University of Glasgow

College of Social Sciences

Understanding Teacher Education Programmes in China and Scotland in the Context of Globalisation

WEIJUN LIANG

MSc Educational Studies

Submitted in fulfilment of the requirements of the

Degree of Doctor of Philosophy

School of Education

College of Social Sciences

University of Glasgow

March 2024

Abstract:

In the context of globalisation, there is an increasing demand for more knowledgeable and highly skilled teachers. Teacher education programmes play a crucial role in shaping the quality and effectiveness of teachers in the context of globalisation in education policy. As the world becomes increasingly interconnected and knowledge-based, these programmes are designed to equip aspiring teachers with the necessary knowledge, skills, and competencies to meet learners' diverse needs and contribute to improving education systems. The previous research and literature have focused on various aspects of teacher education, including curriculum design, pedagogical approaches, assessment methods and teachers. Some researchers have investigated teacher education programme in different regions or countries, such as Australia, Canada, Hong Kong, Japan and the USA. However, there is limited research that focuses on Scotland and mainland China. To address this gap, this research aims to understand two teacher education programmes in China and Scotland in the context of globalisation, with a particular focus on the perspectives and experiences of student teachers and educators in the programmes.

Three educators and six student teachers from the Scottish University and ten student participants from the University in South China are involved in this study. An interpretivist research paradigm and a qualitative case study approach have been applied. Data were collected through individual interviews with the educators and focus groups with student participants through online platforms, such as Zoom, WeChat or QQ Meeting, due to the COVID-19 restrictions. King's Template analysis and deductive analysis were employed for the data analysing.

The findings reveal that there are different understandings of globalisation and its effects on teacher education: globalisation did not seem to be well understood by student participants and was mainly spoken about by the lecturers in terms of internationalisation. There were also different understandings of teacher effectiveness, teacher quality and the design of teacher education programmes in the two universities. Student teachers' experiences and perceptions of teacher effectiveness and quality were influenced more strongly by the teaching activities employed within the programmes than by globalised concepts of teacher effectiveness and quality. However, it is still important for teacher education programmes to strike a balance that prepares teachers to navigate the complexities of education in a globalised world while meeting the needs of their specific contexts. The findings also suggest that the design of both teacher education programmes

is primarily shaped by factors that are specific to each country or region. Each country has its own traditions, values, and professional expectations regarding the teaching profession, which influence the design and content of teacher education programmes. Following from these findings, recommendations for teacher education are provided, including suggestions for pedagogical approaches, curriculum content development, and technology integration.

It is important to acknowledge the limitations of this research, including the small sample size and the subjective nature of personal experiences shared by participants in teacher education programmes. This research was also affected by the COVID-19 pandemic. Nevertheless, this research contributes to the understanding of effective teacher education in a globalised world, informing policy and practice in both countries and suggesting potential areas for further research.

Keywords: Globalisation, Teacher education programmes, Scotland, China, teacher effectiveness, teacher quality, programme design

CONTENT

1. Chapter 1 Introduction 11

2. Chapter 2 Literature Review 17

2.1 What is globalisation? 17

2.2 The Knowledge Economy 21

2.3 Globalisation and Education 26

2.4 The Role of the OECD and the Influence of PISA 29

2.4.1 The OECD 29

2.4.2 The PISA initiative 32

2.5 Teacher Quality and Effectiveness 33

2.6 Teacher Education and Globalisation 36

2.7 Conclusion 41

3. Chapter 3 Teacher Education Contexts in China and Scotland 42

3.1 Teacher Education in China 42

3.2 Teacher Education in Scotland 51

3.3 The Case Study Programmes in China and Scotland 55

3.4 Conclusion 59

4. Chapter 4 Methodology 61

4.1 Research Paradigm: Interpretivism 61

4.2 Research Approach 63

4.2.1 Qualitative research 63

4.2.2 Case study approach 64

4.3 Approach to Data Collection 66

4.3.1 Participant Selection and Recruitment 68

4.3.2 Individual Interviews 69

4.3.3 Focus Groups 70

4.4 Approach to Data Analysis 71

4.4.1 King's Template Analysis 72

4.4.2 Language Challenges 76
4.5 Ethical issues 76
4.6 Conclusion 78
5. Chapter 5 Findings Case Study 1: Scotland 79
5.1 Globalisation and its Effects on Teacher Education 79
5.2 Globalisation and Knowledge 84
5.3 Understanding Teacher Effectiveness and Teacher Qualities 86
5.3.1 Teacher Effectiveness 86
5.3.2 Teacher Qualities 90
5.4 Perceptions of the PGDE Programme 91
5.4.1 Strengths of the Programme 92
5.4.2 Perceptions of Course Approaches 94
5.4.2.1 Lectures and Seminars 94
5.4.2.2 Placement Experiences 97
5.4.3 Perceptions of Challenges 101
5.4.4 Suggestions for Improvement 102
5.5 Conclusion 104
6. Chapter 6 Findings Case Study 2: China 107
6.1 Understandings of Globalisation 107
6.2 The Impact of Globalisation on Education 108
6.3 Perceptions of Teacher Quality and Teacher Effectiveness 110
6.4 Perceptions of the teacher education programme 115
6.5 Suggestions for changes 117
6.6 The importance of placement 121
6.7 The Gap Between the Aim of the Programme and the Reality for Students 122
6.8 Conclusion 124
7. Chapter 7 Discussion 126
7.1 Understanding Teacher Quality and Effectiveness in the Context of Globalisation 126

7.1.1 Dimensions of Teacher Quality and Effectiveness 127
7.1.2 Effective Teachers and 'Good' Teachers 128
7.1.3 Assessing and Developing Teacher Quality and Effectiveness 130
7.2 The Globalisation and Internationalisation of Teacher Education 132
7.3 The influence of globalisation on the design of the programmes 135
7.3.1 The Influence of Policy and Professional Standards 136
7.3.2 The Influence of Curriculum Reforms 137
7.3.3 Adapting Global Ideas to Local Conditions 138
7.4 Student Teachers' Experiences of the Programmes 139
7.5 What Might the Programmes Learn from Each Other 142
7.5.1 Professional Culture and Standards 143
7.5.2 Programme Structures and Content 144
7.5.3 Programme Approaches to Pedagogy and Assessment 145
7.6 Conclusion 147
8. Chapter 8 Conclusion 149
8.1 The Research Questions 149
8.1.1 How are teacher quality and effectiveness understood in the context of globalisation? 149
8.1.2 To what extent does globalisation in education policy influence the design of the two teacher education programmes? 151
8.1.3 What factors affect student teachers' experiences of teacher education programmes? 153
8.1.4 What are the differences and similarities in the teacher education programmes in Scotland and China? 155
8.1.5 What, if anything, could the programmes learn from one another, and what might be learned from both programmes about how globalisation influences teacher education? 155
8.2 Limitations of the Research 156
8.3 Policy Implications 158

8.4 Practice Implications 159

8.5 Suggestions for Future Research 161

References 163

Appendix 1: Excerpt from literature review matrix 194

Appendix 2: King's Template Example 198

Appendix 3: Key characteristics of 3 academics from the University in Scotland 199

Appendix 4: Key characteristics of 6 student participants from the University in Scotland 200

Appendix 5: Key characteristics of 10 student participants from the University in China 201

Appendix 6: Consent Form - Focus groups 202

Appendix 7: Consent Form – Interview 204

Appendix 8: Plain Language Statement – Focus groups 206

Appendix 9: Plain Language Statement – Interview 209

Appendix 10: Interview semi-structured questions 211

Appendix 11: Focus group semi-structured questions 212

Appendix 12: Example of Coding 213

Acknowledgement:

I would like to extend my utmost gratitude to all those who have been instrumental during the writing of my PhD thesis. To each and every person who has supported me along this remarkable journey, I extend my heartfelt appreciation. Your unwavering support and encouragement have propelled me forward on this remarkable journey, and I am forever grateful for your presence in my life.

To my supervisor, I am profoundly indebted to you for your dedication and tireless guidance throughout this arduous process. Your wisdom, expertise, and unyielding belief in my abilities have been the driving force behind the culmination of this thesis. You have challenged me to push the boundaries of knowledge, encouraged me to explore new frontiers, and constantly inspired me to strive for excellence. Your mentorship has shaped not only my research but also my character as a budding researcher.

I would also like to express my deepest appreciation to my family for their unwavering support during the course of my PhD studies. Though they may not possess an intimate understanding of the intricacies of doctoral research, their boundless love, encouragement, and understanding have fuelled my determination to succeed. Despite the pressures of time management and cultural differences, their belief in my abilities has fortified my resolve to overcome obstacles and surpass expectations. Their faith in my capabilities has been a constant source of motivation and strength throughout this journey.

The challenges posed by the global COVID-19 pandemic cannot be understated, and I wish to acknowledge its profound impact on my research journey. The isolation and uncertainties that accompanied this unprecedented situation tested my resilience and mental fortitude. However, I was able to navigate these uncharted waters, emerging stronger and more determined than ever. I must also express my deepest gratitude to the incredible network of peers within the Postgraduate Research (PGR) team. The camaraderie, intellectual discourse, and shared experiences have been an invaluable source of inspiration and growth. The seminars, discussions, and collaborative endeavours have not only enriched my research but have also broadened my horizons and fostered a sense of community that is invaluable on this scholarly path.

In closing, I am filled with profound gratitude for the support, encouragement, and belief that have propelled me through the challenges and triumphs of this PhD journey. It is with

great humility and boundless enthusiasm that I embark on the next chapter of my academic career, fuelled by the knowledge that I am surrounded by a network of extraordinary individuals who have helped shape me into the researcher I am today.

Author's Declaration

"I declare that, except where explicit reference is made to the contribution of others, that this dissertation is the result of my own work and has not been submitted for any other degree at the University of Glasgow or any other institution."

Printed Name: WEIJUN LIANG

List of Abbreviations

BEd	Bachelor of Education
BERA	British Educational Research Association
CEFR	Common European Framework of Reference for Languages
CfE	Curriculum of Excellence
EU	European Union
GCSE	The General Certificate of Secondary Education
GTCS	General Teaching Council for Scotland
ITE	Initial Teacher Education
MOE	Ministry of Education of the People's Republic of China
NCBE	New Curriculum of Basic Education
NPC	National People's Congress
OECD	Organisation for Economic Cooperation and Development
SFR	Standards for Full Registration
PGDE	Professional Graduate Diplomas in Education
PISA	Programme for International Student Assessment
SPR	Standards for Provisional Registration
STEM	Science, Technology, Engineering, and Mathematics
UNESCO	United Nations Educational, Scientific and Cultural Organisation

1. Chapter 1 Introduction

Teachers have an essential role in improving student learning and academic performance (Akiba, 2013). However, as the world becomes increasingly interconnected and knowledge-based, teacher education programmes must equip and prepare aspiring teachers with the necessary knowledge, skills, and competencies to meet the diverse needs of learners and contribute to the improvement of education systems in a globalised world (Cochran-Smith and Fries, 2005). In other words, teacher education programmes play a crucial role in shaping the quality and effectiveness of teachers in the context of globalisation (Goodwin, 2010; Darling-Hammond and Lieberman, 2013). This research aims to understand two teacher education programmes in China and Scotland in the context of globalisation, with a particular focus on the perspectives and experiences of student teachers and educators in those programmes.

Previous research has examined various aspects of teacher education, including curriculum design, pedagogical approaches, assessment methods and teacher quality (Cochran-Smith and Fries, 2005; Darling-Hammond, 2017; El-Abd et al., 2021). Some comparative case studies have investigated the programmes in a specific location in the context of globalisation, such as Canada (Larsen, 2016), and Guyana, Japan, South Africa and the USA (Douglas-Gardner and Callender, 2023). However, teacher education programmes continue to evolve and adapt to the changing demands of a globalised world, and there is a lack of research specifically focusing on Scotland and mainland China. With globalisation exerting significant influence on education policies and practices, it is crucial to understand how teacher education programmes have responded to these demands and how they are preparing future teachers to navigate a globalised world. My research explores these two elements in terms of the postgraduate programme of initial teacher education at a University in Scotland and the undergraduate teacher education programme at a University in South China. (To de-identify the institutions, they will be referred to in this thesis as either the *University in Scotland* or the *Scottish University*, and the *University in China* or *South China.)* The research, therefore, seeks to contribute to the existing literature by exploring globalisation with respect to teacher education in two different countries with different cultural and educational histories. Additionally, by including these two contrasting nations, this research aims to further expand the body of research on teacher education in China, ultimately enhancing our understanding of teacher preparations in this nation.

Investigating teacher education programmes is critical as they serve as the foundation for producing effective and qualified teachers (Cochran-Smith and Zeichner, 2005; Darling-Hammond, 2017). Firstly, the quality of teacher education affects the quality of classroom instruction and student learning outcomes. Effective teacher education helps student teachers possess the necessary pedagogical knowledge, instructional strategies, and classroom management skills to create engaging and meaningful learning experiences for their students (Darling-Hammond, 2000). This PhD study will help understanding of the importance of teacher education programmes in ensuring that teachers are equipped with the necessary skills and expertise to meet the diverse needs of learners. Moreover, teacher education programmes contribute to the professionalisation of the teaching workforce by establishing standards and expectations for teaching practice. These programmes provide a framework for aspiring teachers to develop a deep understanding of educational theories, research-based practices, and ethical considerations. Aligning teacher preparation with professional standards, helps ensure that new teachers are equipped with the necessary competencies to navigate the complexities of the profession.

The literature I have read for this PhD study (see Chapter 2) suggests that globalisation has led to increased interconnectedness and interdependence among nations, resulting in diverse classrooms with students from different cultural backgrounds and experiences. Teacher education programmes can address the demands of globalisation by preparing teachers to be culturally responsive and adaptable (Goodwin, 2020; Guo, 2014). This involves equipping teachers with the knowledge and skills to work effectively with diverse student populations, foster cross-cultural understanding, and integrate global perspectives into their teaching practices (Darling-Hammond, 2017; Kim et al., 2019; Goodwin, 2020). Furthermore, teacher education programmes can respond to the trends of globalisation by incorporating international perspectives and best practices from around the world (Lin, 2019; Larsen, 2016). This can involve providing opportunities for student teachers to engage in international exchanges, teaching practicums in different cultural contexts, or learning experiences that promote global competence (Larsen, 2016; Li et al., 2019). By exposing future teachers to diverse educational systems and practices, these programmes help broaden their perspectives and enable them to better meet the needs of an increasingly interconnected world.

This research developed from my master's dissertation, which focused on investigating student motivation in Chinese and Scottish teacher education programmes. I recognised the

critical role that motivation plays in driving student engagement, commitment, and overall success in the learning process. Through that research, my interest in teacher education deepened, and I developed a foundational understanding of the complexities involved in designing effective teacher education programmes. While student motivation is undoubtedly significant, it is essential to acknowledge that in the context of globalisation, simply enhancing student motivation is not enough to create comprehensive and impactful teacher education programmes. My master's dissertation therefore strengthened my understanding of the importance of student motivation but also highlighted the broader factors that influence the design and delivery of teacher education programmes. It emphasised the significance of a holistic approach that considers the interplay between student motivation. Building upon this foundation, the current research focuses more on policy frameworks, cross-national collaborations, and the diverse perspectives (student teachers and educators) within the programmes I have studied. This research aims to explore some of the challenges of globalisation and the responses of the two programmes to educating teachers in an era of globalisation. I hope to provide valuable insights into the impact of globalisation on education policy and practice, as an understanding of teacher effectiveness and teacher quality. Through an extensive literature review, data collection methods such as focus groups with student teachers and interviews with educators, and a thematic analysis of the data, this research seeks to provide meaningful contributions to the field of teacher education and provide the groundwork for future development in the preparation of teachers in a globalised world.

The choice of the research sites was driven by multiple considerations. Firstly, China's inclusion provides an opportunity to examine the teacher education programmes of a rapidly developing nation. As one of the world's largest countries with a vast population and the second-largest gross domestic product economy body in the world, China faces unique challenges in meeting the educational needs of its diverse student body (Guo et al., 2013). Exploring the teacher education landscape in China offers valuable insights into the strategies, innovations, and obstacles encountered in a country undergoing significant educational reforms. In contrast, Scotland represents a well-established education system with a longstanding commitment to teacher professionalism and continuous improvement. A well-established tradition of providing quality initial teacher education highlights Scotland’s commitment to teacher professionalism (Donaldson, 2010). By including Scotland as a research site, this research investigates the practices, policies, and challenges faced by a system that has achieved a level of stability and a level of political trust in

teacher education (Gray and Weir, 2014; Donaldson, 2010). Understanding the approaches taken by a country like Scotland can provide valuable lessons and potential areas of collaboration with other educational systems. By investigating teacher education programmes in these two contexts, this research aims to contribute to the global knowledge base on teacher education. The challenges and responses within different educational systems offer insights into the universality of certain issues, as well as the contextual factors that shape the design and implementation of teacher education programmes. This comprehensive understanding also can inform policy decisions, enhance professional development opportunities, and foster international collaborations aimed at improving the quality of teacher education worldwide.

The selection of the two universities as research was influenced by my personal academic background and familiarity with these two institutions. Having completed a Master's degree at the Scottish University in MSc Educational Studies and a Bachelor's degree in Chinese Language and Literature (specialised in teacher education) at the University in South China, I have first-hand knowledge of some of the programmes and the cultural contexts in which these institutions operate. Furthermore, my prior experience within these institutions establishes a foundation of trust and rapport with key stakeholders, including faculty members, student teachers, and education administrators. This facilitated data collection efforts and encouraged open and candid discussions during interviews and focus group sessions allowing for a more in-depth exploration of the challenges and responses within the specific teacher education programmes.

This research focuses on the following five questions:

1. How are teacher quality and effectiveness understood in the context of globalisation?
2. To what extent does globalisation in education policy influence the design of teacher education programmes?
3. What factors affect student teachers' experiences of teacher education programmes?
4. What are the differences and similarities in the teacher education programmes in Scotland and China?
5. What, if anything, could the programmes learn from one another, and what might be learned from both programmes about how globalisation influences teacher education?

There are 8 chapters in this thesis which explore the research questions. The chapters are outlined below.

Chapter 1 has given an overview of the research, highlighting the background to the study and the importance of investigating teacher education programmes in an era of globalisation.

Chapter 2 presents a review of literature that synthesises research findings and publications to explore the concept of globalisation, globalisation in education policy, the concepts of teacher effectiveness and teacher quality in a globalised era and teacher education around the world.

Chapter 3 provides an overview of teacher education in China and Scotland, including historical development, policy context, and teacher education approaches for the two nations and two programmes. Some similarities and differences between the two contexts are highlighted. This chapter also provides a detailed overview of both programmes based on information from the handbooks of the programmes in both sites of study. The programme structures, curriculum components and assessment methods are discussed.

Chapter 4 discusses the qualitative research methodology that has been selected for this study, including the rationale for selecting the case study approach to explore the two teacher education programmes and the rationale for choosing focus groups and interviews to collect data with student teachers and teacher educators. It also discusses the ethical considerations and data analysis procedures using King's (2004) approach. King's Template Analysis (2004) offers a systematic framework for sorting, categorising, and coding data, leading to the emergence of conceptual themes.

Chapter 5 and Chapter 6 present the findings from the case studies of the programmes in Scotland and China, respectively. The findings include participants' understandings of globalisation and its effects on teacher education, globalisation and knowledge, teacher effectiveness and teacher quality, and perceptions of the programme content and approaches (including challenges and suggestions for improvement).

Chapter 7 explores the research findings in relation to the research questions and the literature review.

Chapter 8 discusses the practical implications of the research findings, addressing their potential impact on teacher education programmes in China and Scotland. The limitations of this research are also acknowledged. This chapter also provides recommendations for improving teacher education programmes based on the research findings and conclusions drawn from the study. It is significant to discover strategies and approaches to enhance the quality and effectiveness of teacher education programmes in both China and Scotland in response to the trend of globalisation.

2. Chapter 2 Literature Review

This chapter presents a literature review which explores globalisation and its possible influence on education in general and teacher preparation specifically. The first section defines globalisation and its impact on the idea of the knowledge economy. The following section examines the relationship between globalisation and education, including how it has influenced policy and practice. The role of the Organisation for Economic Cooperation and Development (OECD) and the influences of the Programme for International Student Assessment (PISA) are also discussed. Furthermore, this review explores the factors contributing to teacher quality and effectiveness, including teacher qualifications, skills, and pedagogical practices. The relationship between teacher quality and student achievement is also discussed. Lastly, an overview of teacher education programmes is provided, focusing on their approaches in response to the demands of a globalised world.

2.1 What is globalisation?

The term globalisation has been discussed extensively in the literature and has been a research focus for some time, gradually becoming rooted in people's consciousness (Stromquist and Monkman, 2014). This term has broadly influenced different fields, such as social, political, cultural, technological and economic studies (Douglas-Gardner and Callender, 2023; Mundy et al., 2016; Stromquist and Monkman, 2014). However, defining globalisation proves challenging, as highlighted by Menter (2019), Goodwin (2020) and Rizvi and Lingard (2000). Some researchers, including Bovill and Leppard (2006), Rizvi and Lingard (2006), and Stromquist and Monkman (2014), define the term globalisation with respect to neoliberal economic perspectives. Bovill and Leppard (2006) and Stromquist and Monkman (2014) suggest that the focus of neoliberal globalisation is the world market and present evidence of countries becoming more similar economically. The impact of globalisation has been marked by the importation and entrenched presence of neoliberal ideologies and discourses, which prioritise free market economies, profit generation, global competitiveness, and the cultivation of human capital to drive capitalist mechanisms (Goodwin, 2020). However, it is important to note that these neoliberal economic policies focused on economic growth and increased productivity have led to 'profound income, health and social inequalities' and 'a strong emphasis on the reduction of population growth in poorer countries' (Bovill and Leppard, 2006, p.393). Smith (2016) further argues that neoliberal globalisation also causes inequalities in wealth, education, and health in and between countries. Therefore, there is a need for a critical examination of the consequences of globalisation, particularly its neoliberal manifestations, to understand

the multifaceted effects on societies and individuals. While globalisation has brought opportunities for economic development and connectivity, it has also amplified inequalities and perpetuated systemic disadvantages (Amis et al., 2020). By analysing the social, economic, and political ramifications of globalisation, policymakers, researchers, and educators can work towards developing strategies that mitigate its negative consequences and promote more equitable outcomes (Mundy et al., 2016; Stromquist and Monkman, 2014). Furthermore, highlighted by Goodwin (2020), globalisation, in this context, refers to the economic model driven by multinational corporations and neoliberal discourses, resulting in the commodification of education.

Mundy et al. (2016) relate the definition of globalisation to geography, where it encompasses the process and consequences associated with the reduction of distances between different locations on Earth. According to Zhao (2010), globalisation encompasses the processes and consequences associated with the reduction of distances between different locations on Earth. It extends beyond a single event of location and has significant implications for learning and the diverse individuals involved (O'Connor and Zeichner, 2011). And similar as stated by Weber (2007), alterations and occurrences in a particular region of the globe frequently have a profound impact on the global community as a whole. Therefore, from a geographical perspective, globalisation is closely linked to the creation of a borderless world through global communication, social and cultural exchange, and the diminishing significance of national boundaries (Bovill and Leppard, 2006; Lauder et al., 2006; Yemini, Tibbitts and Goren, 2019; Zajda, 2015a). It has contributed to the increasing cultural similarity between countries (Bovill and Leppard, 2006;). Oberoi and Halsall (2018, p.6) also agree that globalisation is a 'messy concept'. However, it has become a 'paradigm of seeing and interpreting things around the world'. They argue that globalisation has helped to break barriers and free boundaries between countries, 'influencing geopolitical reality, culture and much more' (Oberoi and Halsall, 2018, p.6). Zajda (2015a) also argues that, with the declining significance of boundaries between countries, the relationship between people and governments worldwide has become more interdependent.

The phenomenon of globalisation involves the movement and integration of a wide range of global locations, resulting in interconnectivity and interdependence (Ritzer, 2007). Xu and Halsall (2018) and Lauder et al. (2006) perceive that information and knowledge spread more quickly and extensively because of the wide use of the Internet. Additionally,

an increased number of international and multinational companies and universities communicate more frequently across borders (Lauder et al., 2006). Moreover, the interdependence of countries is also reflected in greater mobility with an increasing amount of immigration (Oberoi and Halsall, 2018). This results in the development of a globalised space where various cultures become more similar, and which requires people to develop skills and capacities related to co-existence in pluralistic societies (Yemini, Tibbitts and Goren, 2019). This interconnectedness and cultural convergence underscore the transformative nature of globalisation, necessitating a critical understanding of its implications (Oberoi and Halsall, 2018). In general, definitions of globalisation are varied, but it is undoubted that globalisation as a phenomenon impacts the economy, technology and nation-states' power around the globe (Gunn, 2017).

Economic globalisation is one of the most significant manifestations of globalisation affecting national and international labour markets in terms of trade, business and industry (Carnoy, 2016; Christensen and Kowalczyk, 2017; Tan and Macneill, 2015). Zajda (2009) considers productivity, quality, efficiency and profit to be part of economic globalisation. In general, economic globalisation has been considered to benefit growth in the global economy (Brown et al., 2008; Oberoi and Halsall, 2018) by reducing the cost of transportation and communication and increasing international trade and investment (Christensen and Kowalczyk, 2017; Shangquan, 2000), or by providing a more highly skilled workforce to enhance economic productivity, or by providing more and better jobs and vacancies (Brown et al., 2008). In economic globalisation, the scale of cross-border trade in products and services has also expanded (Christensen and Kowalczyk, 2017; Oberoi and Halsall, 2018; Shangquan, 2000); the mobility of business has been increased with fewer obstacles (Tan and Macneill, 2015); international capital flows and technologies have spread widely and rapidly; knowledge and resources have been increasingly exchanged; and communication between countries is more accessible, simpler and faster (Tan and Macneill, 2015; Shangquan, 2000). These improvements resulted from substantial investment and technological development (Brown et al., 2001).

However, economic globalisation has brought some adverse impacts, including inequality of income between high-income and low-income countries and increased economic competition among countries which may not benefit every nation equally (Oberoi and Halsall, 2018; Zajda, 2015a). The widening gap between the rich and the poor, both within and between countries, is a concerning consequence of economic globalisation (Dabla-

Norris et al., 2015). This inequality stems from the unequal distribution/access of the advantages and opportunities that come with economic globalisation, often favouring economically advanced nations and multinational corporations. However, developing and/or less wealthy countries not only lack the advantages and development opportunities brought about by economic globalisation but will also be affected when economic globalisation is in crisis. Here is an example: the global financial crisis, which began in 2008, had its roots in the USA, but quickly spread across the world like a contagious phenomenon, impacting nearly all international financial markets simultaneously and subsequently triggering an economic downturn in many countries around the world (Huwart and Verier, 2013). This crisis highlighted the intricate interconnectedness and vulnerability of the global economy, shedding light on the risks and volatility associated with economic globalisation.

Furthermore, there was increasing pressure on governments from increased public spending and social welfare but slow global economic growth (Xu and Halsall, 2018). As a result, governments sought to improve their international competitiveness by focusing on knowledge-intensive products and services, as well as developing skilled workers (Carnoy, 2016). This shift towards what has become known as the knowledge economy has been a popular strategy for many countries, as it involves transitioning from traditional industries to ones that prioritising education, technology, and innovation to develop high-value products and services while also investing in the education and skills of their workforce (Carnoy, 2016). The transition to a knowledge economy, characterised by a heightened focus on education, technology, and innovation, has emerged as a popular strategy for numerous countries to adapt to the demands of economic globalisation (Carnoy, 2016). This shift acknowledges that traditional industries alone may no longer suffice in a globalised world, where knowledge and innovation play pivotal roles in driving economic growth and enhancing competitiveness.

To ensure that the benefits of economic globalisation are equitably shared and its adverse impacts are reduced, it is significant to critically examine its consequences. Scholars and policymakers have underscored the need for inclusive and sustainable approaches to managing economic globalisation, with a focus on factors such as social welfare, environmental sustainability, and the well-being of individuals and communities (Christensen and Kowalczyk, 2017). By adopting such strategies, societies can aim to achieve not only economic growth and technological progress but also for greater social

cohesion and equality in the face of the challenges and opportunities posed by globalisation.

2.2 The Knowledge Economy

Some researchers state the importance of knowledge and recognise it as the heart of economic growth (David and Foray, 2002; Guile, 2010a). Brown and Lauder (2006, p.25) further clarify that the 'dominant view today is that we have entered a global knowledge economy, driven by the application of new technologies and collapsing barriers to international trade and investment, accelerating the evolutionary path from a low to a high skills economy.' As Lauder et al. (2006) point out, technology and knowledge are the two key factors that influence the politics and economics of globalisation and the knowledge economy.

The term ‘knowledge economy’ was introduced by Peter Drucker (1969) in ‘The Age of Discontinuity’ to describe the shift from traditional industrial-based economies to those that rely more heavily on knowledge, technology, and innovation. He distinguished between knowledge workers, who could rapidly learn and adapt to changing circumstances based on a knowledge foundation, and manual workers, who could only perform one specific task in a specific way. Drucker (1969) emphasises that a knowledge foundation enables people to become ‘technologists’ who can apply knowledge, skills, and tools to various situations, leading to greater flexibility and adaptability in the workforce. Additionally, Drucker (1969) highlights the importance of imagination and individual skill in developing knowledge and transforming modern society and economics. He believed that the knowledge economy would rely heavily on individuals' creative and innovative contributions rather than traditional industrial production methods.

Drucker's definition of the knowledge economy emphasises the need for a highly educated and skilled workforce capable of adapting to changing circumstances, applying knowledge and technology to new situations, and emphasising creativity and innovation as key drivers of modern economies. The OECD (2017) also emphasises the significance of a skilled and adaptable workforce in successfully navigating structural changes and capitalising on emerging employment opportunities resulting from technological advancements. From the 1970s, this term, the knowledge economy, began to take root in people’s minds (Guile, 2010a). Brown et al. (2008), David and Foray (2002) and Guile (2010a) all emphasise the importance of knowledge in creating economic and social development. Guile (2010a)

considers knowledge could support the future development of society as a critical role of economic resources. Even some governments in advanced economies value the knowledge economy as an approach to increase prosperity (Brown et al., 2008).

David and Foray (2002) summarise capital investment as influencing growing economies. Guile (2010b) argues that the aim of investment structures in a knowledge economy is to create, spread, and accelerate knowledge production. There are two types of investment structures: one focuses on the industrial field, in other words, relating to science and information technologies (Guile, 2010b); the other is spending more resources, including money and materials, on human capital (David and Foray, 2002; Wolf, 2004). Additionally, Wolf (2004) writes that investing in human capital is seen as producing a larger, higher-skilled and higher-quality labour, thereby enhancing productivity and achieving economic progress. Guile (2010a) and Brown et al. (2008) both support the view that the workforce's abilities to play a more or less productive role in the economy depend on not only their level of knowledge but also the broader relationships related to professional qualifications, jobs and rewards.

Education's key role in economic policy and the acquisition of valuable knowledge by the workforce has been recognised for decades. The OECD (2012b) highlighted the importance of education and the enhancement of education policy to nurture people. This was not a new idea: for example, Becker wrote 'Human Capital' in 1964 (cited by Teixeira, 2014) and argued that education could be a powerful tool for economic policy, providing new and valuable knowledge to the workforce. Lauder et al. (2006) and Brown et al. (2008) discuss a similar view that appropriate skilled workers could be provided for the economy through education. While Goodwin (2020) further clarifies that this requires a comprehensive revaluation and potential reform of economic value attributed to human resources and education. Furthermore, Wolf (2004) argues that education policy could help in achieving prosperity and increasing economic growth. As mentioned before, investing in education is viewed as instrumental in cultivating a skilled workforce capable of meeting the demands of a rapidly changing global economy (Wolf, 2004). This perspective aligns with the understanding that education equips individuals with the necessary knowledge and skills to contribute meaningfully to the economy's development and progress.

The concept of the knowledge-based economy, as explored by Brown et al. (2008) and David and Foray (2002), is built on the idea of people working together to create new

knowledge with the help of information and communication technology. Guile (2010a) explains that technology has transformed the way in which knowledge is acquired and shared and has facilitated the development of new models of education. In order to develop and innovate different technologies and cultivate skilled workers, the idea of education-led economies has become central to the concept of the knowledge economy as a way to direct future economic development (Guile, 2010a). In this case, national education and training systems attract attention from governments, policy-makers and educators (Guile, 2010a). Peck and Theodore (2010) also discuss the importance of technology in supporting the construction of international policy networks and communication across national borders in the era of globalisation. In industrial societies, Gunn (2017) and Shangquan (2000) state that advanced technology has facilitated the faster transmission of information, people, and goods. Oberoi and Halsall (2018) also support the idea that advances in technology, such as the Internet, have increased global interdependence. Overall, the integration of information and communication technology into the knowledge-based economy transforms not only the methods of knowledge creation and dissemination but also the dynamics of economic development. Education, in the context of knowledge-based with the use of technology and information, helps to nurture the workforce, further enhance nations' competitive advantage and foster sustainable economic growth.

Castells (1996, p. 17) discusses the concept of an information economy within the framework of a 'network' society, where data is communicated, organised, and exchanged globally. He identifies the link between the increased demand for knowledge and information and the revolution in information and technology. The continuous development of knowledge can support technological innovation and help improve productivity and profitability (Castells, 2000).To further characterised the network society as a 'new economy', Castells (2000, pp.10-11) concludes with three fundamental features: firstly, it is an economy driven by information and knowledge, where the ability to generate knowledge and effectively manage information determines the productivity and competitiveness of economic entities; Secondly, this new economy is a global economy with core activities, such as financial markets, science and technology, international trade, advanced business services, and skilled labour, operating on a planetary scale; and lastly, it is a networked economy where interconnected firms facilitate flexibility and information production.

In addition to Castells' insights, David and Foray (2002) also discuss the impact of information technology on knowledge creation. They note that information technology improves communication between customers and suppliers, increases the capacity of the database and improves processing technology, and enables the collection of big data and the sharing of information. Brown et al. (2008) argue that scientific knowledge can drive and accelerate the pace of technological innovation, enabling society to carry out the division of labour from simple to complex. Overall, the development of information technology has transformed space and time, and most importantly, it provides a technical basis for the new economy (Guile, 2010b).

The relationship between the knowledge economy and the information economy is complex. The knowledge economy emphasises the increased focus on education, research, the development of new technologies, and the creation of high-skilled jobs (Carnoy, 2016). It recognises that knowledge and information are significant assets in driving economic growth and competitiveness. The information economy, on the other hand, centres around the production, distribution, and utilisation of information as a primary economic resource. It relies on information and communication technologies to facilitate data management, knowledge sharing, and innovation (Castells, 2009). The integration of the knowledge economy and information economy is reflected in their mutual dependence on information technology, the interconnectivity of networks, and the importance of knowledge creation and dissemination. The development of information technology provides a technical pillar for the knowledge economy and realises the acquisition, processing and exchange of knowledge on a global scale. Meanwhile, the knowledge economy provides the necessary intellectual capital for the innovation and progress of information technology and promotes the further development of the information economy (Foray and Lundvall, 1996). In sum, the knowledge economy and the information economy are interlinked, with information technology acting as a catalyst for knowledge development and economic transformation. And the integration of these concepts underscores the transformative power of information and knowledge in shaping contemporary economies and education.

However, Foray and Lundvall (1996), Michelli and Keiser (2005) and Guile (2010a) indicate challenges for education in the knowledge economy. One of the significant challenges is knowledge management, which Brown et al. (2008) say is a process and strategy that can enable educators to create, store, and share knowledge, based on the idea that this will lead to improved teaching methodologies and better student outcomes.

However, they also argue that knowledge management in education is undeveloped and undervalued (Brown et al., 2008). Educational institutions prioritise resources such as teachers, campus facilities and infrastructure over knowledge management due to limited funding because these resources are necessary for delivering education and can have an immediate impact on student learning outcomes. On the other hand, technical difficulties, lack of proper training or a lack of buy-in from educational stakeholders may result in inadequate implementation or a lack of effectiveness of knowledge management strategies.

Additionally, the knowledge economy discourse is more likely to focus on social efficiency rather than the quality of national education or training systems (Brown et al., 2008). According to Brown et al. (2008), this may lead to a narrow focus on outcomes such as grades or test scores, which may not reflect the full range of skills and knowledge students need to succeed in the knowledge economy. Moreover, the focus on social efficiency may also have implications for the equity of education systems. Richer families may be more likely to invest more in education for their children (Brown et al., 2008). However, there is no clear evidence to support the economic advantages of increased spending on education (Wolf, 2004). However, Brown et al. (2008) suggest that education systems should prioritise mass higher education because a knowledge-based economy requires a workforce with higher-level skills, including critical thinking, problem-solving, and creativity. Ji et al. (2023) argue that higher education institutions are crucial in developing and diffusing new knowledge and providing the human capital necessary to sustain economic growth.

As a policy-making body, the OECD advocates for quality/efficiency-driven educational reforms in the context of globalisation (Zajda, 2009). The OECD argues that higher education also provides opportunities for social mobility and is associated with higher incomes and better employment prospects (OECD, 2018b). However, some challenges include the need to ensure the quality and relevance of higher education programmes, the affordability and accessibility of higher education, and the need to address the skills mismatch between what employers require and what higher education institutions provide (OECD, 2012a). Nations also need to pay more attention to issues of equity and social inclusion, as not all individuals have equal access to higher education (Marginson, 2016).

2.3 Globalisation and Education

In the context of globalisation, as discussed earlier, education also has undergone significant changes. The relationship between globalisation and education has transformed the landscape of learning, with a shift towards a more synchronised and standardised approach. This transformation is driven by a narrower focus on priorities, such as economic development, skills for the 21st century, core subjects like literacy and numeracy, and education goals centred around moving up the OECD league tables and international competitiveness (Goodwin, 2020). However, as classrooms become increasingly diverse due to global migration and displacement, there is a growing need for a curriculum that embraces this diversity rather than relying on homogenised and standardised approaches (Carter and Darling-Hammond, 2016). As highlighted by Goodwin (2020), the current curriculum falls short in meeting the diverse needs of students, emphasising rote memorisation and language proficiency to improve test scores (Carter and Darling-Hammond, 2016). Social and ideological shifts, propelled by globalisation, are fundamentally reshaping education on a global scale (Apple, 2017).

Economic globalisation presents both benefits and challenges for education. In the perspectives of the problems with economic globalisation, such as income inequity and limited opportunities for low-skilled workers (Christensen and Kowalczyk, 2017). Companies and organisations may face increased competition and the loss of domestic jobs due to outsourcing. The impacts of globalisation on education are also significant. In terms of the positive effects on education, globalisation has led to increased access to education, as new technologies and communication methods have made education easier accessible to students across the world, as mentioned previously. Online courses and distance learning, for example, have overcome geographical and financial barriers, enabling individuals to pursue education from anywhere in the world (Ferri et al., 2020). However, they also discuss technological challenges (specifically the unreliability of internet connections and access to technological devices by students) and challenges of managing students' motivation and attention (Ferri et al., 2020, p.13).

The Global Education Reform Movement (GERM), influenced by globalisation, has introduced policies aimed at standardising education, focusing on core subjects, adopting low-risk approaches to reach learning goals, employing corporate management models, and implementing test-based accountability (Sahlberg, 2023). This movement reflects the increasing alignment of education with the demands of the market economy, redefining

education as a vehicle to support economic growth. Along with the GERM, and with the development of the market economy, the commodification of education has also become a significant concern in the era of globalisation (Naidoo and Jamieson, 2005). Commodification refers to knowledge for commercial use that can be sold and purchased (Naidoo and Jamieson, 2005). This has resulted in a shift in the goals and purpose of education, as it becomes increasingly driven by market demands rather than the broader needs of students and society (Naidoo and Jamieson, 2005). Brown (2010) also argues that educational institutions, influenced by commodification, prioritise cost-cutting and enrolment expansion over investing in teaching and learning to improve educational quality.

Higher education, in particular, has been deeply impacted by the marketisation and commodification processes within the global context (Naidoo and Jamieson, 2005). It has been 'positioned as a crucial side for the production and international dissemination of economically productive knowledge, innovation, and technology' (Naidoo and Jamieson, 2005, p. 38). This perspective might reflect the influence of market forces on higher education, where the pursuit of profit often takes precedence over the holistic development of students. Another consequence of commodification is the rising cost of tuition, leading to university education inaccessible to marginalised groups who cannot afford it (Tomlinson, 2018). Tomlinson (2018) further suggests that lower grades or degree outcomes as having less market value, whereas higher grades and degree outcomes may be viewed as an indicator of effective teaching (p.722). This view suggests that the commodification of education reduces its essence as a holistic process that aims to develop students' critical thinking, creativity, and social skills (Tomlinson, 2018, p.724). Instead, commodification prioritises quantifiable outputs that cater to market demands rather than students' broader societal and personal needs. A narrow focus on academic achievement and rankings may limit the students' development of critical thinking skills and well-rounded education.

The increasing interconnectedness of the global economy and the mobility of people and ideas across national borders has led to changes in education policies and practices. As stated by Apple (2017), this interconnectedness is not only influenced by economic factors but also by the movement of people and ideas across national borders, profoundly impacting official knowledge and educational ideologies. The homogenisation of educational policies is driven by neoliberal and managerial ideologies on a global scale,

requiring a grounded understanding of globalisation's impact on education (Apple, 2017). At the macro level, global and international influences impact the policy process, while at the micro level, localised contexts and specificities come into play (Vidovich, 2007). As Vidovich (2007) notes, educational policy research has shifted from a macro focus on central authorities to incorporating a micro focus on the multiple, often contradictory, policy practices within individual institutions. The complex relationships between global influences, national policies, and local interpretations emphasise the need for nuanced perspectives when analysing the impact of globalisation on education.

According to Mundy et al. (2016), education policies are now widely recognised as a key strategy for promoting national development and competitiveness in the global market. In this context, education systems are expected to provide students with the knowledge, skills, and competencies necessary to compete in the global economy and contribute to the development of their countries. Williams (2009) indicates that education has been linked to national development before globalisation, not only for enhancing economic productivity but also for facilitating national unity. However, Williams (2009) argues that education now plays a similar role across all countries under the influence of globalisation, focusing on developing citizens' social and economic skills. Zajda (2009) further emphasises that enhancing individuals' social and economic prospects is seen as the primary aim of education as this is believed to be essential for achieving economic growth in the globalised world. Governments' belief in the need for educational reforms aligned with globalisation is consistent with the OECD's advocacy for international comparisons of educational outcomes (OECD, 2014). Thus, the primary role of education under globalisation is to develop individuals' skills and values and enhance their social and economic prospects through quality education aligned with global norms.

In the realm of globalisation, governments are increasingly involved in developing comprehensive globalised education policy, driving education policy into a global era. Mayer (2021) emphasises the concept of Global Education Policy (GEP), which encompasses the development, dissemination, and implementation of educational guidelines on an international scale. GEP grapples with the intricate balance between standardisation and the indispensable need for contextualisation, recognising the diverse cultural, social, and economic contexts of individual nations. The influence of GEP, intricately intertwined with globalisation, highlighted the complexities of integrating educational practice with wider international development dynamics. Verger et al. (2018)

contributes to the discussion by emphasising the concept of GEP, its influences from organisations like UNESCO and the World bank. The tension between standardisation and contextualisation remains a key challenge in the global dissemination of education guidelines (Verger et al., 2018).

On the other hand, Intergovernmental organisations (IGOs) are also playing an influential role in shaping or reforming educational policy at the national level (Akkari and Lauwerier, 2015; Rizvi and Lingard, 2006; Verger et al., 2018). Governments are trying to cooperate with IGOs to develop, legitimise and implement their educational strategies or reforms (Rizvi and Lingard, 2006). During the policy-making process, sociologists, education policymakers and reform advocates have been collecting, comparing and analysing evidence, aiming to understand what policies might be suitable or useful for referencing in their own national policies (Mundy et al., 2016; Normand et al., 2018). Therefore, an increasing number of discourses of globalised education policy has been created (Rizvi and Lingard, 2009), and cross-national education policy has been influenced, borrowed and exchanged, reformed and developed (Mundy et al., 2016; Rizvi and Lingard, 2006). Cross-national education policies are supported by several different kinds of international agencies or organisations, such as the World Bank and the OECD, according to assessing skills and learning outcomes (Akkari and Lauwerier, 2015).

In conclusion, the evolving relationship between globalisation and education encompasses a spectrum of influences, from macro-level policy development to micro-level practices within institutions. The tensions between standardisation and contextualisation, the impact of international organisations, and the commodification of education collectively shape a complex landscape that necessitates a comprehensive understanding of the intricate dynamics at play. As education continues to be a key strategy for national development within the global market, policy makers and educators must navigate these complexities to ensure that education remains responsive to the diverse needs of students and societies worldwide. The following section will continue discuss how an intergovernmental organisation like the OECD impacts the policies making.

2.4 The Role of the OECD and the Influence of PISA

2.4.1 The OECD

The OECD has played a significant role in shaping education policies and practices globally, particularly in its member countries (Lingard and Sellar, 2016). Established in

1961, the OECD initially focused on economic growth and productivity in capitalist economies (Lingard and Sellar, 2016). The OECD has been widely discussed in various social fields, including research, practice, policy, and media in recent years (Mølstad et al., 2018). However, since the 21st century, it has increasingly focused on education (Niemann et al., 2017; Mundy et al., 2016). The OECD has emerged as a prominent international organisation in the field of education policy, collecting comparative empirical data to inform policy formulation (Martens, 2007). As Douglas-Gardner and Callender (2023) indicated, the OECD produces reports assessing the performance of its member countries and regularly releases updated data regarding their performance. By doing these, countries could compare to and learn from each other, even influence each other. Among multilateral agencies, the OECD and the World Bank have had significant impacts on education policies, with the OECD influencing countries in the global North and the World Bank having more influence on countries in the global South (Akkari and Lauwerier, 2015; Mundy et al., 2016; Rizvi and Lingard, 2006). Rizvi and Lingard (2006) highlight that the influence of the OECD extends beyond its member countries, affecting developing nations and regions worldwide. Through its research, reports, investigations, and policy recommendations, the OECD reinforces shared beliefs and assumptions about the relationship between education and the economy (Kallo, 2021). These beliefs and assumptions could refer to the importance of education in fostering economic growth, the role of human capital in driving innovation and productivity, the need for skills alignment with labour market demands, and the belief in the economic benefits of education as a means of increasing individuals' employability and social mobility in the context of education and the economy (Kallo, 2021). The OECD helps create a common understanding and framework within its member countries to develop and implement educational policies and practices (Kallo, 2021).

The OECD has become a significant player in shaping educational policies worldwide, alongside other multilateral agencies like the Work Bank (Mundy et al., 2016). The OECD's work has shaped educational policies and practices globally, contributing to the global discourse on education and economic development (Rizvi and Lingard, 2006). As an essential institution and policy actor, the OECD is more likely to support a knowledge and skills economy under economic globalisation (Lauder et al., 2006; Sellar and Lingard, 2013). The OECD has acknowledged its influence on international policies through its ranking of international knowledge assessments and other publications at the national level (Mølstad et al., 2018; Darling-Hammond and Lieberman, 2012). The organisation's work

on comparative educational statistics and indicators contributes to global policy governance and the development of a worldwide policy space in education (Lingard and Sellar, 2016; Grek et al., 2009). Cooperating with other international organisations has created a 'policy conversation' about the knowledge economy which aims to promote policy convergence concerning economic policy and organisational arrangements and practices around the world (Rizvi and Lingard, 2006). In other words, through the OECD, governments can work together to solve economic, social and environmental challenges under globalisation (Martens and Jakobi, 2010; Sellar and Lingard, 2013).

There are 34 member nations involved in the OECD, mostly European (Lingard and Sellar, 2016). Membership of the OECD has been enlarged under the effects of economic globalisation, and then its global significance has spread widely (Sellar and Lingard, 2013). From the 1990s, the OECD started to develop itself in the area of comparative educational statistics, then worked on educational indicators from the early 1970s, both of which contributed to the governance area of global policy (Lingard and Sellar, 2016), especially in developing the creation of the worldwide policy space in education (Grek et al., 2009). To be more specific, through international comparison, the OECD has reframed or redefined what education is and what education should be like (Carvalho and Normand, 2018; Mølstad et al., 2018) and constructs educational policies to improve the quality of education (Carvalho and Normand, 2018). On the other hand, the OECD advocates that nations draw on evidence to shift educational policy towards evidence-based perspectives (Lingard and Sellar, 2016).

Under economic globalisation, the OECD advocates that developing skills and knowledge for the labour market and equity are its two main priorities (Akkari and Lauwerier, 2015). The OECD's impact on education extends to various aspects, including curriculum development, assessment frameworks, teacher education, and governance (Lingard and Sellar, 2016). On the other hand, the OECD encourages member countries to improve their education systems' quality, equity, efficiency and effectiveness (Niemann, Marten and Teltemann, 2017). By focusing on teacher education, several initiatives conducted by the OECD contribute to providing more empirical evidence for developing and restructuring (Darling-Hammond and Lieberman, 2012). For example, the Teaching and Learning International Survey (TALIS) to improve educational policies and outcomes demonstrated the diversity of features and practices in the teaching profession (Norman et al., 2018), which specifically claimed the needs of competence of teachers (OECD, 2014). However,

the most important feature of the OECD's impact on education could be the PISA (mentioned in the next section). Based on its PISA studies and reports, the OECD has become an influential international organisation responsible for measuring school performance in member countries (Grek et al., 2009).

In conclusion, the OECD has emerged as a prominent international organisation in the field of education policy. Its extensive research, reports, investigations, and policy recommendations have shaped education policies and practices globally. Through initiatives like PISA and TALIS, the OECD provides comparative data, benchmarks, and insights that influence educational decision-making, while promoting the importance of education for economic growth, skills development, and equity. The organisation's work extends beyond its member countries, impacting education systems in developing nations and contributing to the global discourse on education and economic development.

2.4.2 The PISA initiative

PISA is sponsored by the OECD (Meyer and Benavot, 2013), and is one of the most well-known of the OECD's global initiatives. It is a large-scale cross-national educational assessment (Yemini et al., 2019), measuring school performance in member countries (Grek et al., 2009). PISA aims to satisfy the increasing requirements for international comparisons of educational results (Zajda, 2015b).

Since 2000, PISA has been conducted every three years (Mølstad et al., 2018). Since it began, the number of participating countries in the PISA testing is growing (Lingard and Sellar, 2016). PISA initially covered 43 countries in 2000, then grew to over 70 countries in 2015 (Addey and Sellar, 2018), most of which took part in the PISA testing process (Niemann et al., 2017). PISA is recognised as a measurement that crosses the borders of countries and cultures to contribute to international education policy making (Mølstad, Pettersson and Prøitz, 2018; Niemann et al., 2017; Schleicher and Zoido, 2016). Mølstad et al. (2018) indicate an increasing number of administrative and political players involved in the discussions about the PISA results. These discussions then shape education reform and education policy development.

