbon as well as in the various headings of Figure 6.1, there are designated forums for different sessions, where the participants were supposed to upload their reflections for that particular session.

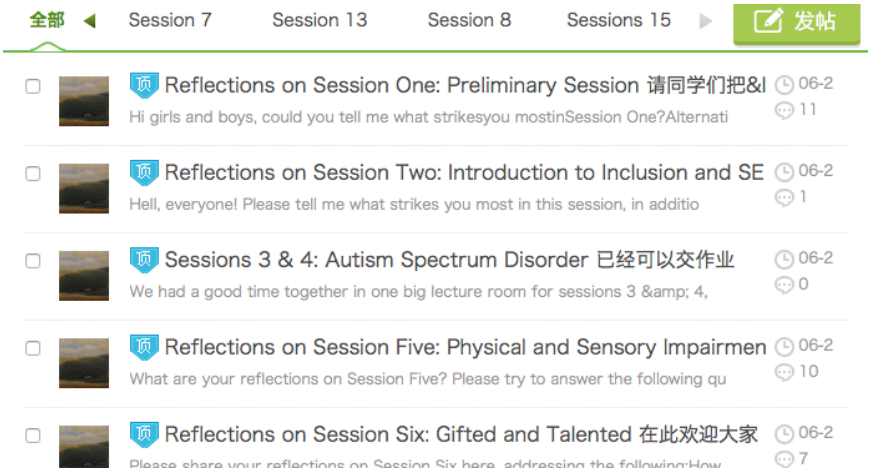

Figure 6.1 Screenshot of online forums for participants to upload their reflections

Figure 6.2 below illustrates how one participant wanted to check whether her reflection for the session was uploaded to the designated webpage and another participated replied.

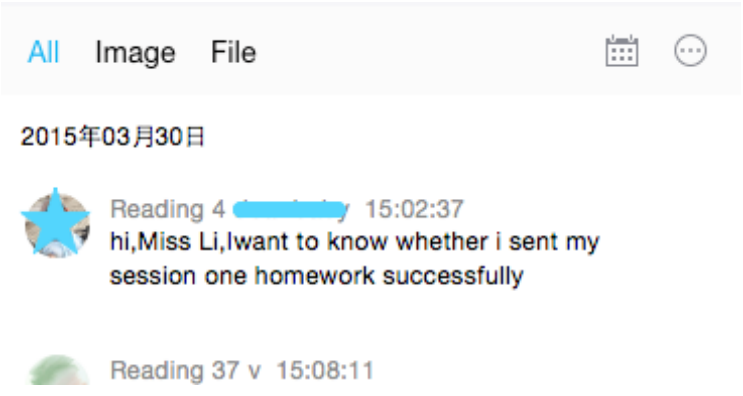

Figure 6.2 Screenshot of online chat group for Session One

Any data collected was held in strict confidence and no real names were used in the study. As shown in Figure 6.2 above, the participants' ID information in their group chat was shown as

"Reading + a number (allocated by the researcher) + a nickname (decided by the individual participants)", and therefore anonymity was also ensured throughout the study. There are images that went with their ID, but the images are easily replaceable and in most cases, are not related to their real identity.

For example, the participant who responded to the first participant gave herself the nickname "v", and her numbering in the researcher's system was 37, and by this means nobody knew who "Reading 37 v" was, except for the researcher and the participant.

All online reflections collected were in English. Therefore, the online reflections on the 16 sessions of the training from 116 student teachers were imported to NVivo in July 2015 and analysed in the software.

6.1.2 Live chat interviews

As was mentioned earlier in the Methodology chapter, this was an opportunity sample from those who volunteered during the first phase of the research. Of the 116 participants who agreed to carry on with the study at the end of Stage 3, the researcher reduced the number to 55, based on their characteristics identified in the first three stages of the study. Basically, they were a smaller but representative sample of the participants, including those with big changes after intervention training and those with little changes, and within the little change group, those with high awareness and those with low awareness of SEN. The 55 student teachers were approached during their teaching practice (or school experience), and 20 took part in Stage 4 of the study (also see Section 4.4.3).

Among the 20 final participants, six turned out to be those with little changes before and after the intervention training, and 14 were with very contrasting answers between Time 1 and Time 2 surveys. The characteristics of the 20 student teachers are listed in Table 6.1 below.

Table 6.1 Characteristics of the 20 participants in the live-chat interviews

Sub-categories	Category A	Category B	Category C	Category D
Characteristics	Great changes before and after training	Little changes but high awareness of inclusion	Little changes with little awareness	Having prior training experience about disability
Numbers of participants	14	1	5	1

In other words, 20 student teachers that participated in all three previous stages of the study had approximately one hour of live chat each with the researcher, and therefore, 20 live-chat interviews were collected at Stage 4 of the study. These interviews were conducted via Tencent QQ live chats, a few months after they completed the intervention training, and in particular, immediately after they finished their teaching practice in local schools.

All the 20 live chat interviews were administered in the Chinese language (see Footnote 41 and Section 4.5.4). The back-translation technique (see Section 4.7.2) was adopted and the quality of translation was checked and assured.

The participants and the researcher interacted via typing on the Tencent QQ chat, in the case of the researcher, on her computer, and for most of the participants, on their smart phones.

Figure 6.3 Screenshots of live chat examples: Interviews after teaching practice

Like all live chat conversations, the questions and answers do not always match exactly, and very frequently there is a time lag, especially when the conversation flows interactively and constructively from both parts. Figure 6.3 above illustrates typical examples of the live chat interviews. Responses like these were then reorganised and the data were imported to NVivo in February 2016 and analysed using the software.

All the 20 participants at this stage were female student teachers.

6.2 Theme 1: Starting the journey

The data collection of the study began with a Time-1 survey. This created the starting point in the analysis of the data, so it is logical to start with the qualitative data in the Time-1 survey, i.e. participant's own definition of inclusive education (namely Question 31 in the questionnaire). The purpose was to explore the participants' views before any intervention could take place, and the researcher specified on the survey questionnaire that the participants could answer in their own words in either English or Chinese. This decision was made because it would reduce any potential restriction on the participants' choice of words due to the level of English of the individual student. The freedom to use either English or Chinese also minimises any potential influence from others or unintentional bias caused by participants seeking to answer the questions with limited English. For example, the following quotes from participants who tried to express themselves in English at the Time-1 survey illustrates possible ambiguity caused by their level of English (for the purpose of confidentiality and anonymity, specific participants will be referred to using the last four digits of their QQ ID):

> [Inclusive education refers to] the education covering as many as it can. (9227)
>
> [Inclusive education is that] all people go to the same school. (2224)

On the whole, the raw data on the students' views on inclusive education (i.e. the participants' responses to the Time-1 survey and later their reflections after each of the 16 sessions) showed a great change over the course of the study, and therefore there is a wide diversity of views on the topic. A useful starting point when looking at the views of students on inclusive education is, then, their definition of the concept before any intervention took place, which partly contributes to the answer to the first research sub-question.

6.2.1 Lack of understanding of inclusive education

As presented in the previous chapter, the quantitative data from the repeated design survey results showed that the student teachers knew very little about the topic of inclusion before the intervention training (see Section 5.3.2). The qualitative data (e.g. their responses to Question 31 at Time 1) is consistent with this finding.

Apart from a general indication of lack of understanding of the concept, the answers given by the participants in the Time-1 survey were also very short in length, most of which were just a few words or an incomplete sentence given in Chinese.

Regarding their definition of inclusive education, here are some of the most typical responses from the student teachers:

> "I have no idea." (7662)
>
> "I don't know." (1859)
>
> "I don't quite know." (2453)
>
> "Actually, I don't know what is the inclusive education. It's my first time to hear of this proper noun [sic]."[59] (8619)

Some participants attempted to guess the answer and gave various definitions such as the following:

> "(Inclusive education means) making all-round students." (3700)
>
> "(Inclusive education is) something similar to making versatile students." (0756)
>
> "(Inclusive education means) making versatile students." (8304)
>
> "(Inclusive education is) something no different from general education." (5040)

A lot of other participants took it for granted that it might be something related to online education, possibly because the training course was mostly online[60]:

> "(Inclusive education means) online education." (7143)
>
> "Inclusive education means online education, which is open to different groups of people." (0098)

Some also concluded that inclusive education was related to teacher education, possibly because the training course on inclusive education was only open to student teachers in the university that they were studying at (where the researcher's field work was carried out)[61]:

> "(Inclusive education means) training student teachers." (8695)
>
> "(Inclusive education means) training teachers in various aspects." (4187)

---

[59] This answer was also originally given in English, and was directly copied and pasted here by the researcher.

[60] As was explained in Chapter 4 of the thesis, the training course was a blended-learning module with the majority of it online: 25 per cent face-to-face taught sessions and 75 per cent distance learning.

[61] In the university where the study was carried out, English Language Teaching was the only teacher-training pathway among a total of four pathways taught in the undergraduate programme in that department. In other words, no non-student-teacher candidates in their department were involved in the intervention training.

Despite the fact that some students had previously taken some optional courses about disability (see Table 5.1 in Section 5.3.1), their answers to Question 31 at Time 1 indicated that the overwhelming majority of the participants did not know about inclusive education, which again is consistent with the quantitative findings about their understanding of inclusive education (see their responses to Question 6 in Section 5.3.2).

Very few (1.5%, n=2, N=132) answered the question with an answer that was close to the definition, such as the following:

> "According to all the questions above, I consider inclusive education as a kind of education that include both healthy children but disabled ones. Every child has the chance to study in school and study well." [62] (7447)

As shown above, the various answers to Question 31 given by the participants in the Time-1 survey illustrate how little prior knowledge the student teachers appeared to have about inclusive education and SEN before the intervention training. The limited understanding of this concept held by the participants in the study will be discussed further in the next chapter (see Section 7.1).

6.2.2 Those with prior training

An interesting finding reported in Section 5.1.2 is about the six participants who had taken SEN training prior to the study, who happened to claim that they knew of the concept of inclusive education, but who were found to know very little about either SEN or inclusion. A closer look at the qualitative data also points to the same results regarding those six participants. Consistent with their responses to the Time-1 survey questionnaire, which indicated a lack of understanding of inclusion despite their prior training, their later reflections as they went along with the blended-learning intervention training also suggest that their earlier voluntary SEN training did not prepare them for inclusive education. In other words, even those few student teachers that had previously been trained about SEN had a very limited perception of SEN and lacked an understanding of inclusive education.

The following are extracts from the online reflections of the six participants at various stages of their intervention training. For example, one of the six student teachers, having claimed to know about SEN and inclusion in the Time-1 survey, admitted in her reflections her unawareness of SEN and unpreparedness of inclusive practice.

---

[62] This is another piece of response from the participants, which was originally given in English.

> To be honest, I haven't ever thought that there will be students like Ishaan[63] in my future teaching. (7831, after the first session)

Even with their previous SEN training, the participant did not have the idea that there would be children with SEN in the mainstream setting where they would go to teach. The SEN training they had prior to the study still reinforced their prior limited understanding of disability, which reflects the existing views that the society holds towards disability and SEN.

> Before learning this course, I thought that inclusive education is only for people who are physical disabled. (8986, reflection at the end of Session 16)

> I only knew little about special education from a college optional course – braille – before I started the course. (4035, reflection at the end of Session 16)

> Before learning this online course, I had no idea [of inclusive education]. (8340, reflection at the end of Session 16)

> At the beginning of this course, I found it difficult. Because it was the first time that I got to know this field and some concepts of SEN were a little bit hard to understand. (0955, reflection at the end of Session 16)

Another of the six participants in her reflections even tried to give possible reasons why her previous understanding of inclusive education was limited:

> To tell the truth, I knew so little about inclusive education and special educational needs before I started this course, so I want to thank you first. Before watching the videos, I had no idea about inclusive education. I thought it was common for the students with special educational needs to study in special education school because it is more convenient for teachers take care of them and easier for students to learn. Maybe the traditional schools had affected my thoughts. (1556)

Such are reflections from those student teachers who previously had taken SEN training out of interest and who had thought that they had known about inclusive education at the beginning of the study. Their later realisation of their lack of awareness and understanding of inclusion and SEN provides evidence of the division between special education and mainstream education even at the teacher education level in China, the significance of which will be discussed in the next chapter (see Section 7.1.2.3).

This is the first time Chinese mainstream student teachers were asked about their understanding of inclusive education and SEN, according to the existing literature. Further discussion about this can be found in the next chapter (see Sections 7.1.1.2 and 7.1.1.3). It is therefore interesting to look at the journey that the participants of this study went through

[63] Ishaan is a character in a film about SEN in mainstream schools. He is a child with dyslexia but mistakenly considered by his teachers and parents as being intentionally difficult.

along with a training course on inclusive education and SEN, to look to see what the changes were to increase their understanding of this concept, and how they took place.

6.3 Theme 2: How the participants journeyed through the training

This section presents the results from the participants' online reflections on each of the intervention training sessions. As was mentioned earlier, these online reflections were written in the English language. Part of the reason for that was the nature of the intervention training, as it was considered by the university in China as a means of improving the students' English skills. Therefore, both the input (the delivery and the content of the training) and output (the students' online reflections) were in English. However, the use of a foreign language in expressing their sophisticated views and reflections resulted in not only frequent grammatical errors but also some problems with choice of words in their writing, although such cases did not interfere much with the meaning. For example, the following quote from a participant's online reflections after a session about ADHD/ADD and BESD:

> In my memory, I didn't meet students with ADHD or BESD in the primary and secondary schools. …… Generally speaking, they **can't concrete on one thing**, and they rarely appeared to listen to anyone who was talking to them. …… To be honest, I don't think that students like ADHD or BESD in school. That's to say, the students with ADHD or BESD in schools weren't sufficiently supported. (4187)

As is shown in the above quote, it seems confusing what the participant was saying about children with ADHD, as the reader might not understand the part in bold letters, which was intended to say 'can't concentrate'. The use of tenses in the same question also seems a problem: The present tense in "can't concrete" and the past tense in "appeared" and "was talking" in the second sentence makes it harder for the reader to interpret the participant's statement about the general symptoms of ADHD. In addition, the logic between the last two sentences also seems problematic, apart from the difference in the tenses used in the two sentences that were supposedly expressing the same meaning.

Therefore, some of the raw data from their online reflections that are used in this section are supplemented with added brackets where there are typos or typical Chinese ways of expression, for the purpose of clarifying the meaning.

As was explained in Chapter 4 (and also see Appendix 1), the intervention training consisted of 16 sessions on inclusive education and SEN. These were concepts that were new to the majority of the participants, which meant that the qualitative data allowed the individuals to explore the concepts in their own way and own words, yielding a rich database.

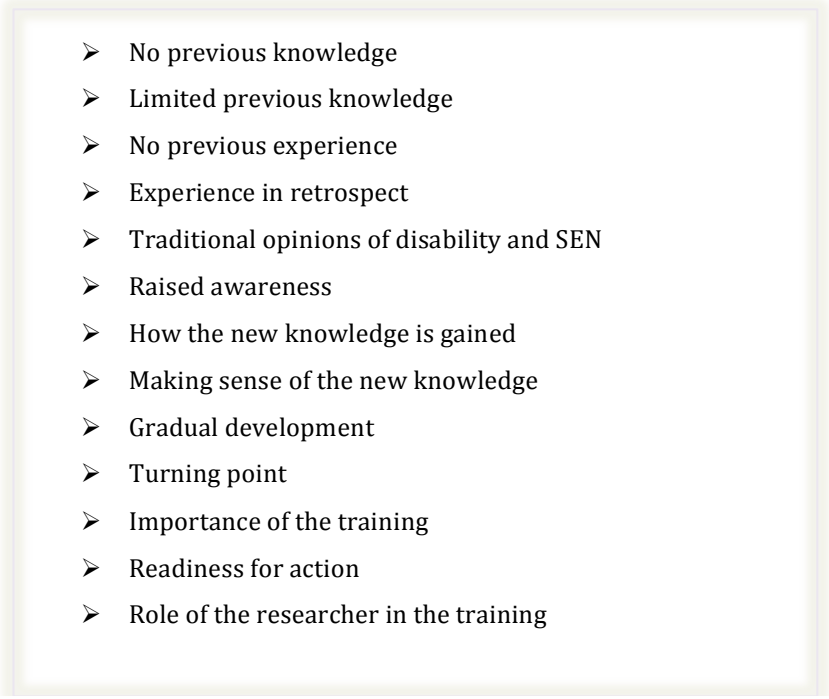

Figure 6.4 Themes that emerged from the participants' reflections

Themes emerged from the large database, which can be roughly classified into groups as illustrated in Figure 6.4 (see above). Examples of some of the themes will be presented in this and the following sections, with regard to the research sub-questions.

6.3.1 Positive attitudes for change

Consistent with the quantitative results (Section 5.3.3), the student teachers, although having little knowledge or understanding of inclusion and SEN, were positive in their views towards equal rights of children with disabilities.

From the beginning of the intervention training, the overwhelming majority of the participants (89.7%, n=104, N=116[64]) expressed great interest and positive attitudes towards inclusion of children with SEN. Accordingly, they expressed their attitudes as the following in their reflections at the beginning of the intervention training:

> I am glad that I can take this course. … (4484)

[64] Only those student teachers who managed to submit their Time 2 survey responses and therein consented on their data being used by the researcher were counted in the total number of participants at this stage, although the original number of participants were 135 (see Section 5.1).

> I am very glad to meet you and learn this course. … (2294)
>
> To tell the truth, I know [knew] nothing about inclusive education and SEN before I started this course, so I want to thank you first. … (1556)

As noted in their reflections for Session One of the training, most of the participants stated that they had either never met any student with SEN before, or that, only in retrospect, there were such students in the schools that they attended (see the following quotes). In the latter case, the participants stated with hindsight that such students with SEN were not accommodated at school (see the quote from Participant 0955 below).

> I have never had any classmates like Ishaan[65]. … (3026)
>
> I've never had a classmate like Ishaan. … (7447)
>
> Actually I did have one classmate like Ishaan in primary school. … To tell the truth, he never enjoyed school. All he got was the teachers' punishment and his parents' sighs. … (0955)

In their Session One reflection, i.e. after they had the first session of the intervention training, most of the participants stated that they had never thought about having students with SEN, despite the fact that they were being trained to be teachers.

However, after this first session, they started to consider this possibility, and they expressed positive attitudes towards catering for SEN in their future students. Examples of such reflections are shown as the following:

> To be honest, I never thought about having students like Ishaan. But after watching this film, I think that's quite likely to happen in my future teaching. (7447)
>
> I haven't thought about this. If I do have such student [students], I will retain his [/her] individuality and learn about him [/her]. In my opinion, a good teacher should not only teach knowledge, but more importantly, respect students' individuality and creativity. (2323)
>
> Frankly speaking, I have never thought that there will be students like Ishaan in my future teaching. But if I meet children like him, I will do whatever I can to help them. (4035)
>
> A teacher should regard every student a special "star". What teachers should do is to spark their interest in learning and support them. Taking care of students' heart is their most important duty. If I become a teacher, I will treasure every "star" in my class. (0955)

Throughout the intervention training, statements of previous lack of awareness, reflections on their new understanding, as well as positive attitudes for change, became the continuing

[65] Ishaan is a boy with dyslexia who was featured in the film for Session One (out of a total of 16 sessions) of the intervention training.

theme in the participants' online reflections. For instance, in their Session-16 reflections, the participants' final reflections on the whole training course on inclusion and SEN, there were typical remarks such as the following:

> To tell the truth, I had no idea about inclusive education before learning this course. No one had ever told me about it and I had never had any training about it. So this course is very helpful for me. Now I know …… This course has helped me to understand the meaning of inclusive education and taught me how to help the students who have SEN. For example, …… I'm so happy that I have taken this course. In the future I will be a good teacher and try my best to meet all students' individual needs in learning. (4963)

As for how much difference was made in the participants' understanding of inclusion and what aspects of the training course contributed most to the change (which are the third and fourth research sub-questions), results from the online reflections will be presented in the next two sections.

6.3.2 The change – increased knowledge and raised awareness

Still consistent with the quantitative results (see Section 5.4.1), the qualitative data from the online reflections indicate that the student teachers experienced various significant changes in their understanding of inclusion and SEN. This section will look at the changes from three aspects: increased knowledge and raised awareness, changes in their perceived experience, and changes in their readiness for action.

The most significant change in the study has been their increased knowledge and raised awareness. This is extensively evident in their online reflections throughout the intervention training.

> Before studying this course, I never heard of anything about inclusive education or SEN, and I had a limited understanding of disability… (7142)

> Before I started this course, I didn't know any information about inclusive education. (0271)

> To be honest, what strikes me most is that it never occurred to me that a disabled child could be talented as well. … (1025)

As also stated earlier in this chapter, the participants began their journey with little or no understanding or awareness of inclusion and SEN, and they welcomed the training and were trying to make sense of the new knowledge gained. They expressed in their own words the gained understanding like this:

> Inclusive education means education for all… From this course I have come to understand that everybody has an inherent right to education on [the] basis of equality of

> opportunity. Everybody has [their] own unique abilities as well as learning needs. Education should take into consideration all those differences in children. Schools must cater for those with special educational needs and should accept all students and say no to discrimination. (4963)

In addition to the new knowledge gained about inclusion and SEN, data from the participants' online reflections also demonstrate a raised awareness of the importance of inclusive education and accommodation for SEN in children. This is an example of their reflections on their educational experiences (which was not inclusive in practice):

> But now I have realized that inclusive education means equality. …… As a result, too many students with disabilities had no chance to enter school, and for those few who were [are] lucky enough to get the chance to attend school, they still cannot enjoy their school life and they are still discriminated by others. Moreover, teachers have no idea about SEN and therefore they are not supporting students with special education needs. (1837)

> From this course, I have begun to have an idea about inclusive education. Firstly, I have got to know the concept of inclusive education. Secondly, I have understood that they [should be "the"] way we used to look at disability is [should be "was"] inappropriate – some children may not be physically disabled [as can be perceived], but they may still have SEN. Thirdly, children with disabilities have the right to be educated in mainstream schools. Besides, I have realized that some troublesome behaviour in children may be a result of their special needs and teachers need to be alert to the symptoms and support the children. (8304)

At the same time, the participants were also pinpointing cases where they did have fellow students in the schools they attended that were with SEN conditions (at the time or in retrospect). The following section is going to focus on the change in the participants' perceived experience with disability and SEN.

6.3.3 The change – their perceived experiences

As was mentioned in the beginning of this chapter, the student teachers started their journey with very little or no knowledge, awareness, or experience of inclusion. Their reflections on their past experiences also illustrated this:

> I have never seen any possible existence of SEN in the schools I went to. (1859)

> Actually, for me, from primary school to college, I haven't found any of my classmates have had SEN. （4998)

> In my educational experience,
> I actually did not see any special educational need in my schools,
> no matter when I was in primary school, secondary school or high school. (4794)

> I never met disability in my schools during my education experience. (4187)

> Actually, during my education experience, I didn't notice any possible existence of SEN around me. （0323）

Some of them reflected on possible reasons behind their lack of experience with SEN:

> Before I took this course, I never came [had never come] across anyone with disabilities or SEN, because they were never really around me, or maybe because I never paid any attention to their existence. (2366)

As an illustration, it is interesting to follow the journey of one individual participant, whose last four digits of QQ ID were 9535. In her reflections on Session One (the preliminary session of the training course, see Appendix 1), having watched a film about a boy named Ishaan who had SEN, she wrote as follows:

> I have never had any classmates like Ishaan. (9535 after Session One)

Her opinion expressed here is consistent with her response to the Time 1 online survey about her previous experiences with disability or SEN. To the statement "I have had fellow students with a disability in my educational experience", her answer on the 6-point Likert scale was the number "1", i.e., "strongly disagree". However, her opinions changed from the second session of the training course, and in her later reflections she expressed strong criticism towards the lack of support for students with SEN:

> When I was in primary school, there was a boy who had a head fever when he was young, and it caused a great damage to his brain, thus he is [was] slower than us, and he was poor at his schoolwork. Many classmates laughed at him and bullied him, and even the teacher didn't care about him. … After learning Session Two, I have recalled this classmate, if there had been inclusion, he wouldn't have suffered so much pain. (9535 after Session Two)

> Now from what I can recollect about my school days, I think there was a girl with dyslexia. … it seemed that all of the students who needed special educational support in my schools finally got nothing. And they always disappeared from school very soon (dropped out). (9535 after Session Five)

> After this session [Sessions 11 & 12], I have many mixed feelings. For children with SEN, the different attitudes people hold towards them can bring them into totally different destinies. For instance, in my high school, there were some students who very probably had SEN, but our teachers and [us] students paid no attention to them at all. (9535 after Sessions 11&12)

Such changes in their perceived experience with disability or SEN can be frequently found in the participants' online reflections. And similarly, in most cases, their acknowledgement of such experiences, although in retrospection, were always accompanied by their statements about a lack of awareness and support for either the students or the teachers from the schools they attended. Data from the participants' online reflections also show that their perceived experiences with SEN, along with their gained knowledge about inclusion, have contributed to and reinforced their willingness to make a difference in their teaching practice.