PISA tests all 15-year-old students in the educational systems which take part in the survey. The tests focus on competencies relating to reading, mathematical, science and results are used to evaluate and compare educational systems (Mølstad et al., 2018; Zajda,

2015b; Grek et al., 2009), particularly in terms of the quality, equity, and efficiency of the schooling systems that take part (Mundy et al., 2016; Schleicher and Zoido, 2016; Hanushek and Woessmann, 2011). However, low-ranking countries are more likely to borrow education policy from top-ranking performers in an effort to improve their education systems (Addey and Sellar, 2018). This can lead to 'policy shock' by Wiseman (2013). Finland, Singapore and Canada consistently lead these rankings (Akkari and Lauwerier, 2015), which, to some extent, might show that teaching in these countries has been invested considerably in knowledge and skill (Darling-Hammond and Lieberman, 2012). Mølstad et al. (2018) support that according to student performance data analysis, teachers' concepts and their activities could be translated and understood in different ways in PISA. As Darling-Hammond (2017), Akiba (2013) and OECD (2014) agree, teaching is one of the school-related factors in helping to improve student achievement and performance. Many governments appear to improve teacher education by understanding the results and rankings of PISA to improve teachers' quality and effectiveness (Wiseman, 2013; OECD, 2014). There are several ways to achieve these two goals, such as raising salaries to attract teachers and changing teacher standards and benefits. However, providing and developing specialised pre-service and in-service training programmes is the most critical approach (Darling-Hammond and Lieberman, 2012; Anderson, 2004).

PISA has influenced the field of national governance and global education policy by focusing on quality and equity (Wiseman, 2013). With the width of the scope, the increasing scale and the enhancing explanatory power of PISA, international education policy has risen to strategic prominence (Meyer and Benavot, 2013). PISA provides educational data as evidence-based for national policy-making and education reform (Addey and Sellar, 2018; Sellar and Lingard, 2013). Importantly, in response to PISA, there are three main topics in educational policy: teacher effectiveness and quality, educational equity, and accountability and standards (Wiseman, 2013). These are explored in the next sections.

2.5 Teacher Quality and Effectiveness

According to Anderson (2004, p.22), 'effective teachers are those who achieve the goals they set for themselves or have set for themselves by others'. These goals rely on the teacher's competence and performance, encompassing extensive knowledge and relevant skills. This includes subject knowledge, effective lesson delivery, and student interactions (Anderson, 2004). Notably, there has been a growing emphasis on teacher effectiveness in

the education policy agenda (Darling-Hammond, 2017). The OECD (2014) asserts that improving teacher effectiveness is crucial for ensuring and enhancing student achievements and performance (Darling-Hammond, 2017). Yet the difficulties and complexities of preparing teachers for effective teaching are increasing (Zeidler et al., 2016).

Empirical evidence and international reports since the 1980s support the notion that teachers' knowledge plays a vital role in enhancing teacher effectiveness (Carvalho and Normand, 2018; Grossman et al., 2009). Dupriez and Cattonar (2018) emphasise the centrality of knowledge in teachers' work. This knowledge, also referred to as teacher expertise (Carvalho and Normand, 2018), includes subject knowledge, pedagogical knowledge and curricular knowledge (Dupriez and Cattonar, 2018; Grossman et al., 2009). Subject knowledge entails a specialised understanding of the subjects being taught, which teachers should possess and develop through collaboration with colleagues (Hargreaves, 2000; Dupriez and Cattonar, 2018). Pedagogical knowledge relates to teaching methods, curriculum and student learning approaches and includes approaches to delivering lessons, ways to represent ideas, and methods to organise and manage the classroom (Anderson, 2004; Carvalho and Normand, 2018). Curricular knowledge can be understood as teachers' vertical and horizontal grasp of the material in a particular course or topic. Vertically, teachers can give students a deep understanding and interpretation of the course material content; horizontally, teachers are required to relate specific courses and contents to similar topics or problems in other courses for discussing and interpreting (Shulman, 2013).

Teacher education programmes play a crucial role in shaping effective teachers by providing them with the necessary knowledge, skills, and competencies to excel in the classroom. The quality of teacher education programmes has a direct impact on the effectiveness of teachers and, consequently, on student outcomes. Many nations recognise the importance of teacher preparation training and therefore have allocated significant resources to support the program. Countries like Finland, Australia and Singapore are notable examples of nations prioritising financial support for teacher training (Darling-Hammond, 2017). Teacher preparation (Higher Education) in Finland is fully state-funded, meaning aspiring teachers receive comprehensive financial support throughout their education and training journey (Darling-Hammond, 2017). Similarly, the Singapore Ministry of Education offers a tuition waiver and additional monthly salaries or stipends for all student teachers enrolled at the National Institute of Education. Additionally, the

teacher's median annual salaries in Singapore ($41,976) are comparable to other professions, such as aerospace engineers and accountants, that require similar qualifications (Lim, 2014). These actions are designed to attract talented individuals to pursue a career in education and enhance the overall quality of the teaching workforce. The provision of substantial financial support in these countries demonstrates their commitment to promoting effective teaching through robust teacher education programmes. By investing in teacher education, educational systems aim to cultivate a highly skilled teaching workforce capable of positively impacting student achievement and overall educational improvement.

However, teacher education's institutional positioning and cost-effectiveness and the ongoing viability of such programmes have been scrutinised (Murray, 2013). Specifically, Murray (2013) criticises whether the significant financial resources allocated to teacher education programmes yield the desired results in enhancing teacher effectiveness, improving student achievement, and driving overall educational advancement. This raises important considerations about the alignment between the investments made in teacher training and the actual impact on educational outcomes. Therefore, educational policymakers and stakeholders have the responsibility to ensure that the investments made in teacher education programmes are strategic, impactful, and aligned with the goal of enhancing educational quality and fostering positive educational outcomes.

Since 2007, there has been a decline in public confidence in teacher quality (Darling-Hammond and Lieberman, 2012), yet, according to Cochran-Smith and Fries (2005), teacher quality is critical to educational reform. A survey by Provost (in Wong et al., 2014, p.81) found that 60% of the 159 OECD countries that participated in Provost's survey worried about a lack of qualified teachers. Meanwhile, Darling-Hammond and Lieberman (2012) and McKenzie et al. (2005) report that there has been an increasing international focus on the quality of teaching in schools since the 21st century, mostly in the early teacher. As Darling-Hammond and Lieberman (2012) noted, teaching should be viewed as a profession. In order to provide professionally qualified teachers and increase the quality of teaching, promoting the quality of teaching and learning in pre-service teacher education is essential. This has been emphasised by educational policymakers, curriculum designers and teacher educators (Darling-Hammond, 2017; Yuan and Zhang, 2017).

However, some disagreement exists about what teacher quality is and which teacher characteristics are linked with desirable outcomes (Cochran-Smith and Fries, 2005). To ensure teacher qualification, it is important that pre-service teachers meet specific criteria through coursework to earn a teaching degree or certificate from a university-based teacher education programme (Darling-Hammond, 2017; Lee et al., 2015). Researchers such as Darling-Hammond (2017), and Avalos (2011) emphasise the importance of these programmes in establishing standards for student teachers' learning and guiding them in effectively translating their knowledge into classroom practice. As mentioned above, governments from all over the world allocate financial resources to universities, colleges, and institutions to develop teacher education programmes that follow various approaches, aiming to support pre-service teachers in becoming qualified educators (Murray, 2013).

However, the standards and levels of qualification required of teachers vary across different nations. For instance, in Finland, teachers are required to hold a Master's degree, and an increasing number of educators are pursuing doctoral degrees to enhance their expertise and qualifications further. Guerriero (2014) notes that research suggests that there might be a positive relationship between teacher education levels and instructional quality, as teachers with more profound subject knowledge and pedagogical understanding are better equipped to facilitate student learning. This possibly also means that higher levels of education can provide teachers with a broader range of knowledge, research-informed practices, and critical thinking skills, enabling them to create meaningful learning experiences and effectively address diverse student needs. Additionally, raising the standards and qualifications for teachers can contribute to the professionalisation of the teaching field and enhance the status of educators. As mentioned in Finland and Singapore, teaching can be recognised as a respected and valued profession, attracting talented individuals and fostering a culture of excellence in education (Darling-Hammond, 2017).

In sum, teacher education programmes are vital in ensuring teacher effectiveness and are characterised by specific standards and qualifications. Investing in teacher education and professional development is suggested, as it could help to elevate the teaching profession, foster excellence in education and ultimately improve student outcomes.

2.6 Teacher Education and Globalisation

As Ary et al. (2018) state, conducting educational research is important for several reasons: to help educators understand how students learn and what teaching methods are most

effective; to enhance the educational experience by developing new approaches to teaching and learning; to identify trends and issues in education; and to provide evidence for policy-making. As Mayer (2021) contends, globalisation shapes policies, practices, and teaching methods, necessitation adaptation in teacher education programmes. However, Goodwin (2020) claims, the impact of globalisation on teaching, education, and students' opportunities is significant and often detrimental. It should be highlighted that the process of comparing countries and the competition associated with international assessments drives the formulation of policies aimed at improving teacher quality and the effectiveness of teacher education (Mayer, 2021). On the other hand, it makes teacher education policies similar across countries (Mayer, 2021).

The PISA scores which influence education policies in many countries, as mentioned above, are now also used to measure global competency (Ledger et al., 2019). Global competency is increasing emphasis within educational policies, referred by OECD (2018d), which includes a range of elements, such as knowledge, skills, attitudes, and values. PISA assesses their skills in engaging in meaningful and effective interactions with individuals from diverse cultures, as well as their capacity to take action for the betterment of society and sustainable development (OECD, 2018d). Yet, this shift towards educating for global competency has not been widely integrated into teacher education programmes compared to higher education more generally (Kopish, 2016).

On the other hand, teacher education programmes have become increasingly standardised and narrow and subject to external regulation, with a focus on measurement, accountability and marketisation, limiting the scope of teacher education (Allen et al., 2018; Livingston and Flores, 2017). As a result, Goodwin (2020) states that teacher education has become more efficiency-oriented, technical, and instrumental, neglecting the knowledge and experiences necessary for developing globally competent teachers. Understanding teacher education is a complicated global issue and there is a range of research on teacher education programmes related to influences of the development of globalisation in the last two decades. This research highlights the importance of the effect of globalisation on the shift towards competency-based teacher education, school placement, preparing student teachers to work in a globalised world, and diversity in student populations.

Under globalisation, countries have become more interconnected and interdependent so there is a growing need for teachers to be equipped with the necessary skills and

knowledge to prepare students for a globalised world. This has led to a number of reforms in teacher education aimed at improving the quality and relevance of teacher education programmes. Firstly, the effect of globalisation on teacher education has been the shift towards a more competency-based approach to teacher training (Ledger et al., 2019). According to Darling-Hammond (2017) and Kim et al. (2019), this approach emphasises the development of skills and competencies that are relevant to the needs of the 21st-century workforce, such as critical thinking, problem-solving, and communication skills. Secondly, it is an expanding focus on intercultural education and the development of global competencies among teachers. Under the changing demands and expectations, including the need for teachers to be prepared to work with diverse student populations and to promote global competencies. Therefore, teacher education programmes are required to incorporate courses, international perspectives and experiences that focus on intercultural education and global competencies (Poole and Russell, 2015).

However, globalisation brings some challenges to teacher education, particularly in the area of standardisation and flexibility (Zhao, 2010). Teacher education needs to meet the changing needs of the workforce and be more flexible and responsive to the needs of students and employers (Zhao, 2010). Therefore there has been a growing interest in alternative teacher certification programmes that allow individuals with non-traditional and workplace backgrounds to become teachers. Additionally, many countries have teacher registration standards and systems, including China and Scotland, but student teachers may be required now to have the ability to understand or work/teach in different contexts or cultures. Zhong argues that that teachers need to have “a broad understanding of globalisation and its impact, education practices and systems in other countries, and global economic integration and interdependence” in order to understand the implications of globalisation for them as teachers (2010, p.426).

In order to address these challenges, and in response to globalisation, researchers propose different ideas. Goodwin (2020) emphasises that integrating global mindsets across the curricular, professional, moral, and personal dimensions can help address the negative impacts of globalisation while nurturing globally competent teachers. Goodwin (2020) argues that these four dimensions are interconnected and essential for teacher education in the context of globalisation, although it is also crucial for teacher education programmes to emphasise diversity, inclusivity, social justice, and personal growth. The curricular dimension (Goodwin, 2020, p.12) encourages teachers to think beyond local and national

boundaries, exploring content, histories, and perspectives that go beyond the immediate classroom, considering broader socio-political issues. Teacher educators should equip student teachers with the skills to create a curriculum that promotes meaningful learning and takes into account philosophical, political, cultural, and existential questions from a global perspective in teacher preparation programmes. The second dimension relates to the professional role of teachers (Goodwin, 2020, p.14). Teachers play a crucial part in national development and economic growth; however, they often face varying working conditions, a lack of professional development opportunities, and a lack of autonomy compared to other professions with similar educational requirements. In teacher preparation, the professional dimension requires redefining and expanding the concept of professionalism on a global scale. The moral dimension (Goodwin, 2020, p.16) emphasises the importance of teachers and teacher educators placing humanity and social action at the centre of their work. Teacher education should go beyond producing certified teachers and instead focus on preparing educators who are ready to address global problems alongside young people. Teachers encounter moral dilemmas regularly, such as addressing the needs of students facing hunger or homelessness, navigating potentially risky government policies, countering biases in instructional materials, and promoting fairness and inclusivity. Teacher preparation programmes should create spaces for grappling with these moral issues, regardless of location, to ensure the well-being of all children worldwide. The personal dimension (Goodwin, 2020, p.18) is the most challenging to develop and involves self-reflection, questioning, and evaluation. Personal beliefs about learning, social structures, hierarchies, and biases can influence instructional decisions, curriculum choices, and favouritism towards certain students or ways of knowing. Developing a global mindset requires exploring the personal dimension, understanding its impact, and remaining aware of its influence on teaching and learning.

Moreover, some researchers highlight that teaching practice should be one of the central elements of teacher education and promote practice-based teacher education as an important approach (Zeichner, 2012; Hauser et al., 2019). Johnston (2020) notes that research has identified the importance and benefits of placement in teacher education programmes. Student teachers gain practical experience in a real-world classroom setting, receive feedback and prepare themselves for future employment (Johnston, 2020). According to Goodwin (2020), these practical experiences should be promoted with self-reflection, interrogation, and evaluation as part of personal development. The majority of student teachers indicated the school is the primary site where significant learning occurs,

but some of them complain the allocation and length of the placements are limited and short (Johnston, 2020).

"Partnership" between different stakeholders has also been proposed in teacher education programmes (Smith, 2016). As Darling-Hammond (2006) suggests, partnerships should include both internal and external stakeholders, especially in the practice field. In other words, there is a close collaboration between universities and schools, where both entities share responsibility for the development and education of student teachers. Schools are crucial in providing student teachers with practical and hands-on learning experiences and opportunities to apply and develop their knowledge and skills in real-world contexts (Armstrong, 2015). While universities support schools by providing them with access to the latest research and pedagogical approaches, as well as opportunities for teacher professional development (Darling-Hammond et al., 2009). Schools and universities are working together to equip student teachers with knowledge, skills, and practical experience and support them to become effective reflective practitioners (Darling-Hammond et al., 2009).

As Zajda (2015a) states, the relationship between people and countries from all over the world has become more interdependent because of the declining significance of boundaries between countries under globalisation. However, educators must understand the impact of globalisation on education within diverse cultural contexts (Apple. 2017), particularly as this relates to inclusion. Teachers' knowledge, skills, attitudes, and beliefs are significant in developing inclusive practices; however, many teachers feel unprepared to handle diversity in their classrooms (Forlin, 2004; Sharma et al., 2008). Research conducted by Beacham and Rouse (2011) found that student teachers held a positive attitude towards inclusion but lacked knowledge and practical experience in implementing inclusive practices (Forlin, 2004). It is likely that teacher education programmes need to evolve to meet the needs of diverse classrooms and prepare student teachers for the challenges of teaching in a globalised world. Beacham and Rouse (2011) suggest that teacher education programmes should focus on building practical skills and knowledge to support inclusive practices and that teachers need to be supported in implementing inclusive practices in their classrooms.

In summary, teacher education and globalisation are intertwined. Teacher education programmes need to adapt to the changing demands of a globalised world, focusing on

competencies, intercultural education, practical experiences, and inclusivity. As suggested by Goodwin (2020), by integrating a global mindset with four dimensions into teacher education programmes, educators can effectively address the challenges and opportunities presented by globalisation, and the student teachers could be prepared well to navigate diverse content, adapt to changing professional contexts, engage in social action, and critically reflect on personal beliefs and biases.

2.7 Conclusion

In conclusion, understanding teacher education programmes in the context of globalisation requires recognising the transformative power of globalisation, the importance of the knowledge economy, and the role of international organisations like the OECD. As education systems strive to meet the challenges and opportunities of a globalised world, teacher education programmes play a critical role in preparing teachers to navigate the complexities of a rapidly changing educational landscape. By embracing global perspectives, exchanging knowledge, and fostering collaboration, countries can strengthen their teacher education programmes and ensure that educators are equipped to shape the future of education in an increasingly interconnected world.

3. Chapter 3 Teacher Education Contexts in China and Scotland

Countries have different requirements for being a teacher, but most mandate that those who wish to teach earn a teacher certification. To gain this certification and prepare for this specific profession, students should complete specified courses under requirements and in fixed settings (Blasé and Kirby, 2009, pp.2-4; Wise et al., 1987, pp.1-8). 'Teacher education is the beginning of the development of prospective teachers' conceptualisation and practice of professional learning; a career-long undertaking' (Loughran, 2007, p.11). However, as Kosnik (2007) state, teacher education frequently faces criticism for its perceived irrelevance, de-connection from theoretical foundations, repetitive nature, and tendency to undermine individuals. It is therefore important to consider programme design issues to avoid these challenges, such as the content of teacher education, the learning process and the learning context (Darling-Hammond et al., 2005).

This chapter explains teacher education in China and Scotland, the two nations that this PhD study focuses on. The first section will give an overview of the changes in Teacher Education in China since 1966. The second section will give an overview of Teacher Education in Scotland. The third section will be a comparison of two specific cases of universities in Scotland and China.

3.1 Teacher Education in China

Education in China was severely damaged during the Cultural Revolution (1966-1976) (Zhou, 2014). The college entrance examination was cancelled during this period, and junior high school graduate students were recommended or nominated to enter the university. Most student teachers were recruited to specific teacher education institutions, also called 'Normal' universities (Liu and Xie, 2002). Teaching students were trained in 'Mao Zedong Thought', 'military sports', 'the foundation of agriculture' and 'professional education' (Zhou, 2014) instead of subject matter knowledge and knowledge of pedagogy (Han, 2012). However, the number of students has limited: perceptions about teachers changed, and they were regarded as 'anti-revolution academic authority', 'evil people' and the 'stinking ninth' of the nine categories of class enemies (Zhou, 2014). As Zhou (2014) claimed, teacher education could not educate a knowledgeable and professional teacher - 'qualified' teachers were qualified in politics as the propagators of Mao Zedong Thought.

By the end of the Cultural Revolution, with the development of the economy and higher education systems in China, there has been a rapid expansion of enrolment in teacher

education programmes, as well as a requirement to improve teaching quality, respond to the shortage of teachers, and reorganise of the structural system of teacher education (Shi and Englert, 2008). Teacher education took place in different types of universities and colleges. Because of this, some questions have been raised. For example, what are the qualities of the teacher education programmes in these institutions? Is it possible to train student teachers in comprehensive universities rather than only the 'Normal' universities (Zhou, 2014)?

The government decided to reform teacher education in the 1980s (Shi and Englert, 2008; Zhou, 2014). According to two important documents ('The Decision on the Reform of Education' and 'The Compulsory Education Act'), published by the Ministry of Education (MOE) in 1985 and 1986 (Zhou, 2014), put the development and reform of teacher education (Shi and Englert, 2008), and the requirement to promote teaching force training (Zhou, 2014) at the top of the government's agenda. Instead of a two-level teacher education system, three-level (three tiers) single-purpose teacher preparation institutions have been promoted by the MOE with the goal of improving teachers' educational qualifications. The three-level teacher preparation institutions include two-year 'normal schools,' three-year professional teacher colleges, and four-year normal universities and colleges (Zhou, 2014). In this hierarchy, the professional status of the teachers is linked to the type and length of training: a two-year programme for elementary and preschool teachers, a three-year programme for junior high school teachers and four-year training for senior high school teachers (Zhou, 2014; Shi and Englert, 2008). To improve the quality of teacher education programmes, the MOE redesigned the programmes' curriculum and asked all teacher preparation institutions to follow and adopt the reforms in the 1980s (Zhou, 2014). The MOE organised groups of educators to write textbooks for elementary and secondary schools, and all schools must use the new textbooks for teaching. Zhou (2014) states that teacher education in this period focused more on subject matter knowledge than professional education. Wang (2012) highlights that teachers trained in the 1980s lacked knowledge about how to teach a lesson or support student learning as well as knowledge of the characteristics of the subject.

Although the MOE published several different documents to indicate the importance of teacher education, the development of teacher education was slow. In 1993, the Fourth Session of the Standing Committee of the Eighth National People's Congress (NPC) approved the '*Teachers Law of the People's Republic of China*', which clearly stipulated

that all teachers engaged in education and teaching in schools or other educational institutions at all levels should obtain teacher qualification (MOE, 1993). In other words, a system of certification for teaching has been established. This system helped to normalise qualities and characteristics that a qualified teacher should have. On the other hand, a document called '*Decision about deepening the reform of education and boosting the quality of education*' has been released, which officially included non-teacher education universities or institutions to the legal organisations to prepare or train student teachers (Shi and Englert, 2008). As Shi and Englert (2008) claimed, the monopoly institutions of teacher education have been replaced, and an increasing number of institutions at different tiers were promoted. The term 'normal' education has also been changed to 'teacher education' during this period. By the end of the 1990s, several documents and policies had been published, which indicated the need to restructure the teacher education institutions: change three-level institutions to open two-level systems. Secondary normal schools incorporate three-year professional teacher colleges and some professional teacher colleges upgraded to four-year colleges or merged with other normal or comprehensive universities (Zhou, 2014; Shi and Englert, 2008; MOE, 2006). Therefore, the number of normal schools and professional teacher colleges decreased while the number of normal universities and colleges increased (MOE, 2006).

Additionally, some vocational and technical schools established teacher education programmes. Among these are six normal universities run and supported by the MOE, which has received significant investments from the Chinese government. These universities have developed and expanded their disciplines (philosophy, economy, law, education, literature, history, science, engineering, medicine, management and the arts) and attempted to become world-class (Zhou, 2014). However, according to Gu (2006), these reforms did not involve any changes or improvements to curriculum, courses, pedagogy, or models. The names of the institutions were changed, but the universities also did not consider how to share or exchange teaching resources between schools, colleges, or universities. This did not improve the quality of teacher education (Gu, 2006).

In the early 21st century, teacher education in China faced several challenges brought about by globalisation, international competition, the development of technology and the imbalanced student-teacher ratios in primary and secondary schools. For example, in response to the imperative of globalisation and the market economy, the MOE implemented a comprehensive Curriculum Reform in June 2001, marking a significant

departure from traditional education practices (Zhong et al., 2001). This reform aimed to cater to the holistic development of each student and called for transformative changes across various aspects of the education system. These included educational philosophy, curriculum structure and administration, curriculum standards and content, pedagogy, curriculum resources, assessment and evaluation, and teacher education and development (Feng, 2006; Guo, 2010, cite in Guo et al., 2013). The new curriculum highlighted the strong influence of globalisation on Chinese education and the pressure to meet international standards (Guo et al., 2013). Teachers had to adapt to new teaching approaches and content, requiring deliberate appreciation, guidance, and support in both pre-service and in-service teacher education programmes. This reform also affected teachers' professional development and identity, as they had to navigate the demands of the new curriculum (Guo et al., 2013). Similarly, international concepts, such as teacher effectiveness, teacher professionalism, and teacher qualities, can also more or less be found in the new curriculum reform, which has come to attention in China (Peng et al., 2014). The term 'Teacher Education' was also first used in the official document '*Decision about Reform and Development of Basic Education*' (MOE, 2001) and replaced the term 'Normal Education' in 2001. The Chinese State Council highlighted these core elements of the teacher certification system following this change: Chinese nationality; good personality and morality, professional spirit, and attitude of serving education; diplomas or degrees in line with education at a given level; ability and skill of educating and teaching; and the process of recruitment and appointment, in the '*Regulations on Teacher Qualifications*' (The State Council of the People's Republic of China, 1995).

China's education changes occurred concurrently with a new phase of globalisation, where the integration of the global economy necessitated China's labour force, natural resources, and expanding consumer market (Guo et al., 2013). Especially in 2006, China officially transitioned into a market economy, marking a significant milestone in its economic development (Guo and Guo, 2018). China has also gradually moved away from a centrally planned economy towards a socialist market economy (Guo et al., 2013). Within China's market economy, education has undergone a process of marketisation and privatisation in various aspects, including orientation, provision, curriculum, and financing (Guo and Guo, 2018; Chan and Mok, 2001). Four essential aspects of education in China's market economy are highlighted by Chan and Mok (2001): the emergence of private or non-government schools, the involvement of non-state sectors in funding, the increase in self-

funding students, and the adoption of market-driven curriculum. These changes reflect the broader influence of market forces on the education sector in China.

Within the expansion of teacher education, a greater focus on content knowledge and examination preparation but neglect the pedagogical training and the development of teachers' professional skills. Market-oriented reforms have introduced competition among teacher education institutions, with a strong emphasis on graduates' employability (Guo et al., 2013). Consequently, there has been a shift towards more vocational and skills-based training, aligning with market demands but potentially overlooking broader aspects of teacher professionalism and pedagogical development. Additionally, the '*Suggestions on reform and development of teacher education*' during the 11th Five-Year Plan proposed new goals and efforts to improve teacher quality: over 80% of the teaching staff at primary and middle schools should have bachelor's degrees, and new teachers in high schools should achieve master's or doctoral degrees (MOE, 2002).

Although some normal universities and institutions, supported and funded by the government or MOE, offered some '4+2', '4+1+2' and '3+3' programmes to improve teacher education levels, there is limited research conducted to assess the effectiveness of student teachers and teacher education programmes (Guan, 2009; Zhou, 2014). On the other hand, teacher education no longer only emphasises pre-service training. It now focuses on the lifelong development of teachers. In terms of curriculum, some new concepts of teaching, such as active learning, problem-solving with inquiry and creativity, collaborative learning and student-centred approaches, have been introduced and delivered (Griffiths, 2009; Maclellan, 2008; Ertmer and Newby, 2013). With the development of technology, the knowledge, skills and potential influences of information technology have been outlined in the teacher education program.

However, a study conducted by Zhou et al. (2011) analysed 192 undergraduate teacher education programmes in China and found that 50% of credits were related to the subject matter, and 30% of credits were about general education (including political issues, English, Physical Education and computer science). A low percentage (10%) of credits related to professional education, such as student psychology, pedagogy and educational technology. Among these 192 programmes, courses offering classroom management skills and strategies, research methods, communication, classroom administration, textbook analysis, and basic education curriculum reform are even fewer (Zhou et al., 2011).

Teacher education has been criticised for inadequate education in knowledge and understanding of the new curriculum and how to teach (Zhou, 2014).

The MOE (2006) initiated the 'PISA 2006 trial test': Shanghai has been participating in PISA since 2009 (Liu, 2019). According to Wang (2009), the PISA National Project Manager representing China, this initiative aims to study PISA's 'modern evaluation framework, theory, and tools, providing practical training to develop assessment standards, mechanisms, and technology for China's education system' (p.22). Among 34 OECD member countries and 41 partner countries and economies, the performance of Chinese students from Shanghai ranked top on the PISA international assessments of math, reading and science in 2009 (OECD, 2010). This result attracted both Western researchers' attention and the attention of educators, researchers and policymakers in China. Han (2012) comments that the reason for the high ranking might be teachers' subject matter knowledge acquired in pre-service teacher education programmes and the improvement of skills through in-service training. However, studies have criticised teacher education programmes in China from the following three aspects: limited attention to children's learning and development, inadequate preparation in pedagogy, and limited opportunities and time for classroom practice for student teachers (Wang, 2012; Yang, 2010; Han, 2012).

With the significant role of human resources in Chinese development and a deeper understanding of teacher knowledge and teacher effectiveness, the MOE published two specific documents, '*The National Curriculum Standards for Teacher Education*' (2011) and '*Standards for Teacher Certification of Kindergarten/ primary school and Secondary School teachers*' (2011a, b, c). The '*National Curriculum Standards for Teacher Education*' (MOE, 2011) is the first and the most comprehensive national curriculum standards for teacher education programmes in China. They "outline the basic requirements for educational curricular set up by teacher education institutions and should guide the establishment of educational curriculum programmes for teacher education, development of textbooks and curriculum resources, and accreditation of teacher licensing" (MOE, 2011, p.6). As Rao (2020) and Han (2012) state, this standard stipulates what teacher education programmes should do in terms of curriculum design, teaching materials development, delivery and evaluation. Among these, three dimensions are highlighted in this standard – educational beliefs and responsibilities, educational knowledge and skills, and educational practice and experience. Zhou (2014) claims this

standard promotes several concepts, such as learner-centred education, practice-oriented teacher education, and teacher-lifelong learning. The standard tries to make the connection between theoretical knowledge and educational practice and the connection between course content and reality and reform. Therefore, increased credit hours for course/practice work are suggested. The types of teaching methods have been enriched, such as demonstration classes, on-site teaching, situated instruction and case analyses (Zhou, 2014). The '*Accreditation Standards for Teacher Education Programmes (trial)*' launched in 2014 also provides guidance for the accreditation and evaluation of teacher education programmes (Rao, 2020). This reform aims to create a coherent and continuous teacher education system that includes teacher professional development.

The '*Standards for Teacher Certification of Elementary and Secondary Schools and Preschools stipulate teachers'* competencies and qualities and the teacher certification examination, which aims at improving teacher quality and professionalism (MOE, 2011a, b, c). Previously, different provinces had different guidelines for assessing student teachers: Han (2012) states that as long as student teachers passed the Mandarin test, they could achieve a teacher qualification certificate. This resulted in uneven qualities of teachers across different provinces. After documents issued by the MOE (2011a, b, c), teacher candidates in different teaching levels (preschool, elementary school, secondary school) should be assessed on their professional ethics, professional knowledge, and basic knowledge and skills with the computerised or paper-pencil examination. All teacher candidates need to pass examinations in subject knowledge and skill. However, secondary school teacher candidates need to pass two other tests on content and pedagogy, respectively. When they pass these tests, they will be invited to participate in an interview, which includes answering questions, solving problems raised by a specific scenario, planning lessons, and microteaching. In summary, according to Rao (2020), the standard introduces three important changes. Firstly, all teacher candidates with any background should take the teacher certification examination without any exemptions, even if they have graduated from teacher education institutions. Secondly, the regular teacher certificate registration system is mandated every five years (including the current in-service teachers). Thirdly this standard was applied in Zhejiang and Hubei provinces and then extended to the other 15 provinces in 2014 (Rao, 2020) to mitigate the disparity in teacher qualifications in different regions of China (Han, 2012).

Revitalisation has been the key theme of teacher education reform since 2017. In November 2017, '*Opinions on Deepening the Reform of the Teaching Force Construction in the New Era in an All-Round Way*' was approved (The State Council of the People's Republic of China, 2018). The objectives of this were to improve the teaching profession's status and treatment and to enhance teacher quality by achieving educational developments. Chinese President Xi Jinping proposed in the Report of the Nineteenth National Congress of the Communist Party of China in 2017: "We should strengthen the construction of the teacher education system, increase support for normal colleges and universities, identify the main problems in teacher education, seek breakthroughs and focus on deepening teacher education reform, and constantly improve the quality of teacher education" (Xi, 2017, no pagination).

After this, the MOE issued '*The Action Plan for Teacher Education Revitalization (2018-2022)*' in March 2018 (MOE, 2018). This plan first defines the goals and tasks for the revitalisation of teacher education; that is, after about five years of effort, a number of high-level and distinctive teacher education colleges and normal majors would be established. The teacher education system would then be basically sound, laying a solid foundation for the long-term sustainable development of teacher education in China. In general, the *Action Plan* highlighted 5 key tasks and 10 action tasks for teacher education, which resulted in a teacher education system with Chinese characteristics had taken shape. In February 2019, the State Council of the People's Republic of China (2019) implemented '*China's Education Modernisation 2035*', which clearly identifies "building a high-quality professional and innovative teaching team"(p.13) as one of the ten strategic tasks for education modernisation. According to Rao (2020), these documents and policies indicate the Chinese government has a conscientious awareness of revitalising teacher education and has laid out the corresponding steps to achieve the goals. As a result of these changes to policy and practice, the content and methods of teacher education and the overall quality, professionalism and innovation capacity of teachers have been improved (Rao, 2020).

During this period (1966-2022) of teacher education reform and development, the independent and closed system has moved to a more diversified and open (Shi and Englert, 2008), and the discourse has transitioned from 'normal education' to 'teacher education'. Teacher education in China has shifted from a planned and oriented environment towards a market-driven environment and gradual integration into the global trend of teacher

specialisation and teacher professionalism (Shi and Englert, 2008; Ye et al., 2019). A modern teacher education system with Chinese characteristics has been developed (Rao, 2020; Ye et al., 2019; Zhou, 2014; Han, 2012). From the perspective of education institutions, secondary normal schools have been incorporated with three-year professional teacher colleges, and some professional teacher colleges have upgraded to four-year colleges or merged with other normal or comprehensive universities. Teacher education has experienced a change from non-degree requirements at all levels of schools to specific degrees matched to particular levels of schools. Pre-service and in-service teacher education has been developed from the perspective of teacher development. Regarding professional standards for teaching certificates, both subject matter knowledge and pedological knowledge are now considered essential for teachers in China. In addition, government guidance, policies and documents have been created to build a systematic and policy-based teacher education system.

However, several researchers have pointed out the limitations and problems of current teacher education. In terms of teacher education programmes in China, coherence between fieldwork and coursework, theory and practice (one of the indicators of the quality of a teacher education program) is weak (El-Abd et al., 2021). The formation of teachers' values and morality involves a long process, and teacher education in China is still at a very early stage in focusing on values (Rao, 2020). Most teacher education programmes in China are subject-centred, which means the credits of subject matter courses have been given the most significant proportion of the programmes, but the study of how to teach students and the opportunities to practice in classrooms are limited (Zhou et al., 2011).

Teachers' low social status and income have also demotivated students to enter teaching as a career. This has resulted in decreased numbers of student teachers and new teachers (Rao, 2020). On the other hand, the requirements and expectations for the role of the teacher are increasing, leading to heavier workloads for teachers (Houston et al., 2006), which might become demotivating (Addison and Brundrett, 2008). In order to face these challenges, different provinces are trying to find suitable ways to develop teacher education. The provincial Department of Education, where the case study university is located, issued an '*Implementation Plan'* in 2018, helping to promote the modernisation of education in the province. The implementation plan (Provincial Department of Education, 2018) clearly states that teacher education will not only study pre-service for 4 years but

will also be extended to 5 years after graduation and taking up a teaching job to help new teachers to develop their latent potential and expand their professional abilities.

This implementation plan also changed the old student teacher's admission mode (only based on the college entrance examination score) to a new mode (comprehensive evaluation: college entrance examination, self-test and academic proficiency test). Successful candidates are able to receive public funding for studying a 4-year teacher education programme and will be assigned once they are qualified to primary and secondary schools in the eastern, western and northern regions of the province in preschool education, special education, teacher and teachers of in-demand subjects. This attracts high numbers of students to apply. The plan also proposes to implement the '*Excellent Teacher Education Program*', which is a programme to improve the system for student teachers to study dual majors and dual degrees. This plan also stipulates that there should be no less than 1 educational practice base for every 20 interns. A 'dual tutor' (school teacher + university tutor) system has been promoted (Jian-guo et al., 2018).

The University in South China issued an *Action Plan (2018-2022),* which introduced how to achieve the goals by following the guidance from the '*Implementation Plan'*. In addition, the University has also established the first Faculty of Teacher Education in China. This Faculty helps to integrate the relatively scattered teacher education and training resources around the university, upgrade teacher education from a social service function, include student-teacher education and teacher education as the primary responsibilities of the university, and promote the integration of pre-service and in-service teacher education (University information 2019).

3.2 Teacher Education in Scotland

Scotland has a rich educational history. In 1838, the first teacher-training college in Edinburgh was established. This aimed to provide a standardised approach to teacher education, focusing on acquiring theoretical knowledge and pedagogical skills. However, undergoing various policy changes over the years, Teacher Education in Scotland has significantly changed as it has been shaped by a range of policies and different stakeholders. Generally, teacher education in Scotland is delivered through various programmes, including undergraduate degrees in education (BEd) and Professional Graduate Diplomas in Education (PGDE). The ratio of recruiting students in the PGDE programme is normally larger than in BEd. Only those student teachers who have

successfully completed a recognised teacher education programme are qualified as teachers by the General Teaching Council for Scotland (GTCS).

The PGDE programme was first introduced by the Scottish Office of Education and Industry Department (SOEID) in 1993 as a response to concerns about the quality of teacher education in the country (Munn, 2006). The PGDE programme is the most common pathway to becoming a teacher in Scotland, and it is designed to provide students with the necessary knowledge and skills to be successful in the classroom (Ellis, 2020). PGDE programmes recruit graduates with undergraduate degrees in a range of different subjects or areas and provide them with one year of teacher education. Therefore, students in this programme could be more specialised in their chosen subject area (Florian and Rouse, 2009) in their undergraduate studies and then gain a deep understanding and practice experiences of the subject they will be teaching in the PGDE programme study. Students can choose two specific levels, primary PGDE or secondary PGDE (Ellis, 2020; Florian and Rouse, 2009).

The first significant policy that currently shapes PGDE programmes in Scotland that should be mentioned is the "*The Standard for Provisional Registration (SPR)*" (GTCS, 2021b). It has undergone update and reviews based on the changing needs of the education sector and the latest research findings and practice in teaching over the past three decades (Xu, 2019). The first version of the teacher standards was published in the late 1990s and strongly emphasised subject knowledge. It detailed the subject and curriculum knowledge and teaching skills that teachers must possess. The 2007 edition of the standards, known as the Framework for Teacher Professionalism, reflected the growing trend towards integrated teacher professional development (GTCS, 2012b, c). The *Code of Professionalism and Conduct* (GTCS, 2012a) outlined the professional qualities and knowledge that teachers need at different stages of their careers and the skills and competencies they should develop (updated by GTCS, 2021a).

In 2011, the current edition of the teacher standards was produced. These standards set out requirements for teaching and learning, as well as personal and professional conduct, and are characterised by an emphasis on competency-based teacher standards (GTCS, 2012a). As the GTCS (2021) indicates, the SPR is 'the benchmark of competence required of all registered teachers in Scotland. This Professional Standard is the gateway to the profession and constitutes the teaching standards in which learners, parents, the profession, and the

wider community can have confidence' (p.3). In other words, the SPR sets out the minimum requirements that all newly qualified teachers in Scotland must meet to be registered provisionally and allowed to teach in Scottish schools. This is similar to the Chinese teacher registration system. Student teachers need to fully equip themselves in classroom management, lesson planning, subject knowledge, assessment and professional development to meet the demands of the teaching profession, according to the SPR (GTCS, 2021b).

The SPR highlights 4 different areas that the newly qualified teachers are expected to engage with during their first year of teaching: professional values and personal commitment, professional knowledge and understanding, professional skills and abilities, and professional attributes and engagement. The SPR impacts the teaching profession and has helped to enhance the quality of teacher education and training and improve the effectiveness of teaching practices (GTCS, 2021b). In other words, the SPR has provided a clear framework for teacher education providers to design and deliver their programmes, ensuring that new teachers have the necessary knowledge and skills to be effective in the classroom.

The GTCS plays an important role in accrediting teacher education in Scotland (GTCS, 2013). It was established in 1965, which was the first time that teachers in Scotland had their own professional guild-like organisation (Kirk, 1994). In the 'Teaching Council (Scotland) Act 1965', the GTCS became responsible for monitoring the quality of pre-service teacher education programmes and was empowered to establish teams to inspect teacher education institutions (Lin, 2014). It has effectively controlled the standards of the teaching profession and played a role in improving the professional and social status of teachers (Wu, 2002). A policy was implemented in 1984 which indicated that only graduates with a bachelor's degree or above could teach in Scotland. Therefore, the majority of the training colleges set up earlier in the 20th century began to seek recognition for their programmes from universities or degree-granting institutions to ensure their graduates could obtain degrees and be recognised as qualified teachers. In 1993, it was decided that all pre-service teacher education programmes in Scotland needed to be endorsed by the Scottish Secretary of Education and the General Teaching Council in Scotland (according to the Teachers (Education, Training and Recommendation for Registration) (Scotland) Regulations 1993). In 1998, the '*Guidelines for Teacher Education Courses in Scotland*' (Scottish Education Department, 1998) finally prescribed

that all teacher registration applicants need to complete the courses that have been accredited by the GTCS (Munn, 2006). This is the primary requirement for registration as a qualified primary or secondary teacher.

As the primary route for initial teacher education in Scotland, the PGDE programme is designed to provide student teachers with the skills, knowledge, values and experiences needed to become effective and reflective practitioners. In other words, the PGDE programme aims to prepare student teachers to meet the standard for provisional registration and become confident and competent practitioners in the field. Therefore, the PGDE programme has been divided into two phases: the first one is delivered by the university and is designed to provide student teachers with the necessary theoretical knowledge and pedagogical skills (academic study); the second phase is delivered in a school-based setting and provides students with hands-on experience in the classroom (practical teaching experience).

The curriculum has three main components: professional studies, pedagogical studies and school experiences for student teachers' professional development. The professional studies component focuses on developing student teachers' understanding of the educational context and policies that shape teaching and learning. This area also covers issues such as social justice, inclusion, equity, bilingual education and diversity in response to the demands of the teaching profession. The pedagogical studies component aims to develop student teachers' understanding of the theory and practice of teaching and learning. It also covers elements such as curriculum design, assessment, technology-enhanced teaching and classroom management. The school experience component provides student teachers with practical teaching experience in the school setting, allowing them to apply their knowledge and skills in a real-life context. In terms of teaching approaches, the PGDE programme adopts a variety of teaching approaches, including lectures, seminars, workshops, tutorials, and school-based experiences. In general, lectures and seminars provide students with theoretical knowledge, while workshops, observation and tutorials enable them to apply knowledge in a practical context. Evaluation and reflection are two main ways of assessment. Student teachers are encouraged to develop their collaborative and reflective skills by means of peer feedback, group work and reflective assignments. In addition, according to the Guidelines for accreditation of Initial Teacher Education Programmes in Scotland (GTCS, 2019), 'students should be supported to develop research and inquiry skills that underpin their professional practice' (p.13).

Placement is another key feature of academic study that the PGDE programme focuses on. Student teachers are required to undertake a minimum of 18 weeks of teaching practice in schools as two/three times placements. Throughout the placements, student teachers are supported by experienced mentors who provide guidance and feedback on their teaching practice. Many universities, including the University of Aberdeen and the University of Glasgow, also prioritise inclusion as a central aspect to cater to the needs of a diverse student community and promote the well-being and inclusion of both students and staff. Rouse (2008) notes that the University of Aberdeen Inclusive Practice Project is an effort by the School of Education to improve initial teacher education to meet the current demands of schools with respect to inclusion. It involves staff in developing new approaches to teacher education, with a focus on enhancing awareness and understanding of educational and social issues that affect student learning. The PGDE programmes for primary and secondary teachers have been revamped to include social and educational inclusion as a core element, drawing on the principles of learning, participation, and collaboration.

PGDE programmes have developed during the past several decades; however, challenges remain. The increasing demand for teachers in Scotland is one of the main challenges. The Scottish government has targets to recruit more teachers, especially for the Science, Technology, Engineering, and Mathematics (STEM) subjects, but the places and educational resources of the PGDE programme are limited. This puts pressure on the PGDE programme to increase capacity and produce more qualified teachers. In conclusion, the PGDE programme in Scotland is characterised by a solid commitment to professionalism, research and inquiry, collaborative and reflective learning, and practical teaching experience. This approach has been developed in response to a range of challenges facing the teaching profession, including ensuring that teachers are adequately prepared to meet the diverse and evolving needs of learners and promoting equity and social justice in education.

3.3 The Case Study Programmes in China and Scotland[1]

When comparing the teacher education contexts of Scotland and China, there are notable similarities and differences. In Scotland, the focus has been on enhancing the quality of

[1] Information and references in this section are from the handbook of Teacher Education Programme at the University in South China and of PGDE programme in the Scottish University.

teacher education programmes, with particular emphasis on aligning them with the demands of the workforce. This has entailed reviewing teacher education policies and introducing new standards for such programmes. Moreover, there has been a drive for increased cooperation between universities and schools in teacher education. In contrast, China has prioritised increasing the quantity and quality of teachers, especially in rural areas. This has resulted in various policy initiatives, including implementing a national teacher certification system and developing new teacher education programmes. Furthermore, there has been a focus on enhancing teachers' pedagogical skills, with an emphasis on the use of technology in education. One of the key differences between the two contexts is the extent of government involvement in teacher education. Scotland grants universities and schools' greater autonomy in designing teacher education programmes, whereas, in China, the government takes a more active role in shaping teacher education policy. Additionally, each country faces specific challenges, such as improving teacher quality in rural areas in China and enhancing collaboration between universities and schools in Scotland. Nonetheless, both countries share a common goal of improving the quality of teacher education programmes and teachers' pedagogical skills in the era of globalisation. The following section will look at the two programmes in China and Scotland that feature in this PhD study.

In general, Chinese teacher education programmes always enrol students majoring in subject teaching, which means that the faculties or departments are more likely to group students who want to become a teacher in a particular subject field, such as Chinese, Mathematics, English, Science, Art and so on. Students specialising in different subjects will not be taught together. Therefore, nearly all the teachers in China teach only one subject. The reasons why the University in South China has been chosen are that I am familiar with this university with its strong reputation in the teacher education profession in the province, and my bachelor's degree in Chinese Language and Literature (Teacher Education) comes from this university. Additionally, different subjects in the university in South China have their own handbooks, however, the main ideas are similar. I have selected the specific subject (Chinese Language and Literature) as an example handbook for analysing.

The handbook explains that this university programme aims at cultivating professional personnel who can meet the requirement of basic education in the fields of education, teaching, research, and administration or other industries relating to Chinese language and

literature. Students are expected to comprehensively master the basic theory and knowledge in the field of Chinese Language and Literature, acquire strong professional skills and possess excellent professional qualities. To be more specific, working independently on education, teaching and administration in basic education, reaching standard qualification in English and computer set by the government, developing strong social adaption and competition skills, and undertaking the responsibility of Chinese teachers and social language workers are four main requirements for abilities and qualifications.

The programme should be completed in 4 years, but 3 to 6 years is also permitted. Students need 164 credits to graduate, and courses occupy 0.5, 1, 2, 3, 4, 6 or 8 credits, respectively. In terms of course categories, courses are divided into 6 specific directions: Public Basic Courses, Curriculum of Major Subject, Core Courses, Curriculum for Orientation, Curriculum of Practice and Curriculum of Teacher Education. Different categories share different credits, 50, 34, 23, 24, 6 and 28 credits separately. Public Basic Courses constitute the largest proportion among these categories. The Curriculum of Major Subjects is the next largest proportion, followed by the Curriculum of Teacher Education. By contrast, the Curriculum of Practice accounts for 3.6% of the programme - the smallest percentage of credits for graduation.

Every category contains various courses. For example, Moral Cultivation and Bases of Law, Basic Principles of Marxism, Physical Education, Basic English and Computer Technology Foundation belong to the Public Basic Courses. The Curriculum of Major Subjects is a category for learning Chinese Language and Literature, such as Modern and Ancient Chinese language, Introduction to literature theory and Chinese ancient or modern literature. Additionally, in the Curriculum of Teacher Education, students are encouraged to learn Psychology, Pedagogy, Subject Pedagogy, Education Research Method, Teachers' Speech, Research on Chinese Learning Psychology, School Managerial Psychology, Microteaching and Educational Internship. Among these courses, Educational Internship values the most credits, 8 credits in total. However, Educational Internship starts in the final academic year, usually lasting 2 months or 4 months. The Degree thesis also should be completed in the final academic year, which values 6 credits. Finally, during schooling, students should not only complete all the courses required by the training programme but also pass the Mandarin Chinese Proficiency test and get this certificate. Only in this way

could students in this programme obtain teacher licensing. This teacher licensing, which is state approved, is the qualification to become a teacher.

In the case study programme from the Scottish University, it is important to note that while the PGDE programme offered by the Scottish University serves as a significant pathway for Initial Teacher Education (ITE), it represents just one of the routes available for aspiring educators in Scotland. In addition to the PGDE, Scotland offers a range of other ITE programmes, including undergraduate degrees in education, alternative certification routes, and postgraduate routes beyond the PGDE. These alternative pathways cater to diverse learner needs and educational contexts, providing prospective teachers with various options to pursue their professional qualifications. While this research focuses specifically on the PGDE program, it is essential to recognise the broader landscape of ITE provision in Scotland and the diverse pathways available for individuals seeking to enter the teaching profession. However, PGDE students in this research is partly attributed to the higher proportion of international students enrolled in this particular programme. The diverse cultural backgrounds and varied educational experiences of international PGDE students offer unique insights into the topic of this study.

In specific discussing the PGDE programme, it aims at providing student teachers knowledge, skills, values and personal commitment in order to meet the Standard for Provisional Registration and help students to become committed professionals necessary for work in Scottish schools. Additionally, by offering courses in educational and curricular issues from both practical and theoretical foundations, the programme aims to contribute to the development of student skills and approaches to learning and teaching, such as self-reflection, critical judgements, collaborative skills, creativity and analytical capabilities. In order to apply theory to practice, the programme also provides school experience with schools that are in partnership with the school of education in the University.

The PGDE programme at this university is for both Primary and Secondary teachers and is taught at Masters-level. The programme consists of 10 months of full-time study, 18 weeks of study on the University campus and 20 weeks of school experience in two schools. There are 4 modules in the programme structure: Understanding Learning and Teaching; Learning and Teaching in the Primary or Secondary Curriculum; Professional Enquiry; and School Placement. However, one of the largest differences between Secondary PGDE and

Primary PGDE is the qualifications in different subjects. Secondary teaching qualifications are offered in the following subjects: Art and Design, Biology, Business Education, Chemistry, Computing, English, Geography, History, Mathematics, Modern languages, Modern studies, Physics and Religious education. Those students who want to enter PGDE programmes are expected to have an undergraduate degree from a UK university or the equivalent of this from another country.