6.3.4 The change – their attitudes towards SEN

As stated earlier in this chapter, at the beginning of their journey (see Section 6.3.1), the student teachers were generally unaware of inclusion and SEN, and unprepared for catering for SEN in their teaching practice. However, as the training went on, there was a noticeable change in how inclined and confident they became to practice inclusion in their future teaching.

> I had never thought about having students with SEN in my future teaching. Now, I think I will have such students. … After the study of this course, I hope that I can be a good teacher in the future. (4484 after Session One)

Contrary to their responses to Question 2 in their Time-1 survey, which was overwhelmingly negative (77.3%, n=102, N=132) and "Not Applicable" was their most frequent answer (see Section 5.3.1), the participants' attitudes and views changed as they learned more about SEN. In other words, before the intervention training, they did not consider accommodating SEN as applicable or relevant to their educational experience. However, this attitude or understanding was reshaped into a retrospective new insight, which is frequently expressed as the following:

> When I was in primary school, I have a classmate who is a mentally disabled boy. In my memory, teachers and students did not care him. Mostly he was absent at class. We ignor ed him. (3583)

> I have never learned about SEN before you introduced these things to us, but I had a classmate who is disabled when I was at Grade Three or Four. He cannot walk even his hands cannot hold his books. He never talked to us. Months later, he dropped school and we never saw him again. (3141)

> I knew a child with poliomyelitis. She was always in a chair, and her grandparents had to take care of her. She never went to school. (8500)

This re-discovery of their past experience indicates a step forward in the participants' attitudes towards inclusive education and catering for SEN: The respondents no longer felt that those with SEN were not relevant to them or "Not Applicable" in mainstream schools.

If there were still traces of uncertainty or lack of confidence at the beginning of their journey, such as that illustrated above, the participants were definitely more assertive and assured as they came to learn more.

> I want to be a good teacher when I graduated [graduate]. Learning about inclusive education has really helped me a lot. … (4285 after Sessions 15&16)

> I'm so happy that I have had this course. In the future I will be a good teacher and try my best to meet all students' needs in learning. (4963 after Sessions 15&16)

> In the future I will be a teacher. What I have learnt in this course will benefit be [me] most in my education career. And I will use this fortune to help more children with special educational needs. (7783 after Sessions 15&16)

However, this assurance of the participants' readiness for action may be only theoretical: and it may not necessarily be the case in practice. Findings of how the student teachers in the study would apply their new knowledge will be presented later in the chapter (see Section 6.4), and possible reasons why this was the case will be further discussed in the next chapter.

6.3.5 Cause of the change – how their new knowledge is gained

There might be other causes of the participants' enhanced understanding of inclusion and SEN, such as a critical incident in their life, personal communication with someone with a disability or SEN, or in-depth discussions with someone outside the training course. However, results from the online reflections indicate that the participants did see the intervention training as the cause for their increased awareness and understanding.

As was mentioned earlier (and also see Appendix 1), the intervention training consisted of 16 sessions on inclusion and SEN, 12 of which were distance learning and 4 face-to-face taught sessions. For the four taught sessions, there were still additional materials provided online for the students, such as video clips, links to further resources, and supplementary reading (also see Section 4.7.2).

Figure 6.5 on the following page shows an example of part of a face-to-face taught session: Sessions 3 & 4. These two sessions were merged into one extended session, mainly for practical reasons[66]. Apart from the face-to-face teaching for that merged long session, there were also supplementary materials online for the participants to consolidate what was covered in the session. Figure 6.5 is a screenshot of one of the many video materials available on the researcher's Qzone blog, for the participants to revisit.

[66] One major reason for the merging of the two taught sessions was the practicability of gathering all the participants into one lecture hall at the same time slot. This was more convenient for the university.

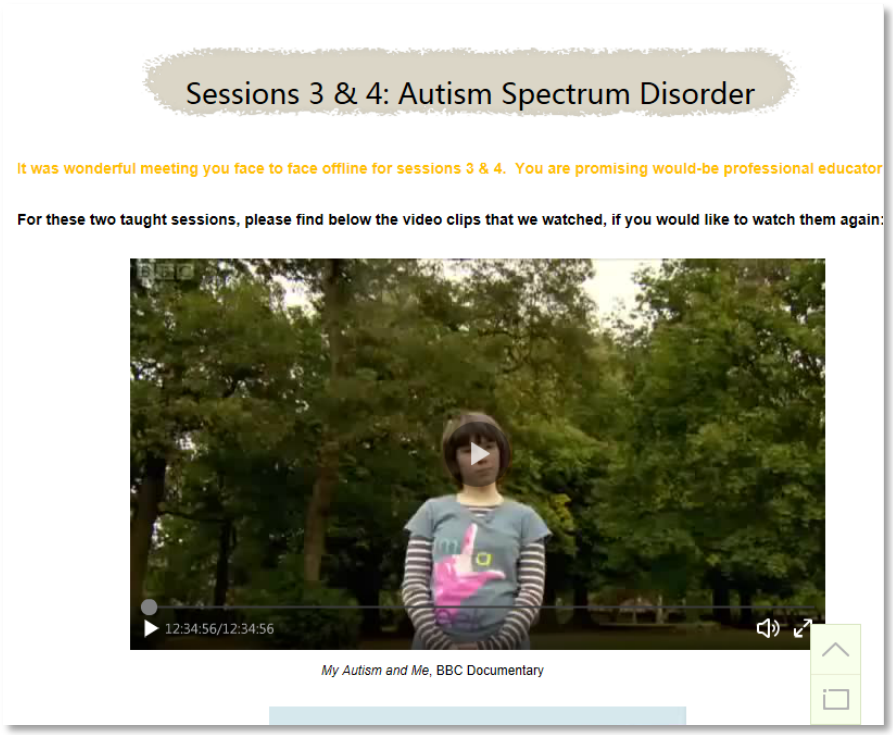

Figure 6.5 Example of supplementary materials for taught sessions

According to the online reflections, most participants stated that their new knowledge came from the intervention training:

> This course is of vital prominent [importance] for me. I [have] not only learned about inclusive education, but I also know how to help those in need around me. (9658)

> Apparently, this course offered me the opportunity to realize [understand] what I mentioned above. (1837)

Some of the participants mentioned about how they acquired the new knowledge like this:

> But after I took this course, I learn [have learned] about inclusive education by watching the videos in the QQ zone and reading [online] the resources you provided. (4221, in her final reflection on the training)

> By learning what you have uploaded on the Internet, I understand much knowledge on inclusive education. For instance, … (0482)

> I'm very glad to have this face-to-face class. … After watching the video [video clips], I was impressed with Inclusive Education Practice in Taiwan, and I realize[d] the difficulty [problems] of inclusive education in China. (8500, after face-to-face Sessions 11& 12)

In addition, the different approaches adopted in the blended-learning course were frequently mentioned by the participants in their reflections, such as the taught element, and their extended learning based on the training course:

> it is very pleasant to spend this class [session] face to face. Your patient explanation made me know more about inclusive education and the specific example [of] ASD. (5158)

> After joined and listened [attending] your speaking [face-to-face taught session], I looked up some information to know what ADS is. …… (4187)

Apart from the face-to-face teaching given by the researcher (and one of the sessions by her supervisor), the majority of the data from the participants' reflections was on the researcher's Qzone blogs, with a major focus on the video clips uploaded for them in each session. Therefore, the next section will report on the role of the video clips.

6.3.6 Cause of the change – the role of the video clips

The video clips in each session (regardless of whether it was distance learning or face-to-face taught, such as in Figure 6.5 in Section 6.3.5), were frequently mentioned by the participants in their reflections. Word clouds from NVivo clearly show this (e.g. Figure 6.6 below). The word "video" (together with "education" and "time") appeared the most frequently in the Word Frequency Query regarding how the participants learned about SEN and inclusive education, as is shown in the word cloud (see below).

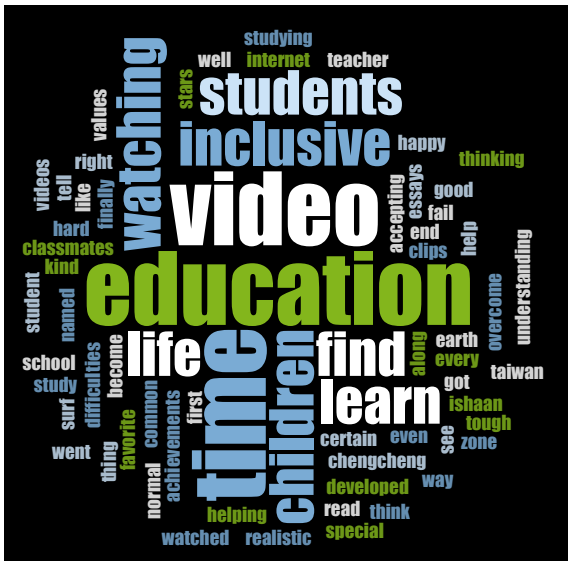

Figure 6.6 NVivo word cloud: Role of video clips in the training

For some, even for the face-to-face taught sessions (i.e. Sessions 3 and 4, and Sessions 11 and 12), what they wrote down in their reflections still concerned the video clips:

> I do [did] not know nothing [anything] about ASD before I study [studied] this course [session]. After seeing [watching] the video clips I learn[ed] that …… (8500, after Sessions 3&4)

> After watching these videos, I got to know how …….. (1423, after Sessions 11&12)

> In this video, Chengcheng is the first special child [from mainland China] to study in Taiwan …… (1062, after Sessions 11&12)

Data from the online reflections also reveals that the participants were taking the training (especially what they saw in the video clips from each session) as their personal experiences with disability and SEN, and this special sort of personal experience, in their perspective, is most influential. Some participants put it like this:

> To be honesty [honest], at the beginning of this semester, I am [was] not interesting [interested] in inclusive education, while after I watched videos one by one, I was deeply touched by those children (0333)

> The video clips you put on your Qzone[67] impacted me most strongly. (1988)

Some even described in their reflection that they were 'exposed to' inclusion for the first time:

> I remember the first lesson, I [was] first exposed to inclusive education. (2142)

Some other participants expressed this 'exposure' in a very personal way:

> During the past weeks, I was deeply touched by those disabled children [in the video clips][68]. I could feel how they wanted to be treated equally. (9480)

> I am touched by the children who have the learning difficulties. They want to improve. They wished something can change. They hope they can be better. They need help. (1859)[69]

The participants' frequent mentioned about how they felt about the children with SEN, and how they were 'deeply touched' by the children. In the light of their individual survey responses, they were, of course, referring to watching the video clips in the intervention training:

> From this course, I [was] deeply moved by those kids who are disabled. Usually they are looked down upon by others. (6858)

> After these several months' study, I have learnt much about inclusive education and those special children from this course. (0766)

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[67] The researcher used her personal Tencent Qzone blogs as the major platform for the blended-learning course.

[68] This inference is according to all the participant's reflections and her responses to the Time-1 and Time-2 survey questionnaire, which indicated that she had never had any experiences with disability or SEN. Therefore, here in her final reflection, she should be referring to the children in the video clips.

[69] This is also written by a participant who stated that she had never had fellow students or personal contacts who were with SEN. Therefore, what she wrote here refers to her virtual experience with SEN in the video materials provided in the blended-learning course.

They appeared to have taken in their virtual experiences as significant first-hand encounters that had a life-changing impact. For example, they regarded Ishaan's art teacher (in the film uploaded for them in Session One) as their role model:

> Ishaan's home is very far away from his school, but the art teacher takes buses for a long time to meet his families and talk with them abo ut Ishaan's problems. I admire him and I really want to be a teacher like him. (4794)

> I want to be a teacher like the teacher in the film. (4253)

Such frequent reflections on the video clips as well as their intensive engagement in what they watched from the video are an interesting phenomenon, which will be discussed in the next chapter (see Section 7.2.2).

6.3.7 Cause of the change – the role of reflections

Some participants also mentioned in their online reflections the importance of the reflections for their raised awareness and improved understanding of inclusive education.

> At first, I just watch[ed] the movies without thinking. Then I participated in the course [i.e. writing the reflections], I started to think a lot. (3532)

The design of requiring the participants to upload their reflections on each session of the intervention training to a designated online forum, according to the participant's reflections, helped them with their learning about SEN and inclusion (something previously seen as irrelevant to their teacher-training programme and something hardly noticeable in their entire education experience). The respondents "started to think a lot", as was put forward by participant number 3532 (see quote above).

Although not every student teacher found writing the reflections easy and enjoyable, the 'compulsory' nature of the reflections as assignments for the training course ensured the completeness and consistency of the data, and pushed the participants through the 16 sessions. The quote below is a typical illustration of how reluctant some of the participants felt (e.g. "'boring' and difficult") about writing the reflections at the beginning of the intervention training but later realised how they benefited from the writing and reflections.

> However, after one session after another session, after I did one "boring" and difficult reflection after another, I began to get something in my mind and really had the desire to learn and reflect what you were teaching us. (4253, final reflections)

Almost all the participants admitted in their final reflection how little they knew about SEN and inclusive education, even those few who had taken optional courses about education of children with disability in China. For example, the following quote from a student teacher that

had previously taken an optional course on LRC reflected that she did not really know about inclusive education even after the previous training, and that the reflecting in the intervention training made the difference.

> The first time I heard inclusive education was in an optional course "Learning in the Regular Class". … I knew that mainstreaming is an educational policy adopted by Chinese government for solving the problem of enrollment of children with disabilities. But I just knew that much … At the beginning of this course, to be honest, I thought it wouldn't be different from other courses. … However, after I watched videos one by one and reflected one by one, I was deeply touched by those children ... (3500, final reflections)

There are also cases where the participants felt encouraged by the writing of reflections, and therefore more determined to make a difference.

> After watching this movie and written [writing] down this comment [online reflections], it made my mind up what kind of teacher will I be? Must be kind, patient, creative ... (1988)

> Though reflection, we find our mistakes and defects, so we can improve ourselves. As a would-be teacher, I will put reflection on my first agenda. (2142)

6.3.8 Cause of the change – impact of the training

Participants also repeatedly stated in their reflections that the blended-learning course in itself contributed to the changes in their understanding of inclusive education.

> This course is very meaningful for me, because inclusive education is totally a new realm for me. I even had never heard [of] it before. And the on-line learning is also a new and convenient way of class. (9480)

> I reckon that this class is really helpful to me, because after learning this lesson, I got the meaning of the inclusive education totally. And I want to be a teacher after I graduate. It benefits me a lot and gives me a meaningful school life. (0766)

> As I said in former sessions, I would like to be a teacher in the future. So it's my obligation to be constantly alert to potential childhood disabilities in the classroom. I'm so glad that I have this opportunity to study this course. And I'll try every effort to cater for special learning needs of children. (2496)

The significance of the intervention training was also constantly reflected upon in the student teachers' reflections. In addition to their boosted favourable attitudes towards inclusive practice and catering for SEN, they expressed loud and clear their confidence and sense of purpose in becoming a teacher who practices inclusive education.

> I find the course is helpful. What's more, it reminds me the importance of teachers. Treat students gently and with our love. (7931)

> So I think this course broadened my horizons and provided me some practical ways to care for students who have special educational needs in the correct way. It is very helpful

for me. Thank you very much for providing us with this excellent and useful course. I will take what I have learned in this course to action as much as I can! (4794)

Other factors might have contributed to the positive changes in the participants' increased knowledge, such as students learning from other students or from discussions between themselves. However, there was no mention of their fellow students' online reflections, although the online forums were designed to enable them to interact with each other. The following is a screenshot from the online forum of the intervention training (see Figure 6.7). It shows that the participants were viewing other students' uploaded reflections, but there were very few replies. This lack of formal (written) interaction between the participants in the online forum might be a characteristic of Chinese students and their culture, and this will be discussed further in the next chapter (see Section 7.3.1).

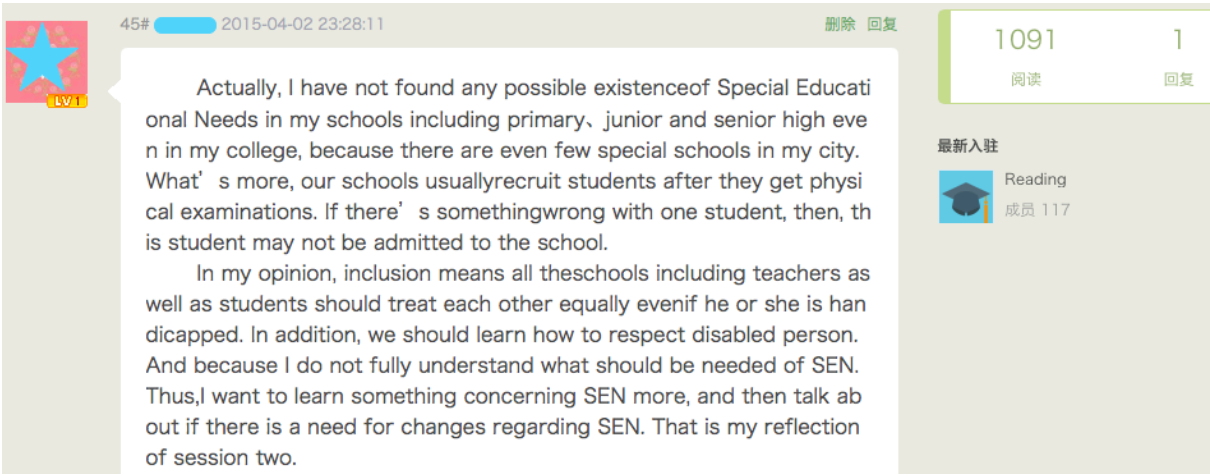

Figure 6.7 Screenshot of a piece of online reflection

Therefore, the qualitative data collected from the online forums are accepted as true and faithful reflections of the participants' views and understanding of inclusive education and SEN, in the process of their learning. The data indicates that their very limited understanding of SEN greatly increased, and their positive attitude and love for education were strengthened. However, how this increased knowledge and change of attitude would be put into practice (e.g. in their school experience) still remained a question, and results about the participants' perceptions of this are going to be presented in the following section.

6.4 Theme 3: Still on the journey – applying theory to practice

This section is going to present the results from the live chat interviews with 20 participants (see Section 6.1.2 for more information) after they came back from their first teaching practice in local mainstream primary and secondary schools. The duration of this teaching practice was one week. How the student teachers went through the week in the schools varied according to the respective schools that they were placed into by their university. Generally, the student teachers were observing teaching in the schools, but a minority of them were given the opportunity to teach one session (of English) during the week.

Unlike the online reflections, which the participants wrote in English (see Section 6.3), the live chat interviews were mostly in the Chinese language[70]. The decision to conduct the interviews in Chinese was made when all the online reflections were collected and analysed. For the majority of the participants, their online reflections were full of grammatical errors and sometimes wrong use of words (see Section 6.3 for example). Some participants even admitted honestly how they felt about having to write down their thoughts in the English language, e.g. "'boring' and difficult" (see Section 6.3.7). The researcher realised that the participants might feel more comfortable and motivated to express their thoughts in depth if encouraged to use their mother tongue, such as in the cases in the foreign language classroom (e.g. in Littlewood & Yu, 2011). Therefore, in Stage 4 of the study the Chinese language was used as the remedy for the unpredictable and complex nature of the interview communication, and the back-translation technique was adopted (see also Sections 4.6.4, 4.8.2 and 6.1.2). The data were imported and analysed in NVivo, and translated into English when quoted in this section.

6.4.1 The settings: the local primary and second schools

As was explained earlier (e.g. Sections 4.5.3 and 6.1.2), a sample of 20 student teachers that had participated in all three previous stages of the study agreed to take part in the live chat interviews.

The 20 student teachers that volunteered to participate were placed (by their university) into seven different local schools. These included two primary schools, two secondary schools, and three "complete schools" (i.e. schools providing both primary and secondary education).

[70] There was only one exception out of the 20 volunteers. That one participant expressed her wishes to try doing it in English, but she soon gave up and switched back to Chinese.

Three were non-fee-paying key schools in the province, which means that they were enjoying abundant funding from the government, and four were fee-paying schools that that had been built very recently (in the new millennium). All were mainstream schools, located in the city, and were following the same curriculum. English was one of the key subjects in all the schools. Some relevant basic information of the schools is presented in the following table (see Table 6.2 below).

Table 6.2 Information about the schools for teaching practice[71]

Local school	School type	Number of students	Number of classes	Number of teachers	Pupil-teacher ratio
1*	Fee-paying, Years 7-12	3,700	70	400	9
2	Non-fee-paying, Years 1-6	1,700	32	88	19
3*	Fee-paying, Years 1-12	4,000		500	8
4	Non-fee-paying, Years 10-12	2,600	45	182	14
5*	Fee-paying, Years 1-9	Statistics unknown because it was a very newly founded school.			
6	Non-fee-paying, Years 1-6	3,000		122	25
7*	Fee-paying, Years 1-9	1,000	25	160	6

The above table was produced because the participants who volunteered in the live chat interviews all mentioned classroom management, and how the teachers had difficulties in meeting the individual needs of the students. As is shown in Table 6.2, in the seven schools where the interviewees went for teaching practice, the pupil-student ratio in all the non-fee-paying schools was much larger than in the fee-paying schools. In the non-fee-paying schools, only one met the criteria, and the other two were exceeding the Chinese national standard

[71] Information in this table was obtained from the official website of each of the schools, and statistics were updated until 2016, the time when the live chat interviews were conducted.

ratio, which is a maximum of 19 for primary schools and 13.5 for junior middle schools (see Table 2.4 in Section 2.1.2). This is particularly interesting in the light of the interview results about accommodation for children with SEN in the schools (see Section 6.3.2), which will be further discussed in the next chapter (see Section 7.1.4).

Table 6.3 Demographic distribution of participants in teaching practice[72]

Number of participants	Type of school (according to features)	Number of participants	Type of school (according to year groups)
12	Fee-paying, new school	**18**	Primary or junior secondary school
8	Non-fee-paying, established key school	**2**	Senior secondary school

Table 6.3 above is an illustration of the number of participants in each type of the schools, both according to the characteristics of those schools and according to the year groups they cater for.

6.4.2 The settings: how their teaching practice was conducted

What the student teachers were allowed to do varied from school to school. Some schools allowed them only to observe for the week but some gave the student teachers an opportunity to practise teaching. This amounted to one 40-minute session towards the end of their teaching practice week, based on prior application so that arrangements could be made. In the following quotes from the live chat interviews, "R" represents the researcher, "P" the participants, and the numbers in brackets after the quotes are the last four digits of the participants' QQ ID for confidentiality and anonymity.

Most of the participants reported that they did only class observations, and they were made to observe only the English classes in the schools (although one of the schools also allowed student teachers to observe other classes on other subjects), as they were trained to be teachers of English:

R: Could you tell me what you did in that school?

[72] Information in this table was gathered from live-chat interviews with the 20 participants.

P: None of us had the opportunity to teach. We were taken into different classrooms and we observed 10 different teachers teaching 10 different sessions to 10 different classes. The five morning sessions were all Year 7 English, and the five afternoon sessions were all Year 10 English. (9480)

P: No, I did not have the opportunity to teach. I just did the observations.

R: How did you do the observations?