Based on the information in the two handbooks, it can be seen that there are several differences and similarities. Specifically, the most considerable similarity is that both programmes aim to train students to become qualified professional teachers and the qualification is specific to each country. Both programmes provide core courses, which are not only about teaching theories or concepts in classroom teaching but also about teaching skills and approaches to teaching practice. However, there are also differences. Firstly, it is a 4-year undergraduate teaching training programme at the University in South China, and students in this programme have to get a suitable score in the College Entrance Examination. In comparison, the PGDE programme at the University in Scotland is a 1-year Master's programme whose students are expected to have a degree before enrolling on PGDE. Secondly, the contents of these two programmes are slightly different. the University in South China's programme groups students into specific subjects and provides various courses, such as the general Public Basic Courses, Curriculum of Major Subject, Core Courses, Curriculum for Orientation, Curriculum of Practice and Curriculum of Teacher Education. Educational Internship occupies a few credits (8/165). In contrast, the PGDE programme divides students into the preparation for Primary teachers and Secondary teachers. Only 4 courses, Understanding Learning and Teaching, Learning and Teaching in the Primary or Secondary Curriculum, Professional Enquiry and School Placements, respectively, are offered. Among these courses, school experience has taken up half time of full-time schooling. Briefly, the University in South China focuses more on theoretical and subject-specific knowledge, while the PGDE programme is about practical teaching skills and teaching experience.

3.4 Conclusion

This chapter has given an overview of the teacher education context in China and Scotland. Chinese teacher education has been reorganised in the education system: integrated subject knowledge, pedagogical skills and practical experience have been added into the curriculum after the Cultural Revolution reform and in response to globalised trends. These

changes include the introduction of the standardised teacher certification system, shifts in the role of universities and government, incorporation of international concepts (such as teacher effectiveness and qualities, professionalism and inclusion), and curriculum reforms. These developments aim to prepare student teachers who can meet the demands of a globalised world and contribute to China's educational and economic advancement. In contrast, Scottish teacher education has a long history of professionalisation, with teacher education colleges being central to teacher education before becoming part of universities, and with a history of comprehensive reforms contributing to a robust system of teacher education. Teacher education programmes in Scotland are now offered at accredited universities, and prioritise theoretical knowledge, practical experience, and the development of pedagogical skills. Collaboration and continuous professional development are also key features. Understanding the historical developments and current practices in these contexts allows for identifying areas of improvement and potential opportunities for collaboration in teacher education.

As for the two specific case studies in South China and Scotland, the Chinese teacher education programme enrols students majoring in subject teaching, which means that the faculties or departments are more likely to group students who want to become a teacher into a particular subject field, such as Chinese, Mathematics, English, Science, Art and so on. Students specialising in different subjects do not teach together and nearly all teachers in China teach only one subject. Moreover, China has a 4-year undergraduate teaching preparation programme, and students in this programme must attain a suitable score on their College Entrance Examination before entry. In Scotland, there are undergraduate and postgraduate teacher education programmes. Roness and Smith (2009) note that the Postgraduate Certificate in Education (PGCE) has been a popular approach for some time to train students to become teachers in the United Kingdom. However, the PGCE has been renamed in Scotland as the Professional Graduate Diploma in Education (PGDE) (Donaldson, 2011). Specifically, the PGDE is a one-year postgraduate course that prepares prospective teachers in Scotland. Students who complete this course successfully can become teachers and teach in Scottish schools.

4. Chapter 4 Methodology

This chapter explains the methodological approaches taken during the completion of the research. This research investigated two teacher education programmes in two universities in the context of globalisation in Scotland and China. This research explored various dimensions of teacher education programmes, including staff and student understanding of globalisation, teacher effectiveness and quality, the influence of globalisation on teacher education policy, and the changes/developments in teacher education programmes under globalisation. An interpretivist research approach has been used to understand and interpret the subjective experiences, meanings, and perspectives of stakeholders (student teachers and educators) involved in teacher education programmes.

Due to the COVID-19 pandemic, online interviews and focus groups were used to collect data. This chapter justifies the choice of interpretivism as the paradigm for this research, provides an overview of the selected methods for data collection and analysis, and discusses the research design and ethical considerations.

The research questions are as follows:

1. How are teacher quality and effectiveness understood in the context of globalisation?
2. To what extent does globalisation in education policy influence the design of teacher education programmes?
3. What factors affect student teachers' experiences of teacher education programmes?
4. What are the differences and similarities in the teacher education programmes in Scotland and China?
5. What, if anything, could the programmes learn from one another, and what might be learned from both programmes about how globalisation influences teacher education?

4.1 Research Paradigm: Interpretivism

A paradigm is defined by Willis (2007) as a guide for the researcher conducting or practising research within specific philosophical beliefs or world views. A paradigm is the fundamental beginning of research and helps to clarify and organise the thinking about the research (Coe, 2017; Clark, 1998). Holliday (2016) has proposed many different kinds of paradigms, such as postpositivism, realism, postmodernism, critical theory, constructivism

and so on. Kovács et al. (2019) state that positivism, postpositivism, critical theory, and constructivism are four significant philosophical paradigms. However, the paradigms can be divided into three families, according to Willis (2007): one family includes empirical, postpositivist, positivist and objectivist, which are preferred in quantitative social science research; the other two families are critical theory and interpretivism, both dominant in qualitative research. Since early 2000, some researchers (Mackenzie and Knipe, 2006; Racher and Robinson, 2003; Kovács et al., 2019) have focussed on using paradigms in a more flexible way. A paradigm analysis conducted by Kovács et al. (2019) also finds examples of different paradigms used simultaneously in some studies in the past 25 years in psychology research. Choosing a particular paradigm to fulfil my research has been a long and challenging journey.

In terms of methodology, postpositivist research dominates quantitative methods (Willis, 2007) and can be used in mixed methods research (Admiraal and Wubbels, 2005). Postpositivist research typically begins with hypotheses (Guba and Lincoln, 1989; McWilliam, 1993), and the methodological approach in postpositivist research is often experimental, as indicated by Guba and Lincoln (1989). Several scholars (Coe, 2017; Willis, 2007; Will et al., 2007a, b) have suggested that postpositivism shares similarities with positivism, particularly in terms of employing scientific methods and objective data. Interpretivism acknowledges the subjective nature of knowledge and emphasises understanding the meanings and social constructions associated with the phenomenon under study (Lincoln et al., 2018). After comparing postpositivism with interpretivism and thinking deeply, I have sought a method and paradigmatic explanation within interpretivism as my paradigm.

Before deciding on a suitable paradigm, the ontological position, epistemology and methodology are three fundamental aspects that should be considered. The ontological position is related to the nature of reality (Willis, 2007; Coe, 2017). Initially, I chose postpositivism as my research paradigm because postpositivists argue that each study in the world can be linked to each other to understand reality, according to Willis et al. (2007a). Understanding the situation and challenges of the teacher education programme in Scotland might also help me understand that in China. My research explores two teacher education programmes in the context of globalisation using an approach which emphasises understanding subjective experiences, perspectives and meanings. These subjective experiences will also be influenced by cultural differences. This research aims to uncover

the diverse perspectives and socially constructed realities surrounding the two teacher education programmes that are the focus of the research. The understanding of the influences of globalisation on concepts of teacher quality and effectiveness in teacher education programmes may be various since the participants are in different cultural contexts in different education systems. Participants in both countries, with their own cultural differences, past experiences and histories, may have different views about the programmes.

Interpretivist research may not be able to generalise from results, but it can explore and interpret participant experiences, beliefs, perceptions and voices (Admiraal and Wubbels, 2005). In addition, Admiraal and Wubbels (2005) argue that interpretivist research allows for multiple perspectives and diverging voices to be heard. Admiraal and Wubbels (2005) additionally highlight the importance of acknowledging and documenting these different voices as they contribute to a more nuanced and comprehensive understanding of the phenomenon under investigation. As a researcher, I should be open to divergent perspectives and interpretations, recognising that participants reflect the complex nature of the research topic. By understanding the perspectives of educators and student teachers, it may be possible to make adjustments and modifications to the programmes by embracing different voices and comprehending the influences of globalisation and student needs.

4.2 Research Approach

4.2.1 Qualitative research

The research design for this research is qualitative in nature, aligning with the interpretivist paradigm. There are two widely accepted approaches for research: quantitative and qualitative (Willis, 2007). Willis (2007) considers that the major differences between qualitative and quantitative are in the foundational assumptions rather than only the type of data collected. Foundational assumptions refer to the underlying beliefs, epistemological positions, and ontological perspectives that shape the research approach. Therefore, as Creswell and Poth (2018) state, in most cases, interpretive, critical or postmodern research would be more likely to dominate in qualitative research, while quantitative research responds to empirical, positivist, postpositivist, or objectivist research. The foundational assumptions of quantitative research often align with a postpositivist or positivist perspective, whose reality exists independently of human perception and can be objectively measured and observed (Antwi and Hamza, 2015). Punch and Oancea (2014) and Holliday (2016) also agree that the differences between quantitative and qualitative are related to

ways of thinking about the world. Generally, quantitative researchers are more likely to focus on conceptualising the world by variables, while qualitative researchers prefer understanding cases and processes (Punch and Oancea, 2014). Qualitative research looks deeply into people's behaviours, perspectives or experiences within specific social settings or under specific circumstances (Lichtman, 2013; Mahoney and Goertz, 2006) rather than pursuing a generalised result. In other words, qualitative research focuses on understanding and interpreting social interactions (Lichtman, 2013).

My research invited participants to discuss their understanding of their situations and perspectives on their experiences in order to understand the two teacher education programmes. The research questions and aims of this research involve exploring the complexities, perceptions, and experiences within teacher education programmes. In other words, this research deals with specifics, respects individuals' understandings and learns about their perceptions in a deep way rather than understanding things at a surface level or with a view to providing a generalisable result (Litchman, 2013). Additionally, qualitative research allows for a holistic exploration of the social and cultural factors (Mohajan, 2018) that shape teacher education programmes, providing a nuanced understanding of the phenomena under research (Austin and Sutton, 2014).

As the researcher, I was responsible for data collection, information gathering, data analysis and data interpretation, but, as Litchman (2013) indicates, information collection, data analysis and interpretation could be influenced by the researcher's own perspectives, such as previous experience, background, knowledge and preferences in qualitative research. Admittedly, as the researcher, I have a previous learning experience in the Teacher Education programme in China and conducted a research project about the motivation of student teachers in teacher education programmes during my postgraduate studies. As Litchman (2013) claims, qualitative research cannot be objective. Therefore, the excessive pursuit of reducing bias is unnecessary. However, I have tried not to influence participants when presenting the ideas and when analysing the data, I have tried not to force the data towards specific meanings.

4.2.2 Case study approach

In the past 25 years, qualitative research has aroused much more attention and interest (Rennie et al., 2000), and a number of qualitative research in social science have been recently conducted (Kovács et al., 2019). Several research approaches can be used to

conduct qualitative research, such as Grounded Theory, Ethnography, Phenomenology, Narrative Approaches and Case Studies (Lichtman, 2013). In my research, the research approach of the case study has been chosen, which has been described by Robson and McCartan (2016), Noor (2008) and Ashley (2017) as investigating a contemporary issue by using different sources as evidence. The case study approach is a valuable qualitative research method that allows for an in-depth exploration of specific phenomena within their real-life context. The contemporary issue I have chosen is globalisation which has had a broad influence in different fields during recent years: social, political, cultural, technological, economic and educational (Mundy et al., 2016; Stromquist and Monkman, 2014). Hamilton and Corbett-Whittier (2014) deepened the definition of case study as a way to enhance our understanding of aspects of educational research in contexts, communities or individuals.

Although Yin (1989) claimed that a case study could be applied in an empirical inquiry relying on objectivist approaches (in Haverland and Yanow, 2012), it is often used in qualitative research. As Mahoney and Goertz (2006) highlight, cases in qualitative research are often oriented, positive, and dependent. This means that the selection of cases is purposeful and driven by the research objectives. In this research, the selection of the two universities and their teacher education programmes as cases is not arbitrary but is done with a specific purpose in mind. These cases are chosen to represent distinct but familiar contexts (Chinese and Scottish) to address the research questions and aims of this research. This is also emphasised: substantively particular cases refer to cases that possess unique qualities and characteristics, providing rich and detailed insights into the phenomenon under investigation (Rowley, 2002). These two selected cases can help me examine the structures, curricula, approaches to teaching and learning and challenges faced in the context of educational globalisation. As mentioned by Beck (2006), the case study approach also facilitates the explanation of these particular cases. This means that the case study possibly can allow me to explore why differences exist or not, why particular programmes are or are not effective, and to consider how they can develop in the context of globalisation.

The case study should not be simply recognised as a method or methodology, or research design (Van Wynsberghe and Khan, 2007). It is a strategic qualitative research methodology (Robson and McCartan, 2016; Noor, 2008; Ashley, 2017). The researcher has the autonomy to select one or more specific persons, groups, places, programmes,

organisations or phenomena in their real-life context to study and understand (Ashley, 2017).

Different types of case studies serve distinct purposes in research. Yin (2018) suggests that case studies should be developed into three categories: exploratory, descriptive and explanatory, respectively. Hypothesis testing is normally the basis of an exploratory case study (Yin, 2018; Ashley, 2017), also recognised as data collection research exploring patterns (Hamilton and Corbett-Whittier, 2014). It is useful for generating hypotheses, research questions, and design options (Zainal, 2007). Descriptive case studies consider a possible theory to structure the research and describe a phenomenon. They are particularly useful for documenting similarities and differences across multiple programme implementations (Zainal, 2007; Yin, 2018). Explanatory research, as the term suggests, focuses on explaining why a particular issue exists and explores how to address a problem or develop an organisation, which could refer to some factors, relationships and mechanisms that could contribute to the observed phenomena (Ashley, 2017). My research topic involves examining and describing the following dimensions of teacher education under globalisation in general: teacher quality, teacher effectiveness, globalisation's influence, factors affecting student teachers' experiences, and programme structures. It then relates these to the two teacher education programmes in Scotland and China. Therefore, my research can be characterised as a descriptive case study of the two teacher education programmes.

4.3 Approach to Data Collection

Lodico et al. (2006) indicate that educational-based research focuses on various aspects of the education field, such as student learning, teaching methods, teacher training, and classroom dynamics, with the systematic collection and analysis of data. As Mears (2012) states, educational research aims at understanding, discovering, explaining, or describing a topic, phenomenon, impact, culture, organisation or experience, in some cases, to adjust or improve the practice. The aim of my research is to explore teacher education in the two case study programmes with a view to understanding practice in the context of globalised teacher education policy.

The first two research questions (How are teacher quality and effectiveness understood in a context of globalisation? To what extent does globalisation in education policy influence

the design of teacher education programmes?) are closely tied to the literature review and the understanding of international teacher education policy.

To explore the other research questions, I selected data collection methods which would allow me to understand teacher education from the participants' voices and perspectives. Therefore, individual interviews and focus groups have been chosen as the main data collection method in my research. Interviews can be beneficial for gathering various kinds of information, such as values, views, opinions, beliefs, personal narratives and thoughts, to answer research questions (Lichtman, 2013; Atkins and Wallace, 2012; Gibbs, 2012). Normally, in educational research, people's insights towards one thing are significant to help explore research questions, especially in qualitative research (Atkins and Wallace, 2012). According to Brown and Durrheim (2009), Roulston (2004), and Gudkova (2018), gathering data by means of interviews is a primary way to explore participants' experiences. Several researchers (Lichtman, 2013; Gudkova, 2018; Gawlik, 2018) also include focus groups as one form of interview. I discuss the interview and focus group approach in depth after I have explained the participant selection and recruitment.

In order to collect relevant data during the interview and focus group, it is essential to mention the formulation of interview questions of this research for both student teachers and educator participants. It was a deliberate process, rooted in the overarching themes and key concepts identified within the research domain. Drawing upon the extensive literature review, I outlined the primary topics relevant to the study, including the concepts of globalisation, globalisation in education policy, teacher quality and effectiveness, programme experiences, and perspectives on teacher education design. Each topic was further broken into critical keywords such as "elements of globalisation", "teaching methods" and "curriculum". These keywords served as the building blocks for crafting focused and probing questions aimed at eliciting nuanced responses from participants. For example, questions regarding globalisation's impact on education policy were designed to acquire participants' understanding of broader socio-political influences on teacher education. Similarly, questions on program experiences were tailored to capture insights into both positive aspects and challenges encountered during teacher education, facilitating a comprehensive understanding of participant perspectives. By aligning interview questions with the research objectives and key thematic areas, the study aimed to capture rich and contextually relevant data, providing valuable insights into the complexities of teacher education practices and perceptions.

4.3.1 Participant Selection and Recruitment

In this research, all student teachers enrolled in the PGDE programme in the academic year 2020-2021 at the University in Scotland and in the Teacher Education Programme in September 2018 at the University in South China were invited to participate. Key staff members involved in the programmes were also invited to participate. All participation was voluntary, and invitations were sent through the researcher's university email or the institution's email, ensuring a transparent recruitment process. All participants had prior familiarity with their respective programmes and had either worked or studied on the programmes. Regarding the recruitment of educators, 6 invitation emails were sent to educators in the PGDE programme at the Scottish University, and 8 invitations to the School of Education in China. Three educators from the School of Education in Scotland expressed interest and agreed to participate in the research. Two educators provided an overview of the programme, and the rest of them focused more on his teaching course. This diverse representation of educators allowed for a comprehensive and diverse understanding of the program's structure and content. Unfortunately, no educators from China responded to the request. This may have been due to the Covid-19 pandemic restriction in China.

For the focus group involving student teachers at the University in Scotland, participants were selected after their third placement to ensure they had accumulated sufficient experiences and reflections on the programme. Participants in the PGDE programme consisted of a mixture of primary and secondary student teachers, although they were not all from the same subject. Two focus groups were conducted at the Scottish University, with one group consisting of 4 participants and the other group consisting of 2 participants (the third student withdrew at the last moment). The smaller group sizes facilitated in-depth discussions and ensured that every participant had the opportunity to share their experiences and perspectives. In terms of the University in South China, student teachers in their 3rd and 4th years, or engaged in postgraduate studies, were approached. Participants were invited from various subject backgrounds. Postgraduate students have completed their undergraduate studies and are pursuing a combined programme to obtain a master's degree in teaching, meeting job degree requirements in some parts of China. This diverse participant pool facilitated a wide array of insights and perspectives on teacher education. Three focus groups were arranged with 3, 3 and 4 participants, respectively. Although a number of invitation emails were sent, few of them had positive responses: most mentioned COVID-19 concerns.

4.3.2 Individual Interviews

The purpose of conducting interviews is to understand and explore participants' experiences or opinions regarding specific topics (Kvale, 2008; Warren, 2001), allowing a deeper understanding of things at a specific rather than a general level (Lichtman, 2013). Kvale (2008, p. 2) defined the individual interview as a conversation between an interviewer and an interviewee. Lichtman (2013) also suggests that an individual interview could be referred to as a conversation between a researcher and a participant. Interviews should be conducted in a one-to-one manner (Xerri, 2018). However, it is important to note that interviews differ from casual conversations, as they require careful planning preparation, purposeful questioning, the interaction between interviewer and interviewee, and attentive listening (Mears, 2012; Gudkova, 2018). As a researcher, I thought it was important to create a safe and open environment that encouraged participants to freely share their perspectives, experiences, and opinions. To achieve this, it was important to approach the interviews with an open mind, setting aside any preconceived assumptions stemming from previous knowledge or learning experiences (Rubin and Rubin, 1995) and aiming to create a non-influential environment (Ormston et al., 2014). I recognised that participants' responses should not be shared with specific meanings based on my prior understanding. Throughout the interview process, I prioritised active listening, allowing participants to express their thoughts without interruption or leading questions. I used open-ended prompts and follow-up questions to encourage participants to elaborate on their experiences and viewpoints (Brenner, 2012).

As Atkins and Wallace (2012) and Mooney and Miller-Young (2021) suggest, interviewing in education can also allow the exploration of education experiences. In the context of this research, the initial plan was to interview educators and programme designers from both universities to gain insights into their perspectives on globalisation, teacher effectiveness and quality, and their impact on teacher education programmes and programme aims.

There are several advantages of conducting individual interviews. Firstly, individual interviews allow the interviewee to express their inner understandings or thoughts securely and provide opportunities to clarify and explore the reasons participants have particular understandings (Atkins and Wallace, 2012). In terms of the types of interviews, according to Gudkova (2018) and Creswell and Poth (2016), standardised and semi-structured or non-structured interviews are the most frequently used in qualitative research. The

standardised interview is explained by Gudkova (2018) as organised by closed-ended questions asked in a fixed order to all interviewees. On the other hand, semi-structured interviews are organised with open-ended questions which aim at exploring and describing participants' perspectives (Gudkova, 2018). The semi-structured interview is more flexible than the standardised interview (Magaldi and Berler, 2020): the researcher has the autonomy to reorder the questions and ask more follow-up questions based on a participant's responses (Xerri, 2018). In my research, the individual interviews were semi-structured: interview questions were set in advance. However, I asked some follow-up questions when more clarifications or explanations were needed.

4.3.3 Focus Groups

I also chose to use focus groups for data collection. According to Gibbs (2012) and Lichtman (2013), conducting research by means of a focus group offers the advantage of gathering multiple perspectives on a topic in an interactive manner, enabling a comprehensive understanding of the phenomenon from various angles. The aim of conducting a focus group is exploring to investigate a specific phenomenon, according to Gawlik (2018), which is one of the aims of my research. Focus groups are particularly suitable for educational-based research, as they allow for the inclusion of diverse groups of individuals who can engage in discussions centred around a specific topic (Gibbs, 2012; Gawlik, 2018). Additionally, participants in the group are likely to be stimulated to interact with each other and share personal experiences and thoughts more deeply (Gawlik, 2018; Lichtman, 2013). As a result, the focus group can allow participants to build upon each other's ideas, challenge assumptions, and engage in critical dialogue. However, it is important to note that while participants in the same focus group may not necessarily arrive at the same conclusion during their discussion, this diversity of perspectives enriches the overall understanding, according to Lichtman (2013).

However, there are some challenges associated with conducting focus groups, as highlighted by Gibbs (2012). Firstly, there is how to maintain confidentiality. Since all participants in one focus group are exposed to each other's personal experiences and ideas, in addition, it is difficult to analyse and interpret data which are complex verbal and non-verbal responses (Gibbs, 2012). Although the participants in this research will be invited from the same education group (PGDE/ Teacher Education Programme). They come from different subject areas, secondary or primary school, and possess diverse parental and living backgrounds. Furthermore, at the University in Scotland, participants have a chance

that come from different regions. Last but not least, as a researcher, it is a challenge to manage a focus group and keep them active. In this regard, the research should actively listen to participants' answers and pose follow-up questions to collect more comprehensive experiences and opinions. It is also important to create an inclusive environment that encourages participants who may be nervous, anxious, or interrupted by others (Brenner, 2012).

To arrange my focus groups, all student teachers from the teacher education programme in both universities were invited. Initially, the plan was to have 4-6 participants in each focus group. However, due to the impact of COVID-19, there was reduced interest in participation. Consequently, I recruited participants from the University in Scotland in two rounds through email invitations and Moodle posts, respectively. There are two focus groups for the University of Scotland, with 6 participants in total and at the University in South China, 10 students participated in two focus groups. Although the group sizes were relatively small, student teachers were willing to share their experiences and opinions. The duration of focus groups in Scotland was approximately 1.5 hours and approximately 2 hours in South China. Although Gibbs (2012) claims a wide range (4-12 people) is possible for group sizes, Sandelowski (1995) emphasises that the size of the focus group should align with the requirement of the research itself. Thus smaller numbers of participants can be considered acceptable. In order to gather more in-depth views, focus group questions were distributed in advance, allowing participants to prepare before the discussion. This approach not only created a comfortable discussion environment but also ensured a more productive discussion. Additionally, due to the COVID-19 guidelines of both universities, the focus groups were conducted via Zoom.

The focus group and the interview stages for my research were in parallel. The focus groups were organised for student teachers, and the interviews were focused on educators. Initially, this research intended to establish a cross-cultural focus group for educators from both universities to explore cultural differences and promote mutual learning. However, due to the effects of COVID-19, no teacher educators from South China participated and I had to adapt the research design.

4.4 Approach to Data Analysis

King's Template Analysis was selected as the data analysis method for this research. To ensure the accuracy of the data before analysis, I sent the transcripts to the participants for

verification (McKenna, 2022). I then carried out the analysis following the guidelines given by King (2012) to code the data and develop themes. However, there were some challenges around language and translation which are discussed after the section on Template Analysis.

4.4.1 King's Template Analysis

The data analysis was guided by the principles of thematic analysis, following the steps outlined in King's Template (2004) for Qualitative Data Analysis. Generally speaking, the use of King's Template Analysis ensures a systematic and rigorous approach to data analysis. King's (2004) is a widely recognised method for organising and analysing qualitative data, which offers a systemative framework for sorting, categorising, and coding data, leading to the emergence of conceptual themes and a hierarchical structure. According to King (2012) and Brooks et al. (2015), template analysis encourages the researcher to reorganise and revise the initial template during the process of analysis. There are 6 main steps in the template analysis: firstly, to become familiar with the raw data; second, carry out the initial coding of the data; thirdly, define an initial coding template; fourthly, use the template to organise the data and modify the initial template if necessary; fifthly, adapting the template to allow a rich and comprehensive representation of the data as part of the interpretation process; finally, the 'final' template can be applied to the full data set, which provides a useful guide and structure for the writing-up of the research findings (Brooks and King, 2014). This approach allows for a comprehensive representation of the data and facilitates the identification of meaningful patterns and relationships.

The strengths of King's Template Analysis are its flexibility and iterative nature (King et al., 2018), which allowed me to modify and refine the initial coding template as the analysis progressed. This flexibility allows the template to be adapted to the data, capturing the nuances and complexities of the participants' responses. And the iterative process of coding and theme development allows for the identification of recurring patterns and themes, enabling a comprehensive interpretation of the data. However, it is important to acknowledge some limitations of the approach. The process can be time-consuming and requires careful attention to detail. The hierarchical nature of the coding structure may lead to the oversimplification of complex phenomena. As an interpretivist researcher, it is important to acknowledge that my own background, perspectives, and experiences may

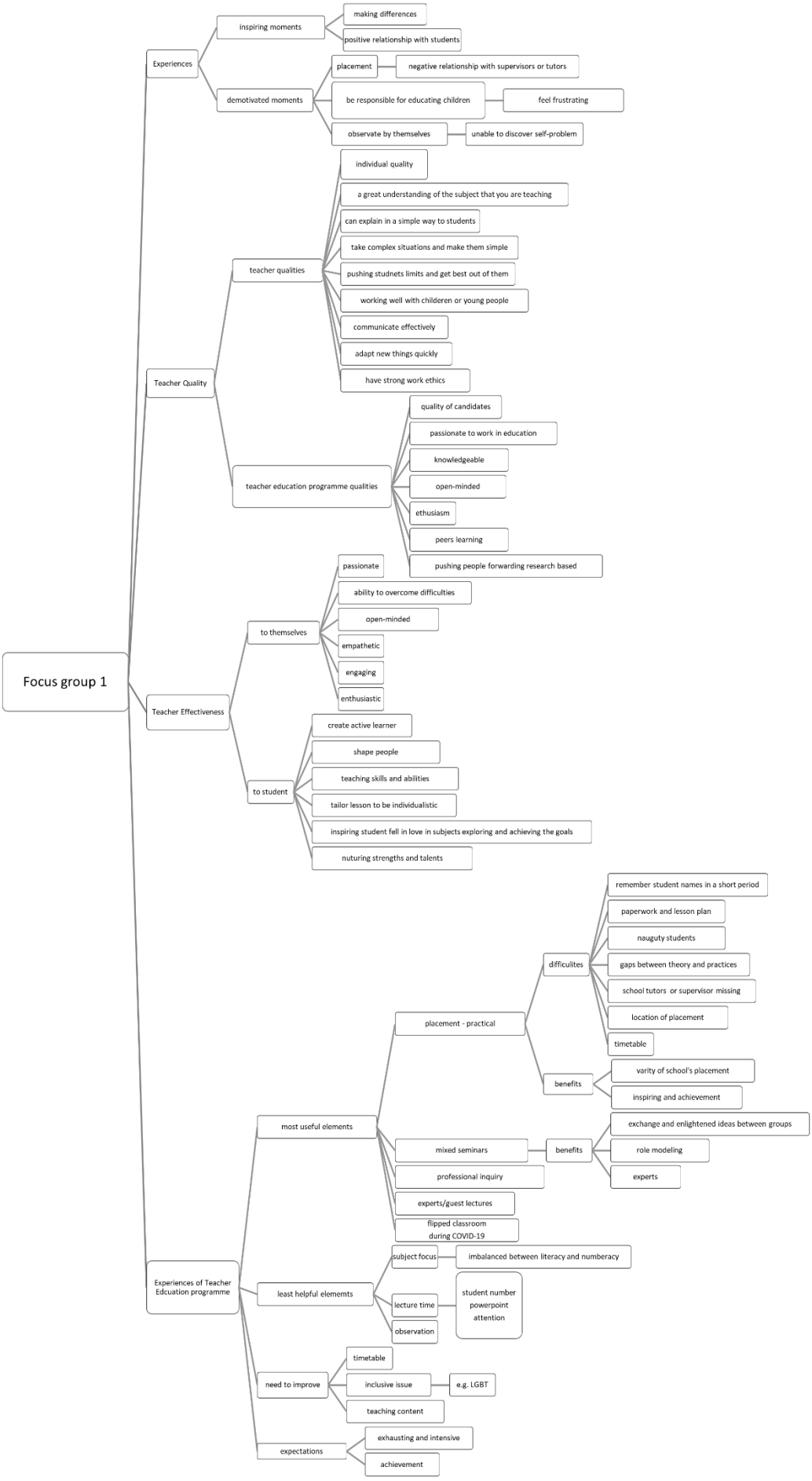
shape my interpretation of the data, as mentioned above. It was essential for me to critically reflect on potential assumptions during the analysis process.

At the initial coding stage of King's Template Analysis, researchers engage in open exploration of the data (Brooks et al., 2015). However, the initial coding is affected by the research questions and previous literature readings. Based on the knowledge that acquired from the previous literature and research, there are some themes applied in the initial coding stage. For example, I put the possible themes, such as 'the quality of teacher education', 'teacher qualities' and 'the most useful elements in the Teacher Education Programme', then highlighted all the related transcriptions in the matrix tables for the (shown in Appendix 8) and created the initial template, like the mind map. Followed by the initial template, a more deductive approach is adopted. I categorised and coded the data aligning with existing theories or concepts (King et al., 2018) from the literature review and from the research questions. For example, the concepts of teacher quality and effectiveness are already established in educational literature and theories, as mentioned in the literature review. I started with pre-existing concepts and knowledge related to teacher quality and effectiveness and then examined whether these understandings influenced participants or were shaped by the context of globalisation. This deductive approach helped me to apply pre-existing knowledge to the analysis process, allowing for a more systematic examination of the data and enabling connections to established theories.

However, I also employed some inductive analysis to help me to explore research question 3. The factors that influence student teachers' experiences may vary across different contexts and programmes. By using the inductive approach, I was able to identify and explore these factors directly from the qualitative data without being bound by pre-existing theories. Different people with different cultural or educational backgrounds probably have different understandings or perspectives. Therefore, the inductive approach allowed for the emergence of context-specific factors that may not have been previously considered in the literature.

Although the investigation of teacher education programmes is not a new research topic, it is a complex topic. The use of an inductive and deductive approach allowed me to remain open to unexpected findings and to capture the richness and diversity of participants' perspectives.

An example of the template coding for Focus Group 1 is given on the next page, with one for a teacher educator given in Appendix 2:



(Figure 1-4. Template coding for Focus group 1 at Scottish University)

4.4.2 Language Challenges

The issue of language was one of the main challenges of data analysis. I conducted the interview and focus groups at the Scottish University in English but in Mandarin at the University in China. This research is represented in English; therefore, translation was necessary. However, it is noted that translation poses several difficulties, including the potential for misinterpretation or loss of contextual meaning during the conversion from Mandarin to English. Cultural differences and language-specific expressions further complicate the translation process. I conducted the initial data analysis in participants' first languages, which allowed for a more authentic and nuanced understanding of their perspectives, rather than translating all transcripts before analysis. By analysing the data in their original language, I can capture the subtleties, cultural nuances, and idiomatic expressions that may not translate directly into English. Additionally, analysing the data in participants' first languages helped the analysis to remain as close as possible to the participants' intended meaning when interpreting the data. After completing the initial analysis, data have been translated into English for presentation and reporting purposes.

4.5 Ethical issues

As Oliver (2010) indicates, social science research data collection is frequently related to people. Stutchbury and Fox (2009) state that there are ethical considerations when it comes to research where people are interacting with each other. Ethical issues in research include 4 different aspects, the 'external layer', 'the consequential layer', 'deontological considerations', and 'the inner layer' (Stutchbury and Fox, 2009). To be more specific, there are external issues in the external layer, which means that the researcher should consider the law, policy, codes of practice and use of resources at this level; in the consequential layer, researchers are encouraged to think about the consequences/results of possible actions for the individuals, groups of people or society; researchers in the deontological considerations layer should pay more attention to the way of conducting research, such as minimising harm; the core in the inner layer is valuing or respecting individuals' humanity, autonomy, diversity and privacy (Stutchbury and Fox, 2009).

I reviewed the guidance of the British Education Researcher Association (BERA) and the guidance from the College of Social Sciences at the University of Glasgow before beginning my research. From BERA (2018), the guidance outlines that research should be conducted within the framework, which includes the responsibilities to participants, sponsors, clients and stakeholders in research, to the community of educational

researchers, for publication and dissemination, for researchers' well-being and development. Because my research involves human participants, I applied for and got approval from the College of Social Sciences Research Ethics Committee at the University of Glasgow. I also received permission from the Head of the School and programme leader to carry out the study and the university postmaster to access the student's and educators' emails to invite them to participate.

The potential risks to the physical and psychological well-being of the researcher and participants needed careful consideration. When conducting research, focus groups and individual interviews under COVID-19, there were many challenges. I started the data collection in April 2020, when it was a difficult time in the UK. Educators were busy with rescheduling timetables and moving to online teaching, and students were experiencing unpredictable changes. Therefore, the difficulties of inviting participants and arranging a physical research meeting were challenging. It was impossible to arrange a focus group or an individual interview face to face with my participants under the health care guidance of the UK government. Alternatively, I held the focus group and interview via Zoom. In the Zoom meeting, I created a password in advance and locked the meeting after all participants arrived to protect their privacy and the research environment. While in China, the data collection began in September 2020, and the situation with COVID-19 was settling down. However, I could not fly back to China and conduct the interviews or focus groups, so I arranged the research meeting via QQ meeting with password access, which is normally used for online teaching and company meetings.

As all participation was voluntary, before the interview or focus group, the consent form was completed to show that all participants understood the research clearly, agreed with their participation and understood that they were allowed to withdraw their consent for any reason and at any time. Additionally, the interview and the focus group were audio-recorded, but all the personal information of participants was de-identified in my research. I also had the responsibility of putting participants at their ease during the interview and focus group (BERA, 2018). Participants come from different nations or places, especially at the University in Scotland. Respecting different cultural backgrounds, language expressions, and previous experiences is significant. The design of the focus group and interview questions needed to be done carefully, such as using gentle questioning methods without directing towards a particular answer. The recording of the interview and focus group were treated as confidential and kept in secure storage all the

time, and any paper copies were shredded and securely disposed of at a specific date. Digital recordings were kept on the university cloud system.

As an educational researcher, in order to protect the integrity and reputation of educational research, some actions have been concerned and considered in the research design. Firstly, the qualitative approach, specifically deductive analysis guided by King's Template (2004) for this research, can demonstrate a commitment to a systematic and rigorous analysis process. Secondly, ethical considerations were carefully addressed throughout the research process. Informed consent was obtained from all participants, and their confidentiality and anonymity were preserved through the use of pseudonyms and secure data storage protocols (Kaiser, 2009). Participants were informed in the plain language statement that anonymity might be difficult to guarantee due to the case study nature of the two programmes: the names of the universities would be de-identified, but identification would still be a risk. Furthermore, the integration of diverse perspectives and the inclusion of two different cases (the PGDE programme at a University in Scotland and the Teacher Education programme at a university in South China) contribute to the credibility of the findings.

4.6 Conclusion

This chapter has provided an overview of the methodology employed in this research. It has outlined and justified the research paradigm of interpretivism, the research approach of qualitative research and case study approach, and the methods used for data collection, including individual interviews for educators and focus groups with student teachers. Additionally, it has discussed the data analysis method of King's Template Analysis, incorporating both inductive and deductive approaches, and addressed the potential language challenges encountered during the analysis process. Ethical considerations have also been highlighted. By doing these, findings from both universities can be collected and developed for understanding. The findings have been presented under two specific cases (the Scottish university and the university in South China) in the next chapter.

5. Chapter 5 Findings Case Study 1: Scotland

This findings chapter of this research involved the collection of data through two focus groups comprising four student teachers in Group 1 and two student teachers in Group 2, as well as three specific individual interviews conducted with educators from the PGDE program. Student teachers from different subjects and teaching levels (primary and secondary) were mixed in the focus groups, while the interviews were conducted with educators specialising in different areas. Student E and Student J specialised in primary school teaching, while the remaining students focused on secondary school teaching. Regarding the subjects, student teachers majoring in primary education (Student E and Student J) did not specialise in one subject. Student L specialised in Mathematics, Student M focused on Physics and General Science, Student G specialised in Religious Education, and Student O focused on Computing. The interviews involved three educators who played different roles within the PGDE programme. Lecturer 1 (L1) has a leadership role; Lecturer 2 (L2) has a primary specialism; and Lecturer 3 (L3) has a secondary specialism. This section summarises the views expressed by participants, focusing on four distinct themes: globalisation and its effects on teacher education; globalisation and knowledge; teacher effectiveness and teacher qualities; and perceptions of the PGDE programme.

5.1 Globalisation and its Effects on Teacher Education

The findings from the focus groups and interviews shed light on the topic of globalisation and its effects on teacher education. Both educators and student teachers found it difficult to give a precise definition of globalisation, although they all agreed this was an interesting and discussable topic. Educators acknowledged the complexity of defining globalisation, encompassing both positive aspects and highlighted challenges. Various definitions of globalisation were articulated during the interviews and focus groups, highlighting its broad nature and influence on teaching and learning:

- *globalisation is a quite broad term that covers different aspects and influences teaching and learning as well. (L1)*
- *globalisation makes the world become like a village which makes us united. (L2)*
- *we can look at what other countries do and how their other education systems work from an international perspective. (L1)*

Commodification and internationalisation were also mentioned. L3 explained that the commodification of education impacts the educational system and students, as well as knowledge, potentially resulting in social hierarchy and inequality. The lecturers thought that the commodification of education was a negative effect of globalisation, with educational institutions sometimes becoming preoccupied with profit-making. On the other hand, the growing presence of international students led L2 to focus on understanding how to welcome international students with different languages and cultural norms. L2 emphasised the importance of welcoming students through literature handbooks and organising social gatherings to facilitate interactions and foster connections among students from diverse nationalities. L2 further highlighted the value of encouraging students to engage with their own national groups, allowing them to come together based on shared language and activities.

Student teachers in the focus groups struggled to fully understand and articulate the concepts of globalisation and internationalisation in education. But they tried to share personal experiences of how globalisation influences their lives and society from an educational perspective. In general, the student teachers held positive views on globalisation and highlighted that globalisation brings people together and enables them to observe both similarities and differences worldwide. This is beneficial for sharing culture, knowledge and good practice:

- *We can adapt to our own unique cultures and unique learning environments, but understanding others helps us broaden our horizons and be critical. (Student J)*
- *In the classroom, it is interesting to hear the different opinions of those who come from different cultural backgrounds. (Student G)*

Student J shared a noteworthy experience involving pupils during placement studying Spanish. In order to facilitate their learning, Student J introduced a Spanish town along with its culture and society, adorned the classroom with culturally significant decorations from Spain, and even prepared traditional Spanish snacks. This preparation aimed to introduce children to a broad range of experiences relating to language and culture. Student J observed that the children were motivated and enjoyed the activities, illustrating the positive impact of such culturally immersive practices. This example emphasises the potential benefits of globalisation in fostering cultural sharing and expanding students' knowledge and appreciation of diverse cultures.

However, some challenges from student teachers' perspectives have been indicated, including the complexities of the international qualification recognition system and language proficiency authentication:

- *I think globalisation kind of brings education into one in general. For example, I did my GCSE [The General Certificate of Secondary Education] in [a nation in Africa]. If it is globalised like that, I can use my certificate to study in whichever country. That degree is equivalent to this degree. But the fact is not like that. When I was trying to apply for courses the first time, I tried to apply for courses in the UK for my master's degree. One of the questions they asked me was English. I need to prove that I studied in English. My course was taught in English in the classroom. So why do you need me to prove if it was taught in English again if I didn't have an English language test? (Student O)*
- *My [partner] actually qualified as a teacher in Sweden. But when they first came to Scotland, although it should have been very simple to notice that the teaching qualification is the same, they have been questioned at the beginning ''What is this qualification? You have qualified in Sweden, but is that the same in Scotland?' (Student J)*

L1 understood why student teachers found it difficult to understand globalisation. Although lecturers introduce and discuss the concept of globalisation in lectures or seminars, students cannot truly understand globalisation in education comprehensively. L1 suggested that the connections between globalisation and education might become more apparent to students after gaining teaching experience in different contexts. Conversely, the impact of globalisation on education might not be readily visible to students who learn and teach within the same context. L1 explained this with an example: 'a *student in the PGDE programme, who trained in Scotland, but goes, works, and teaches in China or the EU [European Union], has a more heightened awareness of all of the things that are seen as global in education and can see the connections and the things that are deemed to be universal, and can begin to see more clearly what is ideological as well.*'

The educators discussed both soft and hard power as an influence on education under globalisation. Hard power normally refers to the control exerted by governments, education councils, national organisations, or departments, while soft power emanates

from organisations like PISA and OECD. L3 provided an example: '*policies, established by big organisations or policymakers, such as the Common European Framework of Reference for Languages (CEFR) by the Council of Europe*', are one of the hard powers. The CEFR is an international standard for describing language ability that can enhance European mobility, as individuals can demonstrate their language competencies across borders. On the other hand, the CEFR also provides a basis for the elaboration of language syllabuses, curriculum guidelines, examinations, and textbooks across the member states of the Council of Europe. It serves as a form of hard power in the field of education under globalisation, as it establishes guidelines and standards that influence educational practices and promote international cooperation. In contrast, L3 and L1 stated that the OECD and PISA results could be the soft power that influences education. Soft power could refer to the ability to shape the preferences and behaviours of others through attraction, persuasion, and agenda-setting rather than coercion or force. Generally speaking, PISA results and the OECD conduct comprehensive research and collect data on educational systems worldwide. By providing valuable research, data, and policy recommendations, the OECD and PISA shape educational practices, policy decisions, and international cooperation, and influence education discourse, promoting evidence-based approaches and fostering convergence in education across countries. L1 and L3 explained these in specific.

According to L1, PISA, as one kind of soft power at a macro level, is used to monitor or measure education. They said that educators would '*look at things like PISA*' to see where their system performs well in terms of these tests and then to understand why other systems perform well, what their pedagogies are, and how their education systems work. L1 gave the example of Singapore, '*which is going to take a shift away, sort of philosophically, from high stakes testing*'. In other words, soft power is to be considered as part of a system's functioning (influencing, for example, education policies or methods). Soft power '*allows educators to try to position where Scotland sits in relation to the rest of the world, and try to make connections between the thought, the theories and the practices that exist and how we fit in*' (L1). On the other hand, L3 stated that in the OECD, different countries in different world regions which might do things very differently in terms of education practice. As L1 stated, soft power enables educators to position their own system within the global landscape, with the OECD and PISA providing educators with a globalised reference to learn from each other in order to improve the quality of education. However, as L3 stated, comparisons involve countries with different characteristics.

In terms of the influences in Scotland, all interviewees recognised that they have high levels of freedom and autonomy to deliver teacher education content and concepts. However, governmental and educational policies can lead to contemporary shifts in schools and classrooms, necessitating corresponding adjustments by teacher educators. In Scotland, the government and different organisations, such as the GTCS and local education authorities, shape Scotland's education directly (L3). According to L2, these educational bodies and governments are very conscious of the effects of globalisation, and they need to ensure that teacher education programmes reflect the influence of globalisation and internationalisation in education. L2 and L3 considered that the role of the GTCS and the Scottish Government in Scotland are supposed to be positive and encouraging - recommending but not enforcing anything.

L1 agreed that the General Teaching Council and government educational department are willing to establish policies to develop the education system in Scotland and promote guidance to teachers about how to teach or why they teach. Firstly, L1 gave an example of the concept of inclusion, which comes from the government. The School of Education covers aspects to do with LGBT experiences in the programme. Similarly, the concept of play-based pedagogy has been added to the content of the programme many primary schools in Scotland have begun to use this approach. In this case, L1 considered that sometimes the responses are '*not so much in response to policy, it is certainly in response to what we recognise as a shift in educational terms*'. L1 continued to highlight another example, the Scottish Curriculum for Excellence (CfE):

- *The Scottish Curriculum for Excellence has been produced in a time of globalisation which allows us to compare the Scottish curriculum with those from other nations.*
- *In CfE, educators are encouraged to be able to reflect on the ideological values that are included in the curriculum and to see that they do produce particular kinds of learners; students are asked to understand the theory behind that curriculum and why it is the way it is.*
- *As an educator, we teach students, we offer them ways in which to understand the curriculum; (CfE) as a political document, as an ideological document, as well as a practical document that students have to be able to master.*

L1 and L3 compared the freedom and autonomy they have in teacher education in Scotland with systems such as England: they felt they had more autonomy to respond to students' needs and respond to any changes resulting from globalisation.

Globalisation brings opportunities and challenges to teacher education programmes, including students' horizon broaden, critical thinking ability development and interconnected among countries for the positive aspects, and commodification of education, social hierarchy and inequality, language and culture barriers and international qualification recognition system with different standards and requirements as the challenges. Also, globalisation shapes educational practices, policy decisions, international cooperation and education discourse, promotes evidence-based approaches, and fosters education convergence.

5.2 Globalisation and Knowledge

The impact of globalisation on knowledge was a common topic discussed by both educators and student teachers. They held the idea that knowledge has become globalised, which leads to positive effects but also to some concerns. One positive aspect of globalised knowledge is that it includes learning resources, theories of learning, educational philosophies and pedagogies, and also brings the opportunity for students to access, exchange, share and learn from each other worldwide. Educators further referred to the PGDE programme itself as developing a deeper understanding of the globalisation of teacher education. The teacher educators recognised that globalisation is unavoidable and that teachers and students, therefore, need to engage with global educational theories.

The PGDE programme goes to go beyond knowledge transfer, taking a sociocultural perspective on learning, but L3 admitted the limited opportunities for internationalisation within the 1-year PGDE program. Because of the tight schedule of the programme (18 weeks in university and 18 weeks in placement schools), it also limits time for student teachers to comprehensively understand all the professional knowledge contained in the programme and do something else like study abroad (L1). However, L1 also mentioned that the University encourages student mobility through schemes like study abroad. This allows students to learn about education from an international perspective, which enriches their subject knowledge.

Participants mentioned a range of positive factors of globalisation:

- *Globalisation could be one of the enrichments of learning and teaching strategies, approaches, philosophies and pedagogies. (L2)*
- *With the growth of international students, students bring their own understandings and experiences to the classroom and share them within the classroom… they can be engaged in dialogues with one another. (L1)*
- *We are not just concentrating on the Scottish context, I have opportunities to read academic papers written not only by academics in Scotland or the UK but also by Americans, Canadians, Australians or other Europeans. (Student J)*
- *Students might go and do a semester in Australia or somewhere else at that. They do not go and work in a school, but what they will do is learn about education in another country. And in that sense, they are learning about their subject, but from a different international perspective, which is an enriching and positive experience'. (L1)*

Student teachers also emphasised the development of technologies to help to reduce the difficulties in accessing knowledge and allow knowledge to be spread at a rapid speed around the world. Student J shared an example of the use of Zoom during COVID-19. A webinar organised by the University featured teachers from Shanghai and Hong Kong sharing their experiences in responding to COVID-19. This webinar via Zoom broke geographical boundaries and created a space for ideas and good practices shared between different countries, even if they were in different parts of the world.

Both student teachers and educators indicated that globalisation might make meaning from knowledge, where international theory and knowledge could guide practice. Educators and student teachers both highlighted the importance of linking global concepts to the Scottish curriculum. The teacher educators stated the PGDE programme is making changes to help student teachers apply knowledge into practice and critically analyse educational policies of other countries and compare them with the Scottish context and education structure. Lecturer 1 stated:

> *From a very macro level, we will make a comparison with other education systems and see how they function. For example, when discussing Scandinavian countries and other places, such as Singapore, I will try to position where Scotland sits in relation to the rest of the world and to make connections between the thought,*

theories and practices that exist in other countries. In my classroom, I explore how other educational systems can fit into the Scottish context, even when students come from different parts of the world.

Educators and student teachers, on the other hand, expressed concerns and challenges regarding knowledge and globalisation. Student teachers are concerned about the relevance of global knowledge and comparisons to their own learning and classroom practices. The main issue is that they feel globalisation is not directly applicable to the real context. Student O summed this up by saying they were '*worried about if the knowledge we gained here could also be beneficial in/ applied to whichever country we want to teach. And if the qualification we had here could be accredited by other countries.*

Educators stressed the need to stay informed about professional knowledge and respond to educational trends and policies. As mentioned above, although educators in Scotland have the autonomy to respond to the policies or sources of power dynamics, there are influences on teaching and learning. L1 proposed four specific steps to help student teachers to respond to government policies or power dynamics: 1) critically understand policy and power, 2) encourage students to critically analyse and question, 3) reflect on policy in relation to their own teaching philosophy, and 4) develop teachers who view policy as a political tool, understanding how it positions and reflects their own teaching beliefs. In sum, both student teachers and educators highlighted the multifaceted nature of globalisation's influence on knowledge. The findings present opportunities for knowledge sharing and the exchanging of perspectives. Challenges such as cultural differences and localised issue must also be considered in order to foster a meaningful, mobility and inclusive educational experience.

5.3 Understanding Teacher Effectiveness and Teacher Qualities

5.3.1 Teacher Effectiveness

The participants in Scotland highlighted two main aspects of understanding teacher effectiveness: being an effective teacher and classroom effectiveness (lesson planning and preparation and engagement). The teacher educators also referenced the Standards for Provisional Registration and Full Registration as 'benchmarks' for understanding effectiveness.

Student teachers emphasised several critical elements that could contribute to teacher effectiveness. The first element is to acquire and possess a deep and wide understanding of knowledge of the subject matter being taught. This includes not only a comprehensive understanding of the curriculum but also a familiarity with the students in the classroom. By knowing the students' interests, backgrounds, and learning needs, a teacher can deliver knowledge in a way that motivates them. Secondly, being child-oriented is the other element the student teachers highlighted. Specifically, this involves building relationships with students and demonstrating care and passion for their growth and well-being. Comments included the following:

- *If you do not know your students, and you do not know what they are interested in, and you do not know anything about their situations, how can you deliver knowledge in a proper way? (Student J)*
- *Understanding students' backgrounds, learning levels, interests, and needs is crucial (to become effective). (Student O)*
- *The better you know your children, the more effective you can be. (Student M)*
- *The children-oriented teacher should be someone who is invested and building relationships with children. Instead of focusing on themselves, they devote passion and care to their children. (Student E)*

Students E, J and M also noted the importance of being empathetic, which they discussed as an ability to understand students' physical, social and mental situations while caring about pupils' emotions and responding compassionately to their needs.

On the other hand, student participants indicated that classroom effectiveness was also a vital component of teacher effectiveness. Two aspects of classroom effectiveness have been identified: lesson planning and preparation and classroom engagement. Student participants L and G noted several points about this:

- The effectiveness of teaching cannot be isolated from the context in which it occurs.
- Anything can happen, and anything can disrupt a lesson in school.
- A well-prepared lesson is seen as fundamental to successful teaching, requiring thorough planning and preparation.

- The preparation of a lesson includes not only the mastery of content and the design of learning activities but also an understanding of students' diverse backgrounds, prior knowledge levels and interests.

Student E said it was important to classroom effectiveness for teachers to be consistent in their teaching methods and maintain clarity and coherence in their instructional approach. Teaching in the classroom is not only teaching children but also teaching them what skills they can apply to real life and an ability to apply, eventually to help children achieve their learning goals and shape their personalities (Student G and Student E).

Effective teachers should be able to engage with students and deliver knowledge clearly and in an easily understandable manner (Student E and Student O). As recognised by Student J, student engagement is fostered through teachers' enthusiasm, passion, and enjoyment of the subject matter. Student G thought that a teacher's ability to stimulate students' curiosity and love of learning is seen as a sign of effectiveness. Active teaching methods were also emphasised, as they promote active learning, interaction and participation in the classroom environment (Student E). Student J said that students are 'more likely to be engaged when teachers themselves are excited about the content'. For that reason, 'displaying a passion for the subject matter and conveying why it is enjoyable is essential' (Student J). Student E stated that a '*teacher's positive behaviour, activeness, and motivation can inspire students'.*

In order to better understand teacher effectiveness, teacher educators discussed the meaning of 'effective', which L1 felt was complicated and subjective. L3 was uncomfortable about the word 'effective' because '*effective is often tied with accountability and performance*'. Therefore, L3 would like to define an 'effective teacher' as a 'good teacher'. However, all three teacher educators thought that professional skills, knowledge, and personal qualities were crucial in defining an effective teacher. They advocated for a broader understanding of effectiveness that emphasises student progress, development, and the overall learning experience. The understanding aligns with a more comprehensive view of teacher effectiveness that considers the impact on learners' lives beyond standardised assessments. L2 thought that teacher effectiveness was 'about ensuring that the learners are learning and making good progress and development'. However, they also thought that '*the effectiveness of the teacher is one who can qualify and quantify that learning has taken place and can measure the depth of the learning*'

(L2). L3 thought that '*effectiveness should link to children's learning or performances, but unfortunately, teacher effectiveness is often linked to exam results*'.

The teacher educators also focused on discussing the Standards for Provisional Registration (SPR) and Standards for Full Registration (SFR) for measuring teacher effectiveness. However, they agreed that being an effective teacher or achieving teaching effectiveness encompasses much more than these standards. They also recognised the influence of professional bodies, such as the GTCS, in shaping the understanding of effective teaching and being a good teacher. The GTCS, acting as a gatekeeper, provides standards and guidelines (the SPR and the SFR) that educators should adhere to in order to ensure the maintenance of professional skills and knowledge. In other words, the SPR and the SFR serve as benchmarks for assessing teacher effectiveness, indicating the qualities and competencies that effective teachers should process: the standards '*sort of indicate, are almost like the qualities of an effective teacher*'(L1).

PGDE programme can help student teachers to achieve the SPR. Within the PGDE program, educators aim to model themselves as teacher educators with a set of values, including equality, social justice, fairness, integrity, trust, and respect. A culture of justice, respect and care within the university can contribute to the development of teacher effectiveness as well, according to L2. The educators' comments indicated that they recognised that they play a significant role in shaping future teachers' understanding of effectiveness by modelling the qualities they desire to see in their students:

- *If educators see respectful and approachable are important, they model that. (L3)*
- *Educators are trying to encourage students to really think about their philosophies of being a teacher, why they want to teach, what it means to teach, and to really get them to develop a sense of professional identity and a passion for teaching. (L1)*

Their aim is to deliver a sense of professional identity and passion for teaching, encouraging teaching students to reflect on their teaching beliefs and their wider impact on pupils' lives.

Overall, the findings highlighted that participant thought that being an effective teacher involves acquiring subject knowledge, understanding students' needs, building relationships, and inspiring and engaging students. Classroom effectiveness, on the other

hand, involves thorough lesson planning and preparation, active student engagement, and consistent and appropriate teaching methods. The SPR and the SFR provide a framework for assessing teacher effectiveness. Although, both student teachers and educators agreed that the effectiveness of teachers should be reflected in whether teachers can help students achieve their learning goals and shape their personalities, the reality is that the effectiveness of teachers is usually determined by the results of the standardised test. On the other hand, to help student teachers improve the effectiveness, educators in the PGDE programme try to play a role in shaping teacher effectiveness by modelling desired qualities, promoting reflection on teaching philosophies and professional identity, and delivering a passion for teaching and learning.

5.3.2 Teacher Qualities

The educators in the interviews and student teachers in focus groups shared various insights regarding the qualities that an effective teacher should have. L2 referred to their previous research project, categorising qualities into two aspects: personal/emotional qualities and intellectual qualities. Within the aspect of personal/emotional qualities, the significance of being approachable, kind, respectful, and patient has been highlighted. However, L2 indicated that being a good or nice person alone is insufficient to be a teacher; intellectual qualities are equally important. According to L2, the teacher must possess not only a solid foundation of knowledge but also intellectual curiosity. This curiosity drives teachers to continually acquire new knowledge and engage in lifelong learning. L2 argued that teachers with intellectual curiosity are more likely to have the ability to be creative, which is crucial in the teaching profession. On the other hand, L3 emphasised the importance of a teacher's strong and comprehensive pedagogical content knowledge along with the abilities of reflection, adoption of innovative practices, a deep understanding of the educational context and purpose, a passion for working with children, strong teamwork and a comprehensive understanding of assessment and pedagogy. Furthermore, L3 emphasised the need for teachers to believe in social justice and actively promote inclusivity in the classroom, enabling students to exercise agency and participate fully in their educational experiences.

The perspectives of student teachers in the focus groups further strengthen these as being qualities that are important for effective teachers to develop. Student G, Student J and Student M identified caring for children as a primary quality that a teacher should possess. They emphasised the nurturing aspect of teaching, highlighting the importance of support

and active listening. Student J referred to their experience of the city-wide nurturing program, emphasising the need for teachers to hear their students and understand their wants and needs. Similarly, Student O emphasised the importance of teachers creating a nurturing and compassionate learning environment: *Bringing nurturing into my classroom and listening to their voice. Do not assume that every person is living in a luxurious house, and do not assume that every person has a moment that makes them breakfast before they leave the house.* Moreover, the importance of joy, warmth and inclusivity in the classroom was highlighted by Student J. They said that pupils would be '*more likely to enjoy the classroom that teachers bring with joy and welcome, rather than those who are overly strict, angry and authoritarian. I also think that if children like your classroom, they are more likely to be engaged in learning (Student J).*

Student G further emphasised the significance of enthusiasm, explaining that teachers who are passionate about their work can inspire students to engage actively in their education; and also motivate themselves to keep forwarding on their careers. Students also mentioned that it was important for teachers to have a strong work ethic, effective communication skills, adaptability, and good time management. The focus group participants explained that teachers possessing these qualities are more likely to facilitate their student's learning and overall well-being (Student O, Student J, Student G and Student M).

In summary, both the teacher educators and student teachers recognised the importance of a diverse range of qualities an effective teacher should have. These qualities included personal/emotional attributes, such as approachability and kindness, as well as intellectual qualities, including curiosity and pedagogical content knowledge. The perspectives of student teachers further emphasised the significance of caring, empathy, a nurturing classroom environment, and teachers' passion and enthusiasm for their work. Participants agreed that teachers with these qualities are better equipped to facilitate student learning, foster positive relationships, and create an inclusive and engaging educational environment.

5.4 Perceptions of the PGDE Programme

This section presents the findings on student teachers' and educators' perspectives of the PGDE programme. The discussion includes insights gathered from focus groups and interviews, highlighting the program's strengths, particularly in terms of staff and peers, as well as the different course types and teaching methods employed. The majority of student

teachers expressed satisfaction with the programme and mentioned that they felt welcome and supported by the educators and staff. They appreciated the knowledge and expertise of the lecturers, who not only delivered the curriculum but also pushed students to reach their full potential (Student L). However, both student teachers and educators committed that the PGDE programme is an intensive and heavy student workload. Participants' personal experiences and perspectives have also identified some other weaknesses and areas for programme improvement.

5.4.1 Strengths of the Programme

L1 and L2 acknowledged that the PGDE programme aligns with professional and societal needs. L1 further noted that the programme aligns with the University's values as well as the values and cultures of the communities in which it operates. L2 emphasised the program's aim of producing highly qualified, competent, and confident teachers who can make a positive difference in the lives of children and families. Additionally, L2 highlighted four attributes that the programme seeks to deliver to the Scottish education curriculum. These attributes include fostering successful learning outcomes for pupils and children, encouraging their active contribution to society, nurturing their confidence, and promoting their willingness to participate in societal changes. L3 commented on the focuses and aims of the program:

> *There are two focuses of this program: one is what will benefit students the most with an awareness of what will probably be the best programme for students, and the other is to have this awareness of what is the best programme for our future children and their collections… The aims of this programme are to help students with communication, manage their expectations and tailor support to students who are at a different stage of development. (L3)*

Educators in the interviews also highlighted that most colleagues in the programme had a strong combination of knowledge background and teaching experiences in secondary and primary practices. They also highlighted that the programme emphasised the importance of being innovative and inclusive in teaching practices, which could allow student teachers to develop their own teaching styles and explore different methodologies. L2 said: '*As an educator, I am very mindful in the PGDE program, trying to remove any barriers to learning and let students feel embraced and included in the classroom.*' They also thought

that the PGDE '*delivers a strong sense of social justice and a strong sense that teaching is a noble profession and is highly valued*' (L2).

In general, student teachers identified more personal aspects as those that contribute to their satisfaction. The student teachers first highlighted the supportive nature of the staff and their availability to help when needed, creating a positive and caring environment. They felt staff are approachable and supportive, addressing students' concerns and providing guidance. Student J said: '*I can feel that I am cared about. All the staff in this programme are supportive and are here for us whenever we need them, helping us learn and teach.'* As indicated by student teachers, the educators went beyond delivering the curriculum and actively supported students' individual growth and development. Additionally, student teachers emphasised the significance of educators' role modelling in the program. While the lectures did not explicitly instruct them on how to teach, they observed the educators' teaching practices and considered them as examples to follow. This approach helped student teachers develop their understanding of effective teaching methods and provided valuable insights into the teaching profession.

Furthermore, student teachers appreciated the expertise and knowledge of the educators who were able to explain complex concepts in a clear and understandable manner. They also appreciated the lecturers who had practical experience in schools and stayed updated with current educational practices enabling student teachers to understand the combination of academic knowledge and real-world experience. Comments included:

- *They would not tell us how to teach in the classroom. However, they are role modelling and showing us: this is teaching. (Student J)*
- *Some lectures are experts in their field, and some of them continue to work with other schools; therefore, they are aware of what is currently happening and classrooms in Scotland, and they are active in research so that students are able to get the freshest/updated experiences, knowledge and situation and be able to prepare more about the real classroom before their placements. (Student J and Student E)*

Last but not least, student teachers revealed that they were encouraged to explore creative pedagogies and adopt progressive and inclusive approaches.

Student teachers found the peer learning aspect of this programme to be significant and beneficial as well. The high-quality peers enrolled in the PGDE programme brought diverse experiences and actively shared their knowledge and ideas (Student E, Student M and Student J). This collaborative learning environment facilitated idea exchange, experience sharing, and a supportive atmosphere (Student E). L1 noted that the approach used was to ask students, '*What would you do as a teacher (rather than ask 'yes' or 'no' questions) in order to develop their critical thinking*'. Students' perspectives included:

- *Instead of giving the answer directly, educators allowed us to use our heads and skills to figure out the answer. They asked us to figure out what we wanted as a teacher. What do we want to improve? What would we do as a teacher? What qualities does a teacher need to have? These questions are helpful and make us reflect on ourselves. Therefore, I am more likely to engage in the classroom and contribute to my learning. (Student O)*
- *Although lectures are experienced, they respect different ideas and views, rather than asking students to follow them (Student J).*
- *Our peers are encouraging and open-minded, which is the greatest thing I want to say about them. They are so willing to take on different concepts and ideas that they may not have necessarily had before they came into the teaching program. (Student L)*

5.4.2 Perceptions of Course Approaches

5.4.2.1 Lectures and Seminars

The PGDE programme primarily consists of course lectures and seminars, and school placements. The delivery approach of these courses is considered a creative aspect of the program, as stated by educators in interviews. While discussing the effective course type, L1 suggested that the question of the most effective course types should be posed to students, but she assumed that maintaining a balance between theory and practice is the most important. L3 expressed that the effectiveness of course delivery depends on the objectives and student engagement, but personally considered that incorporating more group activities and role modelling can be beneficial for students. Both focus groups mentioned different types of course delivery with respective advantages and concerns and agreed that these diverse course types are beneficial for students' learning.

Lectures are the most common teaching method in higher education, which involves a speaker delivering a presentation or talk on a particular subject or topic to a large number of students. Communication in lectures is mostly one-way, from the speaker to the students. Therefore, student teachers in both focus groups and educators in interviews discussed the benefits and disadvantages of lectures. Student O mentioned that lectures provide a quick and efficient way to introduce specific knowledge. The pace of the lecture, controlled by the speaker, makes them effective for content delivery within a limited timeframe but to a large audience. Student L and Student M particularly appreciated guest lectures, where experts in the field share their knowledge and passion. Student teachers found the guest lecturers inspiring and informative, bringing additional information, dynamic perspectives, and up-to-date insight.

However, student participants raised concerns associated with core lectures. Firstly, studying with 400 students in a large hall demotivated them due to the impersonal classroom environment, lack of communication with peers, and insufficient time to address questions (Student J and Student E). Secondly, the duration of lectures was a point of contention, with Student M noting that a two-hour lecture is too long for them to maintain focus. They explained that their maximum concentration time is around 40-45 minutes without distractions, and it becomes difficult to concentrate with a large number of people. Student E and Student L expressed similar feelings, stating that it is especially challenging to focus when the lecturer is monotonous and solely reads from the PowerPoint slide. Student E even described such teaching styles as '*worse than preaching*', as at least preaching can inspire people, whereas these lecturers are more likely to hypnotise students. Student M also mentioned that lecturers referred to additional resources during the lecture or in the PowerPoint slides, but these resources were not provided or were not accessible.

Educators in the interviews understood and held similar ideas as student teachers. They agreed that lectures were the easiest and most practical way to deliver messages to large groups of students, particularly when external guest lecturers are involved. Educators recalled the COVID-19 period with the social distance abundance; most students benefited from the guest lectures who held the lectures online. These lectures engaged an unexpectedly large number of students and aroused their interest in remote/online learning. However, L1 noted that her students enjoyed the smaller group setting in seminars, as it creates a less formal and more interactive space for students and professors than lectures. L2 supported this idea, stating that facilitating seminars and micro-teaching allows for a

meaningful dialogue among students and the sharing of practical experiences. The educators recognised that seminars should be based on the specific needs of the students.

Student teachers in both focus groups emphasised the importance of incorporating more seminars providing opportunities for discussion and exploration. They highlighted the benefits of seminars in facilitating idea exchange among students. Student O, Student M and Student E emphasised the value of discussing and sharing ideas with peers. Student M mentioned that seminars included a diverse mix of students from both primary and secondary specialisms, and she found it enriching to learn from their perspectives. Student L suggested that the insights shared by students majoring in primary education were particularly valuable, as they had firsthand experience and understanding of primary school settings and requirements. Student M also observed that student teachers specialising in primary education demonstrated quick thinking and logical problem-solving abilities while acknowledging that students in secondary education tend to be more confined within their own subject perspectives. The teacher educators also indicated and justified the reason why primary and secondary education student teachers are mixed together in the research and theory courses. L1 explained that this arrangement enables students to learn from each other and enrich their understanding. L2 agreed, stating that as an educator, they recognised that certain teaching approaches used in secondary school settings could also be applied to primary school teaching, allowing students to broaden their ideas and think more deeply about teaching practices.

Student J and Student G recommended combining seminars with lectures, particularly when the seminar follows a lecture. Student J explained that lectures provide an overview or introduction to specific knowledge, and seminars then allow students to reflect on the lecture content and engage in discussions with their peers. Student E humorously remarked, '*Sometimes, I can feel that I am not the only person who didn't understand the lectures.*' Student G highlighted the value of seminars having a core topic or a specific purpose, which was found to be helpful by the student teachers. The interactive nature of seminars was seen as beneficial for enhancing critical thinking and collaborative skills as well.

Interestingly, both educators and student teachers emphasised the significance of professional inquiry. Although it can be challenging, to begin with, Student G expressed the belief that these sessions are helpful. Student M shared that she invested considerable

effort into her professional inquiry, which facilitated reflection on her own teaching practices and prove to be a valuable and important experience.

5.4.2.2 Placement Experiences

Placement is one of the most important components of the PGDE program, as emphasised by all student teachers in both focus groups and educators in interviews. In the PGDE program, placement consists of three blocks. All participants in this research considered placement to be the practical part of the teaching program, acting as a bridge between theory and practice.

According to Student E and Student J, placement helps student teachers gain an understanding of the teaching profession and what lies ahead in their future careers. Student J highlighted and appreciated the timing of the course, which involves six or seven weeks of study at the university, followed by placement. From his viewpoint, this structure allows student teachers to put theory into practice after completing a specific theory and enables them to focus on studying or engaging in practical experiences within a fixed period. The student teachers specifically shared their perspectives on placement, discussing both positive aspects psychologically and practically and areas for improvement based on their own experiences.

From a psychological standpoint, placement holds significant value for student teachers. Student M considered it to be the most valuable part of the course, as it helped alleviate her anxiety and feelings of unpreparedness before entering the teaching profession after graduation. Additionally, Student M believed that placement provided a sense of achievement, which served as a motivation to continue their teaching journey. Student G expressed that placement helped confirm their career choice as a teacher and reassured them that they were on the right path. They enjoyed being with the students and felt a sense of disappointment when the bell signalled the end of her class with the pupils.

Student L echoed a similar feeling, stating that she found joy in '*having fun with the kids*' during her mathematics class. Most student teachers found the connections formed between themselves and children during placement, despite its short and intense nature, were real and touching. Both Student E and Student M shared touching moments they experienced during their placements, particularly when bidding farewell to their students.

And both of them commented that these experiences reinforced the belief that teaching is a meaningful career that makes a difference in shaping the next generation:

- *Some of the students were genuinely upset when I told them this was my last week and I won't be back. I could feel that I was likeable. I was surprised how quickly the children got attached to you. (Student E)*
- *Some students wrote me a letter with the words: I really enjoyed this class, and please don't leave… to be honest, I don't want to leave them either. (Student M)*

Placement also provided student teachers with the opportunity to apply their knowledge to practice and reflect on their teaching. Student O described placement as a starting point that helped her understand what she would experience and what a real classroom looks like.

While postgraduate students may have a good theoretical understanding, their practical understanding and experience are limited, as noted by Student E. Student L also advocated for teaching '*in the real world*' rather than '*living in a theoretical and fantastical realm*'. Practical knowledge cannot be acquired solely from books; it requires the hands-on experience gained during placements. Student teachers also develop their own teaching skills and style during placement, as highlighted by Student E. Furthermore, placement serves as a platform for student teachers to reflect on themselves. Student O confirmed that after the placement, she understood what she was supposed to do as a teacher. Student L emphasised the importance of not sticking to a single teaching approach but rather using different methods to inspire students and develop diverse teaching skills. They also thought that completing placement at different schools and being educated by different tutors could encourage student teachers to learn and develop different teaching methods/skills, which can further prepare student teachers to teach in different contexts after graduation. Student E specifically took her placement as an example to show her understanding of prioritising students' well-being and mental health when teaching, in addition to their academic performance.

However, student teachers in both focus groups raised concerns regarding several aspects of placement, including the arrangement of placement, forms of assessment, paperwork, and lesson plans. Starting with the arrangement of placement, student teachers discussed issues related to the timetable and school allocation. Student G expressed dissatisfaction

with the timing of being taken out of the class at different points to attend seminars or return to the university to meet the subject tutor, especially during her second placement. They believed that the mix and match of placement between the university and schools made it difficult to build relationships between student teachers and pupils. Student E and Student L agreed, saying they felt exhausted as they constantly switched between their roles as students and teachers. They felt unable to connect with anyone or anything in this rapid and frequent transition. Student E noted that they would prefer an apprenticeship model for placement.

Regarding school allocation, opinions varied among the student teachers. Student O would have preferred to stay at one school for all her placements as it allowed her to become more familiar with the school environment, policies, regulations, school supervisor, and students. She believed that this would deepen familiarity would enable her to promote her work more effectively and build stronger connections with the students. On the other hand, Student M, Student L and Student E enjoyed the experience of going to different schools for the placements. Student M viewed the variety as important and interesting, providing opportunities to observe the differences between schools and how they approach various aspects of education. This allowed student teachers to compare practices and gain insights into different approaches. Student L proposed that even if a student teacher had a negative experience in their first school, being allocated to different schools for subsequent placements offered the chance for improvement. Student L said: '*My feeling about the placement could be changed if I had been allocated to different schools. I felt bad about my first placement and nearly gave up my studies, but I felt encouraged in my second and third ones'.*

Regarding the forms of assessment on placement, observation and the joint assessed visit were mentioned. Student G suggested the need for more observations as it would help her understand what she was doing right or wrong during placements. Student O admitted feeling a lot of pressure during the joint assessment at the end of the placement, as she found it unfair to be judged based on a single classroom teaching session. Student O expressed disappointment with the assessment process: '*Well, [the tutor] has never met me until the assessment. And he didn't know anything that I had done before in the school. My result just was judged by this unfamiliar educator by a single classroom lesson, with simply ticking boxes of the quality of teaching' (Student O).*

The student teachers also expressed concerns about the excessive paperwork and lesson planning during placements. Student M shared her experience of preparing lesson plans for every single lesson and having them assessed by her school supervisor, followed by revisions. She found it challenging to keep up with the volume of lesson plans, and Student G agreed with this idea, stating that the school supervisor should not burden student teachers with excessive lesson planning and resource preparation. Both Student M and Student G felt that the extra paperwork and lesson planning took away valuable time that could be spent on developing relationships with students and designing engaging classroom activities. Comments included:

- *Lesson plans for every single lesson. And my teacher told me that I want to see your lesson plans at least like three days ahead, and the evaluation for every of them. And she took my lesson plans and marked them. After the marking, you have to revise them and get them back to her again. (Student M)*
- *I also find it very, very hard, especially on my first placement, to keep up with all the lesson planning. (Student G)*

Student M, Student O and Student G expressed their belief that the overload of paperwork weighed them down and hindered their ability to fully engage with their students in the school.

Apart from placement, educators in the interviews also mentioned another form of practice called micro-teaching. L1 explained that micro-teaching allows students to support each other through post-class modelling, similar to the placement experience. In micro-teaching sessions, student teachers take turns delivering a short lesson to a small group of their peers, allowing them to practise their teaching skills and receive constructive peer feedback. Both placement and micro-teaching hold significance for student teachers as they provide support in bridging the gap between theory and reality. L1 emphasised that theory and practice are interconnected, as theories of teaching are tied to classroom experiences, research, children's learning processes, group work dynamics, and pedagogical approaches. These experiences helped the student teachers make connections between their theoretical knowledge and their own teaching practices. Some student teachers also found its benefits for their learning. According to Student E, micro-teaching helped her gain confidence in front of a small audience and improve her presentation skills.

5.4.3 Perceptions of Challenges

According to the findings of focus groups and interviews, the challenges of the PGDE programme can be examined from two perspectives: the student teachers and the educators, respectively. The educators agreed that the programme is demanding due to its short and intense nature, combined with a significant amount of content to cover within a one-year timeframe. The majority of student teachers expressed that studying in the PGDE programme is challenging primarily due to the tight schedule and heavy workload. In the case of student teachers in primary education, they have a full-time schedule from nine to five every day, with Wednesday afternoons off. The lack of subject specialism in primary education can also be frustrating and demanding for student teachers (Student E and Student L). Likewise, student teachers in secondary education felt that the program's intensity leaves little time for reflection and in-depth learning (Student J, Student M, and Student O).

Student O highlighted the continuous and non-stop nature of the workload throughout the year, from September to August of the following year. Student J emphasised the need for student teachers in this programme to be dedicated and willing to work beyond regular university hours, including evenings and weekends. The heavy workload emerged as another significant challenge, with primary education student teachers having to cover eight different areas of the curriculum, requiring them to read eight different sets of materials every week. However, as student J explained, although each subject has its suggested reading list, it becomes challenging to read all the materials due to time constraints. Overall, most participants in both focus groups recognised the imbalance between the duration of the programme (10 months, including three placements) and the amount of knowledge that needs to be acquired as a major challenge (Student O and Student J).

Lecturers observed that students face both physical and emotional challenges. Student teachers often experience fatigue due to the heavy workload and struggle to keep up with the readings. Planning lessons can be mentally exhausting, and students find themselves multitasking. L1 and L2 noted that student teachers often find it difficult to maintain a balance between their studies and personal life due to the demanding timetable. Additionally, students may encounter conflicts between their idealised teacher self and their own personalities, or they may face a dissonance between theory and the realities of teaching (L3 and L2). L1 also highlighted that academic writing poses a challenge for

some student teachers. There are two possible reasons for this: firstly, some student teachers may be returning to postgraduate studies after several years without engaging in academic writing; and secondly, some student teachers may have undergraduate degrees in science or mathematics, with limited exposure to social sciences. Developing professional methods, skills, and values in teaching requires time and practice. In response to these challenges, L2 stated: '*Firstly, we are very realistic with student teachers about how hard teaching is and the challenges that they will face in this programme when they are interviewed. On the other hand, health and well-being are the key.*'

In summary, the challenges of the PGDE programme include the short and intense nature of the course, the heavy workload, the imbalance between programme duration and knowledge acquisition, and the difficulties in maintaining a balance between academic demands and personal well-being. Student teachers and educators alike recognise the physical and emotional challenges faced by student teachers, including fatigue, time management struggles, conflicts between idealised and actual teaching selves, and the need to develop academic writing skills. The PGDE programme acknowledged the challenges during the interview process and emphasised the importance of prioritising the health and well-being of student teachers.

5.4.4 Suggestions for Improvement

Educators proposed two main suggestions for improving the PGDE program: improving placement experiences and reviewing the program's overall structure. Lecturers agreed that placements and micro-teaching could be considered significant elements that enable student teachers to apply theoretical knowledge to practical classroom settings. Regarding the assessment of placements, L3 raised concerns about the current evaluation process mentioned above, arguing that it is unfair to judge student teachers based solely on their performance in one classroom. He proposed that assessments should take into account the behaviour of student teachers both inside and outside the classroom, such as how they interact with students. On the other hand, it could combine with school supervisor opinions to finalise their placement' overall performance results. L2 added another point by suggesting the inclusion of a specific tutor or supervisor from the university, in addition to the school supervisor, to provide theoretical support to student teachers when needed. Furthermore, all educators agreed that the PGDE programme is demanding and intensive for students due to the limited time available to study a vast array of theories, methods,

approaches, and knowledge. Consequently, L1 and L2 proposed restructuring the program, either by extending its duration to 1.5 or 2 years to release the pressure on students.

Student teachers, on the other hand, provided their perspectives and suggestions regarding the PGDE program. Focusing on classroom delivery, inclusivity, and connections within the university. In addition to lectures, seminars, professional inquiries, and placement, participants from both focus groups recommended incorporating flipped classrooms and arranging more micro-teaching sessions into the program. Student J shared a positive experience of engaging with primary school children during a science class, where small groups of primary school pupils interacted with PGDE students:

> *One thing I really enjoyed, which we only did once in the course, in a science class, there were primary school children and they split them into small groups and came to our class. Although we only have a group of six primary school kids for an hour, we can work with the children. Therefore, if that could be done more often and in other areas, that would be really good for students. There is one of the science lecturers, [they] obviously had a link with a primary school, and contacted the teachers, and said, would you be interested in bringing a class to the university to work with the students so that we could each do our micro-lesson with them. It was brilliant and wonderful. (Student J)*

They suggested increasing such opportunities to work with children, as it provided valuable insights into practical teaching methods. Student O expressed a desire for more opportunities to observe fellow students' micro-lessons and receive feedback before being sent out for actual teaching practice, as this facilitated learning and idea exchange.

Furthermore, student teachers also suggested making good use of technology in education. Student E took the COVID-19 period study as an example, which helped them learn effectively, widely, and automatically. Especially for the use of discussion boards, it helps to foster deeper connections and understanding of the knowledge among students:

> *I have to talk about the COVID thing, but honestly, I felt that they bringing us online, was actually a benefit time for them to do more video content, trying different things instead of straightforward. I like the idea that if some of it were like, posting things on discussion boards, you would get to know people a bit better*

about what kind of things they were interested in and what they were passionate about. People were feeling more comfortable. I definitely think that sort of flipped classroom style that we were then getting into was more powerful than just a traditional lecture and then big seminar groups. This issue with primary is that our seminar groups are still massive. (Student E)

In terms of inclusivity, Student L and Student M highlighted the PGDE program's focus on inclusive education and its consideration of poverty-related issues. However, they felt that is not enough and suggested that more attention should be given to topics such as racism and LGBT issues, which are prevalent in the real world and should not be ignored. Student M further emphasised the importance of inclusive education, grouping students with different education levels and different backgrounds and respecting their differences.

Lastly, Student E suggested that the programme could benefit from a greater balance between time spent in the School of Education and involvement in general university experiences. They expressed a desire to partake in club sports, social events, and societal activities typical of a university student's life. While acknowledging the program's demanding nature, Student E emphasised the need for improved communication and stronger connections with the university at a broader level.

5.5 Conclusion

In this chapter, I have explored the findings of Case Study 1 of a Scottish University's teacher education programme, focusing on four specific themes: globalisation and its effects on teacher education, globalisation and knowledge, teacher effectiveness and qualities, and perceptions of the PGDE program. Through this analysis, several key insights emerged, shedding light on the complexities and opportunities present in the Scottish education landscape.

Globalisation and its effects on teacher education have proven to be multifaceted. While it is challenging to provide a clear definition of globalisation, both positive and negative impacts were discussed. On the one hand, globalisation has led to the commodification and internationalisation of education, which has created social hierarchies and inequalities. However, it has also facilitated the expansion of knowledge and the appreciation of diverse cultures through cultural sharing. The complexities of the international qualification recognition system and language proficiency authentication was also highlighted as a

challenge by student participants. Lecturers mentioned that PISA and the OECD as global influences shape educational practices, policy decisions, and international cooperation. These influences have had an impact on education discourse, promoting evidence-based approaches and fostering convergence across countries. Specifically in Scotland, the General Teaching Council and government educational departments have granted more freedom and autonomy to educators, allowing for innovative and contextually relevant approaches to teacher education. Globalisation has also influenced knowledge itself. Lecturers felt that the accessibility of globalised knowledge resources, learning theories, and pedagogies presents valuable opportunities for students to engage in worldwide exchanges, sharing and learning from one another. However, it is crucial to link these global concepts to the Scottish curriculum and consider challenges related to commodification and cultural differences in order to foster meaningful and inclusive educational experiences.

Understanding teacher effectiveness and qualities has been a central focus of this research. The findings indicate that being an effective teacher involves acquiring subject knowledge, understanding students' needs, building relationships, and inspiring and engaging students. Classroom effectiveness, on the other hand, relies on thorough lesson planning, active student engagement, and consistent teaching methods. The SPR and SFR frameworks have provided a basis for assessing teacher effectiveness. Teacher educators in the PGDE programme play a crucial role in modelling desired qualities, promoting reflection on teaching philosophies and professional identity and instilling a passion for teaching and learning. The importance of a diverse range of qualities, including personal/emotional attributes and intellectual qualities, has been recognised by both teacher educators and student teachers. These qualities contribute to creating a nurturing and inclusive educational environment.

Examining the perceptions of the PGDE programme in Scotland, several strengths and challenges have been identified. Educators highlighted the strong combination of knowledge backgrounds and teaching experiences among their colleagues, as well as the emphasis on innovation and inclusivity in teaching practices. Student teachers valued the supportive environment and peer learning opportunities, benefiting from the expertise and knowledge of their educators. The program's encouragement of creative pedagogies and progressive approaches has allowed student teachers to develop their own teaching styles and explore different methodologies. However, challenges related to the short and intense

nature of the course, heavy workload, and difficulties in balancing academic demands and personal well-being have been acknowledged. The PGDE programme has recognised these challenges and emphasised the importance of prioritising the health and well-being of student teachers.

6. Chapter 6 Findings Case Study 2: China

Three focus groups, with 3 student participants in focus group 1, 3 in focus group 2 and 4 in focus group 3, were conducted via QQ or WeChat Meetings at the University in South China. Participants represented diverse academic disciplines, which included the School of Biological Sciences, the School of Chinese Literature, the School of Fine Arts, and the School of Music, specialising in Teacher Education. Student participants from both undergraduate and postgraduate levels were included in each group, ensuring a comprehensive representation of different grades and specialised subjects. The primary objective of these focus groups was to investigate the student teachers' perspectives in three key areas: the understanding of the impact of globalisation on education, teacher effectiveness and teacher qualities, and reflection on the teacher education programme offered at the university.

6.1 Understandings of Globalisation

The concept of 'globalisation' was not unfamiliar to the student participants of the focus groups; however, they found it challenging to provide a concise definition of it. All student participants agreed that globalisation is a consequence of social development and economic progress. They identified that 'globalisation' facilitates various connections, including economic and trade relations, socio-cultural interactions, and advancements in information science and technology around the world. The prevailing notion among the student participants was that the world is becoming a global village. Interestingly, the term 'regionalisation' also aroused their interest, promoting further discussion in the focus groups. During the focus group discussions, the majority of student participants highlighted the coexistence of opportunities and challenges within the context of globalisation. The main opportunity is to provide chances for culture exchange (S1 and S5).

Student participants in the China focus groups noted that, as mainstream cultures expand, local cultures face significant challenges. For instance, they wondered how local cultures would survive and develop, and how they could address the impact of globalisation on local cultural heritage. These concerns became a central topic of discussion among the student participants. The importance of preserving and promoting cultural heritage under the influence of globalisation, and the need for individuals to navigate their roles and responsibilities in this changing global landscape, were emphasised in the focus groups. To address this challenge, some student participants highlighted the importance of cultural

self-confidence and local development (S5) and the need to preserve cultural identity (S6 and S4):

- *Globalisation introduces some Western thoughts and theoretical systems into China; on the other hand, it may also lead to the loss of local culture. For example, traditional Chinese folk dances and the Chinese classical dance systems have been affected. An increasing number of younger generations are being attracted by other modern dances, such as hip-hop, jazz and locking from the West, while the outstanding local dance cultures are being ignored. (S3)*
  The University is located in (Province), where Lingnan folk dance represents regional characteristics. It is our responsibility to inherit and develop this cultural heritage, which follows President Xi's call for cultural self-confidence. Globalisation provides us with the opportunity to learn from diverse methods and apply them locally. (S5)
- *In the era of globalisation, as foreign cultures continue to be imported, younger generations must find ways to nurture the development of their own culture and gain recognition from others. (S4)*
- *The collision of various ideas and the circulation of diverse resources can broaden horizons, but it also poses the risk of losing our way. Traditional cultures have gradually been forgotten under this trend. Therefore, it is crucial to firmly identify and uphold our objectives in the context of globalisation. (S6)*

In general, student participants in the focus groups highlighted, apart from other economic benefits in the context of globalisation, the complex dynamics and multifaceted impact of globalisation on local cultures.

6.2 The Impact of Globalisation on Education

The impact of globalisation on education includes various aspects that were identified in the focus groups. Within the focus groups, student participants recognised the influential role of globalisation in shaping education policies. Student 2 highlighted that the reform of new curriculum standards could be viewed as a consequence of globalisation's impact on education. Furthermore, S1 emphasised that globalisation has facilitated the dissemination of information and knowledge on a global scale, directly affecting traditional school education. Several student participants expanded on the changes brought about by globalisation, citing the transformative effects of scientific and technological

advancements, internet accessibility and popularisation, and enhanced communication capabilities. They especially noted the changes in the traditional classroom setting, which is no longer confined to such as blackboards, desks, chairs, teachers and students. Instead, student participants highlighted the increased opportunities for online and distance learning, as well as the availability of abundant online resources for access and use (S1, S4, S6 and S9).

The impact of globalisation on education, as identified through the focus groups, can be categorised into three main aspects: the content and perspectives of education, the availability of teaching resources, and the teaching methods employed. In terms of educational content and perspectives, student participants recognised the belief that both students and teachers should adopt a global perspective when addressing educational issues. The traditional teacher-student relationship has been slightly modified with the introduction of student-centred education. Seminars, group projects, and problem-based activities are increasingly encouraged in teaching, although lectures still dominate. The importance of citizenship awareness (S2) and the concept of lifelong learning (S7, S8 and S9), initially proposed by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) and the Council of Europe, are being advocated and developed.

On the other hand, as indicated by S1, education in China was heavily influenced by the '*Four Books (Sishu) and Five Classics (Wujing),*' the foundational text of Confucianism that formed the basis of the imperial civil examination system. Instead, modern education has shifted towards the division of knowledge into different subjects such as Chinese, Mathematics, English, Physics, Chemistry, Biology, Geography, History, Ideology and Political Science, Music, and Computer Science. Furthermore, there is an increased focus on incorporating Western philosophy, history, and concepts into the curriculum, with efforts to integrate them with traditional Chinese elements. S3 took her major 'dance' as an example. She said that the current Dance and Art Education theory 'draws inspiration from the history of Western Dance and aims to explore how to integrate Chinese Classical dance into urban and contemporary styles'.

In terms of teaching resources, as previously mentioned in the literature review, the proliferation of network resources and the rise of online courses have widened educational options to a considerable extent. S9 shared her experience with learning IELTS, mentioning that international examinations like IELTS and TOEFL have generated and

published unified exam-related guidebooks and test standards. And the results of these examinations could be recognised by different countries. Furthermore, S10 noted that there is a heightened mobility of individuals through study abroad projects such as the 'Two plus Two' or 'Three plus One', which involve collaboration between Chinese and Western universities in Europe, the United States, Australia, and the United Kingdom. S10 thought that students have more chances to study abroad, which might contribute to knowledge, resources and cultural exchange because students can bring back what they have learnt from other countries. Additionally, due to the COVID-19 pandemic, many seminars in China have invited educators and researchers from around the world to share their knowledge or deliver lectures virtually (S6). This serves as an example of the global sharing of teaching resources.

As for teaching approaches, S10 expressed surprise at the shift from a teacher-centred mode to a more student-centred approach. In other words, classroom dynamics now prioritise listening to students and incorporating student-led activities, disrupting the traditional model of teachers solely imparting knowledge while students listen passively. S8 highlighted that classroom had moved away from the previous 'Chalk and Talk' model, which relied on monologue-style teaching by the instructor using chalk, crayons, or markers on a board. Instead, classrooms have embraced independent, cooperative, and inquiry-based learning methods, drawing inspiration from constructivist learning theories. However, student participants acknowledged again the need to adapt and contextualise the constructivist teaching concept to suit the demographic structure of their country.

Although student participants mentioned the multifaceted impact of globalisation on education, they demonstrate the need to continually adapt educational practices to a changing world, incorporating global perspectives, leveraging digital resources, and reimagining teaching methodologies to foster comprehensive and student-centred learning experiences.

6.3 Perceptions of Teacher Quality and Teacher Effectiveness

While there was consensus that these two concepts overlap, teacher quality was identified in the focus groups as including various dimensions, such as knowledge expertise, personality traits, and ethical conduct while teacher effectiveness was viewed as focusing on the efficiency of teaching practices. A noteworthy point raised by S8 was that an effective teacher should not be equated simply with a good teacher:

> *An effective teacher, I think he should be effective in teaching, but it is not equivalent to being welcomed and loved; a good teacher, on the other hand, should not only deliver effective teaching but also have a personality that is accepted, welcomed, and loved by their students.*

The effectiveness of a teacher can be referred to as their ability to deliver impactful lessons, but a good teacher might involve other additional considerations, such as personality. S9 supported this idea and distinguished between an effective teacher and a good teacher: effective teachers can be evaluated based on their achievements, such as students' progress rates and academic performance. On the other hand, a good teacher should exemplify a passion for education and demonstrate care for every child. According to S9, regardless of a pupil's character, academic performance, appearance, or socioeconomic background, a good teacher treats all children equally:

> *An effective teacher is defined by his achievements (such as students' progression rate, grades, etc.), and a good teacher should be recognised that he is passionate about education and caring for every student. No matter whether the student's character is good or bad, academic performance is good or bad, his appearance is good or bad, or whether the family is rich or poor or not, the teacher treats them equally. In addition, the teacher should be able to care about the development of individual differences among students and provide them with a warm and safe growth environment.*

S5 and S8 through that a good teacher should demonstrate an ability to understand and address individual differences among students, fostering a warm and supportive learning environment. It is noticeable that students focused less on teaching abilities in understanding the effectiveness and more on teachers' personalities or relationships with children on a good teacher. Teachers should also be equipped with theoretical knowledge in fields such as psychology and pedagogy to help student learning. As S2 highlighted, it is important to understand the characteristics of students' physical and mental development and acquire problem-solving skills related to these aspects.

Teacher quality can be summarised into three aspects according to student participants' perspectives: a solid reserve of theoretical knowledge, the teacher's ideology and morality, and practical skills. Student participants believed that high-quality teachers should have a

solid and diverse theoretical knowledge base, which includes both professional and non-professional knowledge. Proficiency in the subject matter is fundamental for effective teaching. For instance, a Chinese teacher should have a deep understanding of the Chinese language and literature, while a Mathematics teacher should possess strong mathematical knowledge, and a Physics teacher should have expertise in physics, where all people can all contribute to their own field. This idea is similar to an old Chinese saying: 'One might have learned the doctrine earlier than the other, or might be a master in his own special field'. S8 recalled an interview with a renowned teacher who emphasised the importance of possessing solid subject knowledge: '*the famous teacher told me: 'If an Art teacher cannot paint, it is a very sad thing.'*

The majority of student participants also recognised that the ideology and morality of teachers are essential components of teacher quality as it is understood in China. Guided by President Xi's speech in 2020, efforts have been made to enhance teachers' ethical standards through the '*Long-term Mechanism for Improving Teachers' Ethics and Ideology*.' The university has organised forums, lectures, and projects to foster comprehensive development in morality, intelligence, physical fitness, and the arts for future teachers (S9). S4 generally summarised the significance of teachers' language and behaviour in shaping ideological and moral standards. Student 9 shared her previous experience attending a guest lecture, where the importance of settling down to educate, observing ethical principles, and treating teaching and educating people as a lifelong dream was emphasised. Passion for teaching was also discussed as part of the ideals of being a quality teacher, as illustrated by the comparison made by S8 between two teachers' educational ideals. A good teacher, regardless of age, should have a guiding dream that motivates them to excel in their profession, and as suggested by S8, passionate individuals can always succeed in their profession.

Additionally, technical ability was identified as another important aspect of teacher quality and effectiveness by student participants in focus groups. Student participants discussed various abilities required in the classroom, including blackboard writing, PowerPoint design, multimedia teaching, problem-solving during classroom instruction, and crisis management skills in the classroom (S4). Outside the classroom, teachers should have the ability to handle various relationships, such as parent-child relationships, teacher-student relationships, home-school relationships, and student-student relationships (S10, S2). Effective language expression was also considered a requirement for effectively delivering

knowledge to students. As explained by S3, good language expression skills enable teachers to convey knowledge and information from textbooks to real-life situations. Without strong expression skills, no matter how much knowledge a teacher has, they would struggle to educate students successfully.

Student participants further listed the ability to respond to questions and engage students in learning. S9 shared her previous observation classroom in a primary school, where a student raised a challenging question in the classroom. Rather than providing an immediate answer, the teacher encouraged students to collectively investigate the topic and share their findings the following day. This approach not only fostered student exploration but also showcased the teacher's ability to adapt and facilitate learning beyond the classroom. S9 emphasised that teachers should be prepared for unforeseen student questions and possess the ability to respond, in addition to having a wealth of knowledge and lesson preparation. On the other hand, S9 recounted another experience concerning the teacher-student relationship. Initially, the teacher was not welcomed by the students, who displayed disruptive behaviour like smashing a broom upon the teacher's entrance to the classroom. Instead of reacting with anger, the teacher calmly addressed the students, suggesting an alternative way of welcoming her in the future. Eventually, the students changed their behaviour. These two examples further explain that a good teacher is not only focusing on students' learning but also on students' behaviours.

In contrast to teacher quality, students struggled to define teacher effectiveness. The majority of participants recognised teaching as a profession centred around educating individuals. Consequently, they thought the effectiveness of teachers should be assessed based on their ability to assist students, both in delivering knowledge and developing values. Student 7 raised an interesting point, suggesting that effectiveness could also be assessed by teachers' ability to achieve personal goals while meeting the objectives set by school administrators and education departments. S3, S4, S5 and S9, on the other hand, emphasised the importance of accurately conveying complex theoretical concepts, guiding students in their learning process, and fostering problem-solving abilities. S3 mentioned that effective teachers should possess the capability to explain challenging or advanced concepts through their own understanding and experiences. Similarly, S9 noted that effective teaching should encompass rigorous, scientific, and logical content, allowing students to grasp knowledge through practical experiences.

Furthermore, the students thought that employing various teaching methods tailored to pupils' characteristics can contribute to being an effective teacher. For instance, S3 said that when giving dance lessons to primary school pupils, straightforward delivery of knowledge was ineffective in capturing their attention. Instead, the teacher had to rely on enthusiasm and charisma to engage the students. S9 also supported the idea of different teaching methods for students of varying ages, educational backgrounds, and regions. S9 mentioned a calligraphy teacher demonstrating individually to each student and engaging the entire class in discussions of the best works. These examples demonstrated that effective teachers create a positive and comfortable learning environment where students can learn from one another and make progress together.

In addition to demonstrating abilities in the classroom, student participants further highlighted the significance of shaping students' values and personal growth by using their own personalities and behaviours as effective teachers (S4, S5, S6, S8, S10). From Student 6's perspective, an effective teacher can cultivate students' perspectives on life and values, helping them develop resilience in the face of setbacks and shaping their personalities and beliefs. S8 added that effective teachers not only transmit knowledge effectively but also foster students' psychological well-being and develop correct values towards life and the world. S5 argued that students are multifaceted individuals who require all-around growth, and effective teachers positively influence their students' ideologies, spirituality, and value formation. S7 noted that effective teachers play a critical role in reducing negative influences from society and their families, promoting students' learning capacity and development. S1 emphasised the positive impact effective teachers have on shaping students' personalities and psychological growth.

Student participants also highlighted the importance of teachers' interpersonal skills and their influence on student learning motivation and engagement. S3 emphasised the ability of effective teachers to create positive relationships with students. By showing care, support, and understanding, teachers can create an environment where students feel valued and motivated to learn. S9 further agreed with this by sharing the personal learning experience of a calligraphy teacher who instructs each student individually and promotes a collaborative learning atmosphere in the classroom. According to S9, this positive teacher-student relationship fosters mutual learning and improvement. As mentioned above, it is important to create a positive learning environment and to promote active student participation in students' learning and development. S6 and S8 emphasised an effective

teacher should possess the ability to build up a safe and inclusive classroom environment and be able to encourage students to actively engage in the learning process.

In sum, according to student participants, the concepts of teacher effectiveness include various dimensions, such as the ability to transmit knowledge effectively, adapt teaching methods to students' characteristics, shape students' values and personal development, build positive relationships, commit to life-long learning, and create a positive learning environment. By embodying these, effective teachers can nurture students' intellectual, social, and emotional growth and prepare them for success in life.

6.4 Perceptions of the teacher education programme

Student participants in focus groups emphasised the importance of a high-quality teacher preparation course in producing high-quality teachers (S2, S4, S7). The definition of the teacher education programme can be summarised based on participants' opinions, including the following key points: a systematic and scientific curriculum, a focus on students' ideological and ethical guidance, the presence of high-quality educators as role models, and support and cooperation from various societal parties or organisations in society.

Students thought that the systematic and scientific curriculum was one of the most significant aspects of a high-quality teacher education program. For instance, S8 highlighted that a scientific and comprehensive curriculum system enables students to have an overview and understanding of their future studies. Moreover, the curriculum should benefit students' physical and mental development, progressing gradually from basic to advanced levels. For example, students can take foundational/public courses, such as Military Theory and Marxist Ideology, in their freshman and sophomore years, while focusing on specialised teacher-related courses in their third and fourth years (S2). Additionally, since it is a teacher education course, all student participants believed that internships are essential and considered that ample opportunities for such practical experiences should be provided for student teachers (S8).

Secondly, a high-quality teacher education programme should prioritise students' ideological and ethical guidance. Universities and colleges should adhere to educational policies and implement relevant guidelines, such as the "Opinions on Comprehensively Deepening the Reform of the Building of the New Era Teacher Team" and the Ministry of

Education's "Important Messages on the Study and Implementation of General Secretary Xi Jinping and Teacher's Day." These measures aim to explore long-term mechanisms for developing teachers' capacity and morality, which can involve the establishment of teacher training projects, programmes, and forums to guide student teachers. S9 provided examples of special programmes at the University in South China, such as the *Province*-Hong Kong-Macao Teacher Ethics Forum, where experienced teachers share their teaching and learning experiences, and the '*Qingma Project'* (Re-take the Red Army Road), which helps students learn about the spirit of the Red Army. Another programme mentioned was "the future educator talent training project", which enables student teachers to reflect on their growth path by offering various training courses. Ultimately, the primary aim of a high-quality teacher education programme is to cultivate morally upright teachers who are dedicated to serving the country and its people (S7). Lectures, training courses, projects, and forums all contribute to the development of teacher education. S10 also suggested that cultural constructions within the university, such as cultural corridors and graduation exhibitions, play a significant role in shaping and contributing to student teachers' ideological and moral development.