P: I was able to go to 9 classrooms to observe 11 sessions [of English class], and to ask the children how they felt about their English class. (1423)

P: I did not teach. All of us [student teachers] were made to stay in one classroom and observe. It was a big lecture theatre. We stayed in it and different groups of teachers with their groups of students came to have their English class there. Altogether there were 10 sessions from 10 different classes: three Year 7 classes, two Year 8 classes, three Year 10 classes and two Year 11 classes. (9487)

P: We were not allowed to choose which class to observe, but I know that some of my fellow students practising in another school were able to observe other classes apart from the English classes pre-arranged by the school. (4963)

P: In addition to all the English classes arranged by the school, I also observed a Chinese class, a chemistry class and a maths class. (1556)

Overall, four (out of 20) of the participants had the opportunity to teach in the schools, where some of their fellow student teachers also observed their teaching:

P: [apart from observing English teaching from five different teachers with five different classes,] … I taught one session in a Year 7 class. (0482)

P: I did not teach due to my personal reasons, so I observed lots of English teachers teaching different classes, and I also observed the classes taught by my fellow students. Everything was in Year 5. (0774)

The data suggests that the focus of the teaching practice and observation was mostly on the subject teaching, i.e. teaching English in this case. It is also clear that in all the schools the student teachers went to, they were able to observe a large number of children of various year groups.

6.4.3 Making sense of the physical environment in the schools

The interview data suggests that there was very little or no provision for SEN in the local schools the participants went to, regardless of the types of schools. This was firstly evidenced by the lack of a physically inclusive environment in the schools.

Despite modern buildings and new facilities, none of the schools the participants went to were wheelchair accessible. Strong negative adverbs were used by participants in their comments about provision for SEN, such as the following.

P: I don't think there were facilities for SEN. The buildings were not wheelchair accessible at all. (9658)

In addition to inaccessible entrances to the buildings, there were also other barriers restricting the mobility of wheelchair users in the schools, if they could manage to be there. Allowing for the possibility of students temporarily using a wheelchair, even if they could get into the buildings, they would still be faced with other obstacles:

P: The facilities were very new and modern – we were specially provided with a lecture theatre with projectors and everything [and the teachers and students came to have their classes]. There was no lift anywhere in the six-floor teaching building. (9480)

P: There was a lift in the teaching building but it was exclusively for kitchen staff delivering food at lunchtime. Anyone else was not allowed to use the lift. ….. By the way, the students were packed and there was no room for wheelchairs in the classrooms. (7447)

R: Were the toilet there squatting toilets or sitting toilets?

P: All were squatting toilets. (2224)

R: What if wheelchair users needed the toilet?

P: They wouldn't be able to. Too narrow, only for one person getting in and out, and the squatting toilets are a step up from the floor. No consideration for those people.

R: Were there any sitting toilets?

P: No. (4794)

As was mentioned earlier (see Section 6.4.1), all of the seven schools were either very large (in size), established, prestigious and non-fee-paying key schools abundantly funded by the local authorities, or newly built, fee-paying, expensive schools. Therefore, it is interesting to see the lack of planning for an inclusive environment in any of the schools.

However, it is not only a physical environment that was lacking. The following section is going to present results regarding the lack of care and attention to SEN in children.

6.4.4 Making sense of the intangible environment in the schools

Results indicate that all the participants think that there is a need for improvement in the schools they observed regarding improvement to create a more inclusive educational environment. However, according to the participants, what requires the most improvement is not the physical setting of the schools, but the awareness of the teachers.

R: In your opinion, is there room for improvement in the provision for SEN in this school?

P: Yes, a long way to go …

R: Which area do you think needs improvement the most?

P: Teachers' awareness of students' needs.

R: Special educational needs?

P: Yes. (7447)

P: First of all, the teachers ought to have a good understanding of SEN. They don't seem to know anything about it. (9658)

P: The teachers did not display any awareness of SEN at all, at least not in class. I'm not sure about them after class.

R: Do you have any idea of what they do after class?

P: They wouldn't stay in the classroom. They would always return to their office building immediately after class. (5158)

This unawareness of SEN in the schools appeared to be prevalent not only among the teachers but in the school management team, for example in one participant's description of what the head teacher of the school responded to enquiries about SEN (see the following quote).

P: We [the group of student teachers placed in that school] went specially to consult the head teacher about their provision for SEN in the school. The head teacher said that they never accepted children with SEN and therefore there were no students with disabilities in her school. She said that those children should go to special schools. (8986)

Participants observed that the teachers in the local mainstream schools had no knowledge about inclusive education and SEN. When questioned about whether there was a need for change in the schools, all the participants agreed, and many of them pinpointed the problems they noticed in the teachers, such as class systems. Lower-achieving students are observed to be regarded as "inferior human beings" (as shown in the following quote).

P: Yes, the set-system. In a year group, only 20 top students were placed in the Elite Class and the next 60 students in two Experimental Classes. Most students, I mean, all the rest, were labelled as "average" and then students were further labelled as "worse" and "worst". All this was only based on their exam performance. None of the teachers cared about the students' talents or hobbies. Exam results were the only focus. (0955)

P: Yes, I think things need to be changed, but it has to be starting from the views of the teachers. What the teachers think is so important for the students. Some teachers really think that the low-achieving students are inferior human beings than students in the Experimental Classes or the Elite Classes.[73] (1556)

[73] Students in this school were divided into classes based on their performance in an examination at the beginning of their starting year. This is similar to the setting in secondary schools in the UK. However, in China the differentiation does not apply to individual subjects. Instead, students are differentiated on the basis of their total score from one examination. In the case of this school, they

Apart from the discriminating class system, the participants also discovered problems with the seating arrangement in the schools.

> P: The first thing that needs to be changed is the seating arrangement in the classrooms. The teachers should not place those students at the back row who were the most easily neglected.
>
> R: How were their seating arranged?
>
> P: I'm not sure how exactly the teachers did that, but it appeared a rule that the most disengaged students were placed at the back of the classroom. Higher-achieving students were seated in the front. (0955)

In summary, the participants reported very limited inclusive provision in existence for SEN or children with disabilities in all the schools the participants went to for their teaching practice, and the day-to-day focus of the schools appeared to be on exam results, regardless of their school type or pupil-teacher ratio. This is consistent with the literature, and will be discussed in the next chapter (see Section 7.1.4).

6.4.5 Making sense of the teachers' awareness of SEN in the schools

If there was a lack of inclusive provision for SEN, what would happen to the children with SEN in the schools? Data from the live chat interviews show that the participants state that there was not a single child considered as having such needs.

As was mentioned earlier (see Section 6.4.4), teachers in the schools were not aware of SEN and therefore were not accommodating such needs in their students. Almost all (95%, 19 out of 20) participants in the interviews stated that the teachers in the schools had no knowledge about inclusive education and SEN. There was only one participant who was unsure. She initially claimed that one teacher out of the 10 she observed might know about SEN, and then stated later that she was not sure:

> P: There was one teacher who was newly graduated. I felt that she knew.
>
> R: How do you know?
>
> P: Because she divided the students into groups and provided an easy question in addition to a difficult one, for the students to choose from. I was impressed.
>
> R: Do you think she knew about what we covered in our training course, for example ADHD and autism?

---

were placed permanently into one of the three sets: Average Class, Experimental Class, and Elite Class, and would remain in the same set for all subjects until they graduate from the school.

P: I'm not sure. I think she knew differentiated teaching, not necessarily SEN. (9480)

From the perspectives of the student teachers who observed in the schools, the results indicate that the teachers had very limited knowledge about SEN. During the live chat interviews, the participants gave their justification for their opinions (or speculations) like the following.

R: How do you know that they [the teachers] were unaware of SEN?

P: Because nothing about this was mentioned whenever they were talking to us [student teachers] about the students. (1062)

P: Because nobody mentioned this either in the meetings or in their end-of-week workshop, where everything related to teaching would be discussed. (1423)

R: How do you know that they [the teachers] didn't know?

P: Because of their way of teaching.

R: What was it?

P: It was a very hasty way of teaching. Very fast pace. Only fast-learners could cope. (2224)

P: Because they didn't seem to care at all. They seemed to have already given up on those students. (1556)

A few of the teachers in the schools were observed to have displayed their effort to engage more children in the classroom, although they did not seem to have any knowledge about inclusion or SEN, and the participants gave their reasoning as follows:

R: What do you think made their class more engaging?

P: I think it was more of a decision made according to experience and intuition. (7447)

R: What do you think made her different?

P: She was naturally a very gentle person, and she was caring out of her nature. (0482)

R: Do you think she [a teacher who gave special attention to a disengaged little girl] knew about SEN?

P: No, I don't think so. But I think she was practising inclusion without theoretical knowledge or without being aware of it. But teachers like her are rare and children have to be lucky. (0333)

On the whole, the participants viewed the majority of the teachers as not making provision for the low-achieving or disengaged students, especially the ones sitting at the back of the classrooms.

P: When they were teaching, they were just neglecting those students who did not follow. (4187)

P: They didn't seem to care at all. They seemed to have already given up on those students. (4221)

It could logically follow that the mainstream teachers in China are not aware of the learning needs of children with SEN in the classroom, if they were not trained about inclusion and SEN. However, the lack of awareness was not only found in the teachers observed by the participants, but also reflected even in the student teachers when they responded to the interview questions.

6.4.6 Student teachers' awareness of SEN

An interesting finding from the live-chat interview data is the almost automatic negative response to the question "Have you noticed any children in the school who might be with an SEN?" from half of the participants, who stated 'no'. This is unexpected taking into account the fact that they had completed a 16-session training on SEN and inclusive education.

Of all the participants who took part in the live chat interviews, slightly more than a third (35%, n=7, N=20) gave very positive answers by giving various examples of possible SEN symptoms in the children they observed in the schools. Another three (15%) of the 20 participants said that there might be such children in the classes they observed but were not able to provide any examples.

The remaining 10 (50%) of the 20 participants gave an immediate definite answer "No" to the question of whether they observed any students who might be with SEN (although later as the interview proceeded they all changed their answers to this question). For the 10 participants whose immediate answer was a definite "No", half of them gave their assumed reasons such as the enrolment requirements of the schools.

R: What do you think might be the reasons why you didn't see any children that might be with SEN, in all those classes and year groups that you observed?

P: I think it might be because of the enrolment requirements of the school.

R: Do you have any idea what the requirements are?

P: At least they should be selective in exam results, and those who met the standards should be okay. (9658)

Their assumption was that since those were highly selective schools, children who were enrolled should not be with any SEN. In other words, their assumption was that children with

SEN should not be selected in those selective schools, where exam results come before anything else.

There was even one participant who gave the following reason (although later in the interview she admitted that there could possibly be some children with SEN in the school):

> P: They should go to special schools, if they have SEN. (1423)

Two of them stated that they were not sure about the potential existence of children with SEN only because they did not have the opportunity to find out about them:

> P: I didn't find any, probably because we [student teachers] did not have the chance to know the children. We rarely communicated with them. (1556)

> P: I didn't find any, because I didn't have the chance to communicate with all the teachers about that. I only asked one of the teachers and she said she was not sure as she was only a subject teacher, not a form tutor[74]. (9487)

Two of the participants mentioned the emphasis on the delivery of knowledge as the cause:

> P: I think the reason why I didn't notice any SEN was because I didn't pay attention to the children. My attention was placed completely on the teachers and on how they were delivering knowledge. (1820)

> P: I was paying attention only to how the teachers delivered their teaching, because we were placed into the schools [i.e. the teaching practice] as part of the Pedagogy course that we had this semester. (1062)

This perception is consistent with what all the participants described about how the teaching practice was conducted in the schools as well as the focus of their teaching practice (see Section 6.4.2). Discussions about the student teacher's intuitive responses (e.g. thinking that children with SEN should go to special education schools and those who got admitted into the schools should not have SEN) will be discussed in the following chapter (see Section 7.3.1).

Although half of the participants in the interviews started their live chat interviews by automatically stating that there were no children with SEN in the schools they observed, as the conversation went on, they all changed their mind and recalled that there were some children in the classrooms that might be with an SEN. Examples of such children will be given in the next section.

[74] In both primary and secondary schools in China, there is a 'form tutor' for each class of students.

6.4.7 Potential cases of SEN: dis-engaged children

As was presented in the previous section, half of the participants at the beginning of their interviews did not feel that there were students with SEN in the schools they observed. However, it is interesting to look at this phenomenon in more detail, as this same group of participants all stated that there were students who they felt were disengaged, neglected or isolated in the classroom.

This section will look first at a group portrait of these children and how they were supported at the schools, and then at two particular children whose needs the participants felt were not supported by both the teachers and the other children in the classroom. It is important to note that this evidence is presented as found in the raw data. It is not intended to be a comment on the school sessions observed, nor to make any generalisations.

Most participants mentioned dis-engaged or non-compliant students whom they observed, and they described how the teachers dealt with such behaviours. A few of the participants mentioned verbal or physical punishment, such as 'harshly criticising' or 'cursing' the student involved, not allowing the student to sit down or to stay in the classroom, or 'pinching their ear and pulling a little'.

> R: How did the teachers handle those back row children who were moving about or chatting in class?
>
> P: The teachers normally would harshly criticise them, or, as a punishment, make them stand at the back until the end of the class. (3018)
>
> P: On the first day I saw a boy who was made to sit alone outside as a punishment, and it was a very cold morning.
>
> R: Do you know the reason why he was punished?
>
> P: No, because he was not in the class I was observing. But I guess it was because of failure to hand in his homework. Such things were quite common when I was in secondary school. (1556)
>
> R: You spoke earlier of seeing a teacher cursing and beating a child. What was the case?
>
> P: I saw this twice, once in the classroom and once on the playground during the Morning Exercise. This was only occasional.
>
> R: What was the children's reaction to such punishment?
>
> P: Actually it was not beating. It was just pinching their ear and pulling a little.
>
> R: Okay. What was the children's reaction?
>
> P: They immediately obeyed, but appeared to be scared of the teacher afterwards. (7447)

The majority of the teachers in the schools, according to the participants, were not actively doing anything about such back row students in their classroom teaching. The participants frequently chose the word "ignore" when describing the reaction of the teachers they observed.

> R: Did you observe the back row children in the classroom?
>
> P: Yes. They were mostly not paying attention to what the teacher was doing. What impressed me most was a girl, who was fidgeting, talking and looking around, nonstop for the whole class.
>
> R: What did the teacher do with this girl?
>
> P: The teacher just ignored her. (9480)
>
> P: I think such children were being well cared for materially. There were very good facilities in the school for their physical needs.
>
> R: Yes?
>
> P: But they were just totally ignored in the classroom. (4619)
>
> P: I saw lots of disengaged students in the Average Classes, but not in the Elite Class. We [student teachers] were sitting right behind them, but they were eating, drinking water, and sleeping in class.
>
> R: What did the teacher do about these back row students eating, drinking and sleeping in class?
>
> P: The teachers did not seem to see them. (1556)

These quotes may sound very abusive, but the researcher is not making a statement beyond the data, nor making a comment about all teaching in China. What is shown here is a gap between the understanding of SEN in some areas of the world (e.g. the UK and the USA) and the practice discovered in these cases. Without further investigation into what specific consequences were the result of these behaviours and a full story of the cases, however, no conclusions can be made or used as basis for generalisation. It would seem unusual that it would be possible that these student teachers were sharing stories that were less than the whole picture, but this is beyond the scope of the study, as the researcher has not gone into the schools specifically or spoken to the teachers individually.

Nevertheless, this was a worrying trend that was observed by the student teachers. Given the lack of training in SEN in the teacher education programmes in China and general lack of awareness of the legislation, it might possibly be a wider practice than the focus of the study, but it remains unascertained. However, the findings here do provide evidence of practice that is not acceptable in this day and age, and the one thing that is quite clear is that even if this is

happening to a limited extent, there is a definite need for wider universal training, so that practice such as this will stop.

6.4.8 Potential cases of SEN: a Year-3 boy

One participant who did both the observation and the practice teaching gave a detailed account of a Year 3 boy who was regarded by his teachers as having mental health concerns and, according to the participant, was therefore neglected in the classroom. It was a fee-paying school with a very good reputation, state-of-the-art facilities and well-equipped buildings.

This little boy was spotted by the participant during her practice teaching. When the student teacher went to ask for more information about the boy, she was told not to take the trouble. When she kept enquiring, she noticed a lack of interest in the boy's form tutor.

> R: Tell me about that little boy you mentioned.
>
> P: Okay. His form tutor was also the English teacher and my supervising teacher during the teaching practice. She told me that he had mental problems. I asked her whether it was autism and she said no.
>
> R: His form tutor was saying that he was having problems with his intelligence, right?
>
> P: Yes, and she said that he got very low marks in all his exams.
>
> R: How were the teachers supporting him?
>
> P: His form tutor told me that he was self-absorbed and disengaged in all his classes, and that he was always drawing, and sometimes he would run about in class and even shout. She also told me that all the teachers knew about this and they were all letting him be. She told me not to bother as long as he was not harming himself.
>
> R: So the teachers cared only about keeping him safe at school?
>
> P: Yes, I was told so. And when I asked about this child, the form tutor seemed to be very apathetic.
>
> R: Did you initiate the conversation about him, or his form tutor, i.e. your supervising teacher?
>
> P: I did. I spotted him when I was teaching his class, so I asked. (4619)

Interestingly, although the boy was described by his form tutor as being non-compliant (and interruptive sometimes) in class, he did not catch any attention in the same student teacher when she did the class observation.

> R: Did you notice him before your teaching?
>
> P: No, when I was observing the teaching [of his form tutor], I didn't notice him.

R: Does that mean that he didn't run about or interrupt the class?

P: Yes, you're correct.

R: What did you observe when his form tutor was teaching?

P: The class was very lively and children were very active in learning.

R: Very active class, and the little boy did not interrupt. Am I right?

P: Yes.

R: What do you think made him unnoticeable when you were observing the class?

P: The teacher was really giving a wonderful class! I was absolutely attracted to how she did the teaching. My attention completely followed her attention. (4619)

The participants went for teaching practice as part of their pedagogy training, and therefore before they went to the schools they were instructed to pay close attention to the teachers' delivery of their teaching. As shown in the quote above, the student teachers' attention was attracted by the focus of the teacher, who was in control of the classroom.

However, while she paid no notice to that little boy who appeared very different from all the other children in the classroom, the participant picked him out from just one session of practice teaching.

R: How did you notice him when you were teaching?

P: The other children were putting up their hands and looking at me, very active, but he wasn't. He was looking down all the time.

R: Did he interrupt your teaching?

P: No.

R: Was he the only child who did not raise his hand?

P: No. There were also other children who did not put up their hands, but they were listening to me and they were participating. (4619)

Contrary to all the teachers who were observed in that school, who did not seem to notice a possible case of a child with special educational needs, this student teacher, from just one 40-minute session of teaching a whole class, was able to detect the difference in a child and to question whether he had any SEN (e.g. autism).

The difference in the attitudes and perceptions is seen by the student teacher herself as the result of the intervention training on inclusion and SEN, which is going to be further discussed in the next chapter (see Section 7.3.2).

6.4.9 Potential cases of SEN: a Year-3 girl

The second child to be described in depth is the case of a little girl in Year 3 (age 8-9) in a local school. This was a non-fee-paying primary school with approximately 3,000 children. It was a prestigious school with a long history and a key school with generous funding from the local government.

Two of the participants in the interview (who both stated that they had encountered children with SEN) happened to have spotted the same child, who was labelled as "dull and slow" by the teachers and mocked by the other children.

> R: How did you notice that girl?
>
> P: She seemed a bit slow in response. She didn't communicate with the other children. They all laughed at her when she spoke.
>
> R: How did the teacher support her?
>
> P: I didn't see any. Her teacher was telling my fellow student teacher [who was practising teaching in that class] that she was "dull and slow" and that she had "intelligence problems".
>
> R: Was it when the student teacher was teaching?
>
> P: Yes. The student teacher saw the little girl putting up her hand so she asked her to answer a question. But before she could stand up and speak a word, all the other children were already laughing at her. (4221)

The above quote was from one of the participants who observed a class given by another student teacher during their school experience. The latter also shared her observation of that child in the live chat interview:

> R: How did you take notice of that little girl?
>
> P: It was during an examination, when the class teacher, who was supervising me, told me that she was with "intelligence problems" and that there was no need to collect her answer sheets after the exam.
>
> R: How was she supported in the classroom?
>
> P: No, there was no support at all. Her teacher just ignored her. My supervising teacher was even complaining about her, saying that she was dragging down the achievement of the whole class.
>
> R: Were the other children friendly to her?
>
> P: No, they laughed at her. Lots of them even bullied her.
>
> R: What did the teacher do when the mocking and bullying happened?
>
> P: The teacher did not do anything. She didn't seem to care. (8500)

This little girl was labelled as having "intelligence problems" by the teachers and was neglected and mocked in class, however, the participant who did the practice teaching (8500) did not think the labelling was true to the girl:

> R: What do you think about her?
>
> P: According to my observation, she was not that different from the other children. She might probably be a little bit autistic, but her intelligence was normal. She was seated at the back of the classroom, her alone, and that was the teacher's decision.
>
> R: You observed their class just once, right?
>
> P: No, not just once. Their English teacher is my supervising teacher for the teaching practice. I observed her class three times. (8500)

In addition to the participant's judgement based on her repeated observation, that little girl also proved that she was coping well in her study. This was evidenced by another student teacher that was sitting next to her when observing the practice teaching of the participant (8500):

> P: My friend [fellow student teacher] was sitting next to her and was encouraging her to put up her hand to answer my question. She did, so I asked her to give the answer. But the whole class started laughing at her. As a result, she did not dare to stand up.
>
> R: Do you know about what she was like in classes of other subjects?
>
> P: My friend later told me that whatever I taught for that class, the little girl was having no problems at all. Hearing her pronounce the words correctly, my friend gently asked her why she didn't put up her hand and read it aloud to the class. She told my friend that she was not confident, and she was afraid that other children would laugh at her. (8500)

It would appear that the label placed on that little girl as having "intelligence problems" was only because she was not responding in class. And she did not respond simply because she did not want other children to laugh at her. However, instead of encouraging her and creating an accepting atmosphere in the classroom, the teacher was doing the opposite. This is reflected in how the teacher prevented the student teachers from offering the little girl any help:

> P: Yes. What was even worse was what my supervising teacher did when that happened in my class. When she saw my friend gently talking to that girl, she pulled my friend away from the girl, and signed to my friend that the girl had "intelligence problems" and that there was no need to bother with her. (8500)

The case of this Year-3 child was spotted by at least three participants and mentioned in three different live-chat interviews.[75] The participant who did the practice teaching commented in her interview like this:

> P: Especially from what I experienced with that little girl, I've deeply understood the vital importance of a teacher being inclusive and being aware of SEN in children. …… After our training course, I now have knowledge about SEN and skills to take proper measures if I have children with such needs in my class. (8500)

In these cases, the participants' raised awareness of inclusive education and SEN, plus their experience of the teaching practice in the local schools, appears to have enhanced their understanding of SEN in children and given them confidence to question the nature of the children they were observing. This is not an attempt to diagnose children, but more a statement to their growing awareness and confidence in recognising differences in the children they are working with.

As was mentioned in Section 6.4.7, the cases presented above are what was evidenced in the data collected in the study, and are not statements or generalisations made about the whole of China. The stories told by the participants (i.e. the student teachers) may not be the whole picture, which would be beyond the scope of the study. However, such cases do indicate the need for a course like the one in the study in the teacher education programmes.

6.5 Summary

This chapter has presented the qualitative results of the study according to the themes that have emerged from the data analysis in the light of the research questions. It follows the journey that the student teachers have experienced regarding their understanding of inclusive education and SEN.

The first theme, i.e. the starting point of their journey of understanding, has focused on the qualitative findings from the Time-1 survey prior to the intervention training. Consistent with the quantitative data, the qualitative findings at this stage of the study have indicated very limited initial understanding in the participants regarding inclusion and SEN, and provided a triangulated answer to the first sub-research question.

[75] The researcher checked privately with the participant who did the teaching the name of her friend sitting next to the little girl. It turned out to be a different student teacher from the one who also participated in the interview and who also spotted the little girl.

The second theme, i.e. how the participants journeyed through the intervention training, has focused on the data from the participants' online reflections after each session of the training. Starting with very limited understanding of inclusion and SEN, the participants' reflections displayed significant changes in their perception of inclusive education. Consistent with the statistical analysis of the quantitative differences (see Section 5.5), the qualitative data indicated a very distinct improvement in their views and attitudes for inclusive education. Also consistent with the factor analysis of the quantitative data (see Section 5.4), the student teachers contributed the changes to the intervention training, especially the video clips provided online, the reflections required for each session, and the blended-learning nature of the course. The changes in the participants' understanding have also resulted in changes in their perceived experience with SEN and their readiness for action for inclusive practice. The triangulated data from the online reflections of the student teachers has provided an answer to the first four sub-research questions, and part of the two research questions.