Additionally, educators with high-quality and positive role models play a critical role in improving the teaching quality and reputation of a teacher education programme. The concept of "Teach by precept and by example" (*Yan Chuan Shen Jiao*) refers to the influential role of teachers in fostering student learning and growth. As recalled by S9, one teacher effectively mobilised students' enthusiasm for learning through good teacher-student interactions. This experience inspired student teachers to design activities in future classrooms that enhance interaction between students and teachers, thereby fostering active learning. Student 10 mentioned her own experience in an experimental biology course where students were divided into small groups, allowing for personalised attention from the teacher. These examples demonstrate the significance of quality educators as role models in a teacher education program:

- *He provided personalised tutoring, paid attention to students' individual development levels, and treated all students equally, regardless of their differences. (S8)*
- *The teacher is concerned about each of us, and we also have the opportunity to communicate with the teacher one-to-one. This teaching style profoundly affects my current teaching approaches in the placement. (S10)*

Group work and group projects were also highly recommended by the student participants. S1 shared her experience in a Chinese Language and Literature class, where 2 out of the total 11 hours were dedicated to lecturers, and the remaining hours were allocated for students to present their learning outcomes in group form. Students independently prepare, learn, and report their findings in class. This approach aims to cultivate student autonomy and collaboration, develop their learning abilities, and enhance their problem-solving skills. S1 reflected, *"I learned a lot during the preparation, and I was also inspired by other groups' sharing of different aspects of knowledge.*" Students were also positive about learning through thematic discussion, which fosters critical thinking and research abilities among students. By focusing on a specific topic, students independently search for relevant materials and then engage in exchange and discussion. This approach enables students to learn from different perspectives, think critically, find better solutions to problems, and engage in self-reflection. Creating a relaxed and comfortable classroom atmosphere encourages the independent exchange of academic ideas among students (S5). However, S4 suggested that thematic discussions should provide students with the corresponding topic in advance to allow for better preparation, thus enhancing the effectiveness and efficiency of classroom teaching. Additionally, providing advanced topics can generate greater enthusiasm among students to express their ideas, thereby promoting deeper idea exchanges and discussions.

In contrast, student participants in the focus groups expressed their dissatisfaction with the style of reading directly from PowerPoint slides, which they identified as a form of banking education where the teacher delivers knowledge, and the students passively receive it (S2, S5 and S6). S6 and S2 specifically highlighted that the majority of undergraduate courses still follow this passive model of knowledge transmission, which is not conducive to the development of student teachers. In contrast, student participants highlight the effectiveness of a post-problems setting in engaging students' attention and participation (S1, S4, S10). This style involves posing a question or problem to the students, prompting them to organise the class discussion around the question and the resources related to it. It has a positive impact on both the student's personal development and problem-solving skills (S4).

6.5 Suggestions for changes

Most of the student participants in the teacher education programme at the University expressed overall satisfaction with this program. However, during discussions, they also

raised concerns and offered suggestions for improvement based on their own challenges and experiences. The participants primarily focused their discussions on two aspects: curriculum design and the ways of organising a classroom. In this section, the reasons behind the dissatisfaction expressed by some participants have also been explored.

Curriculum design usually includes two key aspects: subject design and course schedule arrangements. The student participants emphasised that professional knowledge is the foundation of a qualified teacher, with psychology and pedagogy serving as essential tools for effective knowledge transfer to students. They also highlighted the significance of practical courses in helping them apply theoretical concepts to real-world scenarios and enhance their understanding of the subject matter. However, some student participants expressed dissatisfaction with the arrangement of subjects in the curriculum. They felt that while there was an attempt to cover a wide range of knowledge, none of the topics were explored in-depth and thoroughly. For example, S3 said that they thought that they had 'covered every kind of knowledge', but this made them feel they were 'tweaking around the edges'.

The student participants identified several subjects, such as teaching methods, psychology, subjects' knowledge and teaching skills, that they believed should be taught and explored more deeply. Regarding teaching methods, S2 highlighted its importance and relevance, as it teaches student teachers how to adapt their teaching approaches to the specific characteristics of different subjects. However, they noted a significant difference between the theoretical teachings they received from the university and the practical challenges they faced during their placement at a school. This disconnect led S1 to express confusion about the practical application of what they had learned in detail at the university. Psychology was recognised as another subject requiring in-depth study. However, all student participants felt that the allocated class hours were far from sufficient. S8 explained that psychology plays a significant role in understanding students not only intellectually but also emotionally. It enables teachers to empathise with their students, comprehend their needs and behaviours, and provide appropriate support. For example, psychology could help explain to parents why their children may struggle with certain concepts/ability development due to their age and developmental stage. However, the limited time dedicated to psychology in the curriculum hindered student teachers from acquiring a comprehensive understanding of this subject and understanding their students' needs.

Participants highlighted that psychology is a course that requires in-depth study, but the course setting at the University only occupies one semester of class hours for the knowledge or framework in psychology, which is far from enough. As explained by S8, psychology is a subject that can help to understand humans. Psychology is not only to understand what students think but also to learn how to empathise with what students think and understand them from the heart: what they truly need and what are the reasons behind their behaviour. Psychology could also explain to parents why their children may struggle with certain concepts, which might be due to their age and developmental stage.

The student participants also mentioned that the university's teaching of professional knowledge lacked depth, focus, and thoroughness. S2 stated it with an example from her own experience in the Foreign Literature course, where the focus was on reading classics rather than on developing a deeper understanding of literature or exploring aspects such as exegesis, phonology, and philology of ancient Chinese. They felt that these traditional Chinese language and cultural subjects were worthy of being studied and preserved. S2 further expressed concern about the program's plan to change these subjects to electives, considering it an unreasonable decision. S2 felt that basic teaching skills and professional skills were not as well-developed as the previous student teachers. S2 noted this during a conversation with her mentor at the placement school, who highlighted the lack of sufficient teaching skills courses in the curriculum, such as chalk writing, blackboard writing, and effective verbal communication (including speech).

Besides curriculum design, student participants in the focus groups also expressed concerns about the course schedule arrangements. S1 complained that the schedule was too full, with 13 classes per week, each lasting four hours. This left little time for students to engage in other activities they believed useful, such as reading classic articles and personal development. S3 and S2 also questioned the effectiveness of the schedule and doubted whether it allowed for a comprehensive learning experience. The arrangement of placement received considerable attention, with participants feeling that both on-campus and off-campus practical courses were insufficient (S3, S4, S6). An example was provided by S8, who highlighted the Basics Design course in their major. Despite being an important subject that included sections on image composition, colour composition, and three-dimensional composition, each section only had three specific morning sessions for learning. This limited time allocation left S8 feeling that they had gained little from the course. Other comments included:

- *We usually participate in some educational training or educational activities, peer learning, for example, going to a vocational school such as the Province Water Conservancy and Electric Power School to instruct or monitor a dance play. Of course, this has trained part of my ability, but this kind of opportunity is rare and limited, and the time involved is too short. (S3)*
- *The two-month off-campus placement is too hasty. During these two months, you may only be able to get access to some module courses, like music appreciation courses or help some dance groups to rehearse. Therefore, students who are majoring in Dancing would not be able to show their professional skills as teachers. In most cases, we are more likely the assistant in the classroom. We can say our opportunity for teaching is very few (S6).*

S8 and S9 are both student teachers at the School of Fine Arts, and, as art students, they require rich time and enough space for design, projects, and creation, but the availability of studios is limited. Making appointments for studio usage is often challenging, possibly due to the limited number of studios and other students from other schools using them for different purposes. Moreover, the existing studios fail to stimulate students' creative inspiration (S8 and S9). Expanding on this issue, S9 extended the discussion to the entire university. She stated the overall availability of seminar rooms for project research, team cooperation competitions, and group work activities. These rooms are also limited, making it difficult for students to reserve them or find suitable spaces equipped with projectors or whiteboards. Furthermore, S9 raised an interesting point regarding access control in the university's dormitories and study rooms. There is a regulation requiring students to return to the dormitory before 12 o'clock. This rule has garnered complaints from students as it does not account for individual schedules. Some students prefer studying quietly at night, while others prefer daytime study sessions. This access control policy restricts those who engage in nocturnal study sessions (S9 and S8). To address this issue, S9 proposed the addition of study rooms within the dormitories or the allocation of late-night study spaces in one of the teaching buildings.

In terms of classroom organisation, the teacher education programme in China primarily adopts a face-to-face teaching approach. However, S1 proposed the incorporation of online-based learning for certain courses, such as the History of Psychology and Educational Research Methods. Especially if these online classes can be recorded and be available for students to watch and listen to at any convenient time, this could enhance the

learning effectiveness. This suggestion aims to enhance the learning experience and improve teaching effectiveness. By allowing students to choose elective courses based on their own schedules and study needs, the university promotes autonomy and time-saving opportunities.

One particular event called the "Teacher Skills Competition" was a topic of discussion among student participants in focus groups. Originally designed to enhance the teaching skills of student teachers and foster a collaborative learning environment, this competition has sparked controversy. Some student participants, including S2, argued that the competition prioritises competition performance over practical experiences obtained. S2 elaborated, stating that the competition involves participants delivering "demonstration classes" that are impractical and unfeasible in real teaching scenarios. While these classes may appear active and engaging, they do not reflect the reality of teaching. S2 criticised that the primary motivation for participating in such competitions is to win prizes, improve the portfolio or increase one's chances of securing desirable teaching positions after graduation. Similarly, S3 shared the belief that it is unrealistic to expect the inclusion of extensive content and information within the limited time constraints of real classrooms. However, she acknowledged that the teacher skill competition could, to some extent, contribute to the development of certain aspects of students' teaching abilities during the preparation process.

6.6 The importance of placement

A key aspect highlighted by most student participants is the need for a high-quality teacher education programme to incorporate an increased amount of placement time.

To begin with, practical courses hold significant value for future teachers as they provide essential hands-on experiences. Student participants recognised that through practice, they could identify their theoretical deficiencies and limitations and suggested adjusting the duration and timing of practical courses, advocating for an earlier start and extended duration. This adjustment would allow student teachers ample time and space to transition from being students to becoming teachers. S3 recommended moving the final placement to Year 3. S2 supported this proposal, highlighting that conducting the final placement in Year 4 would coincide with the preparation for postgraduate entrance exams, graduation thesis, and job hunting. This overlap prevents student teachers from fully engaging in the placement and other related activities, making the current arrangement scientifically

unsound. S9 added that increasing the duration of the placement is necessary due to the unpredictable/ unforeseen nature of real classroom teaching.

The participants thought that student teachers require more time and opportunities to adequately prepare themselves before entering a real teaching environment. The controlled environments and ideal classroom settings in microteaching and teacher skills competitions fail to help students adapt to the complexities of actual classroom teaching and develop relationships with real students and parents. Microteaching and simulated classrooms, while helpful for engaging in teaching plan writing, course design, and teaching preparation, do not fully prepare students for the challenges of real classroom teaching and the dynamics of student-parent relationships (S9, S2).

However, certain courses and educational apprenticeships that do not contribute significantly to learning or teaching could be ignored (S4). The apprenticeships often require student teachers to participate in a set number of lectures, seminars, or forums within a specified time frame but lack specific guidelines regarding the types and topics of participation. Consequently, they become time-consuming endeavours without direct benefits for student teachers. S10 pointed out that some subjects like PE, English, and Military Theory, along with interest-oriented courses, hold little relevance to teaching for student teachers. Reducing the hours allocated to these courses would allow for more practical courses, such as Teaching Language Skills, Teaching Methods, and specific subject knowledge courses (S5). Alternatively, these elective or interest-oriented courses could be offered online. Online courses provide course diversification, foster the multifaceted development of students, and allow them to focus on subjects and skills that align with their specific needs (S1).

6.7 The Gap Between the Aim of the Programme and the Reality for Students

The last significant finding regarding the challenge of the Teacher Education programme in China is the existence of a gap between the program's aim and reality, highlighted by all student participants. S3 drew attention to a conflict between the direction of talent training and the curriculum in the majors of Dance and Music. Both majors share the same course for music teaching positions, requiring student teachers to learn Music Theory in their first year and Piano in their second year. However, S3 identified the challenges of starting piano lessons at the age of 20 and the limited time available for learning. On the other hand, S3

also criticised that student teachers majoring in Dance might not be able to teach dance in primary schools, as the course subject in primary school is music. And music primary school teachers are more likely to teach who to sing in the music class rather than other related knowledge or skills. In other words, those who are majoring in Dance are unable to fully showcase their expertise in dance during real classroom teaching in the future after graduation. Therefore, according to S2, S3 and S4, urgent adjustments are needed in the curriculum settings, possibly starting from the student recruitment process, to address this issue.

Another concern raised by student participants is the effectiveness and importance of studying broad courses. Many student participants questioned the relevance of these courses to their future careers. Student participants suggested the inclusion of career planning courses to help them clarify their future career directions and foster a sense of proactive planning from the beginning of university. Course designers should also have a comprehensive understanding of societal needs and design teaching goals and curricula that are diverse and targeted. This approach would assist student teachers in preparing for future employment. S9 raised the issue of compulsory inclusion of professional knowledge and skills, such as Chinese Painting and Lacquer Painting, which may not be relevant to his future career as a primary and secondary school teacher. This prompts the question of whether the teaching direction and curriculum should be adjusted based on students' career plans. S10 offered a differing opinion, suggesting that students should have the autonomy to make this decision. The focus should be on aligning their studies with their career goals. S10 emphasised the importance of tailored knowledge, stating that a primary and secondary school teacher may not need profound and difficult knowledge reserves, but a researcher in a specific field would require a deeper and wider understanding. However, S10 also recognised the value of career planning courses in helping students make informed decisions about their majors based on a clear understanding of career paths in society. Interestingly, despite some participants initially not actively choosing a teacher education program, most of them confirm the suitability of their choice during their four years of study.

As teachers play a multifaceted role with comprehensive responsibilities, they have a significant influence on students' values, outlook on life, and problem-solving approaches in their daily lives (S4, S5, S6). Society holds high expectations for teachers, prompting the

need for corresponding adjustments and improvements in the curriculum to develop and enhance various abilities of student teachers.

In summary, the findings reveal a noticeable gap between the intended aim of the training programme and its actual implementation. The conflict between talent training and the curriculum in certain majors, the necessity of career planning courses, and the comprehensive role of teachers all underscore the need for adjustments and improvements in the program. Addressing these concerns will help align the teacher education programme more effectively with its desired outcomes and better prepare student teachers for their future roles in education.

6.8 Conclusion

In this chapter, I have explored the findings of Case Study 2- the teacher education programme at the University in South China, focusing on the following themes: the understanding of globalisation, the impact of globalisation on education, perceptions of teacher quality and effectiveness, and perceptions of the teacher education programme.

The student participants from China demonstrated understandings of globalisation, recognising its various connections, including economic, socio-cultural, and technological advancements worldwide. They acknowledged the economic benefits but also expressed concerns about the complex dynamics and multifaceted impact of globalisation on local cultures. Regarding the impact of globalisation on education, the student participants recognised its influential role in shaping education policies. They highlighted three main aspects: the content and perspectives of education, the availability of teaching resources, and the teaching methods employed. Student-centred approaches, problem-based activities, and the integration of technology were identified as significant shifts in modern education.

Perceptions of teacher quality and effectiveness were multifaceted, according to student participants. They emphasised that effective teaching involves delivering impactful lessons while considering additional factors such as personality, ideology, morality, and practical skills. The ability to respond to questions, engage students, and employ various teaching methods tailored to students' characteristics was also considered crucial. Effective teachers are seen as those who transmit knowledge effectively, shape students' values and personal development, build positive relationships, commit to lifelong learning, and create a positive learning environment.

Overall, the student participants had positive perceptions of the teacher education programme. They emphasised the importance of a systematic and scientific curriculum, as well as ideological and ethical guidance. Educators who served as positive role models were also seen as essential in improving the teaching quality and reputation of the program. However, students expressed dissatisfaction with certain aspects of the program, such as the style of reading directly from PowerPoint slides, which they viewed as a form of passive knowledge delivery. Suggestions for change primarily focused on curriculum design and classroom organisation. Participants expressed concerns about subject design, course schedule arrangements, and the need for incorporating online-based learning for specific courses. They also highlighted the importance of providing student teachers with more time and opportunities for adequate preparation before entering a real teaching environment. Additionally, the findings revealed a noticeable gap between the intended aim of the teacher education programme and its actual implementation. Participants highlighted the need for adjustments and improvements in curriculum settings, student recruitment processes, and the inclusion of career planning courses. The comprehensive role of teachers and the necessity of studying broad courses were also areas that required attention.

7. Chapter 7 Discussion

This chapter discusses the research findings from the literature review and the focus groups and interviews. The discussion is organised around the research questions in order to explore the following:

- how teacher quality and effectiveness are understood in the context of globalisation;
- the globalisation and internationalisation of teacher education;
- the effects of globalised education policy on teacher education programmes;
- what factors affect student teachers' experiences of the programmes;
- the differences and similarities between the two programmes;
- what might the two programmes learn from each other, and what might be learned from both programmes about how globalisation affects teacher education?

7.1 Understanding Teacher Quality and Effectiveness in the Context of Globalisation

The findings suggest that certain perspectives on teacher quality and effectiveness have gained prominence and become dominant globally, actively promoted by influential organisations such as the OECD and UNESCO and discussed widely in the research literature. According to the UNESCO report by Anderson (2004), teacher effectiveness can be understood as the extent to which teachers achieve teaching and learning goals based on their competence and performance. These goals encompass extensive professional knowledge and relevant skills. The OECD states that, in addition to subject-specific knowledge, teacher effectiveness is also associated with the ability to create a positive and inclusive learning environment (OECD, 2009). The OECD (2018b) and Darling-Hammond (2017) also suggest that improving teacher effectiveness is significant for ensuring enhanced student achievements and performance.

Understanding the relationship between teacher quality and effectiveness also seems important when discussing teacher education. However, student participants from both universities found it challenging to provide a clear definition of teacher quality and effectiveness. The findings suggest that the ideas of teacher quality and effectiveness were spoken of by participants on both programmes less in terms of globalisation and more in terms of their own perceptions of the qualities a good teacher should have. However, there was awareness from lecturers about the effects of globalisation in shaping debates on

teacher effectiveness. For example, L1 discussed the influence of soft power, saying that educators ‘will look at things like PISA’, to understand why other systems perform well. According to this teacher educator, soft power enables educators to position their own system within the global landscape and make connections between theories, practices, and ideologies.

7.1.1 Dimensions of Teacher Quality and Effectiveness

The literature review findings suggest that the concept of teacher quality overlaps with the understanding of effectiveness and that both are complex. Perspectives in the literature emphasise dimensions of teacher effectiveness as: teachers’ knowledge (Carvalho and Normand, 2018; Grossman et al., 2009); levels of qualification (Darling-Hammond, 2017); abilities in respect of classroom management (Darling-Hammond, 2017); and professional classroom relationships with students, including interpersonal skills and role modelling (Lieberman and Miller, 2008). As the literature states, effective teachers are skilled in classroom management, fostering positive teacher-student relationships, and promoting student engagement and motivation (Marzano and Marzano, 2003; Eccles and Wang, 2012). Carvalho and Normand (2018) provided further insights into these approaches, emphasising the delivery of lessons, presentation of ideas, and classroom organisation and management based on student's learning needs and characteristics. Hunt et al. (2012) also state that teachers should have a deep understanding of subject characteristics and present these in a logical and appropriate manner for learners. Teachers should focus on facilitating students' understanding and problem-solving rather than simply delivering knowledge directly. These approaches help students learn how to learn and apply knowledge in their daily lives (Hunt, et al., 2012).

One prominent dimension of teacher quality where participants’ views were similar to the literature is in discussing the importance of teachers’ professional knowledge and qualifications. Students in both universities saw teacher knowledge as a fundamental factor highlighted by all student participants in focus groups. In the literature, Darling-Hammond (2017) discusses the importance of teacher education programmes equipping teachers with the necessary knowledge and skills to meet the evolving needs of the globalised society. Thus, teachers with a deep understanding of their subject matter and a solid theoretical foundation that can effectively translate that knowledge into meaningful learning experiences for their students are considered to be of high quality (Darling-Hammond, 2017. Fennema and Frank (1992) and Carvalho and Normand (2018) argue that teachers’

knowledge influences classrooms and students' learning significantly. Walshaw (2012) considers knowledge the centre of a teacher's work. Furthermore, Carvalho and Normand (2018) and Grossman et al. (2009) suggest that teachers' deep subject knowledge and pedagogical expertise are crucial in enhancing teacher effectiveness and fostering positive student outcomes. It is evident that professional knowledge is a crucial factor in enhancing teacher effectiveness (Ulferts, 2021; Darling-Hammond, 2009).

7.1.2 Effective Teachers and 'Good' Teachers

It is interesting to note that participants from both universities raised questions about the distinction between an effective teacher and a good teacher. One teacher educator (L3) defined an 'effective teacher' as a 'good teacher', while student participants perceived good teachers as going beyond effectiveness to prioritise the well-being and acceptance of their students (Goodwin, 2020). This perspective aligns with the concept of a moral dimension in teaching, which emphasises the importance of considering the social and ethical aspects of education. The influence of globalisation on participants' perceptions of teacher effectiveness and qualities seemed limited, as there was little evidence that globalisation had significantly impacted their understanding of these concepts. Participants from Scotland and China found common ground in identifying certain qualities that a good teacher should possess based on their own perceptions and classroom experiences. Participants' understanding of teacher quality from both universities was based on professional and personal qualities that they thought good teachers should develop. From the perspective of professional qualities, a solid reserve of subject-related knowledge, pedagogical content knowledge, and an understanding of psychological theories of learning have been highlighted. Personal attributes such as approachability, kindness, empathy, passion, and enthusiasm for teaching were regarded as essential qualities of a good teacher (Darling-Hammond, 2006; Ingersoll and Strong, 2011). These findings align with the research on effective teaching practices, which emphasises the significance of subject knowledge, pedagogical content knowledge, and positive teacher-student relationships (Ulferts, 2021; Li et al., 2022). Practical skills like multimedia teaching and effective communication were also emphasised by the participants. This aligns with the growing recognition of the importance of incorporating technology and diverse instructional strategies in teaching to engage students and enhance learning outcomes (UNESCO, 2011).

In the Chinese context, participants emphasised adherence to ideology and moral values as integral to teacher effectiveness. This idea aligns with the guidance provided by Chinese President Xi Jinping (Xi, 2018a, b). According to the guidance, the fundamental task of a teacher is to "build up people by virtue." This suggests that teachers should not only focus on delivering subject knowledge but also guide students on the kind of person they should become and the character they should cultivate. To achieve this, teachers need to have the correct values themselves to guide and inspire their students. Strengthening their own ideological and moral foundations allows teachers to influence students through their words and actions, establishing a positive role in the long-term process of building relationships with students and shaping their values and outlook on life (Chen, 2020). Although there is little mention of morality in the Scottish focus groups. The concept of being a role model and incorporating values such as equality, social justice, fairness, integrity, trust, and respect was also recognised by the Scottish teacher educator and encouraged by other teacher educators in the programme. This helps student teachers clarify their values and aspirations before entering the profession.

The concept of being a role model and incorporating values such as equality, social justice, fairness, integrity, trust, and respect was also recognised by the Scottish teacher educator and encouraged by other teacher educators in the programme. The moral dimension of a global mindset was also discussed (Goodwin, 2020), calling upon teachers and teacher educators to centre their work on humanity and social action. Supported by the findings from both universities, teacher education should not solely focus on producing certified teachers but on preparing teachers who are ready to address the world's problems alongside young people. This perspective aligns with the idea of teacher education as a transformative process that goes beyond the acquisition of technical skills to cultivate teachers who are critically engaged in society and advocate for social change (Zeichner, 2010).

Participants' understanding of effective teachers and good teachers was shaped by a combination of professional and personal qualities. While subject knowledge and pedagogical skills were recognised as important, attributes such as approachability, kindness, empathy, passion, and enthusiasm for teaching were also deemed significant. The role of teachers as agents of social change and the adherence to ideology and moral values were highlighted, particularly in the Chinese context influenced by the Confucianism and the thought of President Xi.

7.1.3 Assessing and Developing Teacher Quality and Effectiveness

Teaching is described as a seemingly simple yet complex profession that requires a wide range of skills and competencies (Greenberg, 1983; Darling-Hammond et al., 2001). Both China and Scotland have assessments and requirements for teachers based on specific skills and competencies. China has established a standard and examination to assess teachers' qualities since 1993 (MOE, 1993). The teacher qualification examination includes written tests and oral interview tests. The written test mainly examines applicants' subject knowledge, basic abilities in educational philosophy, professional ethics, related Laws and Regulations, scientific and cultural literacy, reading comprehension, language expression, logical reasoning and information processing; the knowledge of teaching and classroom management; and the abilities to analyse and solve practical problems in practice (MOE, 2011a, b, c). The interview assesses the applicant's occupational cognition, psychological quality, language expression, thinking skills and essential teaching skills (e.g., lesson plan, teaching implementation and teaching evaluation) (MOE, 2011a, b, c).

Scotland requires teachers to be educated and qualified through a four-year undergraduate Initial Teacher Education (ITE) programme or a one-year postgraduate PGDE program. Attaining the Standard for Provisional Registration and completing the one-year Teacher Induction Scheme leads to a probationary teacher achieving the Standard for Full Registration, indicating full qualification as a teacher (GTCS, 2021b; GTCS, 2012b). Despite the differences in assessment systems and standards, the gatekeepers to the teaching profession in both contexts are the university programme and the assessors in schools. However, some participants found the assessment levels to be abstract and lacking in specificity. These state-level examinations and the teacher education programme in higher education aim at ensuring teacher qualification.

However, being a qualified teacher doesn't automatically equate to being effective in the classroom. As previously noted, a teaching qualification primarily certifies adherence to established standards and successful completion of required examinations mandated by national educational agencies or departments in both China and Scotland. Yet, feedback from student teacher participants across both universities suggests that while qualifications serve as a baseline for entry into the profession, they do not uniformly guarantee teaching effectiveness, as standards can vary significantly between nations. The multifaceted nature of teacher effectiveness extends beyond mere qualification criteria. Evaluating the effectiveness of teachers often involves considering a range of factors, such as societal

demands, student needs, academic performances, and evolving governmental expectations. OECD (2014) claimed the significance of enhancing student achievement and performance as pivotal in evaluating teacher effectiveness, as corroborated by Darling-Hammond (2017). The literature also strongly emphasises the importance of continuous professional development and a steadfast commitment to lifelong learning in enhancing teacher quality (Ingersoll and Strong, 2011; Darling-Hammond, 2017). Additionally, in the context of globalisation, effective teaching necessitates adaptability to dynamic educational landscapes, encompassing shifts in policies and advancements in technology. Through ongoing skill enhancement, effective teachers can stay attuned to the shifting needs of their students and employ evidence-based instructional approaches that improve learning outcomes (Paolini, 2015).

For example, to improve their effectiveness, Sieberer-Nagler (2016) argues that teachers should foster an environment that allows for mistakes, provides positive feedback, encourages group or peer work, includes every student, focuses on learner-centred approaches, sets clear learning goals, and promotes respect. Bulger et al. (2002, p. 3) suggest that "teachers can begin to establish a positive learning environment by showing their passion for the subject matter, using student names, reinforcing student participation during class, and being active in moving among the students." Freiberg and Lamb (2009) and Wentzel (2016) indicate that teachers who establish positive relationships with their students and create a supportive and stimulating learning environment enhance student motivation, engagement, and overall academic achievement. Participants from both universities also highlighted learner-centred approaches and positive relationships: teachers should listen attentively, communicate fluently, respect differences, respond to individual needs, and demonstrate empathy to facilitate effective learning. Participant data suggested that effective teachers must understand their pupils' personalities, learning needs, and backgrounds before designing lessons. Teachers should also build strong relationships with pupils and show genuine care. According to the experiences shared by most student participants, the better teachers understand their students, the more effective they will be. Scottish students thought that a caring approach aligns with the nurturing approaches promoted in the Scottish education context. Education Scotland defines nurture as focusing on well-being and relationships and supporting the growth and development of children and young people (The Scottish Government, 2013).

It is important to critically engage with these perspectives and approaches to teacher quality and effectiveness. While the focus on knowledge, innovation, and context is valuable, as mentioned above, some scholars argue that a narrow and instrumental view of teacher effectiveness driven by economic considerations might overshadow other essential dimensions of quality teaching (Cochran-Smith and Fries, 2005). They emphasise the need to consider a broader range of factors, including teachers' relational skills, cultural responsiveness, and commitment to social justice, which are crucial in addressing the diverse needs of students in a globalised society (Cochran-Smith and Fries, 2005; Darling-Hammond, 2017). The discussions surrounding the understanding of teacher effectiveness among the participants hold significance because they do focus on a broader range of factors and essential dimensions of relational as well as professional knowledge and skills. The importance of teachers' knowledge, adaptability, pedagogic skills, and abilities in promoting positive student outcomes and developing values through role modelling contributes to teacher effectiveness. A broader and more comprehensive understanding of teacher quality and effectiveness is needed for policymakers, educators and student teachers with the aim of better preparing teachers to meet the complex challenges of education in a globalised world.

7.2 The Globalisation and Internationalisation of Teacher Education

The discourse surrounding the internationalisation of education, as evidenced among student teachers from the Scottish University, presents an intriguing contrast to the broader discourse on globalisation in education. While globalisation encompasses a myriad of interconnected phenomena shaping educational landscapes worldwide, the emphasis on internationalisation among student teachers underscores a nuanced perspective on the practical implications of global trends within their educational context. The distinction highlights the multifaceted nature of higher education internationalisation, which similar to globalisation, encompasses a complex interplay of cultural, economic, and institutional factors. The recognition of internationalisation's practical significance by student teachers reflects their awareness of its implications for their future roles as educators, suggesting a keen understanding of the evolving demands of a globalised world. Therefore, a deeper exploration into the nuanced dynamics of internationalisation in education, alongside the broader discourse on globalisation, emerges as a relevant avenue for further inquiry. By situating these findings within the broader context of globalisation and internationalisation in education, this research gains insight into the complex interplay between global trends

and localised educational practices, enriching our understanding of the evolving role of teacher education in a globalised context.

In the context of globalisation and internationalisation of teacher education, Lin (2019) highlights the growing importance of integrating an international dimension into educational institutions. Lin uses Knight's definition of internationalisation to discuss the phenomenon: 'the process of integrating an international/intercultural dimension into the teaching, research, and service functions of the institutions" (Knight, in Lin, 2009, p.1). This aligns with the broader trends observed in teacher education, where programmes have increasingly embraced internationalisation principles, as noted by Hurtado et al. (2013) and Acedo (2012). The flow of educators and student teachers, integration of teaching concepts and methods, technology usage, curriculum reforms, and research collaborations are some of the aspects that reflect the internationalisation of education (Lin, 2019; Larsen, 2016; Cheng, 2016; Altbach and Knight, 2007; Knight, 2004). These dimensions are more or less mentioned by student teachers' participants from the Scottish University that they are experiencing in the Teacher Education programme. According to de Wit (2009, cited in Lin, 2019), the internationalisation of education reflects not only the broader trends in higher education but also the imperative for teacher education programmes to adapt and respond to the increasingly interconnected and interdependent world.

Lin (2019) discusses statistics provided by the MOE (2014) in China, demonstrating the increasing mobility of students in higher education. The statistics show that a significant number of Chinese students have studied overseas, while the number of international students studying in Chinese higher education has also grown. Specifically, there are 459,800 Chinese students who have studied overseas, such as in the UK, America, Australia and Japan, between 1978 and 2014 (Lin, 2019, p.3). The number of international students studying in Chinese higher education is 356,499 from all over the world, showcasing the reciprocal nature of educational exchanges (Lin, 2019, p.3). These changes have proven advantageous for Chinese students, particularly through the facilitation of dual-degree programmes, such as the '2+2' or '3+1' joint educational programmes, and the encouragement from the Chinese government. These programmes enable students to obtain degrees from both Chinese and non-Chinese universities (Lin, 2019, p.3). The Chinese government has actively encouraged these initiatives, promoted curriculum transformation and the adaptation of Western curricula while retaining Chinese educational characteristics (Lin, 2019, p.4). The trend of dual degree programmes aligns with the broader

globalisation trends in higher education and reflects the mobility and resource-sharing aspects of globalisation (Yiming and Ping, 2011; Larsen, 2016; Altbach and Knight, 2007). However, despite the evident benefits of these internationalisation efforts, challenges persist. For example, participants from Chinese university pointed out limitations in their ability to transfer knowledge or academic credits acquired from overseas institutions back to their home university. This difference highlights the complexities and nuances inherent in the globalisation of education and highlights areas where further refinement and adaptation may be needed to fully exploit the potential of global educational exchanges.

Advancements in technology have also played a role in facilitating the internationalisation of teacher education. Platforms like Zoom and online conferences, mentioned a lot by Chinese student teachers in focus groups, have allowed them to access guest lecturers and learn from international perspectives without the need to travel abroad (Lin, 2019). Similarly, many universities in Scotland and other nations provide opportunities for students to study abroad or participate in short-term programmes, enhancing their global perspectives and overall quality as teachers (Li et al., 2019). These methods allow educators to connect with peers and students from around the world, fostering cross-cultural understanding and knowledge sharing. However, student participants from the Scottish University in my study mentioned that greater internationalisation of their qualification was needed to recognise the standards of qualified teachers in different regions or locations, and the Scottish teacher educators discussed the difficulty of giving time for international experiences in the one-year long PGDE program.

The internationalisation of teacher education represents a significant trend in the global education landscape, fostering collaborative teaching and research efforts across borders. Larsen (2016) argues that globalisation has strengthened relationships between universities, educational institutions, research centres, and even education departments at the state level. These collaborations provide opportunities for joint research partnerships, intercultural extracurricular programming, and engagement with international education rankings (Larsen, 2016, p.398). Such initiatives contribute to the broader internationalisation efforts and foster a global outlook among teacher educators and researchers. Larsen (2016) outlines several goals of internationalising teacher education, including fostering global awareness, intercultural competence, and a sense of responsibility towards global issues. Additionally, it aims to enhance the quality of teacher education programmes and support educators in engaging with diverse educational systems

and pedagogical approaches. Moreover, internationalisation seeks to equip future educators with the skills and knowledge to address the needs of diverse student populations, both domestically and internationally.

However, amidst these benefits, internationalisation also poses potential challenges and risks. One significant concern is the potential homogenisation of education policies and practices across countries. As governments compare themselves and compete in international assessments like PISA, there is a tendency to produce policies focused on improving teacher quality and education effectiveness (Mayer, 2021), as mentioned in the literature review section. This focus on standardisation may overlook the unique contexts and needs of local communities, leading to neglect of local contexts in education policy formulation (Goodwin, 2020; Larsen, 2016; Mayer, 2021). Moreover, without proper contextualisation and integration into local educational landscapes, international experiences may fail to address the specific challenges and nuances of individual education systems. Goodwin (2020) and Larsen (2016) both highlight the importance of ensuring that international experiences are appropriately contextualised to meet the diverse needs of students and educators in local settings. Failure to do so could exacerbate inequalities and undermine the effectiveness of education reforms.

In conclusion, the relationship between globalisation and the internationalisation of higher education, especially in teacher education, is a dynamic process influenced by various factors. The internationalisation of teacher education programme addresses the demands of a globalised world and prepares educators to work in diverse settings. It includes aspects such as student mobility, curriculum transformation, technological advancements, and collaborative teaching and research efforts. While globalisation has prompted the need for educators who can adapt to diverse cultural contexts, foster global citizenship, and prepare students for an interconnected world. By critically examining this relationship, stakeholders in teacher education can ensure that internationalisation efforts are purposeful, contextually relevant, and contribute to the comprehensive development of future educators.

7.3 The influence of globalisation on the design of the programmes

Teacher education programmes play a crucial role in equipping student teachers with the necessary pedagogical knowledge, skills, and attitudes to meet the changing needs of globalisation (Zhao, 2010; Lingard, 2016). However, the findings from the universities

suggest that the direct influence of globalisation on the design of teacher education programmes is limited. In general, the primary driving forces behind the design of these programmes are the professional culture and professional standards within the country.

7.3.1 The Influence of Policy and Professional Standards

In Scotland, the GTCS has a significant role in setting standards, accrediting programmes and ensuring the professional development of teachers (Sorensen, 2020). The influence of the GTCS reflects the strong role of professional culture in shaping teacher education in Scotland (Menter and Hulme, 2011). Similarly, the design of teacher education programmes in China is shaped by a combination of government expectations and professional, political, and cultural elements. The government plays a central role in setting the agenda for education in China and has explicit expectations for teacher education programmes (Huang et al., 2015; Zhang et al., 2023). This top-down approach ensures alignment with national policies and priorities, including the cultivation of teachers who can contribute to the country's development goals (Guo et al., 2019). The MOE (2018) in China emphasises the cultivation of highly qualified, innovative teachers as a crucial objective. The goals include developing teachers with moral character, catering to diverse student needs, and cultivating well-rounded rural teachers. According to the literature and analysis of handbooks of the teacher education programmes in different subjects in China, the curriculum aims to enhance pre-service teachers' professional knowledge, develop their pedagogical skills, and nurture enthusiasm and a positive attitude toward learning. While practical training platforms and internships in local schools are required to prepare new teachers for the contemporary development of the teaching profession (Wang et al., 2013).

The GTCS, as a regulatory body, plays a crucial role in the Scottish education system by registering, regulating, and developing teachers. It sets professional standards and codes of conduct, ensuring the quality and professionalism of the teaching workforce (GTCS, 2021a). However, the Scottish teacher educators explained they had strong autonomy in designing different aspects of the teacher education program. In contrast, the government and education councils have played a significant role in shaping teacher education policies and programmes in China. As Christensen and Kowalczyk (2017) state, policies and strategies have been revised to align with market-driven trends and the requirements of globalisation. The Chinese government has issued multiple policies, guidelines, and strategies to diversify institutional settings, upgrade and merge institutions and schools, innovate teacher education techniques and curricula, change certification systems and

examinations, and increase the number of teachers in rural schools (Rao, 2020; Zhou, 2019). The government's influence has evolved over time, with a shift from central government dominance to a top-down administrative model, where the central government acts as a guide while local governments have more control over education funding and teacher certification examination systems (Rao, 2020; Yiming & Ping, 2011). Evidence of government influence can also be seen in initiatives such as selecting and funding elite universities to enhance their international reputation, reinstating tuition waivers for pre-service teacher education programmes, and increasing financial investment in teacher education institutions (Li et al., 2019). However, it is important to note that while this comparison offers insights into the Scottish system, this study lacks corresponding data from Chinese teacher educators, limiting direct comparison between the two contexts.

7.3.2 The Influence of Curriculum Reforms

Participants mentioned curriculum reforms as part of their learning on teacher education programmes: the New Curriculum of Basic Education (NCBE) in China, and Curriculum for Excellence (CfE) in Scotland (Paterson, 2021; OECD, 2021). These reforms have prompted a shift in focus from a content-centred approach to a more student-centred perspective. In Scotland, CfE has been implemented in the context of addressing socioeconomic disparities and creating a more equal society through education (Shanks, 2020). CfE (The Scottish Government, 2010) aims to offer a coherent, flexible, and challenging curriculum that focuses on the holistic development of students and prepares them for the demands of a changing world. It emphasises the acquisition of skills and the application of knowledge across disciplines, allowing teachers to have more flexibility in curriculum development (The Scottish Government, 2010). By offering a broad range of learning experiences and opportunities, CfE aims to prepare students to navigate the complexities and uncertainties of the modern world. The Scottish government encourages teachers to be agents of change and prioritise the well-being of students, fostering a positive approach to learning (Shanks, 2020). The nurturing approaches highlighted within CfE also emphasise the importance of creating a supportive learning environment and developing teachers' interpersonal skills and cultural competence to meet the diverse needs of students (The Scottish Government, 2013).

Regarding to the curriculum reform in China, the NCBE, introduced in 2001, brought about a comprehensive overhaul of the education system in response to globalisation and the market economies influenced, as mentioned above (Guo et al., 2013). This is a

significant reform effort designed to enhancing the quality of education and preparing students with necessary skills for the demands of the 21st century (Feng, 2006; MOE, 2008; Tang and Wang, 2021). The NCBE focuses on student-centred approaches and quality-oriented education, moving away from traditional rote memorisation and teacher-dominated and exam-oriented teaching methods (Lou, 2021; Meng, Tang and Wu, 2021). It promotes critical thinking, creativity, problem-solving skills, and adaptability through inquiry-based learning and cooperative activities (Yin, 2013). This paradigm shift in teaching methodologies and pedagogical approaches requires teacher education programmes to equip future teachers with the necessary knowledge and skills to implement student-centred strategies effectively (Lou, 2021). By incorporating opportunities for pre-service teachers to engage in practical teaching experiences, reflective practice, and collaborative learning communities, teacher education programmes in China aim to develop the pedagogical expertise and adaptability required in the changing landscape of education. Zhang and Huang (2008) suggest that the curriculum reforms in teacher education have changed teaching methods, instructional relationships, and teachers' attitudes in China. The NCBE also recognises the importance of continuous professional development for teachers to keep up with the new curriculum framework and design meaningful learning experiences (MOE, 2008). In the meanwhile, this reform also brings the changes of teachers' employment conditions, resulting in increased working hours and workloads, which led to feelings of inadequacy and distress among many educators. As the reform requires them to adapt to new curricular changes and undergo training to meet the new standards (Guo et al., 2013).

7.3.3 Adapting Global Ideas to Local Conditions

The globalisation of education involves the borrowing and lending of educational ideas among different countries. Policymakers, teachers, and staff have the choice to reject, resist, or accept these global ideas and adapt them to local conditions (Spring, 2015). Chinese participant data highlights efforts within programmes, particularly in the Dancing major, to integrate global dance forms like Jazz into local Lingnan Dance performances, resulting in a unique fusion appealing to both traditional and contemporary audiences in the region. Furthermore, Chinese student teachers noted the challenge of applying effective small group teaching methods in classrooms with a large number of students. This data suggests a proactive adaptation of educational approaches to suit local conditions. On the other hand, the concept of lifelong learning emphasises the need for individuals to continuously update their skills to meet the changing global job market and technological

advancements. The World Bank (2003) defines a lifelong learner as someone who possesses basic academic skills, can effectively use information and communication technology, and can prepare themselves to work in a multicultural labour force. In the Chinese context, lifelong learning includes the ability to learn new things, work in teams, communicate effectively, manage oneself, question and innovate, and assume personal responsibility (Cheng and Yip, 2006). In response to these global ideas, educators in China have modified their teaching approaches to motivate students and meet lifelong learning demands. Additionally, teacher education programmes have integrated courses on teacher ethics and provided elective procedures and lectures to cater to diverse student interests (Yin and Mu, 2022).

Teacher education programmes in both countries are striving to enhance teaching and learning environments, preparing educators who can navigate the complexities of pupil diversity in a globalised world. As Spring (2015) points out, different ways of seeing and understanding the world contribute to global educational ideas. However, these educational ideas should not travel one way only from Europe and the United States to the rest of the world. With the increasing diversity of the school population in Europe and the United States, including differences in ethnicity, language, religion, and culture, there is a need to adapt the teaching force to this multicultural trend and address the diverse needs of students (Ladson-Billings, 2014). This notion of cultural inclusion was suggested by the Scottish student participants, and educators recognised the importance of embracing and valuing diverse cultural perspectives in education. Experiencing other cultures through international exchange was also important in both China and Scotland. The concept of internationalisation is recognised in the literature as a feature of educational globalisation. However, the PGDE in Scotland is considered too short to fully accommodate global perspectives and experiences. The short duration of the programme limits the extent to which internationalisation can be integrated into the curriculum and pedagogical practices. In China, internationalisation also raises questions about the extent to which teacher education programmes allow for flexibility and responsiveness to local contexts and the diverse needs of students (Zhao, 2010).

7.4 Student Teachers' Experiences of the Programmes

The factors influencing student teachers' experiences in teacher education programmes are multifaceted but related to the local rather than the global context. The data suggest that teacher education programmes can create and provide supportive and enriching learning

environments for student teachers. The findings from student teachers' experiences at both universities suggest several factors as influential in shaping their experiences of teacher education programmes. These factors include teaching activities (pedagogy/approaches), methods of assessments, course content and placement experiences.

Regarding teaching activities, the student participants from both universities emphasised the importance of a combination of theory and practice in organising classrooms and structuring programme modules. While there was no consensus on the most effective teaching approaches, student teachers believed that course delivery should be tailored to meet students' needs and align with the course aims and contents. Placement, seminars, and micro-teaching are recognised as the most frequently mentioned teaching activities in focus groups. Placement, in particular, was highly valued by student teachers in both programmes as it provided a sense of achievement, facilitated self-reflection and skill development, and allowed for the application of theory into practice. These findings align with previous research suggesting that teaching experience positively influences student motivation and contributes to their development as teachers (Sinclair, 2008; Madsen and Cassidy, 2005; Tabacbnick and Zeichner, 1984). Sinclair (2008) and Madsen and Cassidy (2005) clarified that students in teaching experience are more likely to develop some abilities, such as self-evaluation, self-reflective and interpersonal communication, and some real experiences of the practical ideas in teaching, of the value of teaching to other and of real experiences of being a teacher.

Group work and seminars were also highlighted as beneficial teaching activities. They fostered interactions, collaborative learning, and critical thinking among student teachers. The smaller group settings of seminars facilitated more comfortable and relaxed communication between students and educators, promoting engagement, motivation and a deeper understanding of educational concepts and theories. Group projects, on the other hand, enabled experiential learning, action planning, and in-depth knowledge acquisition (Bourner et al., 2001). These findings align with the constructivist approach to learning, where students construct knowledge and meaning from their own experiences and engage in collaborative learning (Jenkins, 2009; Ertmer and Newby, 2013). Also, the learning environment in group work or seminars could be recognised as a model of 'learner-centred learning' (Mclnerney, 2014, p.4), unlike the typical 'teacher-centred' activity lecture (Fry et al., 2009). The focus on learner-centred and constructivist approaches in teaching activities reflects the importance of active engagement and autonomy in student learning,

which could make student learn effectively and efficiently, as suggested by Mclnerney (2014, pp.4-8).

In terms of the use of technology, student teachers from both universities highlighted the benefits of online platforms in teaching and learning, especially during the COVID-19. The findings indicated that the online platforms, such as Zoom, Microsoft Teams and QQ Meeting, could provide opportunities to save time and enhance teaching and learning's effectiveness and efficiency. With the implementation of online platforms, students and teachers have been able to continue their educational activities remotely, overcoming the limitations imposed by physical distance. This has allowed for the delivery of lectures, interactive discussions, and collaborative projects, fostering student engagement and active participation (Crawford et al., 2020). Additionally, the use of technology has enabled the creation of multimedia resources, online assessments, and virtual simulations, providing students with diverse and interactive learning experiences. Some student teachers from the University in South China suggested that some compulsory but not related to their major could hold online, which provides more autonomy and flexibility in learning. These findings highlight the significant benefits of incorporating technology into teacher education programmes, especially during times of disruption like the COVID-19 pandemic, where online platforms have proven to be valuable tools in maintaining continuity in education and enhancing the overall learning experience.

The methods of assessment employed in the teacher education programmes also play a significant role in shaping student teachers' experiences. Assessment is viewed as an integral part of teaching and learning, providing insights into students' progress, identifying areas for improvement, and preparing them for future courses (Miller et al., 1998; Nagy, 2000). The types of assessments varied between the two universities, with examinations being the predominant form in the teacher education institution in South China, while assignments, peer review, presentations and placement assessments are emphasised in the Scottish teacher education programme, according to the understandings of programme handbook and findings of focus groups. The cultural differences, such as the exam-oriented education system in China (Kirkpatrick and Zang, 2011; Deng, 2011), might explain the prevalence of examinations in the teacher education program. Some studies (Douglas et al., 2014; Chen et al., 2015) revealed that examinations, only memorising and repeating the knowledge without practise and understandings, tend to decrease the satisfaction and enjoyment in particular programme (Dahlin and Watkins, 2000). Although, there has been

some improvements in Chinese higher education in the past decade, in some courses, the overall grade frequently consists not only of the final examination (70%), but also of the assignments (30%) at the mid-term. Most of student teachers found the pressure and useless in participating the examination. Generally, student teachers from both universities expressed mixed opinions about assessments. Assignments were praised for promoting self-reflection, deeper understanding and critical thinking, but they also induced pressure and anxiety due to tight schedules and unfamiliar writing styles. The need to strike a balance between different assessment methods and consider cultural differences emerged as an important consideration.

The course content was also a factor influencing student teachers' experiences, particularly in China. Student teachers criticised the inclusion of irrelevant courses, such as "Military Theory" and "Politics," which took away valuable time from core and practice courses, leading to demotivation. These findings emphasise the importance of designing course content that is relevant, engaging, and aligned with the goals of the teacher education programmes. The inclusion of relevant and meaningful courses is essential to ensure that student teachers acquire the knowledge and skills necessary for effective teaching.

Students in Scotland mentioned one issue from a more global perspective: the inflexible teacher qualification system and the limited applicability of the qualification in other countries. This raises the need for programmes to strike a balance between local and global adaptability, allowing for the global transferability of future career prospects for pre-service teachers (Wang et al., 2013). In an increasingly globalised world, where teachers may seek employment opportunities internationally, it is important to consider the global context in teacher education programmes to meet the needs and aspirations of student teachers. In this context, the teacher education programme could incorporate more diverse and internationally recognised teaching standards and frameworks into the curriculum. Familiarising student teachers with different educational systems could help them to develop a broader perspective on professional culture in other countries and adapt their professional knowledge for international teaching practice.

7.5 What Might the Programmes Learn from Each Other

The teacher education programmes in Scotland and China share a common goal of cultivating high-quality teachers in the context of globalisation. In summary, the focus in both countries is on developing teachers with strong subject knowledge, excellent teaching

skills, and comprehensive professional qualities and values in order to prepare student teachers to meet the relevant professional standards. However, the two programmes differ in their specific programme orientations and requirements. The wider professional culture is also very different.

7.5.1 Professional Culture and Standards

In China, Chinese President Xi Jinping has emphasised the role of teachers as the backbone of education and the need for high-quality teachers to achieve high-quality education (Xi, 2020; Xi, 2018b). The "*New Era Basic Education Strengthening Teachers Plan*" (MOE, 2022) place great expectations on normal high-level universities and their role in serving the national teacher education system. These universities are expected not only to prioritise teacher education as their main responsibility but also to contribute to the construction of a high-quality teacher education model with Chinese characteristics (MOE, 2022). The programme aims to train high-quality teachers with a strong foundation in subject knowledge and subject literacy, teaching skills and future participation abilities, and academic and comprehensive qualities. It also emphasises the importance of teachers' understanding of history, nationality, country, and culture and their ability to internalise socialist core values. Additionally, China encourages collaboration between high-level normal universities and other educational institutions to share resources and promote the overall professional level of the teacher education system (MOE, 2018; Guo et al., 2013). By doing so, student teachers could be equipped with the necessary skills and knowledge to adapt to future educational challenges and continuously grow as professionals.

In Scotland, teacher preparation is the responsibility of higher education institutions working in partnership with schools for teaching placement. Completing an accredited Bachelor of Education or Integrated Master (undergraduate) programme, or a Postgraduate Diploma in Education is a requirement for attaining provisional registration as a teacher (Shanks, 2020). Attention towards master's level learning and teaching has also increased in recent years in Scotland, aligning with the international trend observed in countries like Finland and Germany (Darling-Hammond, 2017; Sabrin, 2018). Additionally, those who have completed the programme successfully are required to finish a period of prohibition in a classroom teaching environment. Only student teachers who have completed these two requirements can become fully registered teachers (Qualified Teacher Status). The Scottish programme, therefore, aims to produce highly competent teachers who meet the GTCS Standard for Provisional Registration. After completing the accredited PGDE programme

successfully, student teachers undergo a probationary year of teaching through the Teacher Induction Scheme and are assessed in their school against the competencies in the SFR in order to obtain full registration. The Scottish programme reflects the requirements in the SFR in terms of the teacher qualities and professional knowledge and behaviour the courses help students to develop. The aim is to ensure new teachers have a strong foundation in education theory and curriculum knowledge combined with practical experience.

7.5.2 Programme Structures and Content

In China, the teacher qualification certificate can be obtained through two routes. One is by completing a teacher education programme with specific majors in accredited universities, while the other is by passing the national teacher qualification examination for graduates in all subjects. As mentioned previously, student teachers cannot obtain a teacher certificate either by completing an undergraduate programme in a specific subject or by gaining a master's degree in teaching pedagogy. At present, high-level normal colleges and universities in China have also begun to reform and innovate the structure of teacher education and try to adopt the integrated training model of undergraduate and master's degrees (Rao, 2020). Specifically, at the undergraduate teacher education stage, the focus is on cultivating the subject knowledge of the student teachers, along with the cultivation of knowledge of primary education and the practical classroom skills of the student teachers. At the postgraduate level, based on a deep understanding of subject knowledge, student teachers will focus on nurturing their academic theoretical literacy and understanding of practical classroom activities. They will also focus on improving their ability to transform subject knowledge to encourage pupil learning. Guiding pupils' development of morality is also important (Xi, 2018b; MOE, 2022).

The content of teacher education programmes in Scotland and China reflects each country's professional requirements. In China, there is a focus on cultivating teachers' subject knowledge, ideological and political education and professional ethics. This emphasises the development of not only academic knowledge but also moral character and civic responsibility. In addition, normal universities in China have developed course platforms integrating different subjects to provide a comprehensive education to student teachers. The incorporation of information technology and artificial intelligence into subject courses reflects the recognition of the importance of digital literacy and the integration of technology in modern classrooms. Therefore, compared with the past, the types of teacher

education courses in China are more diverse, and the use of digital media technology in classrooms has also become a trend, especially after the COVID-19. Student participants from China said phrases such as "digitalisation of information systems" and "good use of multimedia teaching" are constantly repeated in both course teaching and learning and extracurricular practice. According to Kayange and Msiska (2016), they explore the impact of information technology integration in Chinese teacher education programmes and highlighted the potential benefits of enhancing student teachers' pedagogical skills and their ability to adapt to the evolving educational landscape.

In Scotland, the curriculum content of the PGDE programme is designed to prepare student teachers for the diverse challenges they will face in the classroom. There is an increasing emphasis on partnerships between schools and universities (Armstrong, 2015). This collaboration between schools and universities ensures that student teachers gain practical experience and a deep understanding of educational theory in practice.

7.5.3 Programme Approaches to Pedagogy and Assessment

Pedagogy is a broad concept and is shaped differently within diverse cultural contexts, but Morris and Adamson state that it refers to the techniques and choices teachers make to deliver learning content that is outlined in curriculum documents (2010, p.88). The method of instruction differs between the teacher education programmes in Scotland and China. In China, the primary mode of programme delivery is through lectures, with some micro-teaching sessions and student presentations. Lectures focus on the transmission of knowledge, and textbooks serve as the main teaching resource. This traditional approach places emphasis on acquiring subject knowledge and content expertise. However, there is also a recognition of the need for improvement in pedagogical methods to foster critical thinking and practical teaching skills (Xu, 2019). However, the University in South China intentionally arranges student teachers from different disciplines of arts and sciences to study in one class. This approach is making up for the deficiencies brought about by the domestic implementation of subject-based teaching, strengthening the connection between subjects, strengthening the integration between subjects, and better helping student teachers to connect the knowledge of this subject with the knowledge of other subjects so that improve their comprehensive literacy ability. In Scotland, teacher education programmes aim to cultivate critical thinking, reflection, and practical teaching skills through an active and interactive approach. The focus is on creating an environment that encourages teacher-student interaction, debate, and deeper learning. Student teachers are

encouraged to actively engage in discussions, collaborate with peers, and reflect critically on their own teaching practices. This approach aligns with contemporary educational theories and research on effective pedagogy, aiming to prepare student teachers to be reflective practitioners (Zeichner and Liston, 2013).

Assessment methods in teacher education programmes also vary between Scotland and China. In China, assessment tasks predominantly consist of paper exams and essays. The final assessment often includes the completion of a thesis, which requires independent research and the demonstration of academic abilities. The assessment process in China is designed to evaluate student teachers' subject knowledge, research skills, and academic capabilities. In Scotland, assessment tasks include a range of activities that evaluate student teachers' practical teaching skills and their ability to reflect critically on their experiences. These tasks may include written critical reflections on practicum experiences, micro-teaching sessions, lesson plans, and essays that demonstrate a deep understanding of educational theory. The aim is to assess student teachers' ability to apply theory to practice, reflect on their teaching, and continuously improve their professional practice. Overall, the assessment methods in both countries are designed to ensure that student teachers meet the necessary standards and possess the required knowledge and skills to become effective teachers.

The teacher education programmes in Scotland and China share the common goal of developing high-quality teachers, but they have distinct approaches and requirements. China emphasises the cultivation of subject knowledge, teaching skills, and comprehensive qualities, along with a strong focus on the country's culture and values. Scotland's programme focuses on theoretical knowledge combined with practical experience to produce competent teachers who meet professional standards. The pedagogical approaches in China rely heavily on lectures and subject-based teaching, while Scotland adopts an active and interactive approach to foster critical thinking and reflection. Assessment methods also differ, with China utilising paper exams and essays, while Scotland employs a range of activities to evaluate practical teaching skills and critical reflection.

It is important to note that the descriptions provided here are based on general trends and available literature on teacher education programmes in Scotland and China. There may be variations and ongoing developments within each system that are not fully captured in this

overview. Further research and analysis specific to individual programmes and institutions would provide a more detailed understanding of the topic.

7.6 Conclusion

In conclusion, this chapter has explored the concepts of teacher quality and effectiveness within the globalised context of education. It has been noted that certain perspectives on teacher quality and effectiveness have gained prominence globally, influenced by organisations such as the OECD and UNESCO. Teacher effectiveness is defined as the ability to achieve teaching and learning goals through competence, performance, subject-specific knowledge, and creating a positive learning environment. Enhancing teacher effectiveness is seen as crucial for improving student achievements.

However, despite the recognition of the importance of teacher quality and effectiveness, participants from the two universities struggled to provide a definitive definition of these terms, instead focusing on their own perceptions of what constitutes a good teacher. Nevertheless, the literature emphasises the significance of teacher knowledge, qualifications, classroom management, and positive teacher-student relationships. Professional knowledge is identified as a critical factor in enhancing teacher effectiveness. Additionally, personal qualities such as approachability, kindness, empathy, passion, and enthusiasm for teaching are highlighted as contributing to effective teaching.

The Chinese context places a particular emphasis on adherence to ideology and moral values as integral to teacher effectiveness. Assessing and developing teacher quality involves various assessments and requirements, but it is important to note that being a qualified teacher does not automatically equate to being an effective one. Ongoing professional development and the ability to adapt to evolving educational contexts are also crucial for teacher effectiveness. Teachers should strive to create a positive learning environment, establish strong relationships with their students, and demonstrate care and empathy. Furthermore, it is imperative to consider a broader range of factors, including relational skills, cultural responsiveness, and a commitment to social justice, in understanding teacher effectiveness. A comprehensive understanding of teacher quality and effectiveness is necessary to better prepare teachers for the challenges of education in a globalised world.

Although globalisation does exert some influence on teacher education programme design, the primary factors shaping these programmes are the professional culture, policy expectations, curriculum reforms, and the need to address local and diverse student needs. Balancing these factors can contribute to the creation of supportive and effective teacher education programmes that meet the needs and aspirations of student teachers in both local and global contexts. The teacher education programmes in Scotland and China share the common goal of developing high-quality teachers, but they employ distinct approaches and requirements. China places significant emphasis on cultivating subject knowledge, teaching skills, and comprehensive qualities while also highlighting the importance of the country's culture and values. In contrast, Scotland's programme focuses on theoretical knowledge coupled with practical experience to produce competent teachers who meet professional standards. Pedagogical approaches in China rely heavily on lectures and subject-based teaching, while Scotland adopts an active and interactive approach to foster critical thinking and reflection. Assessment methods also differ, with China employing paper exams and essays, while Scotland utilises a range of activities to evaluate practical teaching skills and critical reflection.

In conclusion, this chapter has provided valuable insights into the multifaceted nature of teacher quality and effectiveness in the globalised educational landscape. They emphasise the importance of various factors, including knowledge, skills, personal qualities, cultural responsiveness, and ongoing professional development, in shaping effective teaching practices. By understanding and considering these factors, teacher education programmes can be better equipped to prepare teachers who can thrive in the complexities of modern education and effectively meet the needs of diverse learners in a globalised world.

8. Chapter 8 Conclusion

This research has illustrated understandings of the influence of globalisation on teacher education and the perceptions of globalisation, teacher qualities and effectiveness among student participants and educators in two case study programmes. Through focus groups and individual interviews, the study has provided valuable insights into perspectives surrounding teacher education programmes in China and Scotland. There are several limitations and implications of this research which will be discussed in this chapter. The research also contributes to the broader discourse on teacher education and its alignment with the demands of a globalised world. This chapter explores these implications and discusses their significance in shaping teacher education programmes in the context of globalisation. However, the chapter will first provide brief answers to the research questions.

8.1 The Research Questions

8.1.1 How are teacher quality and effectiveness understood in the context of globalisation?

In the context of globalisation, teacher quality and effectiveness have gained increased attention and importance. Globalisation has led to the recognition that effective teachers play a crucial role in preparing students for the challenges of a globalised world. Teacher quality and effectiveness are now understood as more than just transmitting knowledge to students. They encompass a range of skills, competencies, and qualities that contribute to student learning and success. Teacher quality is often associated with possessing the necessary competence and expertise in their subject area. This includes having a deep understanding of the content they teach, as well as the pedagogical strategies and instructional methods required to effectively convey that knowledge to students. Teachers who are knowledgeable in their subject matter can provide students with accurate and up-to-date information, helping them develop a strong foundation in their respective disciplines.

In addition to subject-specific knowledge, effective teachers also possess a set of performance skills that enable them to engage students and facilitate meaningful learning experiences. These skills include effective classroom management, communication, lesson planning, and the ability to adapt teaching strategies to meet the diverse needs of students. By employing a variety of instructional techniques and resources, teachers can create dynamic and engaging learning environments that cater to the individual strengths and

learning styles of their students. Creating a positive learning environment is another crucial aspect of teacher effectiveness. Effective teachers foster a classroom culture that is inclusive, supportive, and conducive to learning. They establish positive relationships with their students, promoting a sense of trust, respect, and collaboration. By creating a safe and nurturing environment, teachers can encourage students to take risks, ask questions, and actively participate in their own learning journey.

The understanding of teacher quality and effectiveness in the context of globalisation has been shaped, to a large extent, by the influence of global organisations such as the OECD and UNESCO. These organisations conduct research, provide recommendations, and set standards to improve education systems worldwide. Their initiatives, such as PISA, have highlighted the importance of teacher quality and its impact on student outcomes, leading to the increased prominence of certain perspectives and approaches. Through their reports and policy recommendations, global organisations have emphasised the significance of continuing professional development for teachers, the need for effective teacher evaluation systems, and the importance of attracting and retaining high-quality teachers. They have also emphasised the role of teachers in promoting global competencies, intercultural understanding and preparing students to thrive in an interconnected world.

The findings and discussion of this research contribute to the broader understanding of teacher quality and effectiveness in the context of globalisation by exploring the perspectives of participants in different educational systems. While the literature emphasises the importance of various competencies and skills, this research provides insight into how these concepts are perceived and implemented within specific cultural and institutional contexts. Effective teachers are not only knowledgeable in their subject matter but also possess performance skills and can create positive learning environments. By examining the experiences and perspectives of teacher educators, this research adds nuance to the discourse surrounding teacher quality and effectiveness, highlighting the diverse factors that influence teaching practice and professional development. For example, the influence of global organisations such as the OECD and UNESCO has played a significant role in shaping the understanding and recognition of teacher quality and effectiveness worldwide. By acknowledging the multifaceted nature of teacher effectiveness, education systems can better prepare teachers to meet the challenges of a globalised world and provide students with high-quality learning experiences.

8.1.2 To what extent does globalisation in education policy influence the design of the two teacher education programmes?

To address this research question regarding the extend of globalisation's influence on the design of teacher education programmes, it is essential to discover deeper to the interplay between global trends and local contexts. While globalisation undoubtedly fosters the sharing of educational ideas and practices, its impact on the design of teacher education programmes is mediated by various factors specific to each country or region, according to both literature and current findings of this research.

Firstly, the existing professional culture within each educational system plays a significant role in shaping teacher education programmes. This includes deeply ingrained traditions, values, and expectations surrounding the teaching profession, which influence the design and content of teacher education programmes. These cultural factors shape the emphasis placed on different aspects of teacher education programme, such as subject knowledge, pedagogical approaches, and professional ethics. For example, in China, where the preservation of cultural heritage is paramount, teacher education priorities the cultivation of subject knowledge and adherence to traditional values. Conversely, in Scotland, where critical inquiry and reflective practice are valued, teacher education programmes focus on developing critical thinking skills and meeting professional standards. These cultural factors offer teacher education a unique character that reflects the local educational ethos, ensuring that the curriculum resonates with the professional aspirations and values of educators in their respective contexts.

Moreover, policy expectations set by governments and education authorities significantly influence the design of teacher education programmes. These policies and regulations define the qualifications and competencies of teachers and define the content and structure of teacher education courses. These policies may vary across countries based on their unique educational priorities and goals. While global trends may influence overall policy frameworks, such as and emphasis on promoting 21st century skills, the implementation of these policies is tailored to meet the specific needs and priorities of each country. Teacher education programmes must align with these policies to ensure that graduates are well-equipped to meet the evolving demands of the teaching, profession and contribute effectively to the broader educational landscape.

Furthermore, curriculum reforms serve as catalysts for innovation and adaptation within teacher education programmes. Driven by local considerations and informed by educational research, these reforms respond to emerging pedagogical trends, technological advancements, and shifting societal needs. While global trends may inspire these reforms, their implementation is tailored to the specific contexts and realities of individual educational systems. As such, curriculum revisions reflect a nuanced understanding of local educational contexts, ensuring that teacher education programmes remain relevant, responsive, and impactful in preparing educators for the challenges of contemporary teaching practice. In the meantime, the population of students might also be one of the factors that need to be considered to the curriculum reforms. Teacher education programmes must equip educators with the knowledge, skills, and dispositions to effectively support students from diverse cultural, linguistic, and socioeconomic backgrounds. By fostering an inclusive and culturally responsive learning environment, teacher education initiatives strive to cultivate educators who are adept at meeting the unique needs of every learner, thereby promoting equitable access to quality education for all.

In specific to mentioned China, the teacher education programme emphasises the cultivation of subject knowledge, teaching skills, and comprehensive qualities. This reflects the importance placed on preserving and transmitting Chinese traditions and educational philosophies, including adherence to ideology and moral values. While influenced by global educational trends, the programme design also reflects the country's unique historical and cultural context. On the other hand, Scotland's teacher education programme focuses on a combination of theoretical knowledge and practical experience to produce competent teachers who meet professional standards. The programme adopts an active and interactive pedagogical approach that encourages critical thinking and reflection, aligning with global trends in education. However, it also reflects the local context and priorities of Scottish education, including the focus on meeting professional standards and addressing the needs of diverse student populations. In other words, by embracing both global perspectives and local context, teacher education programmes can effectively prepare educators to navigate the complexities of a globalised world while remaining rooted in the rich tapestry of their own educational traditions and values.

In summary, it is clear that both programmes are influenced by globalisation by fostering the exchange of ideas and best practices, its impact is mediated by a complex interplay of

factors specific to each educational context. The design of the teacher education programmes is shaped by the existing professional culture, policy expectations, curriculum reforms, and the need to address local and diverse student populations. The programmes are more likely to reflect the specific needs and expectations of their respective contexts. By striking a balance between global perspectives and local needs, teacher education programmes can prepare educators to navigate the complexities of a globalised world while effectively meeting the diverse needs of their students. This research contributes to the field by illustrating the intricate relationship between globalisation and the design of teacher education programmes, highlighting the importance of contextual factors in shaping educational practices.

8.1.3 What factors affect student teachers' experiences of teacher education programmes?

Student teachers' experiences in teacher education programmes are influenced by various factors. Firstly, the teaching activities employed within the programmes play a crucial role in shaping student teachers' experiences. As highlighted in the literature, active and interactive teaching methods that foster critical thinking, reflection, and collaboration are instrumental in enhancing the learning experience for student teachers. By engaging in a variety of pedagogical approaches such as lectures, seminars, group work, and practical teaching experiences, student teachers not only acquire foundational knowledge but also develop the essential skills and competencies significant for effective teaching practice. This research highlights the importance of pedagogical innovation and student-centred approaches in promoting meaningful learning experiences that resonate with the diverse needs and learning styles of aspiring educators.

Secondly, the assessment methods used to evaluate student progress and skills also have an impact on their experiences, study motivation and learning outcomes. Drawing from scholarly discourse, the findings of this research acknowledge the diverse forms of assessment techniques utilised, ranging from traditional examinations (e.g., written exams, essays) to authentic assessments (e.g., classroom observations, teaching portfolios and reflective journals). By aligning assessments with the desired outcomes of effective teaching, teacher education programmes can provide valuable feedback and support student teachers' professional growth. This could enhance the understanding of effective assessment strategies within teacher education contexts. The importance of formative assessment practices that focus on evaluating practical teaching skills, critical reflection,

and pedagogical effectiveness, have been pointed out, thereby fostering a culture of continuous improvement and lifelong learning among student teachers.

Furthermore, the content of the courses and curriculum within teacher education programmes is another factor that shapes student teachers' experiences and professional identities. Building upon existing literature, the curriculum that suggested in this research, should encompass a balance of theoretical knowledge and practical skills that necessary for effective teaching practice. By addressing diverse aspects of pedagogy, subject-specific knowledge, pedagogical strategies, classroom management techniques, and the integration of technology in education, teacher education programmes is suggested in this research to value the importance of incorporating diverse perspectives, global issues, and culturally responsive teaching approaches within the curriculum, thereby equipping student teachers with the cultural competence and sensitivity needed to teach in diverse classroom environments.

Lastly, the adaptability of teacher education programmes to the demands of a globalised educational landscape is crucial to influence student teacher’s experiences. Globalisation has resulted in increasingly diverse student populations, evolving educational technologies, and shifting pedagogical approaches. Teacher education programmes need to equip student teachers with the knowledge and skills to navigate these challenges. The programmes should provide opportunities for student teachers to develop cultural competence, digital literacy, and an understanding of global educational trends. This study suggests to the field by highlighting the importance of flexibility in programme design and the integration of professional development opportunities that prepare student teachers for the dynamic realities of teaching in a globalised world.

Overall, this research advances the understanding of the factors that influence student teachers’ experiences in teacher education programmes, illustrating the important role of teaching activities, assessment methods, curriculum content, and adaptability in shaping the professional development journey of aspiring educators. This study provides valuable insights that by carefully considering these factors and providing a supportive, inclusive and comprehensive learning environment, teacher education programmes can enhance the preparation and effectiveness of future generations of educators.

8.1.4 What are the differences and similarities in the teacher education programmes in Scotland and China?

Based on handbooks of specific programmes from both universities, it can be seen several similarities. One key similarity between the programmes is their shared objective of preparing students to become qualified and professional educators, tailored to the respective Chinese and Scottish teaching markets. This common goal highlights the fundamental purpose of teacher education programmes in both contexts. However, the teacher education programme in Scotland and China differ in several aspects. In Scotland, there is a strong emphasis on combining theoretical knowledge with practical experience to cultivate competent teachers who adhere to professional standards. Pedagogical approaches in Scottish teacher education prioritise active and interactive methods that encourage critical thinking, reflection, and collaboration among student teachers. By blending theory with hands-on experience, Scottish programmes aim to equip educators with the skills and competencies necessary to excel in dynamic classroom environments. Conversely, the Chinese teacher education programme places greater emphasis on subject-specific knowledge, teaching skills, and comprehensive qualities, while also incorporating elements of the country's rich culture and values. Pedagogical practices in Chinese teacher education often rely more heavily on traditional lecture-style teaching and subject-based instruction, reflecting a more didactic approach to education. This emphasis on content mastery and adherence to traditional teaching methods aligns with broader educational philosophies prevalent in Chinese society.

In summary, this research uncovers the diverse pedagogical approaches and educational priorities that shape teacher education programmes in different cultural and national contexts. By highlighting the nuanced differences between the Scottish and Chinese programmes, the study contributes to a deeper understanding of the complexities inherent in teacher education and underscores the importance of context-specific approaches in preparing student teachers in a globalised world.

8.1.5 What, if anything, could the programmes learn from one another, and what might be learned from both programmes about how globalisation influences teacher education?

The exchange of pedagogical approaches between the teacher education programmes in Scotland and China presents an opportunity for mutual learning and enrichment. Scotland could gain insights from China's emphasis on deeper levels of subject-based teaching and

the cultivation of comprehensive teacher qualities. By incorporating elements of this approach, Scottish programmes could potentially enhance the depth of subject knowledge among educators while fostering the development of broader competencies and qualities essential for effective teaching. China could benefit from adopting Scotland's active and interactive pedagogical methods, which promote critical thinking, reflection, and student engagement. By integrating these dynamic teaching strategies, Chinese programmes could nurture a more participatory and student-centred educational environment, better preparing teachers to meet the diverse needs of today's students.

As for both programmes, there are valuable lessons to be learned about how globalisation influences teacher education. The Scottish programme’s emphasis on critical thinking, reflection, and adaptability reflects a recognition of the skills and competencies needed for educators to thrive in an increasingly globalised world. As teachers navigate diverse cultural perspectives, technological advancements, and evolving educational paradigms, the ability to think critically and adapt flexibly becomes indispensable. Similarly, the Chinese programme's acknowledgement of the importance of subject expertise and cultural values underscores the significance of balancing global perspectives with local contexts. By understanding and embracing the cultural nuances and educational traditions specific to their respective regions, educators can effectively bridge the gap between global trends and local realities, ensuring that teaching practices remain relevant and responsive to the needs of diverse student populations.

In general, both programmes provide valuable experiences on the complex interplay between globalisation and teacher education. By recognising the strengths and insights of each approach, educators can cultivate a more comprehensive understanding of how to prepare student teachers for the challenges and opportunities of a globalised education system. By fostering collaboration and dialogue, the quality of teaching and learning on a global scale can be enhanced.

8.2 Limitations of the Research

Although this research provides valuable insights into the teacher education programmes in Scotland and China, it is important to acknowledge several limitations that may affect the generalisability and interpretation of the findings.

Firstly, the sample size of the study may limit the generalisability of the findings. The research was conducted with a limited number of participants from two universities in Scotland and China, which may not fully represent the diverse range of perspectives and experiences within teacher education programmes globally. The findings should be interpreted within the specific context of these universities and may not be directly applicable to other educational contexts with different cultural, policy, and institutional factors. As mentioned above in the discussion, in the context of globalisation, teacher education programmes still need to be adjusted in their own specific contexts. It is also essential to acknowledge that the absence of teacher educators from China in this research. Due to COVID-19 and the restrictions that led to in terms of approaching Chinese educators to ask for their participation, limits any comparisons that could be made between their perspectives and those of the Scottish teacher educators. Pedagogical approaches and perspectives on teacher education may vary significantly across different cultural and educational contexts. Future studies should strive for more diverse representation of teacher educators to ensure more comprehensive insights into the field.

Additionally, the research was conducted during the COVID-19 pandemic, which may have influenced the participants' experiences and perceptions of teacher education programmes. The transition to online or hybrid learning formats, disruptions to teaching practice placements, and the overall impact of the pandemic on education could have influenced the participants' responses and the overall dynamics of the programmes. Future research should consider the potential impact of COVID-19 on teacher education programmes and explore how these programmes have adapted to the challenges posed by the pandemic.

Furthermore, it is important to recognise that the research involved subjective experiences and perspectives, particularly regarding the teacher education programme in China. The findings relied on the personal experiences and reflections of the participants, which may be influenced by their individual backgrounds, biases, and interpretations. While efforts were made to ensure the credibility and validity of the findings through rigorous data analysis and interpretation, it is essential to consider the subjective nature of the data and the potential impact of personal experiences on the results.

Another limitation of this research lies in the selection of the degree program in Scotland as the primary focus. While the PGDE represents a prominent route for Initial Teacher

Education (ITE) provision in Scotland, it is crucial to recognise that it is not the only pathway available for aspiring educators. Scotland has a diverse landscape of ITE providers offering various programmes and approaches, including undergraduate degrees in education, as well as postgraduate routes beyond the PGDE. The decision to focus on a PGDE programme in this study is partly attributed to the higher proportion of international students enrolled in this particular programme compared to other ITE routes in Scotland. The diverse cultural backgrounds and varied educational experiences of international PGDE students offer unique insights into the globalisation of teacher education and the challenges faced by educators from different contexts when transitioning into the Scottish education system. It should be acknowledging that including student teachers from other routes of ITE could have enriched the findings.

Lastly, the research primarily employed interviews and focus groups as the data collection method. While interviews provide valuable insights into participants' experiences and perceptions, they are subjective and dependent on participants' ability to articulate their thoughts and experiences accurately. Alternative research methods, such as classroom observations, could provide additional perspectives and enrich the understanding of teacher education programmes.

Despite these limitations, this research contributes to the understanding of teacher education programmes in the context of globalisation, especially in China and Scotland. Future research should aim to include larger and more diverse samples, consider the impact of external factors such as the COVID-19 pandemic, and employ multiple research methods to provide a comprehensive and nuanced understanding of teacher education programmes in different contexts.

8.3 Policy Implications

This research suggests that the influence of globalisation on education policy and teacher education programmes is indirect but that a careful balance should be created between local contextual factors and global perspectives. It is noticeable that the findings highlighted the complexity and multifaceted nature of globalisation and the difficulty in clearly defining globalisation among educators and student teachers. Policymakers must recognise that globalisation is a complex phenomenon, and its impact on education is not uniform across different regions and cultures. This means the importance of flexibility and adaptability in education policy lies in the dynamic nature of a globalised world.

Although global tests such as PISA and organisations like the OECD might offer guidelines for the development of education, local factors such as changing societal needs and local policy affects teacher education programmes more directly. However, incorporating global perspectives into teacher education programmes is important; it is equally important to ensure that these perspectives are adapted and contextualised to align with local educational priorities (Grudnoff et al., 2017). In other words, policymakers and teacher education institutions need to ensure that teacher education programmes remain relevant and responsive to the demands of a globalised society, such as the market-driven and commodification of education.

Policymakers and educators in Scotland could explore ways to integrate international elements into teacher education programmes, such as incorporating comparative studies of education systems and providing greater opportunities for student teachers to engage with diverse cultural perspectives. This may help develop teachers with a broader understanding of global educational challenges and equip them with the skills to respond to these challenges effectively (Smith, 2009). This research also suggests that student teachers would like their qualifications to be recognised internationally.

In China, where government expectations heavily influence teacher education programmes, policymakers could encourage teacher education programmes to adapt to the changing educational landscape in China and globally and adapt to global pedagogical philosophies. This requires a comprehensive approach that goes beyond surface-level changes, such as diversification of training institutions and establishment of certifications. Policymakers should also focus on addressing underlying pedagogical and systemic issues, such as promoting student-centred teaching approaches and fostering critical thinking skills among student teachers. These efforts can help prepare teachers who are capable of navigating the complexities of a globalised world and meeting the diverse needs of their students.

8.4 Practice Implications

The research emphasises the importance of teacher educators and practitioners embracing a global outlook and integrating international perspectives into their teaching practice. In a globalised world, teachers must be prepared to work with diverse student populations and understand the cultural differences that shape teaching and learning. Teacher educators should provide opportunities for student teachers to engage with different educational

systems, teaching methods, and cultural perspectives from around the world. This can be achieved through initiatives such as international exchange programmes, collaborative projects with schools in other countries, and incorporating case studies from diverse educational contexts into the curriculum. By exposing student teachers to a variety of perspectives, teacher educators can foster a global mindset and enhance their ability to adapt their teaching approaches to different cultural settings.

Collaboration and partnerships between universities and educational institutions across borders are essential for promoting a global perspective in teacher education. By encouraging international research partnerships, intercultural programming, and knowledge exchange, educators can gain insights into effective teaching and learning practices from different contexts (Biesta, 2020). Collaborative efforts can also lead to the development of innovative teaching strategies that address global educational challenges. For example, educators can explore best practices in integrating technology into the classroom, promoting inclusive education, or nurturing cross-cultural competence among teachers and students. By sharing experiences and expertise, educators can collectively work towards improving the quality of teacher education in a globalised world.

This research brings attention to the different perspectives on the aims of teacher education programmes and how programmes are designed to meet those aims. The research also indicated the importance of programme design, content and teaching approaches in the development of teacher qualities, including knowledge (academic, practical, and integrated), skills, and professional values. While student participants primarily viewed the programmes as a means to enhance their individual teaching abilities and employability, educators emphasised the broader societal role of teachers as agents of social change and contributors to social equity. This disparity in perspectives raises important questions about the alignment of teacher education programmes with the broader goals of education and the expectations placed on teachers in a globalised context.

However, programme design should not only focus on developing teachers' technical knowledge and skills but also emphasise the cultivation of qualities such as adaptability, cultural awareness, and a commitment to social justice (Furlong and Whitty, 2017). In a globalised world, teachers need to be prepared to work with diverse student populations and address social inequities. Teacher education programmes should provide opportunities for student teachers to develop these qualities through learning, critical reflection, and

exposure to diverse perspectives (Cochran-Smith and Fries, 2008). The integration of theoretical and practical courses, with a focus on the operational aspects of teaching, can enhance teachers' creativity and practical skills, enabling them to effectively navigate the complexities of contemporary classrooms (Furlong and Whitty, 2017). It is important to emphasise the integration of theoretical and practical courses, focusing on the operational and practical aspects of teaching and nurturing teachers' creativity and practical skills (Cochran-Smith and Fries, 2008).

8.5 Suggestions for Future Research

The relationship between globalisation and teacher education is complex and evolving. Future research should aim to deepen our understanding of how globalisation influences teacher education programmes in different contexts and at various stages of education. This research could explore the impact of globalisation on curriculum reform, pedagogical practices, and teacher professional development (Darling-Hammond, 2017). Additionally, it is significant to investigate the experiences and perspectives of student teachers regarding the role of globalisation in their education. Understanding their readiness to teach in diverse settings and their perceptions of the importance of internationalisation can inform programme design and professional development initiatives.

Furthermore, research should critically examine the potential risks and benefits of globalisation trends in education. Future research should explore the impact of standardised evaluation systems, global student academic ranking systems, and the globalising of teacher evaluation on the design, implementation, and quality assurance of teacher education programmes. By critically examining these trends, policymakers and educators can make informed decisions about the integration of global perspectives while safeguarding the quality and cultural relevance of teacher education.

More research might also be done to explore the role of the government in shaping teacher education programmes and ensuring their quality in the context of a globalised world. Government involvement in teacher education is often tied to issues of accountability, standards, and quality assurance. In Scotland, the GTCS sets teacher standards, reflecting the government's influence in defining expectations for teacher education. Policymakers must recognise the significance of teacher quality and align government expectations with the needs of a globalised education system (Fullan, 2016). This requires ongoing collaboration between policymakers, educators, and relevant stakeholders to establish

comprehensive quality assurance mechanisms that address the changing demands of a globalised world.

In conclusion, this research provides valuable insights into the current situation and challenges of teacher education programmes in China and Scotland. The implications of the study extend beyond these specific contexts and contribute to the broader understanding of the complex interplay between globalisation, teacher education, and the demands of a rapidly changing educational landscape. The findings underscore the need for comprehensive reforms that consider diverse perspectives, align teacher education programmes with broader societal goals, and equip teachers with the competencies necessary to navigate the complexities of contemporary classrooms. These implications can inform policy and practice to foster the development of highly qualified and effective teachers who can positively impact student learning and contribute to the advancement of education in a globalised world.

References

Acedo, C. 2012. Internationalization of teacher education. *Prospects, 42*(1), pp.1-3.

Addey, C. and Sellar, S. 2018. Why do countries participate in PISA? Understanding the role of international large-scale assessments in global education policy. *Global education policy and international development: New agendas, issues and policies*, pp.97-117.

Addison, R. and Brundrett, M. 2008. Motivation and demotivation of teachers in primary schools: The challenge of change. *Education 3–13*, **36**(1), pp.79-94.

Admiraal, W. and Wubbels, T. 2005. Multiple voices, multiple realities, what truth? Student teachers' learning to reflect in different paradigms. *Teachers and Teaching*, **11**(3), pp.315-329.

Akiba, M. ed. 2013. *Teacher reforms around the world: Implementations and outcomes*. Emerald Group Publishing Limited.

Akkari, A. and Lauwerier, T. 2015. The education policies of international organizations: Specific differences and convergences. *Prospects*, **45**(1), pp.141-157.

Allen, J., Singh, P. and Rowan, L. 2018 'Editorial: Teacher education for enduring impact', *Asia-Pacific Journal of Teacher Education*, **46**(1), pp. 1–5. doi:10.1080/1359866x.2018.1416819.

Altbach, P.G. and Knight, J. 2007. The internationalization of higher education: Motivations and realities. *Journal of studies in international education*, **11**(3-4), pp.290-305.

Amis, J.M., Mair, J. and Munir, K.A. 2020. The organizational reproduction of inequality. *Academy of Management Annals*, **14**(1), pp.195-230.

Anderson, L.W. 2004. *Increasing teacher effectiveness*, 2nd edn, Unesco:, International Institute for Educational Planning, Paris.

Antwi, S.K. and Hamza, K. 2015. Qualitative and quantitative research paradigms in business research: A philosophical reflection. *European journal of business and management*, **7**(3), pp.217-225.

Apple, M.W. 2017. Global crises, social justice, and teacher education. In *Beyond bystanders* (pp. 255-268). Brill.

Armstrong, P. 2015. *Effective school partnerships and collaboration for school improvement: A review of the evidence*. London: Department for Education.

Ary, D., Jacobs, L.C., Irvine, C.K.S. and Walker, D. 2018. *Introduction to research in education*. Cengage Learning.

Ashley, L.D. 2017. Case study research. *Research methods and methodologies in education*, 2nd ed. Los Angeles: SAGE Publications. pp.114-121.

Atkins, L. and Wallace, S. 2012. *Qualitative Research in Education*.[Online]. Research Methods in Education. London: SAGE Publications Ltd. [Accessed 27 May 2019]. Available from: https://doi.org/10.4135/9781473957602

Austin, Z. and Sutton, J. 2014. Qualitative research: Getting started. *The Canadian journal of hospital pharmacy*, **67**(6), p.436.

Avalos, B. 2011. Teacher professional development in Teaching and Teacher Education over ten years. *Teaching and Teacher Education*, **27**(1), pp.10-20.

Beacham, N. and Rouse, M. 2012. Student teachers' attitudes and beliefs about inclusion and inclusive practice. *Journal of Research in Special Educational Needs*, **12**(1), pp.3-11.

Biesta, G. 2020. Risking ourselves in education: Qualification, socialization, and subjectification revisited. *Educational Theory*, **70**(1), pp.89-104.

Blase, J. and Kirby, P.C. (2009) 'Principals and Their Effectiveness ', in J. Blase and P.C. Kirby, *Bringing out the best in teachers what effective principals do*. (Third Edition) Thousand Oaks, CA: Corwin Press, pp. 1–9.

Bourner, J., Hughes, M. and Bourner, T. 2001. First-year Undergraduate Experiences of Group Project Work. *Assessment & Evaluation in Higher Education*, 26(1), pp.19-39.

Bovill, C. and Leppard, M. 2006. Population policies and education: exploring the contradictions of neo-liberal globalisation. *Globalisation, Societies and Education*, **4**(3), pp.393-414.

Brenner, M.E. 2012. Interviewing in Educational Research, in J.L. Green, G. Camilli, and P.B. Ellmore (Eds), *Handbook of Complementary Methods in Education Research*. (Third Edition). Routledge E-book. Chapter 21, pp. 357–370. Available at: https://doi.org/10.4324/9780203874769

British Educational Research Association (BERA), 2018. Ethical guidelines for educational research, 4th edition, *Research intelligence*, The British Educational Research Association. No. 82, pp. 2-9.

Brooks, J. and King, N. 2014. *Doing template analysis: evaluating an end-of-life care service*, SAGE Publications, London.

Brooks, J., McCluskey, S., Turley, E. and King, N. 2015. The Utility of Template Analysis in Qualitative Psychology Research. *Qualitative Research in Psychology*, **12(**2), pp.202-222.

Brown, L. and Durrheim, K. 2009. Different kinds of knowing: Generating qualitative data through mobile interviewing. *Qualitative inquiry*, **15**(5), pp.911-930.

Brown, P. and Lauder, H. 2006. Globalisation, knowledge and the myth of the magnet economy, *Globalisation, Societies and Education*, 4(1), pp. 25–57. doi:10.1080/14767720600555046.

Brown, P., Green, A. and Lauder, H. 2001. *High skills: Globalization, competitiveness, and skill formation: globalization, competitiveness, and skill formation*. OUP Oxford.

Brown, P., Lauder, H., Ashton, D., Yingje, W., and Vincent-Lancrin, S. 2008. Education, Globalisation and the Future of the Knowledge Economy. European Educational Research Journal, **7**(2), 131–156.

Brown, R. 2010. The march of the market. In: Molesworth, M., Scullion, R and Nixon, E. ed. *The marketisation of higher education and the student as consumer*. London: Routledge, pp. 25-38.

Bulger, S.M., Mohr, D.J. and Walls, R.T. 2002. Stack the deck in favor of your students by using the four aces of effective teaching. *Journal of Effective Teaching*. **5**(2).

Carnoy, M. 2016. Educational policies in the face of globalization: Whither the nation state. In: Mundy, K., Green, A., Lingard, B and Verger, A. ed. *The Handbook of global education policy*. Chichester: John Wiley & Sons, Ltd, pp.27.

Carter, P.L. and Darling-Hammond, L. 2016. Teaching diverse learners. In: Gitomer, D.H. and Bell, C.A. ed. *Handbook of Research on Teaching*. 5th ed. Washington: American Educational Research Association, pp. 593–637.

Carvalho, L. and Normand, R. 2018. Introduction. In: Normand, R., Liu, M., Carvalho, L., Oliveira, D. and LeVasseur, L. ed., *Education Policies and the Restructuring of the Educational Profession: Global and Comparative Perspectives*. Springer, pp.1-12.

Castells, M. 2009. The new economy: Informationalism, globalization, Networking. *The Rise of the Network Society*, Vol 1. 2nd ed. Oxford: Wiley-Blackwell, pp. 77–162.

Castells, M. 2000. Materials for an exploratory theory of the network society. *The British journal of sociology.* **51**(1) , pp. 5-24.

Castells, M., 1996. Prologue: the net and the self. *The rise of network society. Oxford: Basil Blackwell*.

Chan, D. and Mok, K.H. 2001. Educational reforms and coping strategies under the tidal wave of marketisation: A comparative study of Hong Kong and the mainland. *Comparative Education*. **37**(1), pp.21-41.

Chen, J., Zhou, J., Sun, L., Wu, Q., Lu, H. and Tian, J. 2015. A new approach for laboratory exercise of pathophysiology in China based on student-centered learning. *Advances in Physiology Education*, 39(2), pp.116-119.

Chen, R., 2020. On the Effectiveness of Strengthening Teachers' Morality Construction in Chinese Higher Vocational Colleges. *Contemporary Education and Teaching Research*, *1*(2), pp.167-172.

Cheng, K.M. and Yip, H.K. 2006. Facing the knowledge society: Reforming secondary education in Hong Kong and Shanghai. *Education working paper series,* 1(5), pp. 1-37.

Cheng, L. 2016. Internationalisation of education: An analysis of China's internationalisation professional training paths. *Economic Trade Education,* (7), pp. 151-152.

Christensen, B.J. and Kowalczyk, C. 2017. Introduction to Globalization: Strategies and Effects. In: *Globalization.* Berlin: Springer, pp. 1-16.

Clark, A. 1998. The qualitative-quantitative debate: moving from positivism and confrontation to post-positivism and reconciliation. *Journal of Advanced Nursing*, **27**(6), pp.1242-1249.

Cochran-Smith, M. and Fries, K. 2008. Research on teacher education: Changing times, changing paradigms. In *Handbook of research on teacher education* (pp. 1050-1093). Routledge.

Cochran-Smith, M. and Fries, K. 2005. The AERA Panel on Research and Teacher Education: Context and Goals of New Hampshire. In M. Cochran-Smith and K. M. Zeichner. ed. *Studying teacher education: The report of the AERA Panel on Research and Teacher Education.* New York: American Educational Research Association, pp.37–68.

Coe, R. 2017. The nature of educational research. In: Coe, R. Waring, M. Hedges, L.V. and Arthur, J. ed. *Research Methods and Methodologies in Education*, 2nd ed. London: SAGE Publications Ltd, pp. 5-13.

Crawford, J., Butler-Henderson, K., Rudolph, J., Malkawi, B., Glowatz, M., Burton, R., Magni, P.A. and Lam, S., 2020. COVID-19: 20 countries' higher education intra-period digital pedagogy responses. *Journal of Applied Learning & Teaching*, *3*(1), pp.1-20.

Creswell, J.W. and Poth, C.N. 2018. *Qualitative inquiry & research design: choosing among five approaches*, 4th ed. California: SAGE Publications, Inc.

Dabla-Norris, M.E. Kochhar, M.K. Suphaphiphat, M.N. Ricka, M.F. and Tsounta, M.E. 2015. *Causes and consequences of income inequality: A global perspective*. Washington, DC: International Monetary Fund.

Dahlin, B. and Watkins, D. 2000. The role of repetition in the processes of memorising and understanding: A comparison of the views of German and Chinese secondary school students in Hong Kong. *British Journal of Educational Psychology*, 70(1), pp.65-84.

Darling-Hammond, L. 2017. Teacher education around the world: What can we learn from international practice?. *European Journal of Teacher Education*. **40**(3), pp.291-309.

Darling-Hammond, L. 2009. Recognizing and enhancing teacher effectiveness. *The International Journal of Educational and Psychological Assessment*, *3*(1).

Darling-Hammond, L. 2006. Constructing 21st-century teacher education. *Journal of teacher education*. **57**(3), pp.300-314.

Darling-Hammond, L. 2000. How teacher education matters. *Journal of teacher education*. **51**(3), pp.166-173.

Darling-Hammond, L. and Lieberman, A. 2012. Teacher education around the world: What can we learn from international practice?. In: Darling-Hammond, L. and A. Lieberman. ed. *Teacher Education around the world: Changing policies and practices*. Oxon: Routledge, pp.151-169.

Darling-Hammond, L. Hammerness, K. Grossman, P. Rust, F. and Shulman, L. 2005. The design of teacher education programs. In: Darling-Hammond, L. and Bransford, J. ed. *Preparing teachers for a changing world: What teachers should learn and be able to do*. Indianapolis: Jossey-Bass, pp.390-441.

Darling-Hammond, L. Wei, R.C. Andree, A. Richardson, N. and Orphanos, S. 2009. *Professional learning in the learning profession.* Washington, DC: National Staff Development Council. pp.12

David, P.A. and Foray, D. 2002. An introduction to the economy of the knowledge society. *International social science journal*. **54**(171), pp.9-23.

Deng, Z. 2011. Confucianism, modernization and Chinese pedagogy: An introduction. *Journal of Curriculum Studies*, 43(5), pp.561-568.

Department for Education, 2016. *Standard for teachers' professional development: Implementation guidance for school leaders, teachers, and organisations that offer professional development for teachers, Department for Education*. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/537031/160712_-_PD_Expert_Group_Guidance.pdf (Accessed: 07 July 2022).

Donaldson, G. 2014, Teacher Education and Curriculum Change in Scotland. *European journal of education*, vol. 49, no. 2, pp. 178-191.

Donaldson, G. 2011. *Teaching Scotland's future: Report of a review of teacher education in Scotland*. 1st ed. Edinburgh: Scottish Government.

Douglas-Gardner, J. and Callender, C. 2023. Changing teacher educational contexts: Global discourses in teacher education and its effect on teacher education in national contexts. *Power and Education*. **15**(1), pp. 66–84.

Douglas, J., Douglas, A., McClelland, R. and Davies, J. 2014. Understanding student satisfaction and dissatisfaction: an interpretive study in the UK higher education context. *Studies in Higher Education*, 40(2), pp.329-349.

Drucker, P.F. 1969. *The age of discontinuity: guidelines to our changing society.* Heinemann: London.

Dupriez, V. and Cattonar, B. 2018. Between Evidence-Based Education and Professional Judgment, What Future for Teachers and Their Knowledge?. In: Normand, R. Liu, M. Carvalho, L.M. Oliveira, D.A. LeVasseur, L. ed. *Education Policies and the Restructuring of the Educational Profession.* Singapore: Springer, pp. 105-118.

Eccles, J. and Wang, M.T., 2012. Part I Commentary: So What Is Student Engagement Anyway?. In Christenson, S.L. Reschly, A.L. Wylie, C. ed. *Handbook of research on student engagement*. Boston, MA: Springer US, pp. 133-145.

El-Abd, M. Chaaban, Y. Du, X. and Wang, L. 2021. Exploring quality teacher education programmes in Lebanon, Qatar, and China. *Research in Post-Compulsory Education*. **26**(4), pp.461-478.

Ellis, J. 2020. Professional Graduate Diploma in Education. In: Shanks, R.ed. *Teacher Preparation in Scotland.* Bingley, UK: Emerald Publishing Limited, pp. 95-110.

Ertmer, P. and Newby, T. 2013. Behaviorism, Cognitivism, Constructivism: Comparing Critical Features From an Instructional Design Perspective. *Performance Improvement Quarterly*, **26**(2), pp.43-71.

Feng, D. 2006. China's Recent Curriculum Reform: Progress and Problems. *Planning and Changing*. **37**(1), pp.131-144.

Fennema, E. and Franke, M. L. 1992. Teachers' knowledge and its impact. In Grouws, D.A. ed. *Handbook of research on mathematics teaching and learning: A project of the National Council of Teachers of Mathematics.* New York: Macmillan, pp. 147–164.

Ferri, F. Grifoni, P. and Guzzo, T. 2020. Online learning and emergency remote teaching: Opportunities and challenges in emergency situations. *Societies*. **10**(4), p.86.

Florian, L. and Rouse, M. 2009. The inclusive practice project in Scotland: Teacher education for inclusive education. *Teaching and teacher education*. **25**(4), pp.594-601.

Foray, D. and Lundvall, B.-Å. 1996. The knowledge-based economy: From the economics of knowledge to the learning economy. In: Siesfeld, T. Cefola, J. Neef, D. ed. *The Economic Impact of Knowledge*. London: Routledge, pp. 115–121.

Forlin, C. 2004. Promoting inclusivity in Western Australian schools. *International Journal of Inclusive Education*. **8**(2), pp.185-202.

Freiberg, H.J. and Lamb, S.M. 2009. Dimensions of person-centered classroom management. *Theory into practice*. **48**(2), pp.99-105.

Fry, H., Ketteridge, S. and Marshall, S. 2009. *A handbook for teaching and learning in higher education: Enhancing academic practice*. 3rd ed. New York: Routledge, pp.58-71.

Furlong, J. and Whitty, G. 2017. Knowledge traditions in the study of education. In: *Knowledge and the study of education: An international exploration*. Oxford: Symposium Books, pp.13-57.

Gawlik, K. 2018. Focus Group Interviews. In: Ciesielska, M. and Jemielniak, D. ed. *Qualitative Methodologies in Organization Studies.* Cham, Switzerland: Palgrave Macmillan, pp. 97-126.

General Teaching Council Scotland (GTCS). 2021a. *Code of professionalism and conduct* . [Online]. [Accessed 09 May 2022]. Available at: https://www.gtcs.org.uk/wp-content/uploads/2021/09/code-of-professionalism-and-conduct.pdf

General Teaching Council Scotland (GTCS). 2021b. *The Standard for Provisional Registration.* [Online]. [Accessed 23 February 2022]. Available from: https://www.gtcs.org.uk/wp-content/uploads/2021/09/standard-for-provisional-registration.pdf

General Teaching Council Scotland (GTCS). 2019. *Guidelines for accreditation of initial teacher education programmes in Scotland, ITE-Programme-Accreditation-Guidelines*. [Online]. [Accessed 06 July 2022]. Available at: https://www.gtcs.org.uk/wp-content/uploads/2022/03/ITE-Programme-Accreditation-Guidelines.pdf

General Teaching Council Scotland (GTCS). 2013. *Guidelines for initial teacher education programmes in Scotland*. GTCS. [Online]. [Accessed 12 September 2020]. Available at: http://www.gtcs.org.uk/web/FILES/about-gtcs/guidelines-for-ite-programmes-in-scotland.pdf

General Teaching Council Scotland (GTCS). 2012a, *Code of Professionalism and Conduct.* [Online]. [Accessed 06 March 2023]. Available at: https://mygtcs.gtcs.org.uk/web/FILES/teacher-regulation/copac-0412.pdf

General Teaching Council Scotland (GTCS). 2012b, *The standards for registration: Mandatory requirements for registration with the general teaching council for Scotland*. GTCS. [Online]. [Accessed 06 July 2022]. Available at: https://www.gtcs.org.uk/wp-content/uploads/2021/09/archive-2021-standards-for-registration.pdf

General Teaching Council Scotland (GTCS). 2012c, *Standards for Provision Registration.* [Online]. [Accessed 06 July 2022] Available at: http://www.gtcs.org.uk/web/Files/the-standards/standards-for-registration-1212.pdf

Gibbs, A. 2012. Focus groups and group interviews. In: Arthur, J. Waring, M. and Coe, R. ed. *Research Methods and Methodologies in Education*. London: SAGE Publications, pp.185-192.

Goodwin, A.L. 2010. Globalization and the preparation of quality teachers: rethinking knowledge domains for teaching. *Teaching education (Columbia, S.C.).* **21**(1), pp. 19-32.

Goodwin, A.L. 2020. Globalization, global mindsets and teacher education. *Action in Teacher Education*. **42**(1), pp.6-18.

Gray, D. and Weir, D. 2014. Retaining public and political trust: teacher education in Scotland. *Journal of education for teaching: JET,* vol. 40, no. 5, pp. 569-587.

Greenberg, J.D. 1983. Connections and tensions: Preservice-beginning teaching-inservice. *Journal of Teacher Education*. **34**(2), pp.38-43.

Grek, S., Lawn, M., Lingard, B., Ozga, J., Rinne, R., Segerholm, C. and Simola, H., 2009. National policy brokering and the construction of the European Education Space in England, Sweden, Finland and Scotland. *Comparative Education*. **45**(1), pp.5-21.

Griffiths, S. 2009. Teaching and learning in small groups. *A handbook for teaching and learning in higher education: Enhancing academic practice*, pp.72-84.

Grossman, P. Hammerness, K. and McDonald, M. 2009. Redefining teaching, re-imagining teacher education. *Teachers and Teaching*. **15**(2), pp.273-289.

Grudnoff, L. Haigh, M. Hill, M. Cochran-Smith, M. Ell, F. and Ludlow, L. 2017. Teaching for equity: Insights from international evidence with implications for a teacher education curriculum. *The Curriculum Journal*. **28**(3), pp.305-326.