The third theme has focused on how the participants applied their theoretical knowledge to their teaching practice, and how the participants' knowledge contributed to their practice. This theme has emerged from the core data of the study, i.e. the live chat interviews after the participants finished their teaching practice in local schools, about six months after the completion of the intervention training. Despite the significant changes in the student teachers' views and attitudes towards inclusive education, the majority of them were found to automatically state that there were no children with SEN in the mainstream schools they went to. There is still a difference between the participants' theoretical understanding and putting the theory into practice. Reportedly, there is also a huge gap between the international concept of inclusive education and the practice observed in the schools the participants went into in China. An examination of this has provided data to answer the last sub-research question, and part of the two research questions.

The three themes together have provided an answer to the two research questions of the study, i.e. 1) what the journey for student teachers in China is to increased understanding of SEN and inclusion, and 2) what the impact of their journey is in terms of changing their views that are shaped by long-established traditional culture in China.

In summary, there are various interesting findings from the qualitative results presented here in this chapter. The results here are consistent with the quantitative results presented in Chapter 5 of the thesis, and have displayed a powerful triangulation of the different data sets. The key findings from this chapter and Chapter 5 will be further discussed in the following chapter.

Chapter 7 Discussion

This chapter will discuss the results of the study presented in Chapters 5 and 6 of the thesis, to explore the issues surrounding these findings and their implications for the promotion of inclusive education practice in China, which will be analysed in relation to the existing research literature. Chapter 5 presented the quantitative data from the study, collected via a repeated measures survey, which explored student teachers' views of and attitudes towards inclusive education and SEN immediately before and after an intervention training course provided by the researcher. Chapter 6 reported on the qualitative data collected both throughout the training course and after the participants finished their teaching practice, which was the emphasis of the whole mixed methods research design.

The purpose of this chapter is to interrogate the data and give a detailed description of the journey of the student teachers' understanding of SEN and inclusive education in China, including an examination of their starting point, of the multi-layer description of their journey, and an analysis of the impact of this journey. The aim is to explore the richness of the data based on the participants' own perceptions and then to look across the breadth of raw data to investigate patterns or wider themes that may have implications for teacher education in China.

Findings from the quantitative and qualitative data sets are consistent in the study, where qualitative research was the focus. The first component of the qualitative data was the participants' own definition of inclusive education in the Time-1 survey. The second part was the student teachers' reflections after each session of the intervention training. The core of the qualitative data, i.e. interviews with 20 student teachers, was collected after they finished teaching practice in local mainstream schools. The qualitative data reported in Chapter 6 was intended to give an in-depth account of the student teachers' journey to an understanding of inclusive education as well as the impact of their journey, and this was shown from the distinctively individual perspectives of the participants.

The above-mentioned methods have enabled the researcher to collect a wealth of information about the two research questions of the study, which are:

- What is the journey for student teachers in China to increased understanding of SEN and inclusion?
- What is the impact of the journey in terms of changing their views that are shaped by long-established traditional culture in China?

In particular, the study looks into the following research sub-questions:

1. How do student teachers perceive SEN and inclusive education?
2. What are student teachers' attitudes towards inclusive education?
3. How much difference will be made, after the SEN training, to their views and attitudes?
4. How much will the training course contribute to the difference?
5. How will the training impact the student teachers' practice?

The changes shared in the interviews by the student teachers after they went to local schools for teaching practice are consistent with, and evidence of, Parsons' (1966) theory about social action, which is the theoretical underpinning of the thesis.

Briefly, Parsons (1966, 1968) viewed social action as being determined by the values held by the general public and the experience that they have, and there will never be an evolutionary change without a breakthrough in the value system of the society triggered by changes in their experience. According to Parsons, the "organisation of action elements is, for the purposes of the theory of action, above all a function of the relation of the actor to his situation and the history of that relation, in this sense of 'experience'" (Parsons, 1991, p.5).

This theory is especially helpful for making sense of the findings of the study. The new knowledge the student teachers gained from the intervention training, in this case, is how they relate to their situation, i.e. their normative orientation or their points of view. The fieldwork of the study, especially the 16-session blended-learning training course was, in effect, their experience. The clearly noticeable reflective feature involved in the study, i.e. the participants' experiences of responding to the repeated measures survey, reflecting throughout their learning during the intervention training, as well as answering the interview questions after their teaching practice, formed an indispensable part of their transformative experience (see Section 4.2.4). This reflectiveness was even perceived by some of the participants themselves as part of their learning experience (as in Section 6.3.7). Thus, the findings of the study conform to Parsons' theory that social action is the consequence of changes in the social actors' experience, as well as in their point of view.

Therefore, the discussion of the analysis of the findings will follow the research questions, and will be divided into three parts (see Figure 7.1 on the following page):

- The status quo of inclusive education in China (i.e. factors influencing their journey of learning)
- The participants' learning journey: increased knowledge and experience, and change in action (i.e. how they journeyed through the intervention training)
- The impact of their journey: applying theory to practice in China (i.e. still on the journey)

The starting point of the discussion is the perceived knowledge of SEN and inclusive environment in China in the light of Parsons' social action theory. The ultimate aspiration is to make changes to society on a wide scale, which is quite an extensive process of change and is therefore never easy. However, as Parsons' (1966, 1968) theory indicates, the key factors of changing society start from individuals and from two fundamental areas, namely, knowledge and experience. The focus of the discussion is then about the process of change. The emphasis is not on changes all over China, because that would be unrealistic within the scope of one doctoral thesis. Instead, the focus is the individuals who are in quite a powerful position to change the future of children in China, i.e. teachers (Liu & Morgan, 2016), or more precisely, student teachers.

Therefore, the following sections of the chapter will look particularly at values held by the student teachers, their experience, and changes that took place in their learning and their teaching practice in the context of China. Evidence from both the quantitative and qualitative data sets will be combined, connected (as shown in Figure 7.1), and woven into a story, which will then be analysed and explored in relation to the existing research literature in the following sections. Teachers have a powerful role to play because they are moulding, creating, and nurturing the next generation of citizens. It is therefore vital at this pivotal moment in their training to make a change to their knowledge and experience, which should in turninitiate change in their practice.

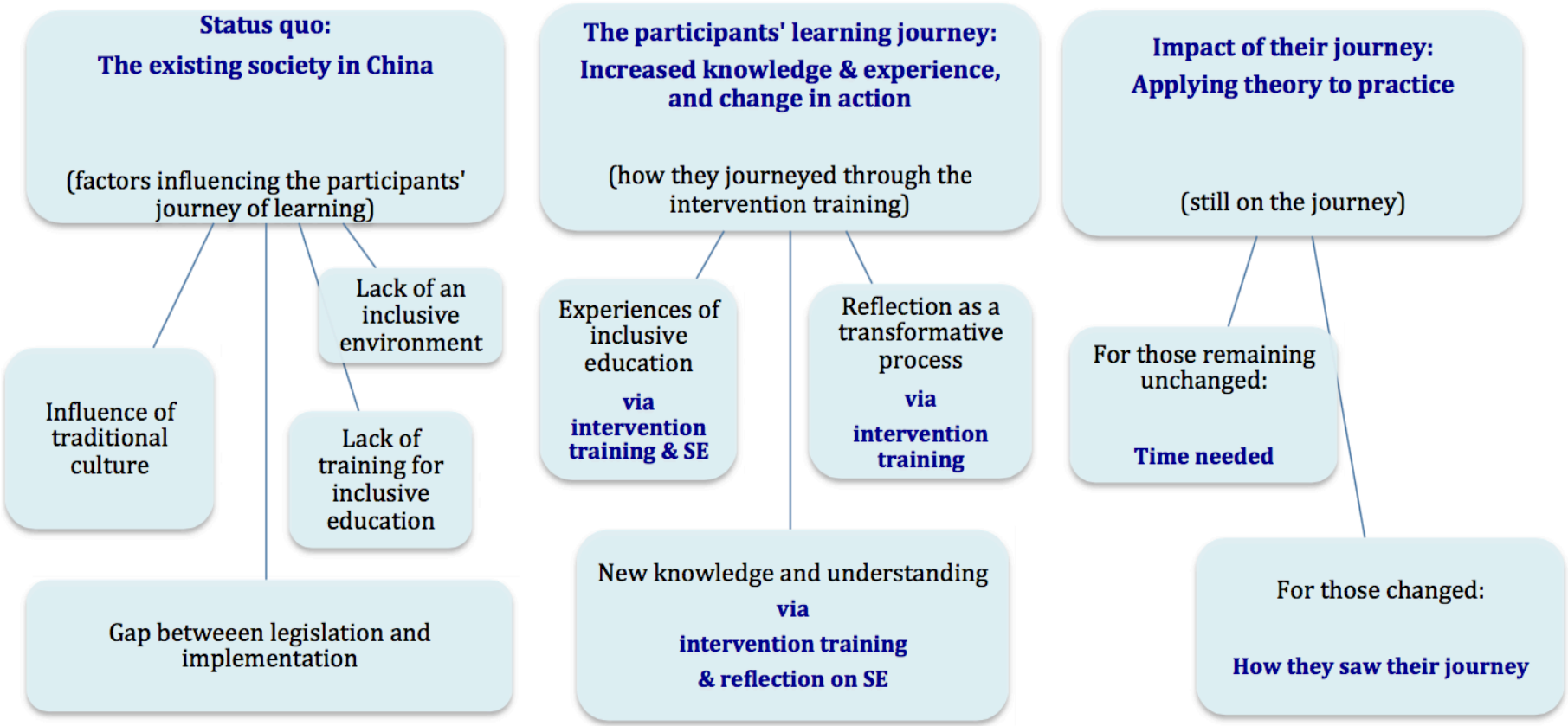

Figure 7.1 Spider diagrams of the key themes for Discussions

Although the findings of the study could have the potential to have a wider impact throughout China, that is not the focus of this thesis. The focus is, by contrast, to explore the impact of increased knowledge on a group of student teachers. It will demonstrate the process of change and the impact the changes have on the individuals from the small group of trainees.

7.1 Status quo: The existing society in China

This section aims to discuss the main factors influencing the student teachers' journey of learning in the light of the literature, which in other words is the status quo, i.e. the existing society in China (as shown in Figure 7.1). Findings of the study reported in Chapters 5 and 6 have indicated that the student teachers had very traditional and outdated views about SEN and disability prior to the intervention training. Therefore the data collected before the intervention (see Sections 5.1.2 and 6.2.1 for example) appear, ironically, to be at odds with the theoretically liberal legislation for inclusive education (e.g. State Council of China, 1989) as well as the traditional Confucian values for inclusiveness in education, e.g. 'Teach without prejudice' ("有教无类"). However, this oxymoron is in line with the existing views held by the general public in China – as manifested, for example, in the laws and national guidelines that are intended to promote inclusive education – with a limited scope of SEN, i.e. 'the three categories' mandated for compulsory education (e.g. NPC, 1986, 2006, 2015) and 'the six categories' (State Council of China, 2017, see Section 3.1). Accordingly, SEN provision in China involves mainly the three categories of students (Y Wang et al., 2013).

The lack of coverage of developmental disorders in the education setting, such as high-functioning autism, ADHD, or any other learning difficulties in school-age children or young people, is repeatedly reflected in the data collected in the study, especially in the student teachers' lack of awareness of the possible existence of those SEN in mainstream classrooms.

Discussion of this dilemma inevitably involves a close examination of existing society. This section of the discussion will then look at the lack of inclusive experience and understanding in China's society, the lack of SEN training in teacher education, the gap between legislation and implementation, and the influence of traditional culture in terms of the over-emphasis on exam results in schools in China.

7.1.1 Lack of an inclusive environment

If the existing law does not appear to take into account many types of special educational needs that are prevalent in children, and if society has a limited view of disability and SEN, it should not be surprising if the participants in the study were found to have a very limited understanding of SEN prior to the intervention training, with very little experience of inclusive education.

7.1.1.1 Experiences with disability and difference

First of all, consistent with what the law specifies as SEN in China, findings from the quantitative results of the study clearly evidenced a lack of inclusive experience and understanding of SEN in the participants. As was presented in Table 5.1 (in Section 5.3.1), the 132[76] participants' responses to the first question of the survey, i.e. whether there were any students with a disability in their university or schools, were close to the negative extreme of the Likert scale: Mode=1.0. The Mode value 1.0 means that the most frequent response to the statement regarding ever having fellow students with SEN in their education experience was the extreme negative on that six-point Likert scale: "Strongly Disagree". As was reported in Section 5.1.2, the overwhelming majority (87.9%) of the participants stated that they had never had any fellow students with any form of disability. In tune with the quantitative findings, the qualitative data demonstrated an even stronger statement repetitively in the student teachers' own words: They had not seen any SEN in their education experience (e.g. in Section 6.3.3).

This triangulated, mixed methods finding of the study confirms what researchers commented about the limited access to education of school-age children with disabilities in China (e.g. in Yan Wang & Mu, 2014), as well as empirical studies of children with SEN marginalised in or even excluded from mainstream education (e.g. W. Chen, 2016; Wangqian Fu & Xiao, 2016; Hou, 2015; Q. Tan, 2014; Yuchen Wang, 2016). In other words, most of the participants in the study stated that they had no experience of inclusive education.

Second, findings from both the quantitative and qualitative data sets of the study indicate a lack of environment for difference to be acknowledged. Similar to findings about their

[76] As mentioned earlier, a total of 135 student teachers participated in the training although 132 in the Time-1 survey (and 116 in the Time-2 survey) stated that they were happy for their data to be used in the research.

reported experience with disability, over three quarters of the participants (in the survey and even more in their reflections) stated that they did not think that their professors or teachers were accommodating SEN in the classroom. This evidenced the existing large amount of review literature about the lack of support for children with SEN in mainstream classrooms (e.g. in Deng & Zhu, 2016). Another interesting finding is that over a quarter (26.5%) of the student teachers who considered the question as "Not Applicable"[77] was justified by the participants themselves as they stated that there were no students with any SEN in their educational experience (see Section 5.1.2). The significance of the responses of "Not Applicable" will be further discussed in Section 7.1.1.2, which is about the lack of SEN awareness in China. However, the widely accepted view among the student teachers of there being no need to consider SEN in mainstream education is consistent with what teacher educators in China's most influential Normal Universities held regarding SEN and inclusive education (S. Li, 2013). This leads to a general acceptance that all children in mainstream provision lack any differences or limitations that might be explained and catered for with an increased understanding of disability and awareness of SEN, which will be discussed in the following sections.

The same phenomena were evidenced by the qualitative data of the study, although with much more detail, and from the participants' own perspective, as reported in Chapter 6. A few participants did mention having seen people with perceived disabilities but the details they gave about those individuals (e.g. "ignored", "never talked to us" and even "never went to school") do not indicate an inclusive education setting (see Section 6.3.4). These again correspond with Hou (2015) as well as the literature about unfavourable attitudes towards LRC children in teachers in the mainstream setting (e.g. Yuexin Zhang, 2016).

Apart from cases of those with perceived disabilities or mandated SEN, who were reported to be either excluded from or neglected in the mainstream classroom, some participants at a later stage of the intervention training did recall having fellow students that had various learning difficulties that were not as noticeable as the mandated SEN. This realization of the existence of possible SEN in their peers, however, was retrospective, as it occurred to them only after

[77] As was mentioned earlier in Chapters 4 and 5, on the six-point Likert scale of 1 to 6 representing a degree from "strongly disagree" to "strongly agree", there was an additional option 0, standing for "Not Applicable", for Questions 2 and 4 in the survey questionnaire, as a result of previous research done by the researcher and feedbacks from the pilot study.

they learned about the specific special educational needs during the intervention training, and those potential SEN in their peers, in retrospect, was never recognised and seldom met (see Section 6.3.3). This is particularly notable as there is no coverage of such in the literature (to the researcher's knowledge). The participants' increased knowledge and changes in their perceived experience will be discussed in Section 7.2 later in the chapter.

In summary, regarding the status quo of student teachers' experience with and understanding of inclusive education, almost all of the participants wrote repeatedly in their online reflections that they had no idea of SEN prior to the intervention training (see Section 6.2.1). The perceived non-existence of any student with an SEN indicates not only the lack of inclusive practice, but, more significantly, the non-existence of inclusive education in its real sense in China's mainstream settings. This corresponds to what Deng (2004) commented about LRC in China (also see Section 3.3.3), and it still applies to the status quo as reflected in the latest literature available (e.g. in Deng & Zhu, 2016). Children with disabilities are still largely excluded from mainstream education because of their disabilities. For the limited number of mainstream schools that do take LRC students, on the one hand they are very specific about what types of disability is allowed (e.g. in Wangqian Fu & Xiao, 2016; Yan & Deng, 2013) and on the other hand they do not cater for the SEN in these LRC students (W. Chen, 2016; Deng & Zhao, 2013).

Therefore with very little experience of having SEN students in the classroom throughout their education, student teachers are likely to grow up unaware of inclusion unless they personally experienced it or followed a course of education about it. The following sections will look at their awareness of SEN as well as how they are trained about SEN in mainstream teacher education in China.

7.1.1.2 Awareness of disability and difference

In addition to a lack of SEN experience discussed earlier, the data sets of this research also suggest a lack of knowledge or awareness of SEN in the student teachers before the intervention training. As was reported in Section 5.1.2, none of the student teachers saw themselves as having any disability. Moreover, over a quarter (26.5%) of the participants did not even consider SEN provision or training as relevant to them, i.e. to the mainstream education setting and mainstream teacher education.

The findings reported in Chapters 5 and 6 indicate that the student teachers had very little idea about the existence of inclusive education policy in China. According to the Time-1 survey

results, the vast majority (71.9%) of student teachers wrongly thought that the law in China was against educating children with SEN in mainstream schools. This unawareness is constantly reflected in the participants' online reflections as well.

> I do [did] not even know that children who are disabled can go to school. (8500)

What is also worth noting is that an even larger number (73.5%) of them were very sure, although again wrongly, that the law did not refer to SEN training for student teachers for mainstream education. This disassociation in the student teachers' understanding toward mainstream education versus special education is also consistent with the literature regarding the separation of the two in teacher education in China (L. Li, 2011; State Council of China, 1992; Worrell & Taber, 2009). Given that the legislation for inclusive education has been there for nearly 30 years in China, these student teachers' total lack of awareness of the legislation appears contradictory to what the laws say about inclusive education and teacher education. As was mentioned earlier, their lack of awareness seems to be the norm among those student teachers in the university where the fieldwork of the study was conducted (although it is at odds with the legislation). This interesting phenomenon will be further discussed later (see Sections 7.1.2 and 7.1.3).

Both the quantitative and qualitative data suggest that the limited awareness the student teachers had about SEN could be further influenced by the prevalent outdated view of special educational needs and disability in China. The overwhelming view held by the participants, of never having any experience with SEN except for a very few mentioning of obvious physical or severe mental disabilities, points to their unawareness of disability and SEN at the beginning of the study. This intriguing phenomenon will be discussed in the following section.

7.1.1.3 Understanding of 'disability'

It appears unusual that such a high percentage (87.9%) of the student teachers in that university in China never had anyone with any SEN studying in their primary, secondary and higher education institutions, although this cannot be generalised to the whole country of China (as it is not the focus of this study). However, this unusual proportion seems to agree with the strikingly small number of students with disabilities who are known in China's primary and secondary education system reported in the government statistics publications in China (see Section 3.1). The latest figure (of the percentage of SEN students among the total number in compulsory education) was approximately 1 in 323, i.e. about 0.3% (NBS, 2017). This figure (0.3%), in the light of the enrolment rate of school-age children in China being

nearly a hundred per cent (MoE, 2017a), differs hugely from either the world average disability prevalence of around 15 per cent (WHO & World Bank, 2011), or the prevalence of SEN in other countries of the world, e.g. 13 per cent in the US and 14 per cent in the UK (DfE, 2017; NCES, 2017). This massive difference between China and the rest of the world might lead to the assumption that the population with disabilities in China is dramatically lower than other countries. However, studies worldwide indicate otherwise (World Bank, 2017).

It would be more logical, therefore, to speculate that either a large number of individuals with disabilities are not recognised as such, or that they are excluded from mainstream society in China, or both. The richness of qualitative data from the study actually indicates that both are true. Regarding the lack of recognition of other SEN conditions, the following quotes provide an illustration of the student teachers' repeatedly stated understanding (or limited understanding) of disability[78].

> Before studying this course, I never knew what is inclusive education and even I didn't know the clear definition of disability… (8304)

> Disability means someone who can't hear, speak, see, or even walk. (0044)

The participants' understanding of disability at the early stage of the study is in line with what is officially recognised in China as disabilities or SEN (State Council of China, 1992, 2017), although in disagreement with what is widely accepted in other parts of the world (e.g. DfE, 2017). Much less to say the UNESCO (2009, p.20) scope: 'be it towards girls, slow learners, children with special needs or those from diverse backgrounds (cognitive, ethnic and socio-economic)'.

More interestingly, of all the participants who stated clearly that they had prior SEN training, all of whom also stated that they understood what inclusive education meant, all were found to have a very limited understanding - despite those optional SEN training courses they took at the university (see Sections 5.1.2 and 6.2.1). Therefore, the following section will discuss why there is such a gap between the student teachers' understanding of inclusive education and the internationally accepted concept, as well as what the study suggests regarding training about SEN in teacher education in China.

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[78] These are from the participants' online reflections after they had Session Two of the 16-session blended-learning intervention training.

7.1.2 Lack of training for inclusive education

As was discussed in Section 7.1.1, the student teachers had no previous experience of inclusive education, nor were they aware of SEN or legislation for inclusion in China; they had very old-fashioned views of disability and SEN, and their professors or teachers were not educating them about accommodating such needs in children. This again is consistent with Parsons' (1966, 1968) action theory: without the knowledge about inclusive education and SEN, when there is no personal experience or taught experience about SEN, the student teachers will not make an effort to change their action for inclusive practice in their teaching.

7.1.2.1 Separation between mainstream and special education

As was mentioned in Section 7.1.1.2, nearly three quarters of the participants gave wrong answers regarding legislation for inclusive education, indicating a separation of the two systems of teacher education in China, i.e. for special education schools and for mainstream schools, which provides empirical evidence for the literature (as commented by L. Li, 2011; Jian Wang & Quan, 2016; to name just a few).

This is, in particular, evidenced by the finding that the majority of the student teachers stated that they were not trained about SEN, as well as the large number of responses of "Not Applicable" given by the participants regarding whether they were trained to cater for SEN in children (see also Section 7.1.1.2). This is particularly interesting as their choice of "Not Applicable" indicates that even the student teachers themselves assumed the lack of SEN training to be the norm for mainstream teacher education. In other words, it suggests that the student teachers did not consider SEN as relevant to them - despite the fact that they were being trained to be teachers for the next generation. Meanwhile and by contrast, their overwhelmingly positive responses regarding SEN training for special education indicate the student teachers' differentiation, or even separation, between "special education" and "mainstream education". Again this evidenced the existing literature about the 'segregation (隔离)' of the mainstream and special school teacher education systems (L. Li, 2011, p.8) and the 'clear-cut division by walls and barriers (相互独立，壁垒森严)' between the two teacher education systems in China (Deng & Zhao, 2013, p.77).

Regarding SEN training in mainstream teacher education, the data sets in the study do indicate some training in a very small number (4.4%, n=6) of the student teachers prior to the intervention training provided in the study (see Sections 5.1.2 and 6.2.2). However, as was reported in Section 5.1.2, their previous SEN training did not seem to help with their

awareness of inclusive education. Half (n=3) of them even mistakenly stated that, by law, children with disabilities should not go to mainstream schools, that mainstream school teachers should not be trained about SEN, and that mainstream schools should not provide for SEN. Qualitative results indicated the same lack of understanding in those same student teachers who received prior training, as was reported in Section 6.2.2. This is a particular case as there is a Department of Special Education in that same teacher education university, and will be further discussed later (see Sections 7.1.2.3 and 7.1.3).

If those student teachers who deliberately made an effort to take SEN training are not prepared to cater for the diverse needs of the children, the case of those untrained will be even less optimistic. The following section will discuss the overall lack of SEN training in mainstream teacher education in China as indicated by the data.

7.1.2.2 SEN training in mainstream teacher education

As was discussed in previous sections of the chapter, the participants' reflections on the lack of SEN training in their teacher education are found throughout the quantitative and the qualitative data sets of the study. This finding evidences X. Peng's (2012) statement that there is little coverage of SEN in mainstream teacher education.