Gu, M. Y. 2006. Guanyu Zhongguo Jiaoshijiaoyu Gaige de Jidian sikao [Reflections on the Reform of Chinese Teacher Education]. *Jiaoshi Jiaoyu Yanjiu [Teacher Education Research]*, **18**(6), pp.3-6.

Guan, P. J. 2009. Woguo Jiaoshi Jiaoyu Gaigekaifang Sanshinian de Licheng Chengjiu yu Jiben Jingyan [Teacher Education Reform in China: 30 years of History, Achievement and Experience.]. *Zhongguo Gaojiao Yanjiu [Higher Education in China]*. 2, pp.3–11.

Guba, E.G. and Lincoln, Y.S. 1989. What Is This Constructivist Paradigm Anyway? *Fourth generation evaluation*. US: Sage Publications, Inc, pp.79-116.

Gudkova, S. 2018. Interviewing in qualitative research. In Ciesielska, M. and Jemielniak, D. ed. *Qualitative Methodologies in Organization Studies.* Cham, Switzerland: Palgrave Macmillan, pp. 75-96.

Guerriero, S. 2014. Teachers' pedagogical knowledge and the teaching profession. *Teaching and Teacher Education*. **2**(1), p.7.

Guile, D. 2010a. The Knowledge Economy and the Challenge for Education. *The Learning Challenge of the Knowledge Economy.* Rotterdam, The Netherlands: Sense Publishers, pp. 1-8.

Guile, D., 2010b. Scientific Knowledge and the Economy. *The Learning Challenge of the Knowledge Economy.* Rotterdam, The Netherlands: Sense Publishers, pp. 9-22.

Gunn, S. 2017. Introduction. In: C. Cullingford and S. Gunn, ed., *Globalisation, Education and Culture Shock*, 2nd ed. [online]. Aldershot: Ashgate Publishing Limited, pp.1-9. [Accessed 6 Apr. 2019]. Available at: https://books.google.co.uk/books?hl=en&lr=&id=GEIrDwAAQBAJ&oi=fnd&pg=PP1&dq=globalisation,+education+and+culture+shock&ots=UFaj4JZcus&sig=cNlDu5jV9LcvVWs4ia_6CdAvcpM#v=onepage&q=globalisation%2C%20education%20and%20culture%20shock&f=false

Guo, L. 2014. Preparing teachers to educate for 21st century global citizenship: Envisioning and enacting. *Journal of Global Citizenship and Equity Education*. **4**(1), pp.1-23.

Guo, L. Huang, J. and Zhang, Y. 2019. Education development in China: Education return, quality, and equity. *Sustainability*. **11**(13), pp.1-20.

Guo, S. and Guo, Y. 2018. Market economy, social change, and education inequality in China. *Oxford Research Encyclopedia of Education.* Oxford: Oxford University Press.

Guo, S. Guo, Y. Beckett, G. Li, Q. and Guo L. 2013. Changes in Chinese education under Globalisation and Market Economy: Emerging Issues and debates. *Compare: A Journal of Comparative and International Education*. **43**(2), pp. 244–264.

Hamilton, L. and Corbett-Whittier, C. 2014. Defining Case Study in Education Research. In: Hamilton, L. and Corbett-Whittier, C. ed. *Using Case Study in Education Research*. London: SAGE Publications Ltd, pp.3-21.

Han, X. 2012. Big moves to improve the quality of teacher education in China. *On the Horizon*. **20**(4), pp.324-335.

Hanushek, E.A. and Woessmann, L. 2011. The economics of international differences in educational achievement. In: Hanushek, E.A. Machin, S. and Woessmann, L. ed. *Handbook of the Economics of Education*. The Netherlands: Elsevier, pp. 89-200.

Hargreaves, A. 2000. Four ages of professionalism and professional learning. *Teachers and teaching*. **6**(2), pp.151-182.

Hauser, M. and Kavanagh, S.S. 2019. Practice-based teacher education. *Oxford Research Encyclopedia of Education.* Oxford: Oxford University Press, pp.1-17.

Haverland, M. and Yanow, D. 2012. A hitchhiker's guide to the public administration research universe: surviving conversations on methodologies and methods. *Public Administration Review*. **72**(3), pp.401-408.

Holliday, A., 2016. *Doing And Writing Qualitative Research*. Los Angeles: SAGE.

Houston, D. Meyer, L.H. and Paewai, S. 2006. Academic staff workloads and job satisfaction: Expectations and values in academe. *Journal of higher education policy and management*. **28**(1), pp.17-30.

Huang, Z. Wang, T. and Li, X. 2015. The political dynamics of educational changes in China. *Policy Futures in Education*. **14**(1), pp.24-41.

Hunt, L. Chalmers, D. and Macdonald, R. 2012. Effective classroom teaching. In: Hunt, L. and Chalmers, D. ed. *University teaching in focus: a learning-centred approach*. Melbourne / Oxford / New York: ACER Press, pp.21-37.

Hurtado, I.G. Coronel, J.M. Carrasco, M.J. and Correa, R.I. 2013. Internationalization of the Practice in Education Degree: Students' Intercultural Experiences in the Teaching and Learning Process at Saharawi Refugee Camps. *Journal of Education and Learning*. **2**(1), pp.253-261.

Huwart, J.Y. and Verdier, L. 2013. The 2008 Financial Crisis–A Crisis of Globalization. *Economic Globalisation: Origins and consequences*. Paris: OECD Publishing, pp.126-143.

Ingersoll, R.M. and Strong, M. 2011. The impact of induction and mentoring programs for beginning teachers: A critical review of the research. *Review of educational research.* **81**(2), pp.201-233.

Jenkins, H. 2009. *Confronting the challenges of participatory culture: Media education for the 21st century*. [Online]. The MIT press. [Accessed 20 May. 2019]. Available at: https://direct.mit.edu/books/oa-monograph/3204/Confronting-the-Challenges-of-Participatory

Ji, M. Jiao, Y. and Cheng, N. 2023. An Innovative decision-making scheme for the high-quality economy development driven by higher education. *Journal of Innovation & Knowledge*. **8**(2), p.1-11.

Jian-guo, H. Xiao-xi, L. and Yao-hui, C. 2018. The Study of Dual-Tutored System in the Process of Cultivation on Full-time Professional Degree Graduates Based on Integration of Production and Education. *1st International Conference on Contemporary Education and Economic Development (CEED 2018).* **221**(1), pp. 88-93.

Johnston, D.H. 2020. School Placement: Problematising notions of the 'good'placement. In Shanks, R. ed. *Teacher preparation in Scotland.* Bingley: Emerald Group Publishing Ltd, pp.111-123.

Kaiser, K. 2009. Protecting respondent confidentiality in qualitative research. *Qualitative health research*. **19**(11), pp.1632-1641.

Kallo, J. 2021. The epistemic culture of the OECD and its agenda for higher education. *Journal of Education Policy*. **36**(6), pp.779-800.

Kayange, J.J. and Msiska, M. 2016. Teacher education in China: Training teachers for the 21st century. *The Online Journal of New Horizons in Education*. **6**(4), pp.204-210.

Kim, S. Raza, M. and Seidman, E. 2019. Improving 21st-century teaching skills: The key to effective 21st-century learners. *Research in Comparative and International Education*. **14**(1), pp. 99–117.

King, N. 2004. Using templates in the thematic analysis of text. In: C. Cassell and G. Symon, ed. *Essential Guide to Qualitative Methods in Organizational Research.* London: SAGE Publications Ltd. Available at: <https://doi.org/10.4135/9781446280119> [Accessed 1 Jul 2019].

King, N. 2012. Doing template analysis. In: Gillian, S. and Catherine, C. ed. *Qualitative organizational research: Core methods and current challenges*. London: SAGE Publications Ltd, pp.426-450.

King, N., Brooks, J. and Tabari, S. 2018. Template analysis in business and management research. In: Ciesielska, M. and Jemielniak, D. *Qualitative methodologies in organization studies: Volume II: Methods and possibilities*. Cham: Palgrave Macmillan Ltd, pp.179-206.

Kirk, G. 1994. The role of the General Teaching Council in teacher education in Scotland. *Journal of Education for Teaching.* **20**(1), pp.39-46.

Kirkpatrick, R. and Zang, Y. 2011. The Negative Influences of Exam-Oriented Education on Chinese High School Students: Backwash from Classroom to Child. *Language Testing in Asia.* **1**(3), p.36.

Knight, J. 2004. Internationalization remodeled: Definition, approaches, and rationales. *Journal of studies in international education*. **8**(1), pp.5-31.

Kopish, M.A. 2016. Preparing Globally Competent Teacher Candidates Through Cross Cultural Experiential Learning. *Journal of Social Studies Education Research*. **7**(2), pp.75-108.

Kosnik, C. 2007. Still the same yet different: Enduring values and commitments in my work as a teacher and teacher educator. In Russell, T. and Loughran, J. *Enacting a pedagogy of teacher education.* London:Routledge, pp. 26-40.

Kovács, A. Kiss, D. Kassai, S. Pados, E. Kaló, Z. and Rácz, J. 2019. Mapping qualitative research in psychology across five Central-Eastern European countries: Contemporary trends: A paradigm analysis. *Qualitative Research in Psychology*. **16**(3), pp.354-374.

Kvale, S. 2007. *Doing interviews.* London/Los Angeles: SAGE, pp.2-10.

Ladson-Billings, G. 2014. Culturally relevant pedagogy 2.0: aka the remix. *Harvard educational review*. **84**(1), pp.74-84.

Larsen, M.A. 2016. Globalisation and internationalisation of teacher education: A comparative case study of Canada and Greater China. *Teaching Education*. **27**(4), pp.396-409.

Lauder, H. Brown, P. Dillabough, J.A. and Halsey, A.H. 2006. Introduction: The prospects for education: Individualization, globalization, and social change. *Education, globalization, and social change.* Oxford: Oxford University Press, pp. 1-70.

Ledger, S. Thier, M. Bailey, L. Pitts, C. 2019. OECD's approach to measuring global competency: Powerful Voices Shaping Education. *Teachers College Record: The Voice of Scholarship in Education*. **121**(8), pp. 1–40.

Lee, J. Turner, J.E. and Thomson, M.M. 2015. A structural equation model of pre-service teachers' perceptions of future goals and current course-related motivation. *Japanese Psychological Research*. **57**(3), pp.231-241.

Li, Q. Zhu, X. and Lo, L.N.K. 2019. Teacher education and teaching in China. *Teachers and Teaching: Special Issue on Teacher Education and Teaching in China.* **25**(7), pp. 753-756.

Li, X., Bergin, C. and Olsen, A.A., 2022. Positive teacher-student relationships may lead to better teaching. *Learning and Instruction*. **80**(1), p.1-10.

Lichtman, M. 2013. Learning about others through interviewing. *Qualitative research in education*. 3rd ed. Los Angeles: SAGE Publications, pp.187-220.

Lieberman, A. and Miller, L. 2008. *Teachers in professional communities: Improving teaching and learning*. New York: Teachers College Press.

Lim, K.M. 2014. Teacher education & teaching profession in Singapore, International Conference on the Teaching Profession in ASEAN, Bangkok, Thailand, October 2014, viewed 08 September 2022, <https://repository.nie.edu.sg/bitstream/10497/16175/1/ICTP_ASEAN-2014-LimKM_a.pdf>.

Lin, P.L. 2019. Trends of internationalisation in China's higher education: opportunities and challenges. *US-China Education Review B*. **9**(1), pp.1-12.

Lin, R.J. 2014. A Historical Examination on the Contributions of General Teaching Council for Scotland to Teacher's Professional Development, 1966-. *Journal of Education Research*. **243**(1), pp.119-132.

Lincoln, Y. Lynham, S. and Guba, E. 2018. Paradigmatic Controversies, Contradictions, and Emerging Confluences, Revisited. In: Denzin, N. and Lincoln, Y. 5th ed. *The SAGE Handbook Of Qualitative Research*. London: SAGE Publications Ltd, pp.108-150.

Lingard, B. and Sellar, S. 2016. The changing organizational and global significance of the OECD's education work. In: Mundy, K. Green, A. Lingard, B. and Verger, A. ed. *The handbook of global education policy*. United Kingdom: John Wiley and Sons, pp.357-373.

Liu, J. 2019. Government, media, and citizens: Understanding engagement with PISA in China (2009–2015). *Oxford Review of Education*, 45(3), pp.315-332.

Liu, J. and Xie, W.H. 2002. Xinzhongguo Gaodeng Shifan Jiaoyu de Tansuo yu Jinzhan. [Exploration and Progress of Higher Normal Education in New China]. In: *Zhalan Neiwai:*

Zhongguo Gaodeng Shifan Jiaoyu Bainian Xingsi [Reflections on China's higher teacher education in a century]. Xian: Beijing Normal University Press, pp. 120-159.

Livingston, K. and Flores, M.A. 2017. Trends in teacher education: A review of papers published in the European Journal of Teacher Education over 40 years. *European Journal of Teacher Education*, **40**(5), pp. 551–560.

Lodico, M.G. Spaulding, D.T. and Voegtle, K.H. 2006. Introduction to Educational Research. *Methods in educational research: From theory to practice*. Germany: John Wiley and Sons, pp.1-21.

Lou, M. 2021. Classroom Activities in Chinese Secondary EFL Classes: Teachers' Uptake of the Learner-centred Curriculum Reform. *International Journal of TESOL Studies*. **3**(2), pp.168-186.

Loughran, J. 2007. Enacting a pedagogy of teacher education. In: Loughran, J. and Russell, T. ed. *Enacting a pedagogy of teacher education: Values, relationships and practices*. United Kingdom: Taylor and Francis, pp.1-15.

Lu, K. 2022. On the Significance of Xi Jinping's Thought of Teachers' Morality. *International Journal of Frontiers in Sociology*. **4**(1), pp.43-47.

Mackenzie, N. and Knipe, S. 2006. Research dilemmas: paradigms, methods and methodology. *Issues In Educational Research*, [online] **16**(2), pp.193-205. Available at: http://www.iier.org.au/iier16/mackenzie.html. [Accessed 2 March 2020].

Maclellan, E. 2008. The significance of motivation in student-centred learning: a reflective case study. *Teaching in Higher Education*. **13**(4), pp.411-421.

Madsen, K. and Cassidy, J.W. 2005. The effect of focus of attention and teaching experience on perceptions of teaching effectiveness and student learning. *Journal of Research in Music Education*. **53**(3), pp.222-233.

Magaldi, D. and Berler, M. 2020. Semi-structured interviews. In: Shacklford, T. and Zeigler-Hill, V. ed. *Encyclopedia of personality and individual differences*. Switzerland: Springer International Publishing, pp.4825-4830.

Mahoney, J. and Goertz, G. 2006. A Tale of Two Cultures: Contrasting Quantitative and Qualitative Research. *Political Analysis*. **14**(3), pp.227-249.

Marginson, S. 2016. High participation systems of higher education. *The Journal of Higher Education*, **87**(2), pp.243-271.

Martens, K. 2007. How to Become an Influential Actor–The "Comparative Turn" in OECD Education Policy. In: Martens, K. Rusconi, A. and Leuze, K. ed. *New Arenas of Education Governance–The Impact of International Organisations and Markets on Educational Policymaking.* United Kingdom: Palgrave Macmillan, pp.40-55.

Martens, K. and Jakobi, A.J. 2010. Expanding and Intensifying Governance: The OECD in Education Policy. *Mechanisms of OECD Governance: International Incentives for National Policy-making*. United Kingdom: OUP Oxford, pp.163-179.

Marzano, R.J. and Marzano, J.S. 2003. The key to classroom management. *Educational leadership*, **61**(1), pp.6-13.

Mayer, D. 2021. Teacher education policy and research: An introduction. In *Teacher Education Policy and Research: Global Perspectives* (pp. 1-10). Singapore: Springer Nature Singapore.

McKenna, L. 2022. Translation of research interviews: Do we have a problem with qualitative rigor?. *Nurse Author & Editor*. **32**(1), pp.1-3.

McKenzie, B. K. Ozkan, B. C. and Layton, K. 2005. Distance Leadership Practices - What Works in Higher Education. In Richards,G. ed. *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2005.* Chesapeake, VA: AACE, pp.926-931.

McInerney, D. 2014. *Educational psychology*. Australia: Pearson Australia Group.

McWilliam, E. 1993. POSTPOSITIVISM, POST-HASTE: Pre-service teacher education and the politics of educational research. *Discourse: Studies in the Cultural Politics of Education*. **14**(1), pp.75-88.

Mears, C. 2012. In-depth interviews. In: Coe, R. Waring, M. Hedges, L.V. and Arthur, J. ed. *Research Methods and Methodologies in Education*. 2nd ed. London: SAGE Publications Ltd, pp.170-176.

Meng, H. Tang, M. and Wu, M. 2021. Current Situation on Exam-Oriented Education in China and the Outlook for Quality-Oriented Education Taking Oral English Education as

an Example. *2021 3rd International Conference on Literature, Art and Human Development (ICLAHD 2021)*. **594**(1), pp. 325-331.

Menter, I. 2019. Defining teachers' professional knowledge: The interaction of global and national influences. *Education and Self Development*. **13**(1), pp.32–42.

Menter, I. and Hulme, M. 2011. Teacher education reform in Scotland: National and global influences. *Journal of Education for Teaching*. **37**(4), pp.387-397.

Meyer, H.D. and Benavot, A. 2013. PISA and the globalization of education governance: Some puzzles and problems. *PISA, power, and policy: The emergence of global educational governance*. Germany: Symposium Books, pp.9-26.

Michelli, N.M. and Keiser, D.L. 2005. *Teacher education for democracy and social justice.* New York: Routledge.

Miller, A., Imrie, B. and Cox, K. 1998. Evaluation of assessment procedures. *Student Assessment in Higher Education: A handbook for assessing performance.* London: Routledge, pp.225-240.

Ministry of Education of the People's Republic of China (MOE). 2022. *New Era Basic Education Strengthening Teachers Plan.* [in Chinese]. [Online]. [Accessed 16 March 2021]. Available at: http://www.moe.gov.cn/srcsite/A10/s7034/202204/t20220413_616644.html.

Ministry of Education of the People's Republic of China (MOE). 2018. *The Action Plan for Teacher Education Revitalization (2018-2022).* [in Chinese]. [Online]. [Accessed 25 March 2021]. Available at: http://www.moe.gov.cn/srcsite/A10/s7034/201803/t20180323_331063.html.

Ministry of Education of the People's Republic of China (MOE). 2011. *The National Curriculum Standards for Teacher Education*. [in Chinese]. [Online]. [Accessed 17 November 2020]. Available at: http://www.moe.edu.cn/publicfile/business/htmlfiles/moe/s3702/201110/xxgk_125722.html.

Ministry of Education of the People's Republic of China (MOE). 2011a. *The Professional Standards of kindergarten teachers.* [in Chinese]. [Online]. [Accessed 17 November 2020]. Available at:

http://old.moe.gov.cn//publicfiles/business/htmlfiles/moe/s3702/201110/xxgk_125722.html.

Ministry of Education of the People's Republic of China (MOE). 2011b. *The Professional Standards of primary school teachers.* [in Chinese]. [Online]. [Accessed 17 November 2020]. Available at: http://www.moe.gov.cn/publicfiles/business/htmlfiles/moe/s6127/201112/127836.html.

Ministry of Education of the People's Republic of China (MOE). 2011c. *The Professional Standards of Secondary School Teachers.* [in Chinese]. [Online]. [Accessed 17 November 2020]. Available at: http://www.moe.gov.cn/publicfiles/business/htmlfiles/moe/s6127/201112/127830.html.

Ministry of Education of the People's Republic of China (MOE). 2006. *A list of merged institutions of higher education since 1990*. [in Chinese]. [Online]. [Accessed 17 November 2020]. Available at: http://moe.edu.cn/edoas/website18/info19558.htm.

Ministry of Education of the People's Republic of China (MOE). 2002. *Suggestions on reform and development of teacher education*. [in Chinese]. [Online]. [Accessed 17 November 2020]. Available at: http://www.moe.gov.cn/srcsite/A10/s7058/200203/t20020301_162696.html.

Ministry of Education of the People's Republic of China (MOE). 2001. *Decision about Reform and Development of Basic Education.*[in Chinese]. [Online]. [Accessed 17 November 2020]. Available at: https://www.gov.cn/gongbao/content/2001/content_60920.htm.

Ministry of Education of the People's Republic of China (MOE). 1993. *Teachers Law of the People's Republic of China*. [in Chinese]. [Online]. [Accessed 05 October 2019]. Available at: http://www.moe.gov.cn/jyb_sjzl/sjzl_zcfg/zcfg_jyfl/tnull_1314.html.

Mohajan, H.K. 2018. Qualitative research methodology in social sciences and related subjects. *Journal of economic development, environment and people*. **7**(1), pp.23-48.

Mølstad, C.E. Pettersson, D. and Prøitz, T.S. 2018. Soft Infusion: Constructing 'Teachers' in the PISA Sphere. In: Normand, R. Liu, M. Carvalho, L.M. Oliveira, D.A. and LeVasseur, L. ed. *Education Policies and the Restructuring of the Educational Profession.* Singapore: Springer, pp.13-26.

Mooney, J.A. and Miller-Young, J. 2021. The Educational Development Interview: a guided conversation supporting professional learning about teaching practice in higher education. *International Journal for Academic Development*. **26**(3), pp.224-236.

Morris, P. and Adamson, B. 2010. Teachers, Teaching and the Curriculum. In: Morris, P and Adamson, B. *Curriculum, schooling and society in Hong Kong* (Vol. 1). Hong Kong University Press, pp.85-108.

Mundy, K., Green, A., Lingard, B. and Verger, A. ed. 2016. *The handbook of global education policy*. West Sussex: Wiley Blackwell, pp.43-63.

Munn, P. 2006. Teacher education in Scotland. *Education Research and Perspectives*, *33*(2), pp.1-18.

Murray, J. 2013. Analysing the fallout in teacher education: government intervention, academic drift and the higher education 'marketplace'. In: Evans, M. ed. *Teacher Education and Pedagogy: Theory, Policy and Practice*. Cambridge University Press, pp.1-23.

Nagy, P. 2000. The Three Roles of Assessment: Gatekeeping, Accountability, and Instructional Diagnosis. *Canadian Journal of Education / Revue canadienne de l'éducation*, 25(4), pp.262-279.

Naidoo, R. and Jamieson, I. 2005. Knowledge in the marketplace: The global commodification of teaching and learning in higher education. In Ninnes, P. and Hellstén, M. ed. *Internationalizing higher education: Critical explorations of pedagogy and policy*. Dordrecht: Springer Netherlands, pp.37-51.

Niemann, D., Martens, K. and Teltemann, J. 2017. PISA and its consequences: Shaping education policies through international comparisons. *European Journal of Education*, *52*(2), pp.175-183.

Noor, K.B. 2008. Case study: A strategic research methodology. *American Journal of Applied Sciences*, *5*(11), pp.1602-1604.

Normand, R., Liu, M., Carvalho, L., Oliverira, D. and LeVasseur, L. 2018. *Education policies and the restructuring of the educational profession: Global and Comparative Perspectives*. Singapore: Springer Verlag.

Oberoi, R. and Halsall, J. 2018. Introduction: The Globalization Agenda. In Oberoi, R. and Halsall, J. ed. *Revisiting Globalization: From a Borderless to a Gated Globe*. Cham: Springer International Publishing, pp.1-23.

O'Connor, K. and Zeichner, K. 2011. Preparing US teachers for critical global education. *Globalisation, Societies and Education*, 9(3–4), pp. 521–536.

OECD. 2021. *Scotland's Curriculum for Excellence: Into the Future,* OECD Publishing, Paris.

OECD. 2018a. *Education at a Glance 2018: OECD Indicators*. [Online]. OECD Publishing, Paris, [Accessed 16 Janauary 2020]. Available at: https://www.oecd-ilibrary.org/education/education-at-a-glance-2018_eag-2018-en

OECD. 2018b. *Overview and policy implications*, In: Equity in Education: Breaking Down Barriers to Social Mobility, PISA, OECD Publishing, Paris, Available at: https://www.oecd-ilibrary.org/docserver/9789264073234-4-en.pdf?expires=1689257506&id=id&accname=oid018225&checksum=0799C91D3440611D2995E39556B8B56C

OECD. 2018c. *Teaching for the Future: Effective Classroom Practices To Transform Education*, [Online]. OECD Publishing, Paris, Available at: https://www.oecd-ilibrary.org/education/teaching-for-the-future_9789264293243-en .

OECD. 2018d. *Preparing Our Youth for An Inclusive And Sustainable World: The OECD PISA global competence framework*, [Online]. Handbook PISA 2018 Global Competence. [Accessed 10 July 2020]. Available at: https://www.oecd.org/pisa/Handbook-PISA-2018-Global-Competence.pdf

OECD. 2017, *Future of work and skills*, [Online]. OECD Publishing, Paris, [Accessed 10 July 2020]. Available at: https://www.oecd.org/els/emp/wcms_556984.pdf

OECD. 2014. *TALIS 2013 Results: An International Perspective on Teaching and Learning*, [Online]. TALIS, OECD Publishing, Paris, [Accessed 10 July 2020]. Available at: https://www.oecd-ilibrary.org/education/talis-2013-results_9789264196261-en

OECD. 2012a. *Better skills, better jobs, better lives: a strategic approach to skills policies*. [Online]. Paris: OECD. [Accessed 10 July 2020]. Available at:

https://www.oecd.org/education/A-Strategic-Approach-to-Education-and%20Skills-Policies-for-the-United-Arab-Emirates.pdf

OECD. 2012b. *Equity and Quality in Education: Supporting Disadvantaged Students and Schools*, [Online]. OECD Publishing. [Accessed 10 July 2020]. Available at: https://www.oecd-ilibrary.org/education/equity-and-quality-in-education/summary/english_9789264130852-sum-en?parentId=http%3A%2F%2Finstance.metastore.ingenta.com%2Fcontent%2Fpublication%2F9789264130852-en

OECD. 2010. *PISA 2009 results: Executive summary.* [Online]. Paris: OECD. [Accessed 16 September 2020] Available at: https://www.oecd.org/pisa/pisaproducts/46619703.pdf

OECD. 2009. *Creating Effective Teaching and Learning Environments: First Results from TALIS.* [Online]. Teaching and Learning International Survey. Paris: OECD, Available at: https://www.oecd.org/education/school/43023606.pdf

Oliver, P. 2010. Introduction: ethics and research. In: Oliver, P. *The student's guide to research ethics*. McGraw-Hill Education (UK), pp.3-24.

Ormston, R., Spencer, L., Barnard, M. and Snape, D. 2014. The foundations of qualitative research. In: Ritchie, J., Lewis, J., Nicholls, C.M. and Ormston, R. eds. *Qualitative research practice: A guide for social science students and researchers*, *2*(7), pp.52-55.

Paolini, A. 2015. Enhancing Teaching Effectiveness and Student Learning Outcomes. *Journal of effective teaching*, *15*(1), pp.20-33.

Paterson, L. 2021. *Partial, sycophantic, and superficial: The OECD Review Scotland's curriculum for excellence, 2021, Reform Scotland*. [Online]. [Accessed: 13 July 2022]. Available at: https://reformscotland.com/2021/08/partial-sycophantic-and-superficial-the-oecd-review-scotlands-curriculum-for-excellence-2021/.

Peck, J. and Theodore, N. 2010. Mobilizing policy: Models, methods, and mutations. *Geoforum*, ***41***(2), pp.169-174.

Peng, W.J., McNess, E., Thomas, S., Wu, X.R., Zhang, C., Li, J.Z. and Tian, H.S. 2014. Emerging perceptions of teacher quality and teacher development in China. *International Journal of Educational Development*, *34*, pp.77-89.

Poole, C.M. and Russell, W.B. 2015. Educating for global perspectives: A study of teacher preparation programs. *Journal of Education*, ***195***(3), pp.41-52.

Punch, K.F. and Oancea, A. 2014. Introduction. In: Punch, K.F. and Oancea, A. *Introduction to research methods in education*. Sage. (2nd Edition). pp. 1-14

Racher, F.E. and Robinson, S. 2003. Are phenomenology and postpositivism strange bedfellows?. *Western Journal of nursing research*, ***25***(5), pp.464-481.

Rao, C., 2020. Teacher Education Policies in China Since the Mid-1990s. In: Fan, G. and Popkewitz, T. S. *Handbook of Education Policy Studies*, pp.95-111.

Rennie, D.L., Watson, K.D. and Monteiro, A. 2000. Qualitative research in Canadian psychology. *Forum qualitative sozialforschung/forum: qualitative social research*, **1**(2).

Rizvi, F. and Lingard, B. 2000. Globalization and education: Complexities and contingencies, *Educational Theory*, 50(4), pp. 419–426.

Rizvi, F. and Lingard, B., 2006. Globalization and the changing nature of the OECD's educational work. *Education, globalization and social change*, pp.247-260.

Rizvi, F. and Lingard, B. 2009. *Globalizing education policy*. Routledge.

Robson, C. and McCartan, K. 2016. *Real world research*. John Wiley & Sons, (4th Edition).

Roness, D. and Smith, K. 2009. Postgraduate Certificate in Education (PGCE) and student motivation. *European Journal of Teacher Education*, **32**(2), pp.111-134.

Roulston, K. 2004. An Investigation of Music Teachers' Work in Changing Times. *Journal of Educational Change*, **5**(1), pp.31-56.

Rouse, M. 2008. Developing inclusive practice: a role for teachers and teacher education?. *Education in the North*, **16**(1).

Rowley, J. 2002. Using case studies in research. *Management research news*, ***25***(1), pp.16-27.

Rubin, H. J. and Rubin, I.S. 1995. Qualitative Interviewing: The guest Art of Hearing Data. Los Angeles: Sage.

Sabrin, M. 2018. Elementary Teacher Education in the Top Performing European TIMSS Countries: A Comparative Study. *International Education Studies*, *11*(4).

Sahlberg, P. 2023. Global Education Reform Movement revisited, In: *International Encyclopedia of Education (Fourth Edition)*, pp. 165–173. doi:10.1016/b978-0-12-818630-5.01023-x.

Sandelowski, M. 1995. Sample size in qualitative research. *Research in nursing & health*, *18*(2), pp.179-183.

Schleicher, A. and Zoido, P. 2016. The policies that shaped PISA, and the policies that PISA shaped. *The Handbook of global education policy*, pp.374-384.

Scottish Education Department (1998). *Teachers (Education, Training and Recommendations for Registration) (Scotland)*. Regulations, Edinburgh

Sellar, S. and Lingard, B. 2013. PISA and the expanding role of the OECD in global educational governance. In: Meyer, H.D. and Benavot, A. eds. *PISA, power, and policy: The emergence of global educational governance*, Symposium Books Ltd, pp.185-206.

Shangquan, G., 2000. Economic globalization: trends, risks and risk prevention. *Economic & Social Affairs, CDP Background Paper*, *1*. UN Secretariat, Department for Economic and Social Affairs: New York. Available at: https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/publication/CDP-bp-2000-1.pdf

Shanks, R., 2020. Development of Teacher Preparation in Scotland. In R. Shanks (Ed), *Teacher Preparation in Scotland* (pp. 95-110). Emerald Publishing Limited: Bingley. Introduction: pp 1-8.

Sharma, U., Forlin, C. and Loreman, T. 2008. Impact of training on pre-service teachers' attitudes and concerns about inclusive education and sentiments about persons with disabilities. *Disability & Society*, 23(7), pp. 773–785.

Shi, X. and Englert, P.A. 2008. Reform of teacher education in China. *Journal of Education for Teaching*, 34(4), pp.347-359.

Shulman, L.S. 2013. Those who understand: Knowledge growth in teaching. *Journal of Education*, 193(3), pp.1-11.

Sieberer-Nagler, K. 2016. Effective classroom-management & positive teaching. *English Language Teaching*, 9(1), pp.163-172.

Sinclair, C. 2008. Initial and changing student teacher motivation and commitment to teaching. *Asia-Pacific Journal of Teacher Education*, 36(2), pp.79-104.

Smith, K. 2016. Partnerships in teacher education-going beyond the rhetoric, with reference to the Norwegian context. *CEPS Journal*, 6(3), pp.17-36.

Smith, K. 2009. Transnational teaching experiences: an under-explored territory for transformative professional development. *International Journal for Academic Development*, 14(2), pp.111-122.

Sorensen, N. 2020. Professional Standards for Teachers: An International Perspective, in *Global Perspectives on Professionalism in Teacher Education*. Springer, pp. 131–148.

Spring, J.H. 2015. *Globalization of education: an introduction*, Routledge, London; New York, NY.

Stronge, J.H. 2018. *Qualities of effective teachers*. Alexandria, VA: ASCD.

Stromquist, N.P. and Monkman, K. 2014. Defining globalization and assessing its implications for knowledge and education, revisited. *Globalization and education: Integration and contestation across cultures*, *1*, pp.1-21.

Stromquist, N.P. and Monkman, K. eds. 2014. *Globalization and education: Integration and contestation across cultures*. R&L Education.

Stutchbury, K. and Fox, A. 2009. Ethics in educational research: introducing a methodological tool for effective ethical analysis. *Cambridge Journal of Education*, 39(4), pp.489-504.

Tabacbnick, B. and Zeichner, K. 1984. The Impact of the Student Teaching Experience on the Development of Teacher Perspectives. *Journal of Teacher Education*, 35(6), pp.28-36.

Tan, C.-H. and Macneill, P. 2015. Globalisation, economics and professionalism, *Medical Teacher*, 37(9), pp. 850–855.

Tang, H. and Wang, Y. 2021. Moral education curriculum reform for china's elementary and middle schools in the twenty-first century: Past progress and future prospects. *ECNU Review of Education*, *4*(4), pp.727-742.

Teixeira, P.N., 2014. Gary Becker's early work on human capital–collaborations and distinctiveness. *IZA Journal of Labor Economics*, *3*, pp.1-20.

Tenny, S., Brannan, J.M. and Brannan, G.D., 2017. Qualitative study, In: *StatPearls*. StatPearls Publishing. Available at: https://pubmed.ncbi.nlm.nih.gov/29262162/.

The Scottish Government. 2020. *Programme for International Student Assessment (PISA) 2018: highlights from Scotland's results: Global Competence*, Dandy Booksellers.

The Scottish Government. 2013. *Applying Nurture as a Whole School Approach: A framework to support the self-evaluation of Nurturing Approaches in Schools and Early Learning and Childcare (ELC) Settings*, *Applying Nurture as a Whole School Approach*. [Online]. [Accessed 07 July 2021]. Available at: https://education.gov.scot/media/2cbbaekj/inc55applyingnurturingapproaches120617.pdf

The Scottish Government. 2010. *Curriculum for Excellence*, *Curriculum for Excellence: Experiences and outcomes*. [Online]. [Accessed 10 August 2022]. Available at: https://education.gov.scot/media/wpsnskgv/all-experiencesoutcomes18.pdf.

The State Council of the People's Republic of China. 2019. *China's Education Modernization 2035* [in Chinese]. [Online]. [Accessed 10 August 2022]. Available at: https://www.gov.cn/zhengce/2019-02/23/content_5367987.htm.

The State Council of the People's Republic of China. 2018. *Opinions on Deepening the Reform of the Teaching Force Construction in the New Era in an All-Round Way* [in Chinese]. [Online]. [Accessed 10 August 2022]. Available at: https://www.gov.cn/xinwen/2018-01/31/content_5262659.htm.

The State Council of the People's Republic of China. 1995. *Regulations on Teacher Qualifications* [in Chinese]. [Online]. [Accessed 10 August 2022]. Available at: https://www.gov.cn/zhengce/2020-12/26/content_5574844.htm.

Tomlinson, M. 2018. Conceptions of the value of higher education in a measured market. *Higher Education*, ***75***(4), pp.711-727.

Ulferts, H. 2021. *Teachers as knowledge professionals: Studying pedagogical knowledge across education systems.* Paris: OECD Publishing. pp.11-28.

United Nations Educational, Scientific and Cultural Organization (UNESCO). 2011. UNESCO ICT competency framework for teachers. [Online]. [Accessed 20 Apirl 2021]. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000213475.

VanWynsberghe, R. and Khan, S. 2007. Redefining case study. *International Journal of Qualitative Methods.* **6**(2), pp.80-94.

Verger, A. Novelli, M. and Altinyelken, H. 2018. Global education policy and international development: a revisited introduction. *Global education policy and international development: New agendas, issues and policies*. 2nd ed. Norfolk: Bloomsbury Academic, pp.2-34.

Walshaw, M. 2012. Teacher knowledge as fundamental to effective teaching practice. *Journal of Mathematics Teacher Education*. **15**(3), pp.181-185.

Wang, D. Moloney, R. and Li, Z. 2013. Towards internationalising the curriculum: A case study of Chinese language teacher education programs in China and Australia. *Australian Journal of Teacher Education*. **38**(9), pp.116-135.

Wang, L. 2009. China large-scale education assessment reform: Lessons learned from PISA China trial research. *Assessment and Measurement*. **5**, pp.17-25.

Wang, M., 2012. The establishment of the curriculum standards of teacher education: significance and value. *Modern Educational Administration*. **2**(1), pp.74-78.

Warren, C. 2011. Qualitative Interviewing In Gubrium, J.F. and Holstein, J.A. ed. *Handbook of Interview Research*. New York: SAGE Publications, pp.83–102.

Wentzel, K.R. 2016. Teacher-student relationships. In Wentzel, K.R. and Miele, D.B. 2nd eds. *Handbook of motivation at school.* New York: Routledge, pp.211-230.

Williams, L. 2009. Globalisation of education policy: Its effects on developing countries. In Zajda, J. and Rust, V. ed. *Globalisation, Policy and Comparative Research.* Dordrecht: Springer Netherlands, pp.77-92. Willis, J.W. 2007. World views, paradigms, and the practice of social science research. *Foundations of qualitative research: Interpretive and critical approaches*. United States: SAGE Publications, pp.1-26.

Willis, J.W. Jost, M. and Nilakanta, R. 2007a. History and context of paradigm development. *Foundations of Qualitative Research: interpretive and critical approaches.* United States: SAGE Publications, pp.27-66.

Willis, J.W. Jost, M. and Nilakanta, R. 2007b. Foundational issues: postpositivist and critical perspectives. *Foundations of qualitative research: Interpretive and critical approaches*. United States: SAGE Publications, pp.67-94.

Wise, A.E. Darling-Hammond, L. Berry, B. Klein, S.P. 1987. Introduction. *Licensing Teachers: Design for a Teaching Profession*. Santa Monica, California: The Rand Corp. Publications, pp.1-8.

Wiseman, A.W. 2013. Policy responses to PISA in comparative perspective. In: Benavot, A. and Meyer, H.D. ed. *PISA, power, and policy: The emergence of global educational governance*. Oxford: Symposium Books Ltd, pp.303-322.

Wolf, A. 2004. Education and economic performance: Simplistic theories and their policy consequences. *Oxford review of economic policy*. **20**(2), pp.315-333.

Wong, A. Tang, S. and Cheng, M. 2014. Teaching motivations in Hong Kong: Who will choose teaching as a fallback career in a stringent job market?. *Teaching and Teacher Education*. **41**(1), pp.81-91.

World Bank. 2017. *World development report 2018: Learning to realize education's promise*. The World Bank.

World Bank. 2003. *Lifelong learning in the global knowledge economy: Challenges for developing countries*. The World Bank.

Wu, D. 2002. PGDE Kecheng de Pingjia he Tantao. [*Discussion on the Appraisal of PGDE curriculum]*. East China Normal University: Doctoral dissertation.

Xerri, D. 2018. The Use of Interviews and Focus Groups in Teacher Research. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*. **91**(3), pp.140-146.

Xi J. (2020). On the occasion of Teacher's Day, congratulations and sincere condolences to teachers and edcuators across the country [In Chinese]. [Online]. [Accessed 07 Apirl 2021]. Available at: https://www.gov.cn/xinwen/2020-09/09/content_5541866.htm

Xi J. (2018a). *Talks with students and faculty at Peking University* [in Chinese]. [Online]. [Accessed 06 November 2020]. Available at: http://www.moe.gov.cn/jyb_xwfb/moe_176/201805/t20180503_334882.html.

Xi J. (2018b). *Persist with the developmental path of socialist education with Chinese characteristics; Cultivate builders and successors of socialism with all-around development in morality, intelligence, physique, aesthetics, and labour skills* [in Chinese]. [Online]. [Accessed 06 November 2020]. Available at: http://edu.people.com.cn/n1/2018/0911/c1053-30286253.html.

Xi J. 2017. *Give priority to the development of education*, In: Enhancing security and improving people's livelihood, strengthening and innovating social governance. [In Chinese]. [Online]. [Accessed 06 November 2020]. Available at: http://www.moe.gov.cn/jyb_xwfb/moe_176/201710/t20171018_316735.html

Xu, Q. and Halsall, J.P. 2018. Globalization and Migration: Is there a Borderless World?. In Oberoi, R. and Halsall, J.P. ed. *Revisiting Globalization: From a Borderless to a Gated Globe*. Cham: Springer International Publishing, pp. 43-67.

Xu, W. 2019. *Yingguo Jiaoshi Jiaoyu Kecheng Sheji yu Shishi Anli Yanjiu: Yi UCL Yingyu PGCE Kecheng Weili. [A Case Study on the Design and Implementation of Initial Teacher Education Curriculum in Britain -----An Example of UCL Secondary English PGCE Curriculum]*. Northeast Normal University: Doctoral dissertation.

Yang, Y. 2010. Jiaoshi Jiaoyu Shijian de Lishi he Weilai. [The history and future of clinical practice in teacher education]. *Education Exploration*, *5*, pp.39-42.

Ye, J. Zhu, X. and Lo, L.N. 2019. Reform of teacher education in China: A survey of policies for systemic change, *Teachers and Teaching*. **25**(7), pp. 757–781.

Yemini, M. Tibbitts, F. and Goren, H. 2019. Trends and caveats: Review of literature on global citizenship education in teacher training. *Teaching and Teacher Education*. **77**(1), pp.77-89.

Yiming, Z. and Ping, F.Y. 2011. Characterising reform and change of teacher education in China in the new era. *Journal of Research, Policy & Practice of Teachers and Teacher Education*. **1**(1), pp.30-44.

Yin, R.K. 2018. *Case study research and applications: design and methods.* 6th ed. California: SAGE.

Yin, Y.M. and Mu, G.M. 2022. Reproducing the urban or reappraising the local? Extracurricular activities developed by fellows in an alternative teacher preparation programme in China. *Journal of Education for Teaching*. **48**(1), pp.21-34.

Yuan, R. and Zhang, L.J. 2017. Exploring student teachers' motivation change in initial teacher education: A Chinese perspective. *Teaching and Teacher Education*. **61**(1), pp.142-152.

Zajda, J. 2009. Globalisation, and comparative research: Implications for education. In Zajda, J. and Rust, V. ed. *Globalisation, policy and comparative research.* Germany: Springer, pp.1-12.

Zajda, J. (2015a). Globalisation and its impact on education and policy. *Second international handbook on globalisation, education and policy research.* Netherlands: Springer Netherland, pp.105-125.

Zajda, J. (2015b). Overview and introduction. In *Second international handbook on globalisation, education and policy research*. [online] Springer, pp.1-31. [Accessed 10 Mar. 2019]. Available at: https://link.springer.com/content/pdf/10.1007/978-94-017-9493-0.pdf.

Zainal, Z. 2007. Case study as a research method. *Jurnal kemanusiaan*. **5**(1), pp,1-6.

Zeichner, K. 2012. The turn once again toward practice-based teacher education, *Journal of Teacher Education*. **63**(5), pp.376–382.

Zeichner, K. 2010. Rethinking the connections between campus courses and field experiences in college-and university-based teacher education. *Journal of teacher education*. **61**(1-2), pp.89-99.

Zeichner, K.M. and Liston, D.P. 2013. *Reflective teaching: An introduction*. 2nd ed. New York: Routledge.

Zhang, L. Tan, Y.S.M. and Adler, D.J. 2023. Teacher Change in Mainland China: Collaborative Action Research as a Means of Promoting Secondary School Teachers'

Engagement with the New Curriculum Reform. *The Canadian Journal of Action Research*. **23**(1), pp.3-20.

Zhang, Q. and Huang, B. 2008. How Does Teacher Clarity Affect Student Learning? A Multi-Cultural Test for the Mediated Effect. *Texas Speech Communication Journal*. *33*(1), pp.10.

Zhao, Y. 2010. Preparing globally competent teachers: A new imperative for teacher education. *Journal of teacher education*. **61**(5), pp.422-431.

Zhong, Q. Cui, Y. and Zhang, H. 2001. *Weile Zhonghuaminzu de Fuxing, Weile Meige Haizi de Chengzhang: Dudong Jichujiaoyu Kecheng Gaige Gangyao.* [*For revival of the Chinese nation, for every child's growth: Understanding the compendium for curriculum reform of basic education].* Shanghai, China: ECNU Press.

Zhou, B. 2019. Cong Guimo dao Zhiliang: Zhongguo Jiaoshi Jiaoyu de Jingyan yu Tiaozhan. [From Scale to Quality: Experiences and Challenges in Teacher Education in China]. *ECNU Review of Education.* **2**(2), pp.196-204.

Zhou, J. 2014. Zhongguo Jiaoshi Jiaoyu de Bianqian: 1974-2014. [Teacher education changes in China: 1974–2014]. *Journal of Education for Teaching*. **40**(5), pp.1-17.

Zhou, J., Tang, Y.Y. and Gong, A.Y. 2011. Woguo Benke Jiaoshi Jiaoyu Kecheng Yanjiu. [A Study on Teacher Education Curriculum at Undergraduate Level in China]. *Teacher Education Research*, **23**(4), pp.44-50.

Zhu, H. 2010. Curriculum reform and professional development: A case study on Chinese teacher educators. *Professional Development in Education*. **36**(1-2), pp.373-391.

Appendix 1: Excerpt from literature review matrix

Main Trends

Reference	Main trend 1	Main trend 2	Main trend 3	Main trend 4
Zeidler, D., Herman, B., Clough, M., Olson, J., Kahn, S. and Newton, M. (2016). Humanitas Emptor: Reconsidering Recent Trends and Policy in Science Teacher Education. *Journal of Science Teacher Education*, 27(5), pp.465-476. (Zeidler et al., 2016)	Struggled to prepare teachers to effectively teach, and now the complexity of doing so has been increased.			
Yemini, M., Tibbitts, F. and Goren, H. (2019). Trends and caveats: Review of literature on	Globalization is claimed to lead to more diverse societies that require engagement with broader,	Intercultural leaning, intercultural competence	International educational policies as a rationale for GCE programming. Agency most frequently	

global citizenship education in teacher training. *Teaching and Teacher Education*, 77, pp.77-89. (Yemini, Tibbitts and Goren, 2019)	more inclusive conceptions of citizenship. Globalization is generally perceived as the main catalyst for GEC, leading to the development of a variety of cultures with the same national spaces and the subsequent need to advance the skills and competencies associated with co-existing in a diverse society.		noted this regard was UNESCO, and typically in relation to ESD. The second most frequently mentioned inter-governmental actor was UNICEF, followed by references to the OECD and PISA/TIMSS (large-scale, cross-national educational assessments)	
Normand, R., Liu, M., Carvalho, L., Oliverira, D. and LeVasseur, L. (2018). *Education policies and the restructuring of the educational*	After accountability reforms in most countries, the implementation of New Public management restructures relationships	The government by numbers is extended to the government of the workforce through policies which claim modernization and quality	Teachers' knowledge is also at the core of international reports arguing for making their professional practices	As well as nurses and social workers, professionals in education were, at least in Europe, the Welfare State's agents ensuring equality for all.

profession: Global and Comparative Perspectives. Singapore: SPRINGER Verlag, SINGAPOR. (Normand et al., 2018) Chapter 1 Introduction Normand, R., Liu, M., Carvalho, L	between professionals and the Educative State. Since several decades, governments and policy-makers, believing in accountability and New Public Management, have sought to change teachers' professionalism and to adapt it to a new organization of schools. This new policy modifies deeply the relationships between the State and institutionalized professions in education.	improvement in education. International Organizations are key players in the restructuring of education professions. The OECD's TALIS survey is a good example, displaying a diversity of characteristics and practices among the teaching profession. OECD's PISA reports have been significant carriers of this vision, portraying teachers both as transformational actors, i.e., agents of transformation, and	more effective and based on evidence. Teachers expertise: school systems need versatile teachers who adapt, learn and constantly develop their professional knowledge; it is necessary these versatile teachers are provided with a core of technical knowledge specific to the teaching profession; however, presently, such technical knowledge is fragile and doesn't have a universally recognized existence; therefore, to bridge this gap, new standards need	

		‘reformable’ actors, who must have the ‘will’/disposition to adopt new knowledge.	to be generated by selecting, joining and legitimizing diverse innovation and knowledge sources and agencies, neither only from the professions, nor only from the State-, but from science, firms, practitioners, and users (see Schleicher 2012, pp. 33-45).	