It is interesting to look again at the survey results before the intervention training. About two thirds (65.2%) of the student teachers clearly stated that they had never been taught to cater for SEN, and a considerable number of them (20.5%) regarded that question as "Not Applicable", i.e. irrelevant to their teacher education. This not only reflects the lack of training, but also is proof of Deng and Zhao's (2013) assertions regarding the indifferent attitude towards SEN training in mainstream teacher education system. However, where does such an indifferent or distant attitude towards SEN training come from?

The first place to explore is the existing teacher education system. In line with the literature, SEN-related training is rarely found in the training courses provided by most of the teacher education institutions in China (X. Peng, 2012). This could be the result of the limited resources or expertise in inclusive practice for SEN in China (as commented in Yin & Pang, 2010), although it is not the focus of the study.

Why does this appear to be the case? Quotes such as the following may be an explanation, which are frequently found in the participants' online reflections throughout the intervention training, confirming the quantitative results regarding the lack of SEN training in teacher education.

> To be honest, I have no idea about the inclusive education before learning this course. No one has ever told me what the inclusive education is and I never had any training about inclusive education. (4963)

However, even if there were training on SEN for student teachers, there might still be very limited application to general practice in schools. The following is a typical example from the online reflections of the student teachers at the beginning of the intervention training.

> In my educational experience, none of my classmates had SEN. Although there were troublemakers, I believe that they were poor at learning because they were so lazy that they didn't enjoy the difficult things like studying. （5593）

With such a limited understanding of the differences in children and the impact of SEN on learning progress, the default position is that the student who fails to make progress is therefore 'lazy' and not trying his or her best. This negative perception of 'troublemakers' overlooks children that may well have undetected SEN conditions (such as high-functioning autism, dyslexia, ADHD or SEBD, to name just a few). If such needs are simply unnoticed and unrecognised by the teacher, or even worse, the children are labelled as "unacceptable" or 'lazy', or as the same participant said, just unwilling to 'enjoy the difficult things like study', the children's needs are very unlikely be addressed and met.

This lack of understanding and awareness of SEN in children in mainstream schools is therefore linked to the lack of SEN training in mainstream teacher education, which in return results from the lack of understanding and awareness in the teacher educators themselves, and thus forms a vicious cycle (S. Li, 2013). This again resonates with Parsons' (1966, 1968) theory: Unless there is a change in the views of the general public and their experience, the cycle is going to continue.

7.1.2.3 The case of the university: with a Department of Special Education

As was mentioned earlier, a unique aspect about this study is the presence of a Department of Special Education[79] in the university where the fieldwork was carried out (see Section 4.5.1), where a few (n=6) of the participants took SEN-related training. This is 'rare', as only around 10 teacher education institutions have a Special Education Department in the whole of China (X. Peng, 2012), where there are reportedly 143 mainstream higher education teacher

[79] Special Education Departments specialise in training teachers for special education schools in China.

education institutions[80]. As a matter of fact, in the case of the study, all first-year student teachers in that university have access to some SEN-related optional courses provided by that Department of Special Education. However, only six (out of the 135) student teachers actually took the optional courses from that department (see Sections 5.1.2 for details), and the findings indicate a lack of understanding of SEN or inclusion, despite their prior SEN-related courses (see Sections 5.1.2 and 6.2.2).

What is interesting is that those participants even expressed a wrong understanding (also see Section 7.1.2.1). This is especially intriguing as, theoretically, training should contribute to increased knowledge, and therefore those who were trained in SEN and who felt confident about their knowledge about inclusive education should, instead, have had a better idea about inclusion. Therefore, it points to a phenomenon: There is training, however rare, about SEN in mainstream teacher education in China, but some does not appear to help student teachers with a better understanding of inclusive education (as revealed by the findings of the study). The study, on the other hand, demonstrate a training course that does work, as was reported in Section 6.3 and will be further discussed in Section 7.2.1.3.

The various data sets of the study also indicate that the SEN-related courses which the six participants took prior to the intervention training were either about Braille reading or about sign language (as reported in Sections 5.1.2 and 6.2.2). Moreover, those optional courses about SEN were only concerning supporting children in special education schools, rather than in the mainstream classroom. Therefore it can be concluded that the SEN-related training provided for mainstream student teachers in the university was still delivered with a "special education only" mind-set, without taking the mainstream classroom into consideration. This is in line with what the literature suggests about the disconnect even in Normal Universities with a Special Education Department (e.g. S. Li, 2013; also commented in Xiu Li, 2016; Jian Wang & Quan, 2016). Thus in the case of the study, the mainstream student teachers who took those optional SEN-related courses provided by the Department of Special Education in their university accepted their new knowledge without associating it with their future practice of teaching in mainstream schools.

[80] The statistics come from official reports from major news agents in China, such as eol.cn, ifeng.com, etc. (Source: http://gaokao.eol.cn/daxue/zixun/201504/t20150401_1243173.shtml; http://edu.ifeng.com/a/20150402/41034994_0.shtml).

This lack of understanding in those six participants is significant, as it indicates an even more intensified separation between special teacher education and mainstream teacher education. In other words, the two teacher education systems appear to be so segregated in China that, even when they happen to co-exist in the same teacher education university, on the same campus, and even when their courses are offered to exactly the same group of students, they are still completely discrete from each other. It also means that where student teachers do learn about SEN (such as in the case of the study) they are not ready to take this new learning and apply it to a mainstream setting, which was also indicated in the findings of the study (see Section 6.4.6) and will be further discussed in Section 7.3.1.

This section focused on the role that education and teacher education can have in making this change, but it is not the only way to move society forward. In this case, theoretically, the law, which is 'the system of rules which a particular country or community recognizes as regulating the actions of its members and which it may enforce by the imposition of penalties' (Oxford Dictionary of English, 2016), along with its enforcement, should suffice as agents that bring about changes in society. The next section is therefore going to focus on the legislation and implementation regarding inclusive education in China.

7.1.3 Gap between legislation and implementation

As has been discussed so far in the chapter, results from both quantitative and qualitative data indicate a gap, or even an enormous gulf, between the legislation for inclusive education and its implementation in China. The overwhelming majority of the student teachers stated that they had hardly any experience with disability, and they were not trained by their university about SEN and inclusive education, despite the legislation that was established nearly 30 years ago (e.g. State Council of China, 1989).

It is worth looking again at the quantitative finding that a large number (73.5%) of the student teachers were very sure (although wrongly) that, by law, SEN training is irrelevant to student teachers for mainstream education (also see Section 7.1.1.2). This could probably explain their predominantly negative responses to the survey questions regarding whether their professors or teachers accommodate SEN in the classroom and whether they have been taught to cater for SEN in children and their responses of "Not Applicable" in the Time-1 survey. Similar to this is the participants' unawareness of what the law in China says about children with disabilities who attend mainstream schools (also see Section 7.1.2.1).

Why are the experiences of the sample at odds with what the legislation directs? There are several areas to explore.

7.1.3.1 Societal inclusiveness

Firstly, what the findings in the study indicate is that society does not seem to integrate individuals with disabilities into mainstream life in China. In addition to the prevailing responses of "Strongly Disagree" to the survey question of "There definitely are/have been students with disabilities in my university or school" (Mode =1), the participants gave more details (such as the following quotes) about their lack of SEN experience.

> During my education experience I never met disability in my school. It is only through TV that I can see disability. (1316)
>
> In fact, we hardly see those people [with disability] in our daily life. (4939)
>
> All of us just regard[ed] that only normal [non-SEN] students can go to school, and children who are disabled should either stay at home or go to special school. （6362）

Such common reflections of "only through TV" and "hardly see those people" in the day-to-day life of the student teachers, plus the majority (87.9%) not having any education experience with SEN (see Sections 5.1.2 and 6.3.3), have evidenced Parmenter's (2008, p.s126) comments about China that people with disabilities are 'often neglected and consigned to a life in poorly managed segregated institutions'.

This is not only a gap but a contradiction to what the law states about equal rights for persons with disabilities 'for their equal participation in social life' (State Council of China, 1994, Article 2). What the participants noticed was not only the societal exclusion, but also negative attitudes towards the children's rights for education (see the following quotes for example).

> I do [did] not even know that children who are disabled can go to school. … I knew a child with poliomyelitis. She was always in a chair, and her grandparents had to take care of her. She never went to school. (8500)
>
> If there is an abnormal child [a child with a disability] in their family, they [the family] do not let him or her go to school. (6401)
>
> They [parents with a child with a disability] just think the child is an idiot and it is unnecessary for the child to go to school. (2490)

This is consistent with the literature regarding the societal views of disability in China (Zheng, 2008), and evidenced reports from social media regarding discrimination from within the family of those with disabilities (CHINADP, 2016a, in Section 3.1.4). The parental attitude of

'unnecessary for the child to go to school' also coincides with how Chinese society has been referring to individuals with disability – 'useless (废)' and 'disabled and useless (残废)' (Hao, 2013, see Section 3.1.4).

7.1.3.2 School inclusiveness

Secondly, mainstream schools in China tend to have a discriminatory attitude towards children who are regarded as with a disability, which was also frequently mentioned in both the online reflections and the live-chat interviews collected in the study.

> Actually, I have not found any possible existence of Special Educational Needs in my schools including primary, junior and senior high even in my college... What's more, schools usually recruit students after they pass their physical examination. If there's anything wrong [physically], then, this student may not be admitted. (8619)

> First of all, I'd like to say I never met any students who had special educational needs. Maybe this is because normal [regular] schools do not allow students with special needs to enter in. (2496)

> I have no classmates like Ishaan[81], for any state school will not give such students a chance to go to school. (2883)

Such phenomena could be considered as discrimination against the children's physical conditions, as these are clearly visible disabilities. This is at odds with the legislation regarding access to regular classes in mainstream schools at the compulsory education level (State Council of China, 1994). The phenomena have also evidenced Worrell and Taber's (2009) statement that only those who can adjust to the study and life of mainstream school are eligible for LRC placements in China.

However, even those very few who were lucky enough to get into mainstream schools may fail to remain there, as revealed in the study:

> When I was in primary school, I have a classmate who is a mentally disabled boy. In my memory, teachers and students did not care him. Mostly he was absent at class. (3583)

> I had a classmate who is disabled when I was at Grade Three or Four. He cannot walk even his hands cannot hold his books. He never talked to us. Months later, he dropped school and we never saw him again. This is the only disability that I know. (3141)

[81] Ishaan is a boy with dyslexia who was featured in the film for Session One of the intervention training course (also see Footnote 65 in Section 6.3.1).

> When I was in primary school, in my class, there was a boy whose legs were disabled because of polio. He never talked, because we were so young and we seldom considered his feelings. We laughed at him. Finally, his study became worse and worse. However, our teachers didn't care about him or communicate with him. They ignored him. Consequently, he discontinued school after Grade Six. This is a tragedy. (1732)

> There was a boy who was lame in one leg when I was in my primary school. At that time, we were so young and we didn't understanding his feelings. We all laughed at him and made fun of him, which made him extremely painful. And the teachers just paid no attention to what we have done. Consequently, I don't think there has been any provision for SEN. (0323)

This position is at odds with international best practice. The non-inclusive environment in mainstream classrooms reflected from the perspectives of the student teachers is in line with what L. Li (2015a, 2015b) commented and corresponds with Wangqian Fu and Xiao (2016) about LRC children who had to drop out from mainstream education because they were made 'outsiders' in the mainstream classroom.

7.1.3.3 Implementation of inclusive legislation

As was discussed above, despite all the legislation for inclusive education, the findings of the study indicate that the disabilities of a large number of individuals are not recognised as such, or else those individuals are excluded from mainstream society in China. The legislation exists but without much effect, unknown to its people, an overwhelming majority of whom even had the opposite understanding to what the law specifies (see Section 7.1.1.2).

These all point to the problem of the implementation of legislation. A law without enforcement is useless, and the key to the problem is implementation of the legislation for inclusive education in China (Deng, 2004).

This oxymoron is at odds with enforcement of most of China's laws. China claims to have very strict law enforcement. As the propaganda phrase goes: "Enforce the law firmly; punish offenders severely (执法必严，违法必究)". Theoretically, laws should be able to regulate the actions of the society and should be executed 'by the imposition of penalties' as indicated by definition (Oxford Dictionary of English, 2016). Certain laws and regulations in China are implemented extremely strictly by the imposition of penalties, such as enforced sterilisation and abortion campaigns during the years of execution of the one-child policy (W. Feng, Gu, & Cai, 2016; Whyte, Feng, & Cai, 2015).

Therefore, why is there differentiation in the implementation of the legislation for inclusive education? In the case of inclusive education in China, the problem is possibly rooted in the

traditional views the society has of disability and of education, which will be the focus of the next section.

7.1.4 Influence of traditional culture

As was mentioned in Chapter 3, China has a long tradition of discriminating against disabilities, e.g. addressing individuals with disabilities as "useless" (Hao, 2013), and despite the Confucian humanistic views on social justice and a harmonious society, it also has a long tradition of a hierarchal pyramid of social order (Kritzer, 2012).

7.1.4.1 Exam-orientated tradition in education

This long tradition of hierarchy, in addition to the long-standing emphasis on exam results (which in return consolidates the social hierarchy), has resulted in a discrimination against poor academic performance in Chinese society. As indicated by the data, children at schools are treated differently by their peers according to their achievements in exams. Such partisan attitudes among the children may well be rooted in the school tradition in China, as reported by the student teachers.

> Only the top 10% of the applicants were recruited, but then they were classified into two groups of classes: the Elite and the Average. (9658)
>
> They put all their students into three groups: the Elite, the Experimental, and the Average. (1556)
>
> Students there were divided into two layers of classes: the Elite and the Average. (0955)
>
> They rank the students according to their grades at the end of each term from Year 4 beyond [in that primary school], and all this is done publicly so everybody knows everyone else's rank. (0333)

The above phenomena were observed in the local schools, including primary schools, by participants during their 'teaching practice' (equivalent of 'school experience' in England). This phenomenon has evidenced the comment J. Chen (2013) made on the highly pressurized and immensely exam-orientated nature of even primary education in China.

This ranking of the children's grades can be seen as a modern version of how exam results were published throughout Chinese history, namely, the *ke-ju* system (Lan Yu & Suen, 2005). The direct impact of this extreme emphasis on exam results was observed in both the teachers and the children in the local schools the participants went into.

Immersed in such an exam-orientated mentality, schools and teachers tend to try all they can to improve their overall exam results, as that is the only criterion for their reputation (Deng & Guo, 2007; Q. Tan, 2014). Interview data in the study indicates the pressure and anxiety in the teachers as well as how they cope.

> They are so pressured that a teacher said 'quick quick' for 34 times within one single session[82], just to urge the children to give speedy answers. (4187)

Some other teachers try to be strict with every student, by exerting penalties on the children if they fail to reach the standard. Such penalties include standing during the class, or being kept outside the classroom (see Section 6.4.7), as observed by the student teachers during their school experience.

> If the student can't give the right answer, they were not allowed to sit down. (5158)

But the majority of the teachers observed by the student teachers appeared to have chosen to concentrate on some students while ignoring others.

> In order to spare their effort for good students, teachers give up on low-achieving ones. (9487)

> I know that teachers give up on those students 'who are irresponsible for themselves'. (1556)

> Some teachers just give up on them if they don't appear to be promising in exam results. (4221)

> The teachers probably have to give up, because they don't know what to do. (4619)

Such comments are not only frequently found in live-chat interviews after their school experience, but also in the participants' online reflections, and are consistent with the literature regarding the competitiveness and elitism in Chinese society as well as in its education system (S. Chen, 2016; Qu, 2014; Yuexin Zhang, 2016). As Qu (2014) points out, the teachers' exam-orientated practice was closely associated with the collective aspiration for better exam results prevalent in society. Reflecting this exam-orientated tradition, both the quantitative and qualitative data sets collected in the study confirmed recent studies into attitudes towards LRC children in mainstream schools (e.g. Q. Tan, 2014; Yuhong Zhang & Gao, 2014).

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[82] Here, in primary and secondary schools in China, a session normally lasts 45 minutes.

This highlights a very important point: When lower-achieving students are frowned upon, society is casting its spotlight solely on learning ability and academic achievement of its children and young people, rather than equality and diversity. This is the case throughout Chinese history and in every part of society, and little is taken into account regarding individuals with SEN, and much less those with a recognised disability. Individuals in this society have been influenced by tradition to such an extent that they are used to this fixed mind-set and are unaware of the need for change, and those who are disadvantaged, marginalised or excluded do not have a voice. This is probably why the implementation of legislation for inclusive education in China has appeared to be lip-service and lacking executive power, even though the legislation has been there for nearly 30 years (e.g. State Council of China, 1989).

7.1.4.2 Barriers to inclusive education

Although LRC has been the major channel for education of children with mandated SEN in China (MoE, 2017a), in terms of the individual children involved, if they achieve top results in exams, they will be accepted and respected despite their conditions, and vice versa. This is shown in the following different cases regarding children with poliomyelitis but with different academic performance results.

> She did well in her studies, so everyone respected her. … However, her mother was with her at school every day. (0955)

> In my school experience, there was a student who was a lame and lack of intelligence, everyone laughed at him and nobody played with him. (4484)

This does not seem to be supportive, but rather an elitist attitude towards children with recognised disabilities. Consistent to this are the participants' repeated reference to cases of neglect and exclusion, from both the schools and the children's families.

> I noticed a girl during an exam, as my supervising teacher there told me not to bother to collect her test paper. The teacher said that it was because she was mentally impaired. The teacher totally paid no attention to her. She even despised her and considered her performance as a shame to the whole class. Some of the students teased her and bullied her. (8500, live-chat interview)

> In my memory, teachers and students did not care him. Mostly he was absent at class. We ignored him, and his parents also did not care about him. (3583, online reflection about a fellow student who was mentally impaired)

These observations on the disabled child, either from the student teachers' school experience or from the retrospective perspective of a fellow child, reveal a negative attitude towards

children with disabilities in China. This observed discrimination corresponds with the perceived stigmatisation from their family reported by the individuals with disabilities (Lin Zhang, Li, Liu, & Xie, 2014) or even reported by parents themselves (Yuchen Wang, 2016).

Researchers such as Lin Zhang et al. (2014) point out that social participation of people with disabilities in China 'has never been improved' (p.119) while acknowledging great advances in the physical living environment for disability. Data collected from the study clearly demonstrated the former, i.e., the lack of participation from children with disabilities in education, with almost all the participants stating that they had never had any fellow students with disabilities. However, the findings are even less optimistic than the latter, i.e. physical environment for inclusive education.

> There was no wheelchair access to the buildings. There was a lift in the teaching building, but it was locked most of the time. (1820)

> No disability access. No lifts in the six-story teaching building, only stairs. There were only squat toilets and they were one step above the toilet floor. (9487)

The lack of both physical and attitudinal environment for inclusive education in China, as revealed by both the quantitative and qualitative results from the study, appear vividly at odds with the legislation and Confucian legacy on equality and harmony. The root of the problem, as Y. Zhao and Deng (2015) put it, is in the popular views of society, where the awareness of equal rights is suppressed by the exam-orientated elitism. In such an elitist culture, anyone who appears to be low achieving would find it difficult to be recognised by their family, peers and society, not to mention those with additional needs.

Similarly, the common problem of large class sizes in China's schools seems to contribute to the lack of inclusive practice, as almost all the participants remarked when they reflected on their teaching practice.

> There were about 60 children in that Year-3 classroom. (1820)

> I observed 10 classes in that [primary] school. … The teachers couldn't accommodate the individual needs of so many children, around 50 per classroom. (4619)

The class size and pupil-teacher ratio reported here by the participants (also see Section 6.4.1) obviously exceeded the stipulated national standards of 45 maximum (class size) and 19 (pupil-teacher ratio) for primary schools (e.g. State Council of China, 2001, also see Section 2.1.2). The cases here correlate with the literature (Malinen et al., 2012), especially in non-fee-paying key schools.

Both the observed large class size and the lack of implementation of inclusion correspond with Kritzer (2012). Also in line with Kritzer (2012), what the participants described about the schools indicated a lack of equality of opportunity and diversity.

> Difference was not allowed. … Uniformity was required, even when the children were required to give applause, they had to clap their hands at one uniform pace. (7463)

All this sounds rather discouraging. However, the core data of the study demonstrate remarkable changes in both the participants' views of inclusive education and their actions. The following section will discuss the learning journey of the participants.

7.2 The participants' learning journey

If there is a lack of knowledge and experience for the change to take place, the data in the study has revealed that the desired changes in action could be facilitated via intervention training about the knowledge and 'created' virtual experiences for the individuals. The data indicate that the participants' increased knowledge was gained through the blended-learning course provided in the study, especially through the reflective learning they were made to do throughout the training. This section of the chapter will therefore look at the participants' journey of learning from three aspects: of their new knowledge and understanding gained from the intervention training, of their new experiences, and of reflective learning as a transformative process.

7.2.1 Of gaining new knowledge and understanding

As was mentioned earlier, both the quantitative results and the qualitative data of the study indicate that the student teachers experienced significant changes in their understanding of inclusion and SEN (e.g. see Section 5.4.1 and 6.2.2).

7.2.1.1 Increased knowledge of SEN and inclusion

The most significant change took place between the Time-1 and Time-2 surveys. A comparison of the results indicates a significant increase in the student teachers' understanding of SEN and disability. The first jump regarding their understanding is that, after the intervention training, nearly two thirds (63.8%), in contrast to less than a tenth (9.1%)

before the intervention, of the same group of student teachers[83] stated that they had fellow students with disability.

What the participants said in the Time-1 survey about the types of disabilities their fellow students had were "mental disability", "blind", "deaf and mute", "crippled leg", "dwarfism" and "loss of a leg", which again are in line with the limited understanding of disability held in Chinese society (Gan, Wang, & Yan, 2009). However, in the Time-2 survey it included such terms as "autism", "dyslexia", and "ADHD", all indicating a more current and universal understanding of SEN and disability. Although of course no proof exists of their fellow students' disabilities, the student teachers, after the intervention training, began to reflect on their education experiences, recall and detect symptoms of SEN in their fellow students and even in themselves. Therefore, after the intervention training, the participants' awareness of SEN increased despite the fact that they were outside the existing scope of understanding of SEN in Chinese society. This is the first time (according to the researcher's knowledge) SEN intervention training is offered to student teachers in China, and the contribution of the study will be discussed in the next chapter (see Section 8.2.6).

7.2.1.2 New understanding of inclusive practice

This thesis argues that fundamental changes occurred along with the raised awareness of SEN is in the participants' views about catering for special educational needs in children in mainstream schools.

The previous sections have discussed the very interesting phenomenon of the participants' choice of "Not Applicable", which reflects the separation of 'special schools' and 'regular schools' and is in line with the literature (e.g. L. Li, 2011; X. Peng, 2012; Juan Wang & Wang, 2009). What is even more interesting and worth probing into in detail, however, is that, half (51.1%) of those who responded "Not Applicable" at Time 1 still stated that this question was "Not Applicable" at Time 2, even though they demonstrate a significant increase in their understanding of inclusive education.

This seems confusing; however, findings in the qualitative data provide an explanation to the complexity of the phenomenon. Take participant 4187 for example, who was one of those

[83] As mentioned earlier, in the Time-2 survey, 116 out of the 135 student teachers who took part in the intervention training gave consent for their data to be used by the researcher.

who still responded "Not Applicable" at Time 2. The following quotes are from the live-chat interview with her after her school experience.

> R: Do you agree with the concept of inclusive education?
>
> P: Only partly.
>
> R: Which part do you agree with, and which not?
>
> P: The part I agree with is exactly what I disagree with.
>
> R: Could you explain what you meant?
>
> P: The children with SEN simply cannot cope … They get upset and they may blame themselves … You can't guarantee that other children are friendly … Children with SEN deserve better teachers who really understand their needs. (4187)

Therefore, her response of "Not Applicable" was actually referring to the current situation of a lack of inclusive practice in China, rather than her own personal disapproval of inclusive education.

Equally interestingly, there were some participants (17.4%) who changed their choice from "Not Applicable" to very positive at Time 2. It seemed that they were stating that their teachers were catering for SEN in the classroom. Nevertheless, these responses might be a mistake by chance when they were answering the questionnaire, as a careful look at what they stated in their online reflections throughout the intervention training indicated otherwise (e.g. in the following quotes).

> There was a boy [possibly] with ADHD in my primary school. He is [was] my deskmate. All our teachers disliked him. They often scolded him in class. … I felt so sympathetic because I knew he is [was] a good boy. (0767)[84]
>
> Children with ADHD didn't get much attention in our country. In primary school, there was a boy [probably] with ADHD in my class … From my point of view, they weren't supported … What they usually got was criticism and blame. (1988)

There were also an unusual number of participants (4.5%) even at Time 1, who responded "Strongly Agree" to the same question, which means that they firmly believed that their

[84] According to this participant's answer to Question 1 of the survey, before the intervention training, she did not think there were any fellow students with SEN in the schools she attended. However, as is shown here, during the training, she retrospectively recalled some students with SEN and she obviously did not think that the SEN in these children were met by the teachers in her school.

teachers or professors were meeting the SEN in their students. However, their later reflections frequently suggested the opposite, such as the following.

> In my school, there is no inclusive education. They even do not know what inclusive education is." (7831)

As is shown above, their online reflections during the intervention training indicated that their views also changed as a result of their improved understanding of SEN. They originally thought that their teachers were aware of SEN in the classroom and were catering for such needs. Yet later they realised that such needs were not met, in fact not even identified, and that their entire school did not even know about inclusive education.

The student teachers' new perception of inclusive practice in their education experience corresponds to what researchers have commented on regarding the lack of inclusive education in China (e.g. Yanqin Chen & Lan, 2014; Deng & Guo, 2007; X. Peng, 2014; Yan & Deng, 2013), and their new conception has enabled them to reconsider how they are trained as student teachers in this regard.

7.2.1.3 Refreshed perception of SEN training

As reported in Sections 5.1.2 and 6.2.2, the participants who had prior SEN-related training all demonstrated little or an inaccurate understanding of inclusive education and later they all admitted their limited initial knowledge and understanding. This then brings about the question of whether there is any existing training for student teachers in China about SEN, and if so, whether this training is preparing them for inclusive practice in the classroom when they graduate and start teaching (as was discussed in Section 7.1.2.3). It is interesting, therefore, to look at how the student teachers view the problem in the light of the literature.

There is very limited research literature on SEN training in mainstream teacher education in China, except for a telephone survey into LRC-related curriculum provision in Normal Universities (Haiping Wang, 2006) and teacher educators in Normal Universities (S. Li, 2013). Findings in this study are consistent with the above empirical studies, and are in line with what is commented in the review literature (e.g. L. Li, 2011; Xiu Li, 2016; Juan Wang & Wang, 2009).

It is worth looking again at the responses of 'Not Applicable' regarding SEN training for mainstream teacher education, where one fifth (20.5%) of the student teachers clearly stated so at Time 1; however, about three quarters (74.1%) of this group of participants changed their mind after the intervention training. It is interesting to see how the overwhelming

majority of student teachers changed from one extreme of considering the question "Not Applicable" to the other extreme of really enjoying the intervention training.

> R: You've just had our 16-session training course.
>
> P: Yes, but that was just once a week for just one term, in our four-year study … What's more, it's not covered by any other professor or in any other course in our programme. (4187)

As shown in the above quote (and found repeatedly in the participants' online reflections), the student teachers at the end of the study even wanted more SEN training because they found it so valuable and so lacking in their teacher education programme.

Overall, findings from the qualitative data collected during the intervention training suggested a significant increase in the participants' understanding of SEN and inclusive education (see Chapter 6, Section 6.3 in particular, for more information). This positive change in their views and awareness took place in the course of the intervention training, as is shown in their online reflections. Furthermore, the change in the participants took place throughout the intervention training, which meant to them not only a training course that raised their awareness, but also a brand new experience for them to see the differences and to reflect upon them. Conforming to what Parsons (1966, 1968) stated, the participants' enhanced understanding and additional experience of SEN have paved their way for change in their action. Discussion about such experiences will be given in the following section.

7.2.2 Of gaining experiences of inclusive education

As was presented in Section 6.3.3 and earlier in this chapter, the student teachers in the study discovered various cases of SEN in their primary and secondary schools and their discovery was retrospective during the intervention training, after they learned about the respective types of SEN. However, their retrospective discovery resulted mainly from their virtual experiences gained during the intervention training, i.e. the video clips uploaded in each session of the blended-learning course.

7.2.2.1 Virtual experiences during intervention training

What helped most in the intervention training, according to the qualitative data collected throughout the training, was the video clips. As was illustrated in Figure 6.6, i.e. the NVivo word cloud in terms of how the participants learned about SEN and inclusive education, the most frequently mentioned word is "video", with "after watching the videos," as the typical

phrase in the student teachers' online reflections. What makes it more remarkable is that the participants automatically took the video clips as their personal experiences with SEN and disability, and furthermore, in their perspective, this virtual experience with SEN is most touching and most influential (see Section 6.3.6).

The role of the carefully chosen video materials was repetitively referred to by the student teachers, who stated that they were "deeply touched", "moved to tears" and "cried" while watching, such as the following.

> I burst into tears because I saw his struggling for learning[85]. (1924)

This is intriguing in the light of Parsons (1966, 1968) social action theory regarding the role of experience (along with other factors) in bringing about social change. The virtual experience of SEN and inclusion the participants underwent in the study, brought about by watching the video clips, seemed to have caused the same motivation in the individuals to take action as was physically experienced by the researcher when she began to make sense of the inclusive environment around her in a different country (see Section 1.2.1). The virtual culture shock that the student teachers experienced in the study appeared to be as instant as the physical culture shock that the researcher experienced, and even sharper (as indicated by the emotive phrases expressed by the participants).

The blended-learning training course adopted in the study is significant not only to the student teachers who participated in the training, it was also the first time for SEN awareness-raising courses to be offered to mainstream student teachers. In addition, it was the first time the approach of blended-learning courses was used for SEN training, and it is not covered in the existing literature regarding inclusive education in China. What is vaguely similar but not closely related is the possibility of using MOOC for special education in-service training; however, the potential problems with MOOC in such training (N. Peng & Lei, 2016) can all be moderated by the blended-learning approach adopted in the study. The implication of the blended-learning course will be further discussed in the next chapter (see Section 8.2.6).

7.2.2.2 Physical experiences during 'teaching practice'

After the intervention training, the participants' school experience became another important source of experience of SEN. The participants were able to observe the provision of inclusion

[85] This refers to a video clip about a boy called Andrew who had learning difficulties.

in the schools, and for the four that had the opportunity to practice classroom teaching, to even try to cater for the SEN that they detected in the children. The live-chat interviews indicated their observation of the teachers' lack of awareness for SEN and the lack of inclusive practice in the schools (see Section 6.4 for details).

What is unusual here is that, it is the same situation, but newly captured by refreshed eyes. In other words, what the student teachers had experienced but overlooked (before the intervention training), i.e. what remained unchanged in mainstream classrooms in China, was eventually recognised by the same group of student teachers (after the intervention training).

Take one of the participants, 9658, as an example.

> The teachers ought to have a good understanding of SEN. They don't seem to know anything about it. (9658)

The above quote is remarkable because her understanding of SEN and inclusion was very limited at Time 1, and her reflections on the first few sessions of the intervention training repeatedly indicated the same. However, her observation of inclusive education in her school experience indicated a remarkable change.

Therefore, it is natural to ask the question: How did this transformation take place? Why were the student teachers immediately able to identify what they used to be unaware of?

The catalyst for the marked change in the participants' perceived experience is their reflective thinking, throughout the intervention training and during the live-chat interviews after their teaching practice, as frequently indicated in the qualitative data (see Sections 6.3.3 and 6.3.7). The following section looks at reflection as a transformative process.

7.2.3 Of critical reflection as a transformative process

As has been mentioned in previous chapters, the participants of the study were made to reflect on their past experience and on their new knowledge throughout the intervention, their teaching practice as well as the live-chat interviews.

7.2.3.1 'Transformative learning' in the participants

The rich data collected during the intervention training clearly indicates how the student teachers changed their way of thinking about this issue, e.g. their predisposition of regarding SEN training as "Not Applicable" to mainstream education, and started to develop their autonomous thinking in the process of the study.

> After learning this session I realised that's because I viewed this problem in a traditional position, just like most Chinese people do. (9480)

The case of the participants' journey is exactly consonant with Mezirow (1991, p.167) in that, in order for learners to change their specific beliefs or attitudes, 'they must engage in critical reflection on their experiences, which in turn leads to a perspective transformation'. The above quote from Participant 9480 has illustrated how "transformative learning develops autonomous thinking" (Mezirow, 1997, p.5). The culture-shock equivalent the student teachers experienced in their virtual experiences has enabled them to make their independent interpretations, although retrospective, of their physical experiences during their school years and university, rather than to act on the traditional prejudice against disability or difference (see Section 6.3.6).

Therefore, the student teachers began their journey with few experiences and a limited understanding of SEN and inclusion, and gradually started to re-examine their previous 'problematic frames of reference – sets of fixed assumptions and expectations (habits of mind, meaning perspectives, mindsets) – to make them more inclusive, discriminating, open, reflective and emotionally able to change' (Mezirow, 2003, p.58).

The participants themselves even recognised in their online reflections and live-chat interviews how much they benefited from reflecting on their new knowledge and experiences (see Section 6.3.7), which proves that critical reflection is the most significant learning experience in adulthood (Mezirow, 1990).

7.2.3.2 The researcher's role and her transformative learning

The case of the participants' journey of learning is also consistent with what the researcher had experienced in her understanding of SEN and inclusion. In a sense, this case study (with critical reflection as an approach to enhancing the intervention training) was the result of the researcher's own personal transformative learning (see Footnote 2 in Section 1.2 and Footnote 9 in Section 1.3.3).

The researcher's personal journey of understanding SEN and inclusion has proved that perspective transformation does not occur spontaneously without apparent external cause: The typical symptoms of Asperger's Syndrome in her beloved only child did not naturally make her even aware of the condition, despite her efforts to make sense of the problem (see Section 1.3.3). The perspective transformation did not take place even after nine years of daily observation and reflection as a devoted mother on her child's behavior. Then the

realization dawned on her when she was studying Education in the UK and was taught about the different needs in children. As a former student teacher trained at the most influential Normal University, and an experienced educator, the researcher was then able to see (with her transformed frame of reference and with evidence from the review of the literature) that what had been lacking in her education and training was still missing in teacher education in China. The perspective transformation in the researcher has inspired her to take a step further, to try to facilitate a similar learning experience in the student teachers in the study.

The findings are exciting especially to the researcher. What took place in her personal journey has also taken place, in one form or another, in the participants' learning processes, as was repeatedly demonstrated in the data (e.g. how the participants who regarded SEN as Not Applicable to them dramatically changed their views and attitudes, see Chapters 5 and 6). This learning process is the more essential aspect of education and teacher education, just as O'Sullivan, Morrell, and O'Connor (2002, p. 11) put it:

> Transformative learning involves experiencing a deep structural shift in the basic premises of thought, feeling and action. It is a shift of consciousness that dramatically and permanently alters our being in the world. Such a shift involves our understanding of ourselves and our self-locations; our relationships with other humans and the natural world; our understanding of the relations of power in interlocking structures of class, race and gender; our body awareness; our visions of alternative approaches to living; and our sense of the possibilities for social justice and peace and personal joy.

In other words, the transformative learning process that takes place in the learner (such as the researcher herself and the participants in the study) starts from thought and feeling, and leads to action[86]. This again is consistent with Parsons (1968) regarding how changes in the social actor's experience and their point of view facilitate social action.

The impact of their learning journey will be discussed in the following section.

7.3 Impact of their journey: Applying theory to practice

So far the thesis has been looking at the marked changes that took place in the student teachers' understanding of SEN and inclusive education, as well as their perceived experience

[86] In addition to all the changes in the participants' understanding, attitudes, and practice in their teaching (as reported in Chapters 5 and 6 and discussed so far in Chapter 7), one of the student teachers told the researcher that she had a calling to study SEN instead of her major which was English Language Teaching. And by the time this thesis was written up, that participant had already started her MA study in SEN.

of SEN and the lack of inclusive practice. However, data collected from Stages 3 and 4 of the study (see Chapters 5 and 6) indicates that their theoretical knowledge has not been completely put into practice, and that they are still on the journey of learning.

7.3.1 For those remaining unchanged: Time needed

Despite the significant changes reported in Chapters 5 and 6, there were a small number of participants (15.5%) who seemed to remain unchanged in the repeated measures survey in terms of SEN training for mainstream student teachers, regardless of the intervention training.

This lack of change, however, was mitigated by the qualitative data that gave an in-depth reality of the complexity of the issue, as was discussed in Section 7.2.1.2. Some of the participants (e.g. 4187), who did not indicate in the surveys an increase in their understanding of inclusive education, instead demonstrated a much greater concern for the implementation of inclusive education in China.

Nevertheless, it has to be admitted that half (50%) of the participants in the live-chat interviews automatically stated that there were no children with potential SEN in the schools they went to. However, as was presented in Section 6.4.6, only one of the 10 such participants still insisted throughout the interview that children with SEN should not go to mainstream schools. The reason for her responses was not explicitly given by the participant but was indicated in her online reflections such as the following.

> I knew a disabled little boy who was my neighbour. In my memory, he always stayed alone and never played with other children. … My mom thought he was abnormal, so she never allowed me to play with him and other mothers in our village also did the same. (1423)

It is apparent that the long-established tradition in the Chinese culture has shaped the student teachers' frames of reference, which does not accept or integrate individuals who have a disability or who are different, but discriminates instead (Hao, 2013). The impact of this culture is unsurprisingly extensive, especially when even the MoE openly set discriminating rules to reject competent applicants with insignificant different physical features from becoming student teachers (Y. Hu, 2007; MoE, 2002a; see Section 2.2.4). By the same token in this culture, when teacher educators are strongly against inclusion in the recruitment of student teachers (e.g. Pan, 2009), it is predictable why the student teachers were so profoundly influenced by the established and habitual patterns of thinking.

Moreover, the exclusion of SEN training in the current teacher education programmes in Normal Universities has accelerated the problem (e.g. as commented by Xiu Li, 2016). SEN was not supposed to be taken into account even in the student teachers' teaching practice in local schools, as was reflected repeatedly in the live-chat interviews.

> Because teaching practice was for our Pedagogy course, we were supposed to concentrate on the method of teaching English only. (1062)
>
> Unluckily, we didn't have any opportunity to communicate with the teachers there. Every day we were made to observe different teachers giving their English lessons, and we didn't have a supervising teacher[87]. (4187)
>
> We had to take detailed notes of how the teachers [of English] delivered their teaching, so I didn't manage to observe the children. (1423)

This overemphasis on subject speciality rather than teacher preparation, as well as the lack of emphasis on teaching practice, are consistent with the literature (Dai, 2011; Ding & Li, 2014; Hongyu Ma et al., 2013), which is at odds with what researchers suggest in other parts of the world about the importance of school experience in the education of student teachers (e.g. Mutton & Butcher, 2008).

Apart from the influence of society and the factors in teacher education, what also adds to the problem is the practice of teachers in mainstream schools, as suggested by the student teachers themselves in the live-chat interviews.

> R: What do you think made him[88] unnoticeable when you were observing the class?
>
> P: The teacher was really giving a wonderful lesson! I was absolutely attracted to how she did the teaching. **My attention completely followed her attention.** (4619)
>
> P: I think the reason why I didn't notice any children with SEN was that **such children were neglected by their teachers**, and also because we student teachers were required to focus on the teachers' pedagogy while observing their class. (9480)

There is yet another possibility regarding the participants' views and attitudes to inclusive education in China: Their seemingly unfavourable attitude reflects their mixed feelings towards the lack of SEN provision in China (e.g. the case of Participant 4187 in Section 7.2.1.2).

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[87] During their school experience, student teachers are usually allocated a 'supervising teacher' in the school they go to, who is normally a teacher of the specific subject the student teachers major in.

[88] This is a Year-3 boy who the participant (4619) later in her practice teaching session spotted as probably having SEN, see Section 6.4.8 for more information.

In summary, the automatic responses those participants gave regarding children with potential SEN in their school experience indicated a gap between the significant increase in their theoretical knowledge or perceived experience, and their immediate reaction to SEN or inclusive education. This gap in response is, however, consistent with Mezirow (1990) in that it takes time for critical reflection to become an integral part of the instantaneous action process. This is especially the case regarding inclusive education in China, considering the long-established Chinese tradition and the status quo of education and teacher education.

7.3.2 For those changed: How they saw their journey

What is inspiring about the study is that, despite the prevalent societal influence and barriers to inclusive education in China, the data collected from the majority of the participants suggested very encouraging implications for practice as well as high practicability of SEN training, as reflected in the case of this blended-learning course.

All the sets of data collected in the study suggest a sizable increase in the student teachers' knowledge of SEN. In the views of the participants, this greater understanding has in turn changed their way of looking at education and stimulated their desire for change in the school setting. This phenomenon is consistent with Parsons' (1966, 1968, 1991) theory of social action, which was discussed at the beginning of the chapter (also see Section 4.1.1).

Participants described how they felt the impact of the intervention training in similar ways – such as the following from their online reflections during the intervention training:

> My understanding of inclusive education and SEN has grown from zero to quite some. (4619)
>
> I wasn't aware of this until I started taking your course last semester. Your course made me aware and I started to think about such issues. This will be very helpful for my future teaching. (7447)
>
> In me, it has been a transformation from not caring to caring [for the needs of children]. (0482)
>
> I had only very limited and wrong understanding of SEN, but after taking the course, I now know how to understand the children and how to deal with their problems. (4221)
>
> I find the course very useful. I have learned a lot from you, although my answers to your questions might not be in great detail. (1556)
>
> In the past I would only focus on the teaching methods and the content of the teaching, but now I also look at how the teachers treat the students. What matters most is not the knowledge delivered, but the emotional and mental wellbeing of the children. (7463)

One of the participants at the end of the study expressed her concern about the lack of SEN training for student teachers, and even expressed her interest in continuing postgraduate study and specialising in SEN, in order to continue the journey:

> Think about that: Here we had just one session a week [for one semester] to study your course, but think about the four entire years for university! How little emphasis was placed on this! And there are no such courses open to student teachers anywhere else! …… You kindled a fire in us, but I hope it won't go off in the dark. You know, I've even been thinking about applying for postgraduate study on SEN. (4187)

One participant after her interview reflected on her journey from the beginning of the course to after their first teaching practice. She pointed out that the reflections during the training as well as the interview itself that made her think and reflect was actually as a new way of learning which enhanced her existing knowledge gained from the training. This realisation correlates highly with Mezirow's (1990, 1991, 2003, 2009) theory of critical reflection as a transformative process (as was discussed in Sections 7.2.3 and 7.3.1). Therefore, the student teachers' journey of understanding should continue as they keep reflecting on their experiences and inclusive practices.

7.4 Summary

This chapter has examined the results of the study in the light of the research questions and the literature.

It is self-evident that the 16-session blended-learning intervention training provided in the study has been effective in making a significant difference in the student teachers' understanding of inclusive education, as well as their practice in the school experience that followed the intervention. The participants' repeatedly expressed statements about how much they contribute their new knowledge to the intervention training are powerful indicators of future success.

Student teachers who had never had any knowledge of SEN or understanding of inclusion became aware of children with potential SEN after the intervention training, and even managed to cater for such needs in the children they spotted. Similarly, after the intervention training, the participants were able to realise the vital importance of an encouraging and respectful environment, i.e. an inclusive attitude, when they went to local schools for teaching practice. Even the very participants who expressed a seemingly unfavourable, mixed attitude towards inclusive education later at the end of the study expressed wishes and hopes for

inclusion. For those few who appeared to remain unchanged after the intervention, more time is needed for the change to take place in a society with both long-established traditional culture and more contemporary ideology for competition and elitism rather than inclusion, as indicated in the rich review literature and the scarce empirical research, mainly in Chinese.

The raised awareness of SEN, along with critical reflection on the student teachers' experiences with disability and difference, facilitates transformative learning (Mezirow, 1997), and enables social action to take place (Parsons, 1968).

The next chapter will look at the implication and potential of the study for future work.

Chapter 8 Conclusion

This final chapter aims to reiterate the essential parts in the preceding chapters regarding inclusive education in China. It will start with a recapitulation of the background and rationale of the research questions, then a summary of the key findings in order of the research questions, and will finish with an examination of the implications and limitations of the study as well as potential for future work.

8.1 Background and rationale of the study

The idea of the study germinated when the researcher was doing her MA. The knowledge and experience she acquired during her MA study was so enlightening that she decided to explore further the area of inclusive education in China.

The wide range of special educational needs for mainstream education that was covered in the SEN training in her MA modules, as well as the inclusion of and provision for students with SEN that she observed during her MA study at university, differed strikingly from the researcher's original understanding of SEN and teacher education in China, and her experience of disability and SEN in China. In fact, the researcher had never heard of the term 'inclusive education', much less the concept of quality education for all.

To the researcher's knowledge at that time, on the one hand, special educational needs related only to those with severe visual, hearing or mental impairments, and children with such disabilities applied only to special education schools, rather than mainstream schools in China. People with disabilities seemed to be hidden from mainstream society in China. On the other hand, as for conditions such as dyslexia, ADD/ADHD, ASD, BESD, SLCN, etc., neither teachers nor parents in China were aware that these could apply to their students or children in the mainstream classroom and therefore needed to be accommodated. Children who may have such needs were mostly likely regarded merely as 'slow', 'lazy' or 'difficult', instead of as in need of additional support. Moreover, the traditional exam-orientated ideology in Chinese

society seems to have reinforced prejudiced opinions on such children if they happen to be lower-achieving students.

In particular, the new knowledge and new experience the researcher gained during her MA study in the UK shed light on her personal experience as a mother. For a few years she had been concerned by the lack of social etiquette and social communication skills she had observed in her son despite all her efforts to help him improve. However, his teachers in China and other parents did not understand why the researcher considered it as a problem, as the little boy was a high-achiever at school and that was all that mattered to them. Therefore, to the researcher, the training sessions on ASD and Asperger's syndrome during her MA study were like a strong beam of sunshine, and later her son benefited immensely from both the SEN provision at school[89] and practical support at home[90].

To the researcher, her journey of understanding SEN and experience of inclusion was similar to a culture shock, the impact of which was so profound that she decided to carry on learning more about it and investigating further into the case of inclusive education in China. After her MA dissertation about how much teacher educators were facilitating inclusive education in China, she decided to provide training to student teachers, since there was a significant lack of understanding of inclusive education in the teacher educators she investigated in the most influential universities in China (S. Li, 2013). The SEN training therefore became part of the fieldwork of her PhD study.

The theoretical underpinning of the study was Parsons' (1966, 1968) social action theory (see Section 4.1.1), as well as the theory of critical reflection and transformative learning (Mezirow, 1990, 1991, 1997, 2003; 2009, see Section 4.2.4), since the researcher's journey corresponded exactly to both these theories. In other words, the new knowledge about SEN and inclusion, along with the newly encountered exposure to inclusiveness, had inspired the researcher to reflect critically on her original understanding, to generate new opinions, and to take action according to the new frame of reference.

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[89] This refers to the boy's primary school in the UK, where the class teacher, the SENCo teacher and the headteacher all detected symptoms in him that were typical of high-functioning autism and they started supporting him accordingly in the school.

[90] For about two years during her PhD study, the researcher participated in training courses organised by the local council for parents with children with Asperger's.

The rationale of the PhD study was to dig deeper into the specific individual student teachers' understanding of SEN and inclusion and examine their in-depth interpretation of multiple realities from their perspectives. The main research questions are therefore the following (as presented in Section 3.4):

- What is the journey for student teachers in China to increased understanding of SEN and inclusion?
- What is the impact of the journey in terms of changing their views that are shaped by long-established traditional culture in China?

The hypothesis was that there would be increased knowledge and raised awareness in the participants after the intervention training about SEN and inclusive education. Therefore, the researcher decided to focus on the following research sub-questions, in order to obtain a better picture of the carefully selected sample, which are:

1. How do student teachers perceive SEN and inclusive education?
2. What are student teachers' attitudes towards inclusive education?
3. How much difference will be made, after the SEN training, to their views and attitudes?
4. How much will the training course contribute to the difference?
5. How will the training impact the student teachers' practice?

Based on the research questions, a qualitatively-driven mixed-methods approach was adopted for the study, and a 16-session blended-learning training course was provided for 135 student teachers who were majoring in English at a Normal University in China. Multiple sources of data were collected to obtain multiple measures of the same phenomenon. These included:

- Repeated measures design survey questionnaires before and after the intervention;
- The participants' online reflections throughout the intervention;
- Semi-structured live-chat interviews after the participants had finished their school experience.

The fieldwork of the study lasted for approximately a year, from the start of the Time-1 survey to the end of the live-chat interviews.

8.2 Recapitulation of results

In order to recapitulate the findings reported in Chapters 5 and 6, this section will follow the sequence of the research sub-questions listed above.

8.2.1 Student teachers' original perception

The first research sub-question, i.e. "How do student teachers perceive SEN and inclusive education?", was aimed at discovering the student teachers' original perception of SEN and inclusion before they took part in the intervention training. This is found both in the Time-1 survey results and in the participants' online reflections, and findings from the different sources are in agreement with each other (see Sections 5.1.2, and 6.2).

In terms of the concept of inclusive education, the overwhelming majority of the participants stated that they did not know about inclusive education. Similar to this, the same number of the participants stated that they had never had any fellow student with a disability throughout their education experience, and the rest of the participants who stated otherwise all indicated cases of obvious physical or intellectual disabilities only.

Regarding SEN training, a small number of the participants clearly stated that they had previous training about disability; however, the additional information they gave to that statement suggest that all the prior training the six participants had were exclusively for special education schools, rather than inclusive education in the mainstream setting (also see Section 7.1.2.3).

Regarding SEN awareness in their teacher preparation, about two thirds disagreed with the statement that they were taught about catering for SEN in children, and one fifth regarded the statement as "Not Applicable". An even larger number of the participants chose "Not Applicable" for whether their professors or teachers had been catering for SEN in their students, and more than three quarters gave negative responses.

The qualitative data indicated an even more striking lack of understanding of inclusion. For example, barely any participants gave a definition close to the concept of inclusive education, one of whom clearly stated that she was postulating it according to all the other questions asked (see Section 6.2.1).

To summarise, the student teachers investigated hardly had any understanding of inclusive education, and their ideas of SEN were restricted to the very visible physical and mental impairments, a stereotypical view of disability that is prevalent in China.

8.2.2 Student teachers' original attitudes

The second research sub-question, namely "What are student teachers' attitudes towards inclusive education?", refers to the participants' original attitudes towards inclusive education before the intervention training.

Despite the lack of awareness and understanding, the results indicate a mixed attitude in the participants amongst a generally warm attitude towards catering for SEN. More than four fifths stated that they would in their future teaching try to cater for SEN in children. However, more than two thirds did not even agree with children with SEN going to mainstream schools, roughly the same number disagreed that their teacher education programme was preparing them for catering for SEN, and the majority stated that they had no confidence working with children with SEN.

Therefore, their seemingly positive attitude towards catering for SEN in children, expressed before the intervention training, appear to be highly theoretical, and their prevalent objection against children with SEN going to mainstream schools indicates the opposite of the concept of inclusive education. Qualitative data from the participants' online reflections frequently suggests the same, although explicitly and in their own words (see Sections 6.3.1 and 6.3.4).

In a word, the student teachers shared quite mixed views. They felt unprepared for inclusive education, although at the same time they were attitudinally highly positive towards equal rights for all children and much more open to recognising a wider range of disabilities.

8.2.3 Difference after the intervention training

The results of the study, especially from both the repeated measures design surveys and the online reflections of the participants during the intervention training, demonstrate huge differences after the SEN training, i.e., increased awareness, better understanding, and more positive attitudes towards inclusive education in China.

The difference before and after the intervention training was phenomenal in both the quantitative and the qualitative results of the study. Regarding the quantitative data, ANOVA analysis in SPSS indicated that the differences between the Time-1 and Time-2 surveys were

statistically significant (see Sections 5.5 for more details). Regarding qualitative findings, the rich data of the participants' online reflections and live-chat interviews were not only in line with the quantitative results, but also provided multiple-tier details about each individual throughout the whole process of the intervention training.

The participants' increased awareness and better understanding of SEN and inclusion were also reflected in their changed perception of their retrospective experience (see Section 6.3.3). Moreover, remarkable positive changes were also reflected in the participants' new understanding of inclusive practice (see Sections 6.3.2 and 6.4.6), their willingness to take action (see Section 6.3.4), and their critical reflection on SEN training (see Section 7.2.1.3).

Even for the very small number of participants who seemed to remain unchanged in the repeated measures surveys, qualitative data from their online reflections and live-chat interviews indicated otherwise (see Section 7.3.1).

8.2.4 Role of the training in the difference made

The fourth research sub-question, namely "How much will the training course contribute to the difference?", refers to the role of the intervention training in the student teachers' journey of understanding. The participants were never asked this question explicitly throughout the study. However, analysis of both the data sets suggested the answer.

Quantitative data from the repeated measures design surveys were grouped into four sets: 1) knowledge, 2) understanding, 3) training about inclusion, and 4) willingness to take action (see Section 5.4.1 for details). Canonical correlation analysis was then conducted between the differences in the four sets, which indicated very high correlation between the four sets of variables (see Section 5.4.2). In other words, the student teachers' increased knowledge, enhanced understanding, and their greater willingness to take action were all highly interrelated with the intervention training.

Qualitative data from both the online reflections and the live-chat interviews indicated the same, yet with far more details and richer layers of information, and expressed explicitly in the participants' own words (see Sections 6.3.5, 6.3.6, 6.3.7, 6.3.8, and 7.3.2). Even for those very few participants who had some SEN training prior to the study, the qualitative data they gave all indicated their lack of awareness and understanding of SEN and inclusion, thus pointing to a sharp separation between mainstream education and special education in China (see Section 7.1.2).

8.2.5 Impact of the training on practice

The last research sub-question, i.e., "How will the training impact the student teachers' practice?", refers to the impact of the intervention training on the student teachers, the answer to which lies mainly in the qualitative data collected after the participants completed their teaching practice.

The participants, after the intervention, were able to observe the schools they went to for teaching practice with a refreshed frame of reference, one that was distinctly different from what they had been accustomed to throughout their own education experience. In other words, the student teachers noticed a lack of both physical and attitudinal environment for inclusive education in the schools (see Section 6.4.3 and 6.4.4), they perceived a lack of awareness of SEN and inclusion in the teachers in the schools (see Section 6.4.5), and they spotted some children that might well have a SEN (see Sections 6.4.7, 6.4.8, and 6.4.9). One of the few student teachers that had the opportunity to teach during the teaching practice was even able to take action as soon as she detected the potential SEN in a child (see Section 6.4.9). This is remarkable considering the length of the participants' teaching practice.

Interestingly, half of the participants gave an automatic response at the start of the interviews, stating that there were no children with SEN in the local schools they went to (see Section 6.4.6), which indicated a gap between the significant increase in their theoretical knowledge or perceived experience and their immediate reaction in practice. However, the gap or imbalance in this case is normal, as it takes time for critical reflection to become an integral part of the instantaneous action process (Mezirow, 1990).

8.2.6 Original contribution to knowledge

The above sections about the answers to the five research sub-questions have made the answer to the two main research questions self-evident, regarding the journey for student teachers to increased understanding of SEN and inclusion, as well as the impact of the journey in terms of changing their views that are shaped by long-established traditional culture in China.

First of all, the findings summarised above, i.e. the consistency in both the quantitative and qualitative data sets in the study, are significant, because it contributes highly reliable empirical evidence for the lack of inclusive education in the knowledge of student teachers in one part of China. Although it is beyond the scope of this research to check which part of

China individual students came from, as the university enrols students from all over the country, so it is unlikely that the findings are limited to this area exclusively.

Secondly, the study is an original contribution to knowledge in the light of the lack of empirical research evidence of the lack of inclusive practice in even the compulsory education system in China. What is especially unique to the study is its focus on providing a possible solution to the lack of inclusive education in China, via intervention training to a cohort of student teachers, and on examining the participants' journey to increased understanding. Through the student teachers' school experience in local schools, the focus of the study is broadened to the day-to-day classroom practice in primary and secondary schools in China, including the participants' own practice teaching. The breadth and depth of the study, therefore, is a major contribution to knowledge, in particular to empirical research in teacher education for inclusion in Mainland China. In addition, it adds to the limited research literature about inclusive practice in China, as most of the existing literature (although mostly review literature) is published in China in Chinese.

Meanwhile, the focus on training, i.e. on awareness raising and not on teachers in the field, is also significant.

Thirdly, in the process of this intervention-centred study, the data collected has demonstrated remarkable impact of the intervention training on student teachers' understanding of SEN and inclusion, as well as considerable impact of their learning journey on their immediate response in action despite the influence of the long-established tradition in society. This is another significant contribution, a step further in the context of inclusive education in China, by not only experimenting a possible solution, but also validating the proposed solution with carefully chosen research design and strategies. Apart from the piloting and data triangulation for reliability and validity, the design of adding comment boxes to the survey questions, for example, is a significant contribution, as it allows the ground-breaking discovery of what people really think by examining their comments about how they act in choosing a response in the questionnaire. For another example, the approach taken in conducting the interviews, the drilling down through the chat is also original in terms of method of empirical research.

Fourthly, the specific approach to intervention training is significant, including the adoption of blended learning as well as reflection as a transformative learning process. The blended-learning training approach taken in the study was significant in changing hearts and minds, and the use of personal social networking blogs as a permanent accessible platform of multimedia learning and resources is an approach not used in China. The required reflection

on each session of the intervention training not only ensured the quality of training, especially of the distance-learning sessions, but also contributed to and consolidated the participants' making sense and hence learning.

Another contribution of the study is its duplicability, easy and feasible due to the openness and transparency of the method of the study, which could be a good solution for the scarcity of empirical research in the literature in China, and a boost to the implementation of inclusive education.

8.3 Limitations of the study

There are three major limitations to the study.

8.3.1 Convenience sampling

The first limitation of the study is its convenience sampling – the 135 student teachers were chosen because their Dean agreed for the researcher to provide the training and to conduct the fieldwork in their university (see Sections 4.5.2 and 4.5.3). Furthermore, the 20 participants at Stage 4 of the study were the result of the researcher's deliberate choice to cover a full range, the voluntary decision of the student teachers, and practical considerations such as time and effort (also see Section 4.5.3).

Therefore, it is not intended for the findings to be generalised to the whole country of China or for the findings to be replicable. It may be the same in the rest of China, but this cannot be proven without further empirical research, and therefore there is no confirmation of that in the thesis.

However, the fact that this is a case study of one particular university, i.e. how the researcher failed to get consent from other universities (see Section 4.4.2), as well as how this university unexpectedly changed the pre-arranged participants for the study (see Section 4.4.1, especially Footnotes 44 and 45), shed a significant light on Chinese educational culture. This is in itself evidence of the lack of inclusive practice and lack of awareness of inclusion in China, and the distinct segregation remains between mainstream and special education in teacher education universities. The old mindset seems to persist despite the establishment of any new Department of Special Education. It shows that, even at a senior level in educational administration in China, there is a lack of concern for mainstream teachers to receive

instruction in teaching children with SEN, and shows how 'natural' and hegemonic this view is within the Chinese educational culture.

8.3.2 English majors and English input

Another limitation is the fact that all the second-year English major student teachers in the university that agreed to the research were required to take part in the intervention training, and that the training materials as well as the delivery of the training were all in the English language. In other words, student teachers that were trained to be teachers of English were recruited in the study, but those who were trained to be teachers of other subjects (such as Chinese, mathematics, etc.) were not included. This might possibly skew the results towards a higher degree, as students majoring in English might be more open to changes when exposed to a carefully chosen variety of materials that had an international perspective. Meanwhile, the required participation in the blended-learning intervention training, plus the fact that the training was provided by the researcher, who was doing PhD study in the UK, could also possibly lead the student teachers to deliberately give responses desirable for the researcher, i.e. the Hawthorn effect (McCarney et al., 2007).

However, the Hawthorn effect was minimised, as the participation of the study was not required, precautious arrangements were made to ensure that the researcher would not be involved in the assessment of the course, and consent was sought (and not always given) at each stage of the study. In addition, the researcher kept encouraging (and requiring) the student teachers to give honest answers rather than trying to give answers that they thought would please the researcher (see Section 4.8). This is evidenced not only in the data collected, such as the remaining lack of knowledge about inclusive legislation in China at Time 2 (see Section 5.3.2) and the mixed or negative responses in the interviews (see Section 6.4.6), but also the fact that 19 student teachers that took the training course did not give consent for their data to be used by the researcher.

As for the English-majoring participants, as well as the English-language materials for the training and the English-language delivery of the training, this limitation was due to the availability of the materials (see Footnote 46) and the opportunity (see Section 4.5.2), and the priority of the Dean to utilise the blended-learning course as another opportunity for his students to use English.

8.3.3 One-week teaching practice

A third limitation was the duration of the participants' school experience. The one-week, i.e. five-day, school experience was not long enough for the student teachers to get to know the children.

This was due to the time constraints on the thesis, as the researcher could not afford to wait for another year to collect more data from the same group of student teachers when they would have their proper (and normally only) teaching practice, which would be in the first term of their fourth undergraduate year. Their one-week teaching practice was the result of an improvised decision near the start of the fieldwork, when the university changed the starting participants from the originally-agreed third-year English majors into students majoring in Special Education, and then as a remedy, back into English majors but second-year students (see Sections 4.4.2 and 4.4.3).

Such are, however, circumstances outside the control of the researcher, which is inevitable in real-life research when researchers normally do not have the luxury of keeping everything under control.

8.3.4 Western-style intervention

Another limitation could possibly be the style of the intervention training: It is a Western-style intervention based on a discourse of individual self-actualisation and rights of individuals, and therefore it might not be the best way to change attitudes of Chinese teachers towards SEN provision.

However, this Western concept should not be a problem in the context of China, as for the past one and a half centuries (apart from Mao's era) China has been learning from the West. Regarding equal rights and inclusion, China was one of the signatories of the Salamanca Statement in 1994 (see Section 3.2 for all the related legislation in China). The modern education system in China, including higher education, was imported from the West in the nineteenth century and influenced modern China ever since (Luo, 2013). Despite Mao's political changes, the internationalisation of higher education has been a national policy in China for the past two decades, and China is still receptive to Western influence (Huang, 2015; Huacong Liu & Metcalfe, 2016).

On the other hand, it should be possible in the future to produce a distinctively Confucian programme of SEN-awareness for teachers and student teachers in China, as the humanistic

beliefs for inclusive education have long existed in the Confucian ethos, such as 'Teach without prejudice (“有教无类”)' and 'Teach according to students' individual abilities (“因材施教”)' (see Section 1.3.2).

8.4 Recommendations for future work

The key findings and major limitations of the study have led to some recommendations for future work.

8.4.1 For future research

For future research, the first recommendation is to follow up with the same group of student teachers investigated in the study, to see whether the same pattern or evidence continues after the participants' longer placement - or even after they have started working full-time as teachers. The second recommendation for future research is to see how the intervention training could be used in other groups of student teachers in in China. This could be in a different university, with English-majors as participants. However, the intervention training materials could also be translated into Chinese and then offered to mainstream student teachers in China who are trained to be teachers of subjects other than English. Furthermore, the training could be offered to in-service mainstream schoolteachers in China, to explore possible patterns or empirical evidence from the perspectives of this specific group. The last point is also a feasible recommendation for inclusive practice in China.

8.4.2 For future practice

For future practice, the blended-learning intervention course could, after necessary adaption or translation into the Chinese language, be provided to both student teachers and in-service teachers in China, to help raise their awareness of SEN and to facilitate inclusive practice. The advancement of technology has made distance learning (or blended learning in the case of the study) increasingly practicable and more far-reaching, which will especially meet the challenge of promoting inclusive education in the vast area of China, and to a huge population shaped by a long-established traditional culture.

As was discussed earlier in Chapter 7, if such an intervention training course could be made available and effective by one researcher to student teachers in one university in China, it would be of much higher quality and would have a far more extensive impact if more time,

more capacity, more opportunity, more support and more resources are applied to the provision of such training.

8.5 Summary

In summary, the PhD study originated from the impact of the researcher's personal journey of understanding of inclusive education on her own decision-making and practice, i.e. further investigation about inclusive practice in her home country. The study then focused on SEN training and awareness-raising in student teachers in a university in China, as well as on the impact of the student teachers' journey to increased understanding on their practical application.

Results of the study revealed the gulf between the legislation for inclusive education from the Chinese government and the lack of inclusive practice in mainstream education, not only in China's compulsory education setting, but at the root of the problem, in the discrete teacher education systems in China for mainstream schools and special education schools. The findings of the study confirmed the lack of awareness and understanding of inclusive education in mainstream teacher education (S. Li, 2013), and provided evidence for the vital importance of SEN training in China. The trajectory of the participants' learning curve displayed in the study closely corresponds to Parsons (1966, 1968) in that, in order for a social change to take place, there has to be a breakthrough in the social actor's viewpoint and experience. It also precisely agrees with Mezirow (1990) in the theory of critical reflection as transformative learning.

The study has contributed to existing literature, in particular first-hand evidence of inclusive practice in Chinese society, as well as SEN training in teacher education in China, which is especially lacking in empirical research literature. The multi-layer contributions and major limitations of the study have also signposted workable recommendations for future research and practice for the promotion of inclusive education.

If such a blended-learning course could be made possible by one researcher single-handedly in one university in China, how much better and more far-reaching it would be if more expertise, more access, more support and more resources were involved in the provision of such training? The study has sought to prove that what is most lacking (and therefore most effective) in China for inclusive education, for quality education for all, is not even the much-needed expertise and resources, but instead the raising of awareness of disability and diversity.

Therefore, the most important contribution of the study has been to present practical evidence of the power of awareness-raising training in China, where traditional views of disability are dominant and where there is still a lack of understanding of what inclusion really means. The researcher would like to end the thesis with a quote from one of the participants in the study, and sincerely hopes that the new insights presented in the thesis will make a significant difference to the individuals that matter.

> I feel sorry for what the disabled individuals suffer when others laugh at them. Therefore, I believe that encouragement and respect is the first step to help them. (9942)

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Appendices

Appendix 1 Overview of the training course

Session	Method	Topic	Objectives in brief
1	DL	Preliminary	To engage students in this course and to trigger their awareness of inclusive education
2	DL	Introduction to inclusion and SEN	To introduce to students the different perspectives on inclusion and SEN, as well as different models of disability, i.e. medical & social models
3	T	Autism and Aspergers Syndrome (1)	To introduce to students the prevalence and symptoms of ASD and how to support autistic children, especially early detection and early intervention
4	T	Autism and Aspergers Syndrome (2)	To increase knowledge about the autism spectrum among the students, and to introduce good practice that enables children to benefit from the mainstream school system
5	DL	Physical and Sensory Impairments	To familiarise students with some less 'obvious' physical and sensory impairments
6	DL	ADHD/ADD and SEBD	To introduce to students the symptoms of ADHD/ADD and SEBD as well as how to support children with these impairments
7	DL	Dyslexia	To introduce to students the symptoms of dyslexia and how to support children with such needs
8	DL	Gifted and Talented	To enable students to also take into consideration the needs of gifted and talented children so as to support children with such needs
9	DL	Other Learning Difficulties	To introduce to students the symptoms of some other learning difficulties like dysgraphia, SLCN, etc., and how to support children with such needs
10	DL	Celebrating Difference	To increase awareness of differences and diversity, and the importance of open-mindedness and inclusion
11	T	Inclusive Practice from a World Perspective	To introduce to students how the policies and legislation in the world like the UK and the US ensure good practice for inclusion
12	T	Inclusive Practice in China	To introduce to students how the policies and legislation in China call for inclusive education
13	DL	Observing Local Mainstream Schools	To enable students to observe their local mainstream school classrooms
14	DL	Working with Local Special Education Schools	To enable students to observe their local special education schools, for a direct experience with children with SEN
15	DL	Reflection	To make students formally reflect on their personal experience as well as what they get from this course about inclusion and SEN
16	DL	Peer Review & Assessment	To enable students to share with each other their reflections by reviewing and providing feedback on each other's work

Appendix 2 Lesson plan for the first sessions

Inclusive Education and Special Educational Needs Tutor: Sufang Li Date: 1st session (for Week 1)

Session Title: Preliminary session to the course

Preparation: Students are assumed to have already been using Tencent QQ, and if not, they need to register for a free account to get full access to the course.

Learning Outcomes:

Students should understand:

- The overall introduction of the course
- What is expected of them for the course and the learning outcomes
- Their future role as a teacher to be responsible for all the children in their class

Students should be able to:

- Be confident in learning the course about inclusion and SEN
- Have a better understanding of disability and SEN
- Be aware of the possible existence of SEN of children in schools
- Be considerate and supportive in their future teaching practice from an inclusive perspective

Session Content: All online, listed as follows.

- Course overview
- Video clip: self-introduction and welcoming speech made by the researcher/tutor to students
- Film: *Like Stars on Earth* which depicts a school child with SEN
- Supplementary reading: Excepts from books like *Nobody Nowhere* and related websites for further reading

Follow-up Tasks:

Students to write and upload a 500-word review to the session webpage as reflection on the session.

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http://www.youtube.com/watch?v=9bev--7zthI (In case the YouTube link cannot be open from China, the film will be uploaded to the session webpage.)

https://www.bb.reading.ac.uk/webapps/portal/frameset.jsp?tab_group=courses&url=%2Fwebapps%2Fblackboard%2Fexecute%2Fcontent%2Ffile%3Fcmd%3Dview%26content_id%3D_2016546_1%26course_id%3D_89706_1%26framesetWrapped%3Dtrue

http://www.dyslexiaaction.org.uk/

https://www.gov.uk/government/publications/teaching-pupils-with-special-educational-needs-and-disabilities-send

Inclusive Education and Special Educational Needs Tutor: Sufang Li Date: 2nd session (for Week 2)

Session Title: Introduction to inclusion and SEN

Preparation: Students are assumed to have had some thoughts about SEN, after the 1st session.

Learning Outcomes:

Students should understand:

- The complexity of the concept of inclusion
- The different perspectives on inclusion and SEN
- Different models of disability, i.e. both medical and social models
- That all children have educational needs
- The worldwide increased emphasis on inclusion and SEN

Students should be able to:

- Deepen and broaden their understanding of disability and SEN
- Be more aware of the possible existence of SEN of children
- Begin to reflect on their education experience about inclusion
- Begin to appreciate the need for changes regarding SEN

Session Content:

- Tutor presentation (covering the concept of inclusion, different perspectives on inclusion and SEN, medical and social models of disability, worldwide increased emphasis on inclusion, etc.)
- Students group discussions (e.g., on their understanding of inclusion, SEN, disability, etc.)
- Linking students' discussion to their own education experience (i.e., getting them to talk about what they have found in schools and linking it to the lecture)

Follow-up Tasks:

Students to write and upload a 500-word review to the session webpage as reflection on the session.

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https://www.gov.uk/government/publications/teaching-pupils-with-special-educational-needs-and-disabilities-send/training-modules-and-resources-for-teaching-send-pupils

http://www.thespecials.com/index.php (for students to learn about lives of some young people in the UK who have Downs Syndrome).

http://www2.le.ac.uk/offices/ssds/accessability/staff/accessabilitytutors/information-for-accessability-tutors/the-social-and-medical-model-of-disability

http://uk.ettad.eu/understanding-disability/models-of-disability

https://www.gov.uk/government/publications/teaching-pupils-with-special-educational-needs-and-disabilities-send

Appendix 3 Repeated-measure design questionnaire

Please complete the following questionnaire which consists of five sections. In the first three sections, you are being asked to indicate your level of agreement or disagreement with each statement by circling a given number indicating:

(Strongly Disagree) 1 2 3 4 5 6 (Strongly Agree)

Section A: Experience with Inclusive Education						
1. There definitely are/have been students with disabilities in my university or schools. (* An additional box is provided for specifying what disability if there is any.)	1	2	3	4	5	6
2. My professors/teachers always accommodate students with disabilities and adapt their teaching process according to their special educational needs. (* An additional NA option is provided for this statement.)	1	2	3	4	5	6
3. I have often been taught to cater for the individual needs of children.	1	2	3	4	5	6
4. I have often been taught to cater for the needs of children with disabilities. (* An additional NA option is provided for this statement.)	1	2	3	4	5	6
5. I have definitely had courses at university about disability and special educational needs. (* An additional box is provided for specifying when and where if there is any.)	1	2	3	4	5	6
Section B: Views and Knowledge About Inclusion and Special Educational Needs						
6. I understand what “inclusive education” means.	1	2	3	4	5	6
7. I am aware that the law states that pre-school and school teachers are obliged to be constantly alert to potential childhood disabilities in their students.	1	2	3	4	5	6
8. I am aware that the law states that children and adolescents with disabilities should be educated in special education schools, or in special education classes attached to ordinary schools, rather than in mainstream classes of mainstream schools.	1	2	3	4	5	6
9. I am aware that the law states that universities must enroll students with disabilities who meet the State's admission requirements and should not deny them enrollment on account of their disabilities.	1	2	3	4	5	6
10. I am aware that the law states that trainee teachers in special education teachers colleges should be trained for teaching children with disabilities.	1	2	3	4	5	6
11. I am aware that the law states that all trainee teachers in normal universities should be offered courses of special education.	1	2	3	4	5	6

12. I am aware that the law states that only those children with a diagnosis have a disability.	1	2	3	4	5	6
13. I am aware that the law states that it is not right to give extra time in exams for those with disabilities.	1	2	3	4	5	6
14. I am aware that the law states that mainstream schools do not need to provide facilities or support for students with disabilities.	1	2	3	4	5	6
Section C: Attitude Towards Inclusion ** This section is adapted from Boyle et al's (2013) Teacher Attitudes to Inclusion Scale (Adapted).						
15. All children, disabled or not, should be entitled to the same educational services.	1	2	3	4	5	6
16. It is important for student teachers to be trained to cater for children with special educational needs.	1	2	3	4	5	6
17. I will try to cater for the educational needs of every single student in my class.	1	2	3	4	5	6
18. It will be my responsibility as a teacher to cater for the educational needs of every single student in my class, including students with disabilities.	1	2	3	4	5	6
19. It is important to have ongoing training programmes regarding students' special educational needs.	1	2	3	4	5	6
20. Children with special educational needs should be educated in a mainstream school.	1	2	3	4	5	6
21. I feel that my teacher-training programme is preparing me adequately for working with all children irrespective of disability.	1	2	3	4	5	6
22. Educating children with additional support needs in mainstream classes has a negative effect on the other children in the class.	1	2	3	4	5	6
23. I do not support the policy of inclusion no matter how much extra support the teacher is given in the class.	1	2	3	4	5	6
24. Including children with special educational needs in the classroom can adversely affect the learning environment of the class.	1	2	3	4	5	6
25. The teacher should usually attempt to ensure that all the children in the class, irrespective of levels of difficulty or ability, are able to participate in the class as much as possible.	1	2	3	4	5	6
26. I am confident that I will be able to make a positive educational difference to children with special educational needs in my classroom.	1	2	3	4	5	6

27. Student peers will reject children with special educational needs in their classroom.	1	2	3	4	5	6
28. Some children have difficulties that mean that they should not be educated in mainstream schools.	1	2	3	4	5	6
29. A teacher, if given what are regarded to be appropriate resources, could teach the vast majority of children with special educational needs.	1	2	3	4	5	6
30. I feel confident to work with students who have varying levels of difficulties.	1	2	3	4	5	6

Section D: Definition/Understanding of Inclusive Education

31. Please provide your definition/understanding of inclusive education (in one paragraph):

Section E: Further Information

32. You are: Male □ Female □ .

33. Do you have a disability? Yes □ No □ .

If yes, could you please specify what disability: _____.

34. Do you know personally someone who has a disability? Yes □ No □ .

If yes, what relationship? Friend □ Schoolmate □ Family member □ Other □ .

35 If you would be willing to take part in the next phases of the research[i], please could you provide:

Your Tencent QQ ID: _____ and/or WeChat ID: _____.

36. Thank you very much for taking part in this phase of the research, please could you provide:

Your Student ID (rather than your name): _____.

37. Are you happy for your data to be included in the research? Yes □ No □ .

Appendix 4 Question outline for semi-structured live-chat interviews

The following is a list of questions for semi-structured online interviews (or "live chats") with student teachers who have participated in all previous stages of my study. They have taken a blended-learning course about inclusive education, as part of the study, and by the time of the online "live chats", they will have finished their first school experience, which will be two-week observations. The questions will be about their application of the training course on inclusive education and special educational needs (SEN).[91]

Prior to the following questions, there will be "easy" questions about the kind of school they went to, the year group of the children, size of the class, etc.:

Q1: Were there any children with SEN in the school or class you went to?

Q2: To what extent do their SEN appear to be met and how?

Q3: How are the teachers you observed aware of SEN and inclusive education?

Q4: From your perspective, is there a difference in your understanding of SEN before and after training about inclusive education?

Q5: Do you think the training about SEN has changed how you observe teachers in your school experience? In what way?

Q6: Could things be improved in the school regarding SEN?

Q7: Do you think the training about SEN will enable you to do better?

[91] Informed consent for this has already been obtained during the previous stages of my study. Any data collected will be held in strict confidence and no real names will be used in this study or in any subsequent publications. Neither the individuals, the schools they went to for teaching practice, nor their university will be identifiable in any published report resulting from the study. Their involvement with the research project will not affect any grades they get in their university.

Appendix 5 ANOVA tests of within-subjects effects

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Knowledge	Sphericity Assumed	1285.814	8	160.727	71.484	.000
	Greenhouse-Geisser	1285.814	4.751	270.662	71.484	.000
	Huynh-Feldt	1285.814	4.863	264.433	71.484	.000
	Lower-bound	1285.814	1.000	1285.814	71.484	.000
Error (Knowledge)	Sphericity Assumed	4155.075	1848	2.248		
	Greenhouse-Geisser	4155.075	1097.395	3.786		
	Huynh-Feldt	4155.075	1123.246	3.699		
	Lower-bound	4155.075	231.000	17.987		
Understanding	Sphericity Assumed	3268.677	14	233.477	135.186	.000
	Greenhouse-Geisser	3268.677	8.691	376.110	135.186	.000
	Huynh-Feldt	3268.677	9.062	360.691	135.186	.000
	Lower-bound	3268.677	1.000	3268.677	135.186	.000
Error (Understanding)	Sphericity Assumed	5561.190	3220	1.727		
	Greenhouse-Geisser	5561.190	1998.873	2.782		
	Huynh-Feldt	5561.190	2084.322	2.668		
	Lower-bound	5561.190	230.000	24.179		
Taught	Sphericity Assumed	66.572	2	33.286	13.394	.000
	Greenhouse-Geisser	66.572	1.843	36.114	13.394	.000
	Huynh-Feldt	66.572	1.858	35.839	13.394	.000
	Lower-bound	66.572	1.000	66.572	13.394	.000
Error (Taught)	Sphericity Assumed	1148.095	462	2.485		
	Greenhouse-Geisser	1148.095	425.825	2.696		
	Huynh-Feldt	1148.095	429.093	2.676		
	Lower-bound	1148.095	231.000	4.970		
Action	Sphericity Assumed	114.388	2	57.194	83.722	.000
	Greenhouse-Geisser	114.388	1.482	77.197	83.722	.000
	Huynh-Feldt	114.388	1.489	76.818	83.722	.000
	Lower-bound	114.388	1.000	114.388	83.722	.000
Error (Action)	Sphericity Assumed	315.612	462	.683		
	Greenhouse-Geisser	315.612	342.287	.922		
	Huynh-Feldt	315.612	343.975	.918		
	Lower-bound	315.612	231.000	1.366		

Appendix 6 Ethical Approval Form and other supporting documents

See the following pages for the documents.

Researcher:
Name: Ms Sufang Li
QQ: 914661753
Email: sufang.li@pgr.reading.ac.uk

Supervisor:
Name: Dr Cathy Tissot
Title: Director of Teaching and Learning
Email: c.tissot@reading.ac.uk

Dean Information Sheet

Research Project: Student Teachers' Perspectives of the Impact of Training on Their Teaching Practice Regarding Inclusive Education and Special Educational Needs in a City in China

Dear Dean,

I am writing to invite your school/department to take part in a research study about inclusive education.

What is the study?
The study is being conducted at the University of Reading as part of the researcher's PhD thesis. The study aims to investigate the possible impact of a training course provided to student teachers about inclusive education and special educational needs; to find out the student teachers' perspectives of the impact of training on their teaching practice. It hopes to make recommendations regarding how we can best help promote inclusive education in China. The study will involve student teachers majoring in English language teaching who are in their third and fourth years at your university.

Why has this school/university been chosen to take part?
This school/department was chosen as it is in the capital city where I am from.

Does the school/department have to take part?
It is entirely up to you whether you give permission for the school/department to participate. You may also withdraw your consent to participation at any time during the project, without any repercussions to you, by contacting the researcher at the contact information above.

What will happen if the school/department takes part?
With your agreement, participation would involve us administering a questionnaire before and after a training course offered by us to student teachers majoring in English language teaching, who are in the second term of their third year in your university. The pre-and-post course questionnaire asks about student teachers' views and attitudes towards inclusive education. The course will be approximately 16 sessions in the spring term of the 2014-2015 academic year, given by the research team (distance learning and taught sessions blended), and students will be required to write and upload their reflections (onto their designated Tencent QQ blogs or WeChat groups) after the sessions, as part of the data to be collected in the study. We will be sending an information sheet and a consent form to give students the opportunity to opt out of the questionnaire and the online focus group phases of the research (but all students are required to participate in the course), if they do not wish information relating to them to be released to us. After analysing the initial data collected, we will request interviews with approximately 10-15 student teachers who have volunteered to do so, and a separate information sheet and a consent form for the interview will also be sent prior to that. The interviews will be based on how they see the impact of the training on their teaching practice regarding inclusive education.

What are the risks and benefits of taking part?
The information given will remain confidential and will only be seen by the research team listed at the start of the letter. Neither you, your school/department, your university, nor your students will be identifiable in any published report resulting from the study.

We anticipate that the findings of the study will be useful for teacher educators in planning how they might promote inclusive education in student teachers. An electronic summary of the findings of the study can be made available to you by contacting the researcher.

What will happen to the data?
Any data collected will be held in strict confidence and no real names will be used in this study or in any subsequent publications. The records of this study will be kept private. No identifiers linking you, your students or your university to the study will be included in any sort of report that might be published. Participants will be assigned a number and will be referred to by that number in all records. Research records will be stored securely in a locked filing cabinet and on a password-protected computer and only the research team will have access to the records. The data will be destroyed securely once the findings of the study are written up, after five years. The results of the study may be presented at national and international conferences, and in written reports and articles. You can be sent an electronic copy of a summary of these publications if you wish, by contacting the researcher.

What happens if I change my mind?
You can change your mind at any time without any repercussions. If you change your mind after data collection has ended, we will discard the school/department's data.

Who has reviewed the study?
This project has been reviewed following the procedures of the University Research Ethics Committee and has been given a favorable ethical opinion for conduct. The University has the appropriate insurances in place. Full details are available on request.

What happens if something goes wrong?
In the unlikely case of concern or complaint, you can contact Dr Cathy Tissot at University of Reading by phone on (0044) 01183782674 or by email on c.tissot@reading.ac.uk.

Where can I get more information?
If you would like more information, please contact Ms Sufang Li by QQ on 914661753 or by email on sufang.li@pgr.reading.ac.uk.

What do I do next?
We do hope that you will agree to your participation in the study. If you do, please complete the attached consent form and return it to us by email. A scanned PDF file attached to your email is much appreciated.

Thank you for your time.

Yours sincerely,

Sufang Li

Signed:

Date: 15 April, 2014

Researcher:
Name: Ms Sufang Li
QQ: 914661753
Email: sufang.li@pgr.reading.ac.uk

Supervisor:
Name: Dr Cathy Tissot
Title: Director of Teaching and Learning
Email: c.tissot@reading.ac.uk

Research Project: Student Teachers' Perspectives of the Impact of Training on Their Teaching Practice Regarding Inclusive Education and Special Educational Needs in a City in China

Dean Consent Form

I have read the Information Sheet about the project and received a copy of it. I understand what the purpose of the project is and what is required of me. All my questions have been answered.

Name of dean: _____

Name of school and university:

_____

Please tick as appropriate:

I consent to the involvement of my school/department in the project as outlined in the information sheet. ☐

Signed: _____

Date: _____

Researcher:
Name: Ms Sufang Li
QQ: 914661753
Email: sufang.li@pgr.reading.ac.uk

Supervisor:
Name: Dr Cathy Tissot
Title: Director of Teaching and Learning
Email: c.tissot@reading.ac.uk

Student Teacher Information Sheet

Research Project: Student Teachers' Perspectives of the Impact of Training on Their Teaching Practice Regarding Inclusive Education and Special Educational Needs in a City in China

Dear Student,

We would like to invite you to take part in a research study about inclusive education.

What is the study?
We are doing a project to investigate the impact of a training course on classroom teaching practice regarding inclusive education. We would like you to help us with the project. We have already asked your university and dean and they are happy for you to take part.

Why have I been chosen to take part?
You have been invited to take part because you are majoring in English language teaching and in your third year, and all third-year students majoring in English language teaching at your university have been chosen to take part in this project.

Do I have to take part?
I think you will find the course interesting and useful but no, you do not have to take part in the research although you are required to complete the training course as it is part of your studies. Also, you can stop helping us with our project at any time, without giving a reason. Just tell Ms Sufang Li by QQ on 914661753 or by email on sufang.li@pgr.reading.ac.uk.

What will happen if I take part?
You will be invited to answer a questionnaire before and after a training course offered by us. The questionnaire asks about your views and attitudes towards inclusive education and the course will be on inclusion and special educational needs. The training course will be approximately 16 sessions given by the research team (distance learning and taught sessions blended), and you will be required to write reflections online (in your designated Tencent QQ blogs or WeChat groups) after the sessions, as part of the data to be collected in the study. These reflections will be approximately 200 words in English and you will be supposed to spend about 30 minutes completing each of them. After analysing the initial data collected, we will interview approximately 10-15 student teachers from you who have volunteered to do so. The interviews will be based on how you see the impact of the training on your teaching practice, which will be 30 minutes long, through your mobile phone via Skype (or video chat via Tencent QQ, depending on which is applicable for you), and carried out after the completion of your teaching practice.

What are the risks and benefits of taking part?
The information you give will remain confidential and will only be seen by the research team listed at the start of the letter. Neither you, your fellow students, nor your university will be identifiable in any

published report resulting from the study. Your involvement with the research project will not affect any grades when you take the course.

We anticipate that the findings of the study will be useful for teacher educators in planning how they might promote inclusive education in student teachers. An electronic summary of the findings of the study can be made available to you by contacting the researcher.

What will happen to the data?
Any data collected will be held in strict confidence and no real names will be used in this study or in any subsequent publications. The records of this study will be kept private. No identifiers linking you, your students or your university to the study will be included in any sort of report that might be published. Participants will be assigned a number and will be referred to by that number in all records. Research records will be stored securely in a locked filing cabinet and on a password-protected computer and only the research team will have access to the records. The data will be destroyed securely once the findings of the study are written up, after five years. The results of the study may be presented at national and international conferences, and in written reports and articles. You can be sent an electronic copy of a summary of these publications if you wish, by contacting the researcher.

What happens if I change my mind?
You can change your mind at any time without any repercussions. If you change your mind after data collection has ended, we will not use your data.

Who has reviewed the study?
This project has been reviewed following the procedures of the University Research Ethics Committee and has been given a favorable ethical opinion for conduct. The University has the appropriate insurances in place. Full details are available on request.

What happens if something goes wrong?
In the unlikely case of concern or complaint, you can contact Dr Cathy Tissot at University of Reading by phone on (0044) 01183782674 or by email on c.tissot@reading.ac.uk.

Where can I get more information?
If you would like more information, please contact Ms Sufang Li by QQ on 914661753 or by email on sufang.li@pgr.reading.ac.uk.

What do I do next?
We do hope that you will agree to take part in the study. If you are happy to take part you do not need to do anything. If, however, you **do not** wish to take part you need to complete and return the consent form on the next page to us as soon as possible. A scanned PDF file attached to your email is much appreciated.

Thank you for your time.

Yours sincerely,

Sufang Li

Signed:

Date: 15 April, 2014

Researcher:
Name: Ms Sufang Li
QQ: 914661753
Email: sufang.li@pgr.reading.ac.uk

Supervisor:
Name: Dr Cathy Tissot
Title: Director of Teaching and Learning
Email: c.tissot@reading.ac.uk

Research Project: Student Teachers' Perspectives of the Impact of Training on Their Teaching Practice Regarding Inclusive Education and Special Educational Needs in a City in China

IF YOU ARE HAPPY TO TAKE PART THEN YOU DO NOT NEED TO TAKE ANY FURTHER ACTION.

****

IF YOU DO NOT WANT TO BE INCLUDED THEN PLEASE FILL IN THE FORM BELOW AND RETURN IT TO US.

Student Teacher Consent Form

I **DO NOT** wish to take part in the questionnaire or the online focus groups of the research.

Name: _____

Name of school and university:

_____

Please tick as appropriate:

I **do not** consent to the involvement in the questionnaire or the online focus groups of the project as outlined in the information sheet. ☐

Signed: _____

Date: _____

University of Reading
Institute of Education
Ethical Approval Form A (version February 2014)

Tick one:

Staff project: ___ PhD ✓

Name of applicant (s): Sufang Li

Title of project: Student Teachers' Perspectives of the Impact of Training on Their Teaching Practice Regarding Inclusive Education and Special Educational Needs in a City in China

Name of supervisor (for student projects): Cathy Tissot & Helen Bilton

Please complete the form below including relevant sections overleaf.

	YES	NO
Have you prepared an Information Sheet for participants and/or their parents/carers that:		
a) explains the purpose(s) of the project	✓	
b) explains how they have been selected as potential participants	✓	
c) gives a full, fair and clear account of what will be asked of them and how the information that they provide will be used	✓	
d) makes clear that participation in the project is voluntary	✓	
e) explains the arrangements to allow participants to withdraw at any stage if they wish	✓	
f) explains the arrangements to ensure the confidentiality of any material collected during the project, including secure arrangements for its storage, retention and disposal	✓	
g) explains the arrangements for publishing the research results and, if confidentiality might be affected, for obtaining written consent for this	✓	
h) explains the arrangements for providing participants with the research results if they wish to have them	✓	
i) gives the name and designation of the member of staff with responsibility for the project together with contact details, including email . If any of the project investigators are students at the IoE, then this information must be included and their name provided	✓	
k) explains, where applicable, the arrangements for expenses and other payments to be made to the participants		✓
j) includes a standard statement indicating the process of ethical review at the University undergone by the project, as follows: 'This project has been reviewed following the procedures of the University Research Ethics Committee and has been given a favourable ethical opinion for conduct'.	✓	
k)includes a standard statement regarding insurance: "The University has the appropriate insurances in place. Full details are available on request".	✓	
Please answer the following questions		
1) Will you provide participants involved in your research with all the information necessary to ensure that they are fully informed and not in any way deceived or misled as to the purpose(s) and nature of the research? (Please use the subheadings used in the example information sheets on blackboard to ensure this).	✓	
2) Will you seek written or other formal consent from all participants, if they are able to provide it, in addition to (1)?	✓	
3) Is there any risk that participants may experience physical or psychological distress in taking part in your research?		✓

4) Have you taken the online training modules in data protection and information security (which can be found here: http://www.reading.ac.uk/internal/imps/Staffpages/imps-training.aspx)?	✓		
5) Have you read the Health and Safety booklet (available on Blackboard) and completed a Risk Assessment Form to be included with this ethics application?	✓		
6) Does your research comply with the University's Code of Good Practice in Research?	✓		
	YES	NO	N.A.
7) If your research is taking place in a school, have you prepared an information sheet and consent form to gain the permission in writing of the head teacher or other relevant supervisory professional?			✓
8) Has the data collector obtained satisfactory DBS clearance?			✓
9) If your research involves working with children under the age of 16 (or those whose special educational needs mean they are unable to give informed consent), have you prepared an information sheet and consent form for parents/carers to seek permission in writing, or to give parents/carers the opportunity to decline consent?			✓
10) If your research involves processing sensitive personal data[1], or if it involves audio/video recordings, have you obtained the explicit consent of participants/parents?			✓
11) If you are using a data processor to subcontract any part of your research, have you got a written contract with that contractor which (a) specifies that the contractor is required to act only on your instructions, and (b) provides for appropriate technical and organisational security measures to protect the data?			✓
12a) Does your research involve data collection outside the UK?	✓		
12b) If the answer to question 12a is "yes", does your research comply with the legal and ethical requirements for doing research in that country?	✓		
13a. Does the proposed research involve children under the age of 5?		✓	
13b. If the answer to question 13a is "yes": My Head of School (or authorised Head of Department) has given details of the proposed research to the University's insurance officer, and the research will not proceed until I have confirmation that insurance cover is in place.			
If you have answered YES to Question 3, please complete Section B below			

PLEASE COMPLETE **EITHER SECTION A OR B** AND PROVIDE THE DETAILS REQUIRED IN SUPPORT OF YOUR APPLICATION, THEN SIGN THE FORM (SECTION C)

A: My research goes beyond the 'accepted custom and practice of teaching' but I consider that this project has **no** significant ethical implications.	✓

Give a brief description of the aims and the methods (participants, instruments and procedures) of the project in up to 200 words. Attach any consent form, information sheet and research instruments to be used in the project (e.g. tests, questionnaires, interview schedules).

Please state how many participants will be involved in the project:
This form and any attachments should now be submitted to the Institute's Ethics Committee for consideration. Any missing information will result in the form being returned to you.

The study is based on my MA dissertation and a careful literature review about inclusive education in China, which indicated that although legislation is there for inclusion, very little has been done in universities regarding teacher training on inclusive education and special educational needs.

The purpose of the study is, therefore, to investigate what impact, in the student teachers' perspective, will training on inclusive education have on their teaching practice in schools in China. Specifically, it aims to find out the views and awareness of student teachers in a university in China by probing into their understanding and awareness of inclusion, their experience of inclusion, their attitudes towards inclusion, as well as their perspective of the impact of a training course on their understanding and teaching practice, with the hope to make recommendations regarding how to help promote inclusive education in China in those training to be teachers.

[1] Sensitive personal data consists of information relating to the racial or ethnic origin of a data subject, their political opinions, religious beliefs, trade union membership, sexual life, physical or mental health or condition, or criminal offences or record.

The methods of the study will be

Phase 1: a survey questionnaire pre-and-post intervention (which will be a required course for student teachers prior to their teaching practice),

Phase 2: online focus groups during the course (i.e. their reflections on each session), and

Phase 3: follow-up interviews after their teaching practice with volunteers (about their perspectives of the impact of the training).

For Phase 1, the questionnaire will be distributed in the same sample before the intervention and then again afterwards, , with the purpose of finding out the changes over time, i.e. before and after the intervention, and therefore students' ID will be asked in the questionnaire. This will allow me to track the sample across the three data collection methods and also serve the purpose of identifying possible volunteers for case studies for Phase 2 and Phase 3 of the study, when there are significant changes pre-and-post the course. Neither the students' ID nor their participation in the study will affect their marks for the course as I will not be involved in the marking.

Anticipated number of participants is 100 for the survey and online focus groups, and 10 for the interviews.

B: I consider that this project **may** have ethical implications that should be brought before the Institute's Ethics Committee.	

Please provide all the further information listed below in a separate attachment.

1. title of project
2. purpose of project and its academic rationale
3. brief description of methods and measurements
4. participants: recruitment methods, number, age, gender, exclusion/inclusion criteria
5. consent and participant information arrangements, debriefing (attach forms where necessary)
6. a clear and concise statement of the ethical considerations raised by the project and how you intend to deal with then.
7. estimated start date and duration of project

This form and any attachments should now be submitted to the Institute's Ethics Committee for consideration. Any missing information will result in the form being returned to you.

C: SIGNATURE OF APPLICANT:

I have declared all relevant information regarding my proposed project and confirm that ethical good practice will be followed within the project.

Signed: Print Name. SUFANG LI Date 10 June, 2014 .

STATEMENT OF ETHICAL APPROVAL FOR PROPOSALS SUBMITTED TO THE INSTITUTE ETHICS COMMITTEE

This project has been considered using agreed Institute procedures and is now approved.

Signed: … Print Name…Daisy Powell. Date…3/9/2014
(IoE Research Ethics Committee representative)*

* A decision to allow a project to proceed is not an expert assessment of its content or of the possible risks involved in the investigation, nor does it detract in any way from the ultimate responsibility which students/investigators must themselves have for these matters. Approval is granted on the basis of the information declared by the applicant.