Note:

Red – Teachers’ knowledge/teacher effectiveness;

Orange – globalization/citizenship;

Green – intercultural;

Blue – policies/agency;

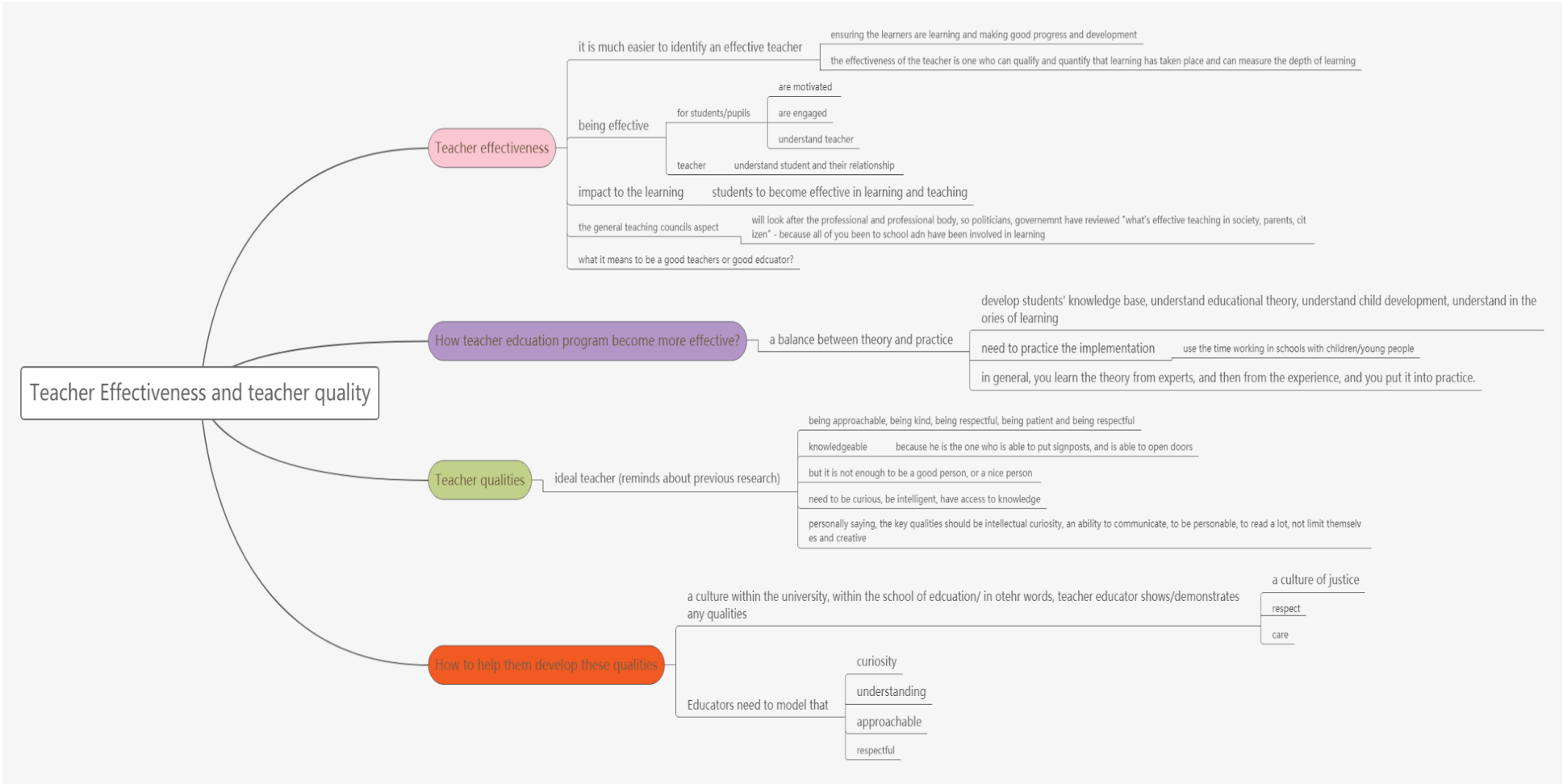
Purple – teacher profession/accountability reforms;

Yellow - social perspective;

Brown – equality

Appendix 2: King's Template Example

Teacher educator example



Appendix 3: Key characteristics of 3 academics from the University in Scotland

Name	Post
Educator 1	Programme Leader
Educator 2	Former Programme Leader Primary Education
Educator 3	Secondary Education in Modern Languages

Appendix 4: Key characteristics of 6 student participants from the University in Scotland

Student	Primary or Secondary	Subject
Student E	Primary Education	All
Student G	Secondary Education	Religious Education
Student J	Primary Education	All
Student L	Secondary Education	Mathematics
Student M	Secondary Education	Physics and General Science
Student O	Secondary Education	Computing

Appendix 5: Key characteristics of 10 student participants from the University in China

Student	Education Level	Subject
Student 1	Postgraduate level	Chinese
Student 2	Undergraduate level Year 4	Chinese
Student 3	Postgraduate level	Music and Dance
Student 4	Undergraduate level Year 4	Music and Dance
Student 5	Postgraduate level	Music Dance
Student 6	Undergraduate level Year 4	History
Student 7	Undergraduate level Year 4	Music and Dance
Student 8	Undergraduate level Year 3	Fine Art
Student 9	Undergraduate level Year 3	Fine Art
Student 10	Undergraduate level Year 4	Biology

Appendix 6: Consent Form - Focus groups

Consent Form (focus group for students)

Title of Project: **Understanding Teacher Education Programmes in China and Scotland in the Context of Globalisation**

Name of Researcher: **WEIJUN LIANG**

I confirm that I have read and understood the Plain Language Statement for the above study and have had the opportunity to ask questions.

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.

I consent to focus group being audio-recorded.

I acknowledge that participants will be referred to by pseudonym.

I acknowledge that there will be no effect on my grades arising from my participation or non-participation in this research.

- All names and other material likely to identify individuals will be de-identify.
- The research material will be treated as confidential and kept in secure storage at all times.
- Personal data will be retained until the process of de-identification has been completed, or by June 2022 (whichever date is earliest).
- Research data will be retained for 10 years after the award of PhD. Specifically, paper copies will be shredded and securely disposed of, and hard disks of PC will be wiped.
- Research data will not be shared to any other organisation or researchers.
- The research material may be used by me in future publications, both print and online.

I agree to take part in this research study ☐

I do not agree to take part in this research study ☐

Name of Participant: ……

Signature ……..

Date ……

Name of Researcher: **WEIJUN LIANG**

Signature ……

Date ……

…… End of consent form……

Appendix 7: Consent Form – Interview

Consent Form (Interview for educators)

Title of Project: **Understanding Teacher Education Programmes in China and Scotland in the Context of Globalisation**

Name of Researcher: **WEIJUN LIANG**

I confirm that I have read and understood the Plain Language Statement for the above study and have had the opportunity to ask questions.

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.

I consent to interviews being audio-recorded.

I acknowledge that participants will be referred to by pseudonym.

I acknowledge that there will be no effect on my employment arising from my participation or non-participation in this research.

- All names and other material likely to identify individuals will be de-identify.
- The research material will be treated as confidential and kept in secure storage at all times.
- Personal data will be retained until the process of de-identification has been completed, or by June 2022 (whichever date is earliest).
- Research data will be retained for 10 years after the award of PhD. Specifically, paper copies will be shredded and securely disposed of, and hard disks of PC will be wiped.
- Research data will not be shared to any other organisation or researchers.
- The research material may be used by me in future publications, both print and online.

I agree to take part in this research study ☐

I do not agree to take part in this research study ☐

Name of Participant: ……

Signature ……..

Date ……

Name of Researcher: **WEIJUN LIANG**

Signature ……

Date ……

…… End of consent form ……

Appendix 8: Plain Language Statement – Focus groups

Plain Language Statement (focus group)

Dear participant

My name is Weijun Liang and I am a PhD student in the College of Social Science at the University of Glasgow. My research title is ‘Understanding Teacher Education Programmes in China and Scotland in the Context of Globalisation’. My supervisor is Dr Fiona Patrick.

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

The purpose of the study

This study compares two teacher preparation programmes in China and Scotland respectively. It will take the South China Normal University and the University of Glasgow as two specific cases for studying, in order to identify how globalised concepts of teacher quality and effectiveness have influenced teacher education in both countries. The study also aims to understand similarities and differences in understandings of teacher quality and teacher effectiveness in both programmes. To do this the study will explore student teachers’ and teacher educators’ perceptions of teacher quality and teacher effectiveness.

The reason why you have been chosen

You have been asked to participate because you are a student on one of the Teacher Education Programmes being studied. You will be able to discuss your understanding of the effects of globalisation and internationalization on teacher education. You will also be invited to discuss your experiences of the programme and your perceptions of teacher quality and teacher effectiveness.

Do you have to take part?

It is up to you to decide whether or not to take part. If you decide to take part, you are still free to withdraw at any time without giving a reason. A decision to participate or not to

participate will not affect your university studies in any way, and will not affect any teacher/student relationships during your studies.

What will happen if you take part?

I will organise a focus group (2-10 students) with you and participants together to discuss and share your own experience and understandings about the globalisation and quality in teacher education. I will audio record the focus group. The focus group will last for about 40-60 minutes. After the focus group, I will transcribe the content. The focus group will take place in English.

Will your taking part in this study be kept confidential?

All information which is collected about you during the course of the research will be kept strictly confidential. Complete anonymity may be difficult to guarantee because of the case study nature of the research, however research data will be de-identified. You will be identified by a pseudonym and any information about you will have your name removed. I will refer to 'staff at a School of Education in Scotland/China' in my research. **Please note that assurances on confidentiality will be strictly adhered to unless evidence of wrongdoing or potential harm is uncovered. In such cases the University may be obliged to contact relevant statutory bodies/agencies.**

What the data collected will be used for, how it will be stored, destroyed or kept and re-used?

I will write up the results of the study in my PhD research. Personal data will be retained until the process of de-identification has been completed, or by June 2022 (whichever date is earliest). And research data will be retained for 10 years after the award of PhD. Specifically, paper copies will be shredded and securely disposed of, and hard disks of PC will be wiped. All research materials will not be shared or re-used with any other organisation or researcher.

Contact information :

Weijun Liang
w.liang.1@research.gla.ac.uk
Fiona Patrick
fiona.patrick@glasgow.ac.uk

If you have any questions or concerns or complaint, you can also contact the college of Social Sciences Ethics Officer, Dr Muir Houston (**Muir.Houston@glasgow.ac.uk**)

_____End of Participant Information Sheet_____

Appendix 9: Plain Language Statement – Interview

Plain Language Statement (Interview)

Dear participant

My name is Weijun Liang and I am a PhD student in the College of Social Science at the University of Glasgow. My research title is 'Understanding Teacher Education Programmes in China and Scotland in the Context of Globalisation'. My supervisor is Dr Fiona Patrick.

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

The purpose of the study

This study aims to compare two teacher preparation programmes in China and Scotland respectively. It will take the South China Normal University and the University of Glasgow as two specific cases for studying, in order to identify how globalised concepts of teacher quality and effectiveness have influenced teacher education in both countries, to understand similarities and differences to teacher quality and teacher effectiveness in both programmes, and understand student teachers' and teacher educators' perceptions of teacher quality and teacher effectiveness.

The reason why you have been chosen

You have been asked to participate because you have a key role in the Teacher Education Programme. You will be able to discuss your understanding of the effects of globalisation and internationalization on teacher education, and the aims and expectations of teacher quality and effectiveness the programme is designed to meet.

Do you have to take part?

It is up to you to decide whether or not to take part. If you decide to take part, you are still free to withdraw at any time and without giving a reason. A decision to participate or not to participate will not affect your university employment in any way, and will not affect any teacher/student relationships.

What will happen if you take part?

I will interview you and will audio record the interview if you consent to recording being used. The interview will last for about 40 minutes. After the interview I will transcribe the content and will contact you to make sure that I have accurately transcribed what you said if you requested. The interview will take place in English.

Will your taking part in this study be kept confidential?

All information which is collected about you during the course of the research will be kept strictly confidential. Complete anonymity may be difficult to guarantee because of the case study nature of the research, however research data will be de-identified. You will be identified by a pseudonym and any information about you will have your name removed. I will refer to 'staff at a School of Education in Scotland/China' in my research. **Please note that assurances on confidentiality will be strictly adhered to unless evidence of wrongdoing or potential harm is uncovered. In such cases the University may be obliged to contact relevant statutory bodies/agencies.**

What the data collected will be used for, how it will be stored, destroyed or kept and re-used.

I will write up the results of the study in my PhD research. Personal data will be retained until the process of de-identification has been completed, or by June 2022 (whichever date is earliest). And research data will be retained for 10 years after the award of PhD. Specifically, paper copies will be shredded and securely disposed of, and hard disks of PC will be wiped. All research materials will not be shared or re-used by other organisation.

Contact information :

Weijun Liang
w.liang.1@research.gla.ac.uk
Fiona Patrick
fiona.patrick@glasgow.ac.uk

If you have any questions or concerns or complaint, you can also contact the college of Social Sciences Ethics Officer, Dr Muir Houston (**Muir.Houston@glasgow.ac.uk**)

_____End of Participant Information Sheet_____

Appendix 10: Interview semi-structured questions

Topic 1: Globalisation/internationalisation on Teacher Education Programme

1. What do you think are the effects of Globalisation and internationalisation on teacher education?
2. What is your understanding of i) teacher effectiveness and ii) the qualities of an effective teacher?
3. How does the existing Teacher Education Programme you work on respond to the changes and requirements of society or government under globalisation/internalisation?

Topic 2: The design of Teacher Education Programme

4. What factors are important when designing a Teacher Education Programme, and why are they important?
5. What are some of the aims of this Teacher Education Programme? Were there any challenges when designing it?
6. How does teacher education on the Programme contribute to the development of student-teacher competencies?
7. What aspects of this Programme are most effective? What aspects might be improved and why?

Topic 3: Students' Perspective to Teacher Education Programme:

8. What kinds of course delivery do you think are most useful or effective for student learning (e.g. lecture, seminar, tutorial), and why?
9. What aspects do you think students find challenging on the Programme?
10. Are there any gaps between the reality for students and the ideal of teaching in this Programme?
11. In your experience, to some extent, why do students drop out of the Programme/drop out after the probation?

Appendix 11: Focus group semi-structured questions

1. Understanding of globalisation in education policy:
    - What do you know or understand about the influences of globalisation in this society and how globalisation influences education?
    - In your opinion, how does globalisation in education policy influence the Teacher Education Programme?
2. Understanding of the quality of teacher education:
    - What do you think the quality of teachers is?
    - How the quality of the teacher affects the Teacher Education Programme?
    - Why the quality of a teacher is important to the Programme or in the future career?
3. Understanding of teacher effectiveness:
    - What do you think teacher effectiveness is? What is an effective teacher?
    - How teacher effectiveness affects the Teacher Education Programme?
    - Why is teacher effectiveness important to the programme or in the future career?
4. What motivated you to i) choose to become a teacher and ii) choose this teacher education programme?
5. Experiences of the Teacher Education Programme:
    - Which elements of the programme have been most helpful in preparing you to be a teacher? (Please explain why)
    - Which elements have been least helpful? (Please explain why)
    - What are the most positive aspects of this programme?
    - What are the challenges in this programme?
    - What types of course delivery and teaching approaches do you think are most useful for your study (e.g. lecture, seminar, tutorial), and why?
    - What aspects of the programme could be improved? And how might they be improved?
6. Has your opinion of teaching as a career change as a result of taking part in teacher education?
7. Do you think the programme is matching your expectations, or not? Can you explain why?

Appendix 12: Example of Coding

The example of coding provided on the next page is from the transcript of the focus groups of student participants in the Scottish University (called University X in the coding template).

Codes	Focus group 1	Focus group 2
Quality of Teacher Education Teacher quality	***Student E:*** in the program, they recruit high quality candidates, very educated, experienced people who've either had previous careers, or certainly have spent a long time on their own personal development, so their education and obviously going and spending time work with children to see that they would like to work in education; they are very knowledgeable and quite open about sharing their experiences. ***Student M:*** The enthusiasm plays into that as well. You've been surrounded by people who are interested and want to participate. It makes it much easier for yourself to participate. You've got like-minded people who you can discuss everything with. It can be so prevalent in some	***Student O:*** It depends on the teacher. I think a quality of a teacher is how do that teacher influences good practice. What quality can attitude bring to better learning for the students. I think empathy. Once a teacher has empathy, can empathize with a child, can understand where they came from, understand where that person is coming from. Child to learn in a very nurturing and loving environment. Understanding the children. I think that kind of now bring the nurturing into your classroom that treating every child different by the same time equally. Kind of understand where I'm coming from, or empathize with me, I kind of like. Love that teacher for one then kind of want to go to

	school even on placements you can tell that's the way that some teachers work. But the way they are pushing us to be so open minded and forwarding research based, which is really good. ***Student L:*** The open mindedness that I've seen on the courses that people are just so willing to take on these different concepts that they may not have necessarily had before they came into the teaching program. About the teachers, they are really taken on the learning that they have from the lectures and the seminars, and they are being really open minded. You have to be a high quality individually and a really great understanding of the subjects that you are teaching. You can explain it in a nice simple way to the students because some things can come off as very complex. And the great teachers that I see are those who can take those complex situations and just make them simple. Teachers are not just delivering the curriculum,	that teacher's class. And that makes me want to learn at the same time. Passionate about learning and teaching. Some teachers are passionate about their subjects. ..... it is a kind of like passionately about getting the learning and teaching and getting the people to kind of like understand where you're coming from and how you are the pricing developed your own learning skills to subject because computing. Computing, it can be boring. ..... the code is making my life well and I kind of make the people understand I don't worry. I experienced with the course was that the teachers didn't give you the answer. They put us to figure out what do you want as a teacher? Or what do you want to? What do you want to improve? What would you do as a teacher? So they didn't just say. You should shape yourself to where you want to be. That's because they gave us the chances to go use

	but they are really pushing the limits of, of the students on an individual level and to get the best out of them. ***Student G:*** A high quality teacher is what a high quality individual; but on the top of that teachers should like working with the children and young people, which is not a small thing. That is a must. To be enthusiastic and to have like strong work ethic, and just to be able to communicated effectively, and to adapt quite quickly prioritizing. ***Student E:*** PGDE primary program, they have been very much promoting the idea my previous life that I was an academic researcher. So they are very research focused, and really talked about this idea that we should be professional doing professional practice, what they call inquiries, which is almost like many little research projects about reflecting on your own practice as a teacher and what you what teacher you want to be, but also trying something in the class to see if it works. It is	our head and kind of like figure it out and say. You think you don't really answer because you'd be thinking. I noticed about teachers they way they taught us in between them. For the future career, I think it was the model. I'm sure that I'm carrying it on to be a better teacher, hopefully a great teacher someday because of what I've learned from quality of teachers. ***Student J:*** My personal belief is that a teacher should be very nurturing. A lot of your curriculum for excellence, certainly in [names city]. In [city], they have a programme called [names nurture programme]. It means to really nurturing children, and you'd be supportive. About the other qualities, I think we read a lot about what children thought the qualities of teachers should be. Be kind, hear what they had to say. One of the main qualities a teacher should have is to be able to bring joy into the classroom.

	not only a professionalism, but a professionalism that's kind of embedded in our research culture that obviously maps on to policy and all the other things that happen to us as teachers. Scottish Government tune is happening at that time. Plus, we are benefiting from all these lectures that are really embedded in that lifestyle, they are experts in their field. And if they're still active in research, you get that sense that everything is still up to date. The classroom is like a little subculture bubble of its own world, and it is nice to have that link to the bigger world. And the bigger picture, that is the only thing that encourages us to be the research active as a good way to kind of keep up to date and not get too stale and stuck in. This is the way we've always done it kind of practice, which I am keen not to do. We want to pretend that we are dynamic individuals.	Children don't like teachers who is overly strict and angry and authoritarian. One of the main qualities a teacher should have is to meet the classroom welcoming and make it somewhere that children want to be. If the children like you and want to be in your class, and you can engage them, I think a big thing is being passionate. A teacher should be passionate about their subject. You making everything, you show them your excitement, you show how passionate you are about it. I love that this is why you want to love it, and really be able to engage. I felt very lucky with lecturers that we had. They were very engaging, and even perhaps some areas of the curriculum that I wouldn't have expected to enjoy so much. I found myself getting quite excited about them. Rather than saying to you that how to do it, the role model, how to teach. I came to realize the more that I learned about good teaching, she was

		just showing us by example, making us think about your problem solving skills. The sort of qualities that we were talking about. [Names lecturer], he makes the subject exciting. I'm particularly thinking back to the start of the course, when we had the seminars, the understanding learning in teaching, the seminars were very good, because that was just a chance to sit with a lecturer, who would walk around the room, but very much a discussion about we've learned about these theories and movement in the business, but what do we want to be like as a teacher? What do you want to be like in the classroom? Have you seen something that you're like? I like that style. I want to teach like that, or equally, have you seen something that you're like? What are the qualities I would need to have or develop to show that? ..... We are different teachers have quite different ideas about how things should be. The big thing was all

		the lecturers was everyone was very, very supportive. I'm here for you.Yes, I'll challenge you. Yes, I will ask you to think, but I am here to help. And very much passing that on to us and showing us the scene, without instructing us to do that, again role modelling and seeing, showing us this is teaching. I'm here to help you learn. I love that. It is very special. The quality of teacher is hugely important to the programmeand my future career. Because by the lecturers showing you the qualities that make a good teacher. Showing those qualities rather than seeing well what you should do. They do lead by example and show you and I thinking about the qualities of a teacher is going to be really important. We need to think about not only my academic knowledge, but why I am special to someone else, what can I bring to the school. I think you really have to be able to

		see these are the real qualities I have. These are the qualities that I think make a good teacher.
Reasons/background to choose to become a teacher/enter to education Reasons for choosing University of X	***Student G:*** Based in [city], but they don't have [names subject area]. I liked the idea of going to [this] University more than [other university]. And it is the clear choice for me. I am in love with my subject. I think it provides opportunities for the children and people to reflect and to discuss and debate and I just can't. theology is my background for four years in [EU nation] university. I think that was the natural path for me to be a teacher. I was also an au pair for two years. I just wanted to be a teacher all this time. ***Student L:*** Based in [names city] for six years, and I applied to [names university] first of all. I was like why am I just applying to this one place and I hadn't even looked up like what is the best school. Then I saw the great reviews that the [names education faculty] has for [this	***Student O:*** In [names nation], most or people would choose to work at the bank. I taught people because education wasn't really a priority for them in the notes. They like doing business before they do education before education. I found that people that were older than me, people were I think they were like in their 50s. But they were passionate, they wanted something our of education. They wanted to show they could do something. I am passing knowledge to somebody, and the person is actually appreciating. I am doing something good. I am doing a good deed for people. I wanted to help them learn and I wanted to kind of give them entangled knowledge that they are ungrateful. I am excited, making them better in what they do. If I can support somebody learning even not in the classroom, even after the classroom

	university], and it's only an hour away and I've always wanted to live in [city] as well, because of the nightlife and the food and the people. It has been absolutely fantastic. I had applied to [other university] a week probably before I applied to [University x] . X got back so quickly had the interviews had everything, and then I got an offer to X and I just cancelled my [other] one. I am really glad and in hindsight that I did that as well. For myself, it was never really the plan to be a teacher. I had always done tutoring, and university, I've done tutoring. As soon as I finished at university, I went to be an au pair. Subsequently, because I've always loved being around children, and I've always loved teaching, but I never, for some reason thought of actually teaching. I was told you're good at maths. So I was going to finance make a lot of money and stuff. So I went into finance. I just did not enjoy it at all. Money is not a good motivator. I left it after three years after thinking about waht I've actually loved. It's because I love all the things	outside the classroom. I can give what I have learned I can give it back to society. It drove me to change. I did my masters in [University X] so I was really welcomed. I was glad the way I talk about [University X] that we think maybe I am part of the shareholder or at [University X]. They were really diverse. The way [University X] just welcomed every person they could welcome and it is really welcoming is a welcoming place. The classroom, the teachers ... ***Student J:*** I do believe that teaching is more than a job. It is more like a vocation actually. You do something good to make a difference. When I was in, as a parent to observe, for school visits, or sometimes to volunteer, I was so impressed with what teachers were doing with children, and so impressed with

	that hopefully make up the foundation. So of what a teacher need to have to be at to be motivated and to be motivating. ***Student M:*** I was torn between [University X] and [other university]. Based in [names city]. But [other university] is so well known as being like, the teaching that like us, they have the most teaching students I feel like I've heard that. But I think overall, I'd been to [University X] for my undergraduate and so I kind of knew it. And also it's kind of perceived as a better university as well. But I am glad that I decided to come to [X]. - experience when interview to [other university], they mentioned that [X] had no [names subject] subject specific tutor and I was really shocked at this. And then I went to my [X] interview and asked the preson who interviewed me and he just kind of looked at me and was like, I'm the subject specific tutor. So I don't know if that was to , I assume it was unintentional, or maybe they're just trying to get me	what my daughter was learning, and seeing how she could be engaged by teachers, and seeing how they could really grip her enthusiasm and subjects. I really get an idea of how much a teacher can affect a child's life. I want to inspire young people and engage them. I want to go out and help other people. So develop that joy of learning for them. I am thinking about teaching. They spoke a lot about in Scotland, primary teaching nice out of every 10 teachers is still female. There are so many young boys in particular, who don't have good male role models. With this desire to do something good to be able to maybe come in and, add something a little bit different by being another male teacher in the primary environment. That was also a big motivating factor. I wanted to go to X. I knew of other students experiences on everyone spoke very, very positively of the [names education faculty] at X University. It

	into [other university]. You know, [subject area] is obviously very undersubscribed. I've been interested in teaching, since I was in high school. I like teaching, always like younger people than me, doing kind of like work experience and running classes for younger kids. I took a year out and worked as a teaching assistant for a year down in [names city in England]. And I confirmed that I wanted to go into teaching. So I came back finished my degree and applied for the PhD. ***Student E:*** I live in [city] and about family and other things to juggle. I wanted to go to one of the universities in my city from a realistic juggling point of view in my decision came down and I went to speak with both people, both cohorts that have been through the course to see what where they went and what they did with their qualifications and things. I have studied at [this] University before and too many times. I didn't see a lot	is also my intention to teach in a [particular] school in Scotland. A big factor about that core set X University. First of all, because I new I had a great reputation for the [names education faculty], but also from the faith teaching side. X was probably the best place to do that in Scotland.

	of separating views here in [University X]. The Scottish Government funding in the last three years have also offered the [names additional qualification] if you want to do that as part of your degree as well. Although [X] won the award, this year again for their education course. They will be quite proud of that putting that on the social media. So yes. My background is mental health and well-being so I have been a lecturer for [X] for years doing that. I stared to do more and more work in the schools. I spent a bit of time working in [names EU nation] before I stared my own family. In [EU nation}, their system is that the skills and the education system very much overlap, particularly form a mental health point of view, psychological interventions improve children's educational outcomes. I was thinking about finding a little bit more stable work, because lecturer isn't really stable. And I was thinking is there a way I could do some of that teaching experience	

	in another sector. Then I started to do some volunteering and bits and pieces in school and I quite liked.	
Teacher Education Program Most useful/helpful elements in preparing you to be a teacher? Least helpful/useful elements in the course	***Student G:*** Every core seminar had its own significant purpose. But the most helpful one was the placement and the experience I got in schools. The practical part of the teaching programmehelped me understand the job and what I'm getting into. I would like to emphasize the professional inquiry, it is quite helpful, even though it was a nightmare to begin with. I did not like differentiation, and trying to apply all the different differentiation. Least helpful was the focus on literacy and numeracy. The literacy and numeracy is just for someone who's doing something else apart from primary is just a bit overwhelming and it just feels slightly unfair. I understand that the health and well-being part of it and	***Student O:*** The placement is the most helpful one. The placement prepared me. In my first placement, I didn't know what I was doing. This is what I am going to experience. It is 50-50 classroom and practical. I understand waht I am supposed to be doing. So I think the most helpful part of it was the placement. At the end of the placement, it is call the joint assess visit, which is an assessment evaluation. You do your six placements, a tutor from University comes to watch you teach and tick boxes of you quality of teaching. He was never get to know me until my first placement. When I start to teaching, I was preparing for this joint assessed visit, and I wasn't

	how it should be at the core of everything. But then literacy is naturally going to be blended in my subject and numeracy to something to an extent, but I think the educational system is pushing this too, in an unfair way... ***Student E:*** I would definitely say the placements are invaluable. You get to try out a lot of the theory that you've been told in practice. At postgraduate level, most of us kind of have a good understanding of theory. It is a very different ballgame, putting it into practice in the schools and I think the placements are just invaluable for that. The enthusiasm you got from the children made it worthwhile. I think it gives you the first sort of taste of what might be your teacher identity and what might be the future for you. I also would say there's also the most exhausting part of the course as well. Happy exhausting, but still exhausting. It is hard sometimes to know, suck it up for another, feels like a long time when you're not happy. I definitely	myself, and I wasn't doing what I am doing. But after the joint, I taught a lot better when I was preparing with the joint to come. I'm just literally teaching or kind of liked doing what I'm here to do. After finishing the joint, I was just being me. The joint visit gave me panic. ***Student J:*** The opportunity to go and placement. My first placement in particular, it was amazing. It was so luckily to work with two amazing teachers. I liked the timing of the course, because I think it had a straight period of six or seven weeks in university, then on placement. It was great to have that break to be able to see right now that I have six weeks of really thinking getting my head done. It was helpful that a lot of the lecturers had teaching experience and skills, as well. They weren't all just coming from an academic background where they had all been at university for their entire career. Many of

	have friends on the course who had good experiences and placement and then didn't complete that placement. But make it into the next placement and then had different experiences. Could reduce the lecture time, they kept preaching, preaching is a bit strong.I always there was I thought that was a mismatch in the rhetoric. A practical thing because of the numbers and the fact it is an intense course with, the University beautiful as it's really impractical. You are trying to fit in lots of people, they just stick in the lecture thinking that will be the safe all, but actually, I'm not sure that is. I think maybe they should move to the smaller group dynamics, and you would get more out of people and maybe more of a discursive. I didn't even think of thse great points, so I'm loving it. But the things that I had thought about was the sort of cohesion between like the GTCS and the school, and then your tutor.	them had been teachers and primary skills or high skills, so could talk from experience as well. And I think that was so helpful because they were very much aware of what was currently happening and classrooms in Scotland. So they could talk to you about things and you see, well this will definitely happen. I think that the balance of the course was really good. I think having such a supportive team, and the [names education faculty] was so helpful, all of the lecturers were there for you whenever you needed them. This year is very intense. I felt that was really helpful was that the staff at the [names education faculty] were really cared about their students. I would find that hard to see that there was anything I had such a positive experience and they year that I really would find it difficult to see that there was anything that was not helpful. I thought that the lectures were all very good, particular in primary,

	They didn't have to be the same point of the weekly calendar every week. I thought just mix up a bit in case you were messing something like good. It was just driving that I went to the wrong school for the second one. ***Student L:*** The placement is one of the big things I have done as like invaluable it is the most invaluable part but actually my first placement I just dislike it so much that I left it and another thing that I've written down is that the experience of others. This might be an isolated event. One of the great things that I've gotten from it is to be able to sit down and just have though I think it was halfway through each placement we have like a get together where everyone came together on the Friday and just talked about how it has been going on. Both of them were really good to talk local authority level. And then also talk subject specific, that really motivated me into it. The support that you have from the	we cover the eight different areas of the curriculum. So we are covered in a lot of different subjects. You maybe can't go into some things as deeply as you would like to but again, that wouldn't really be a criticism of the course. I think that's just the reality of a one year or nice months course. You can't do you know everything at once. But I would find that personally tough to criticize anything.

	teachers has been fantastic on the course. Unfortunately, they have a dozen people every year that just really get a placement that doesn't suit them. Emotionally draining. One of the student representatives and one of the things that people were feeding back big time from the first placement was having not two week observation and having a break and then having six weeks. After two weeks and then come back again to potentially a different timetable and everything because people have been in secondary schools but especially had been placed into different classes all of a sudden. So, they come back and they don't know their class really that well anymore their timetable is changed. This is the negative things. I would also preferred just to stay, remain on the first placement. And also lectures and big huge halls where people are kind of just reading off PowerPoints. But for my course, it just felt like it maybe wasn't necessary. ***Student M:***	

	I definitely agree that the placement are like the most valuable part of the course. I got a friend who's applied to be a teacher in a private school down south who hasn't done any teaching courses. I would feel woefully unprepared, having not done a teacher. To an extent, the professional inquiry, like the other two essays for that are really important as well. I put the most effort into my professional inquiry. All theory that we've been reading about was really, really useful. Agree with the big lectures, two hour lectures where people like, I mean some people can pay attention some people can't. they could be utilized in a much better way. PGDE programmestudents can be trusted. They can read the content by themselves and develop some level of understanding. When they maybe get people in from outside areas, get them to talk to us, sort of thing are really interesting. But just the straight lectures, I wouldn't say get rid of them, I just say reduce them vastly.	

	I want to add in another negative about the course specifically. During placements, we were all taken out at different point to go to different seminars, to go back into the university to see our subject tutors all these things and especially in the second placement, it was like three weeks in a row, the same morning. We all found it so frustrating because they've been half term. We missed out on so many lessons with specific classes. I think two seminars doesn't sound like much when you're away for half a day for both of them. I think they could just be done in non placement time. It was very frustrating for a lot of us.	
Reasons why they mixed different subjects/secondary and primary together (lectures and seminars)	***Student L:*** We would have, like understanding learning and teaching, you would have primary and secondary and all different subject specialists within secondary in one room. For the seminars, all lectures, it was huge. It was like 300 people for the big lectures. But then we would	

Difficulties when in placement	also have our subject specific and primary specific, I don't really know what primary did, all I felt like was that they just had their things. Primary seems to have this crazy schedule and secondary had like, maybe eight hours a week was insane the difference. It was always the primary school ones that honestly had way more enlightened ideas to listen to, because they had experienced everything because you're going through everything. I feel like kids' minds are forming so quickly at that age that you just like, you just experienced so many things with them and we learn so much more from actually listening to the primary ones and observing we got to observe in our thing on our second placement the primary and it's just so different. ***Student E:*** We were in full time nine to five every day. It is very intensive in primary. Primary teachers had absolutely no specialism, we're like the general practitioners of education.	

	I don't know how you remembered all your classes with the different names. Not allowed to drink in the class ***Student M:*** Mixed seminars much more useful than the subject specific seminars. It is really useful going to the primary school. Students will just laugh at you, if you do stuff like 123 eyes on me (Gerogiana) You are not allowed to eat food or drink in science, but the teachers do have cups of tea on the desk and stuff or bottle of water. Because of the health and safety if like a kid gets burnt is that.	
Placements issues 1. Time schedule problems 2. Location of placement schools	***Student M:*** I would have liked three placements. I think more than three would have maybe been a bit excessive, but three would have been very useful. The variety is also really important, like going to different schools. You can go to a different school and	

3. Lesson plan/paper work	see how that is. And it was interesting to see how things work differently. We are getting some new ones, it is good, bit of a mix. Making the 3rd placement longer if it was a different school. ***Student E:*** I think if you've got a good good school, a school that works for you. It would be nice to have this model you know they like to do with apprenticeships, but you kinda like three days in school two days at uni. So you're constantly like half and half life. But if you're in a school that you really didn't connect with. That would have been really torture this year. If you were actually doing the job, you would be seeing more of as a teacher already because you had that whole year's worth of experience with a school. I think it would be beneficial to do three schools because you would them have a real wealth of experience of different schools and what they do and don't do. If you	

	went back to somewhere, you've been already. You don't have all that starting again to learn their school policies and the rules and all the little nuances of things that they do their way. You're a bit more confident to do things cause you kinda know what parameters you're working with them. I can see the benefit of having a 3rd school. Because you also see it's another chance to g is that somewhere I'd want to work in the future. ***Student L:*** I guess with the kids as well with them only seeing you for three days and then two days and other than maybe the rapport doesn't properly build up whereas whenever you have like those that six week block, you basically become their teacher for a while and you can really feel what it is like to be a full time teacher. I was happy with three placements for sure. And that have been that the ideal. It is good just to see how two different schools work.	

	I quite like that. It is two separate schools because you get to that initial experience again, but in a different environment. But then you really get into it within that second school. ***Student G:*** I think three placements would have been just right. I definitely wouldn't want to just delay the probationary year. The observation makes I would like them connected to the first placement. I wouldn't mix and match University and school placement, because it is hard to build relationships. It is a struggle with learning their names.	
PGDE program 1. Teaching methods (course delivery) 2. Inspiring moment 3. Demotivate	***Student M:*** Mixed seminars were definitely the best. Some of the seminar PowerPoints, I don't know they had references in them. I couldn't find the references anywhere in the PowerPoint or anywhere else.	***Student J:*** The amount of work that you have to do in a short period of time challenging me. I think the reality of the post graduate course is as intense, because you are covering, and trying to cover so much between August and at the end of May. So it is nonstop, and

moment/difficulties/ challenging 4. Improvement of the program 5. Expectations on the programme	The connections that you make with the kids, like the kind of unexpected times as well. Because if you work hard, you're going to make some sort of relationship with them. And then underneath it had written I really enjoyed this class (kids works). Can we do more of this and put a little smiley face which I like totally didn't expect cause none of the rest done it and it was just like such a touching moment. It is really sweet. I was struggling a lot with like the volume of paperwork or having to do because I didn't expect, I would enjoy the teaching aspect of it. Getting on with the kids, developing relationships and things. But then all of this extra paperwork was weighing down and down on me. And then going into second placement, it was a lot easier for me. If not more kind of paperwork and tasks to do. Because of like, the teacher being more helpful in the school night, but definitely the amount of paperwork we had to do. Lesson plans for every single lesson, and see my lesson plans at least like three days ahead. A lesson	you need to be willing to put the work and away from university as well. You need to be willing to work and the evening, you need to be willing to work at the weekend. Also, the challenge was maybe for me in the primary course, we are having eight different areas of the curriculum. There are a lot of suggested reading for a week, that is wonderful, because everyone's very passionate about their own subject. But the reality as you couldn't read it all, because there is so much of it. I guess I have to pick what I'm either most interested in, or what area I feel I really need to learn more about, maybe areas that I wasn't so confident or key concentrate on that. For me would be a challenge, that prioritizing what you would read and what you would maybe put aside for later. I really like to balanced actually. There's a lot of value in the lectures. But occasionally, we would do a lecture together with 400 students, and that never

	plan for everyone and then an evaluation for every one of them. She took my lesson plans and she liked marked them, like as a teacher marks and you gave them back and you have to revise them and they get them back to her. And I wasn't just doing the 15, I was like redoing some of them because she was like this bits wrong do this bit differently. The teacher was away on a school trip with other pupils. I had planned like experiments for the lesson. But no one really told me whether I was allowed to be doing these things that you know, required more health and safety in science class. There is more health and safety issues to do with them. I agree with the inclusion aspect. How surface the level of inclusion we learn about is even in terms of like how to include people's within the classroom, yet it aimed at specific age. How I was learning about it was a different way of doing inclusion. But regards to the course, it is	really felt that great, because there's just too many people in a room. But 100 or 150 people were always great. We have followed-up seminar, which is good. In the seminar, thinking back to the lecture, you were given a lecture on this, but let's discuss it together. I think the seminar was so important. Sometimes, you could find that oh good, I'm not the only person who didn't understand that in the lecture. You were talking to other students, who will talk about their own experiences. So having the chance to share the experience at seminars, was really really good. I really like that balance of lectures and seminars. Another thing is about the role modeling. She came to that she'd role modelled everything. And I could realize later that you were really taking us through a lesson there. You were treating us as your students the same rate, and let's handle these materials. Let's use them to solve this problem. I thought was

	definitely exceeded my expectations. There is so much more theories around in teaching than I ever realized. ***Student L:*** About the experts coming in whenever they were doing the lectures, I thought that was amazing to have actual experts int he field come in and talk about this specific topic of the week. And like engagement sometimes for my self was not the best. They are talking about something they're quite passionate about. It is their whole life, and the way that they deliver it, like you're absorbed into it. It is fantastic. Going into the classroom and being able to have fun with the kids and enjoy the moment that they're having fun and laughing in a maths class. This feels perfect. Everyone is like so forward thinking we're talking about things like emotions. This is how you teach it, and the kids are going to learn. And I was amazed by that. This is what I hope for, but did not expect. I think that took that totally destroyed my opinion of thinking that	brilliant and super helpful of having a chance to play with the materials yourself and see what it would fell like for a student to use those things to really good. I really enjoyed, which we only did one in the course. In a science class, the primary school children came in our classroom and they split them into small groups. Each group of children came to one of the rooms that we run and we worked with the children and the room. Only for the one week that you would have that chance away from placement to see. We are going to have a group of six primary school kids are just going to come and work with us for an hour. That was a really valuable experience of taking the science work that we've been doing but see right. Let's see if this works with children. I think if that could be done more often and other areas that would be that'd be really good for students.

	teaching was right for me. I was going to go in there be an individual and hopefully inspire kids. But the only way I'm allowed to inspire kids is if I'm just one of the masses, I am not allowed to be an individual. These sort of things could potentially happen to be prepared for it. And not like just live in new fantasy world and go in there and do it. The fantasy might not line up perfectly, and you just have to be ready for that and you will be able to be that teacher that you want to be. They need to sort of line up your expectations with the reality of what the schools may or may not allow. In my second placement, completely fantastic. I was allowed to and I was told, definitely don't just stick to one way, because that's not how students learn. And there is lots of different ways. And we should be open to different ways of teaching. This has definitely exceeded my expectations of the programmefor sure. I think it's been structured extremely well. It's been delivered extremely well.	I was in a group before so that there are little experiment or 10 min lesson with students. But then we could watch their fellow students also do a 10 min lesson. You got so many ideas because you could watch the other students who were exactly at the same stage as you. Sometimes, you would see things and think and I can see what they are trying, but that doesn't really work. Because we don't get so many opportunities to see our fellow students trying to put things into practice to be able to do that. I think if there is a way of a little bit more of that in the course and be really valuable. We just did once. If we do more of that would really be helpful. That's one thing to improve. It is realistic about teaching, but it is not changed my opinion. The programme made me even more sure that that is a good thing to do. Although it is slightly scared me, it is exciting and it is a try.

	There's just certain things I would change. I would like the changes that we talk about inclusion a lot. But I think we talk about inclusion, poverty. But there's just so much more to inclusion that I don't feel like we touch on a lot. There is not a lot of talk of racism. There is not a lot of talk of LGBT queue sort of issues. I think we need to talk about them a lot more within the inclusion and aspect of the courses. It's fantastic that this has been my experience and from people I've talked to about. The faculty in general have been pretty amazing. They are just so much more involved, so much more compassionate in general, so much that they actually seem to care at all. For the actual people lecturing you to be that the emblematic of what you're going to, I just thought it was absolutely fantastic. ***Student E:*** Yeah, like subject specialists are the guest speakers, I think it brings something into, like another dynamic, it brings it alive, and normally more up to date, as well.	I think that the [names education faculty] are rightly but great promoting it and seeing and reminding you that this year is hard work. But remember why you're doing this. Remember the differences that you can make, and very much reminding you that children out there, they need good teachers. They need people who care. And it will be passionate about it. So they were very good at talking that enthusiasm, building it. For me, it would being on placement. Being out the first placement that I was on and right towards the end of the placement, I did a music lesson with the class. I've been trying to centrally hard about everything and I'd learnt and the things that I wanted to put into it. I have had some experiences with the same class a week earlier where I thought this is a disaster. This just doesn't work, I decided to do a music lesson and spoke to the teachers about what I wanted to do. I was just lucky. The kids were

	They would definitely signpost, you, I would see that better than the core lecture. I think sometimes the core lectures got a little bit sloppy about referencing things on their slides, the stuff that obviously for us, it'd be more useful to help us find that and then do a bit more reading or go and look at that resource online. Flipped classroom: online learning and teaching; COVID time, honestly, I felt that they bringing us online, actually was a benefit times for them to do more video content, trying different things instead of straightforward. I like the idea that posting things on discussion boards, you would get to know people a bit better about what kind of things they were interested in, and what their what they were passionate about. people were feeling more comfortable. Sort of flipped classroom style that we were then getting into was more powerful than just a traditional lecture and then big seminar groups.	in a good mood that day, and they just love that. It probably the first time that I was standing in front of a class thinking, I can do this. That I can actually teach them something here. It was the first moment. It is actually something that's possible that is gonna happen still really nice feeling. ***Student O:*** The workload in the shorter space of time is the most challenging. In the seminar, we get a chance to study students who bounce ideas off each other. For example, four students in a table and we could bounce ideas off each other, kind of like debates our idea and opinions. If we can do more of modelling as a student ourselves to the teacher to see if we are doing it right, before they send us off to go slay ourselves and say, oh, you are doing it right. Oh why can't you speak up louder and so on. These are your

	It was more than just the kids getting them, I was surprised how quickly the children got attached to you. This is my last week, some of them are genuinely upset by that. And I was like oh my god, I'm likable, I did not anticipate that that's good to know. And you're trying to seem professional to these teachers that you don't know. But for primary, it's kind of like a care home. Breakthrough moments when the children like showed that they care or they learn something off your whatever. You are making a difference. We believe in ourselves by the end the same way as we tried to do that for the kids. The school placements are literally the most important thing on the course. The responsibility you have on top of obviously, educating the children, there's also meeting all their social emotional needs. When you are in a school as a class teacher, you're quite reliant on the process, even within the school level of reporting up the chain of command, if you see something in the child that you're	students, your peers, your fellow students. They are your primary students, you are the teacher, why don't you want to do it? And let's see and say I didn't try to or I like to adapt to that. Gabriella, one of the science lecturer. She obviously had a link with a primary school, and contacted the teachers, seen you there and said, would you be interested in bringing a class to the university to work with the students so that we could each do our micro lesson with them? It was very brilliant and very valuable. I am really sure this is what I want to do. The Teacher Education programme made me want to be better and want to just do well for the people. This programme kept me going. I could bring into this my smile it to people's face, seeing them, calling my name, say, Miss Student O, how are you today? The people wanted me to did that was the thing that kept me going.

	not happy with. If you think that child is not being neglected in a very light touch way, it's still don't neglect like, if they're not clean. I find that still a little frustrating in the school that I think as a teacher, you kind of can't help but get emotionally involved with these children, because you spend a year with them, they're your work babies, then you do want to mind them and make sure that everything's okay. Maybe that will make me reassess for my own health and well-being needs without always work in that kind of area or would I get experiences in other demographics. Children will be different adults come in for them every day. We have to investigate that in some schools are like, you pick your battles. If we don't see is if you can't prove there's a big problem. Constant flexibility. I really wish the university had really got us into like weekly planning or monthly plus some sort of like longer-term planning skills.	When I was in my CTC, which is catholic teaching certificate. I have learned so much about it. And hopefully I want to go back and learn more about our course. Because every time I was teaching our class, I am kind of seeing myself telling myself that you can do this. My second placement course was wonderful and fantastic. But my first placement was a really difficult placement. When the students say I like it and we will miss you.

	My difficulty with my second placement was I didn't have a class teacher I had a class that just had supply teachers. I didn't know who was going to be on with me every day. Whereas I felt with the postgraduate students that was this idea that you were maybe older and wiser, who I mean, what uses that to you when you're still in a brand new world. I think they definitely get a lot more support, both in schools and also out back within on tutors. It is not possible to observe yourself while thinking ahead about what you want to do minding the children looking at the clock. They tell you it is all best practice and standardized guidelines and all that they preach you in university and then we get to the real world even when you're not fully finished, you find as a stark mismatch between sewers we'd say and yeah, what we do is very different. My only complaint about the programme are not I don't think they are programme specific. I think they're more	

	of a university level issue. I think that obviously this is only one programme embedded in thousands of programs that the universities deliver daily. They still really struggle with structural issues like timetable in a separate curricular classes, communication. Some of their social media is brilliant. Cause my background psychology and I thought because education is more about because of a professional degree like medicine or dentistry. We'd spend more time in the [names education faculty]. It would be more like a job. While you are in the university, is still very much the general student experience where you're just floating about trying to get your lunch, trying to do this trying to do the other, trying to get somewhere in the library. But you're also doing a 9 to 5 course, which is with the university most of the time. A little bit of a mismatch in the way it's delivered. A university structural thing. I did expect it to be exhausting, cause I knew it was obviously an intensive year. We can be better. And the	

	programme is empathic to it. I think education is very approachable compared to some other faculties in the university. ***Student G:*** In my first placement when I went in the classroom. It made me realize that I want to be a teacher and I'm on the right path. I got upset when the bell went off. I did feel annoyed with the fact that the time, it was time to go home. I really enjoyed it. I also find it very very had, especially on my first placement to keep up with all the lesson planning. The department I was working in to they were really easy going. They were just briefly looking through them. All the evaluation where I had to just write them by hand. I think mentors should not be allowed really to ask student teachers to prepare so many lesson planning and resources because they're like. They want you to come up with ideas and strategies and how you do it. But it is really hard.	

	I needed much more like to be observed. I needed to know what I was doing wrong. And I just had no one to tell me do you know where the moments where you made that things? I also feel like I learned so much and I improved so many aspects. I feel the program, the PGDE programme has definitely exceeded my expectations.	
Effective teacher/ teacher effectiveness	***Student E:*** I was defining what I know is an effective teacher, it is someone who genuinely is passion and care enough to try every day and get it right. But get it adapt, overcome, do whatever you need to do. So that child in your class has an educational experience and grows. I think to be effective at that, you have to be somebody who's really invested and building relationships, creating active learners, doing all these other buzzords. They have to really be open minded and adaptive and not see themselves first. They should always be seeing the people first. I think that person is comes in like that. I	***Student O:*** Be a good role model. If you are my teacher, and your effectiveness, there is no consistency in your practice as a teacher. People be effective in your job. You should know more than your students. Be prepared for your students when they come to class. ***Student J:*** I agree with what you were saying about role modelling and consistency. They are really important. You have to role models, they're the behaviours that you expect. There is not enough to

	don't think the course creates those people. I think they shape those people. Change their view of themselves, but should even more like powerful. It is not just teaching them. The subject is actually just teaching them what skills a life that they can apply to anything like that. Even if they're not experts in every topic that was covered. We are referring to all these amazing skills and abilities and then go and teach your teach. ***Student M:*** Have to be empathetic and engaging and like enthusiastic and interested. Just like all of thee words that make up kind of such a of rounded person. ***Student L:*** I think the people that are gravitating towards wanting to be a teacher in today's society hopefully have these characteristics a little bit more inert. I just feel like everyone's probably actually really fantastic.	expect children children to behave, when you don't behave that way yourself. I agree very much with what you're saying about to be an effective teacher. I think planning and preparation are very very important. I think you should always be organized in advance so that your lessons can be effective. I think to be an effective teacher, your subject knowledge has to be, you need to have good subject knowledge. You also need to have knowledge of the children in your class, I think you need to get to know them. I don't think your lesson will be as effective as they could be. The more effective you can be and your teaching and I think to be really effective. I would say the other thing is that subject knowledge and content knowledge and theory. But in practice, it wasn't engaging the children and there was no joy in the classroom. It is not all about content knowledge, subject knowledge, and knowing the curriculum. If you connot engage those

	Being empathetic and everything, what makes you a great effective teacher is been able to take all of that and then tailor your lessons to be really individualistic. Could change their whole view on the education system. Even if they aren't good at your subject, like inspiring them to do something that they like to do. Different subjects as long as they want to be doing it and they're kind of learning something and applying themselves. ***Student G:*** I think effective teachers are just like inspiring. Inspiring some of them to fell in love with your subject or to explore more or achieve common goals. And just like nurture strengths and talents.	children and give them joy in their learning, your lessons wouldn't be effective or wouldn't be as effective.
Globalization and education		***Student O:*** Globalization and teaching is what wanting is that it ends up being one same concept of teaching, wants to change globalized then at the end of the day. For example, I did my GCSE from [names nation]. If it

		is globalized like that, I can use my certificate to study it in whichever country. I think globalization kind of bring education into once in general. This degree is equivalent to dis degree, you don't need to check. I cannot be able to study in whatever country, I want to study when it comes to globalization of education. Most of the times when I am trying to apply for courses the first time, I tried to apply for courses in the UK, my master's degree. One of the questions they asked me is English. After proving that I studied in English, why do you need to prove if it was taught in English again, if I didn't have to do English language test? So I say it is globalized. It kind of influences education to be equal all over the world. The globalization in education, it can make education more solid and more unified, when every person is speaking the same language. Let's see what's different that person is done.

		One thing we share resources is very bright writer. For example, there's a resources in Canada. The UK needs to kind of always kind of like share resources. That's a good influence. That's a good thing that would influence teacher education programme. All around the world. They are telling you a sample from what happened in the country. I think with our globalization educate globalizing education, kind of making more diverse. Kind of preparing for that diverse Scotland so that it works for everybody. ***Student J:*** I would agree with that. My wife actually qualified as a teacher in Sweden. When she first came to Scotland, although it should have been very simple to see, the teaching qualification is the same. It was quite complicated at first to see. You have qualified in Sweden, but is that the same as in Scotland? We should be able to recognize that if a teacher is

		qualified as a teacher, they can be qualified everywhere. Maybe in terms of the subject matter and globalization, it is quite positive in a way that children are exposed to more things from cultures that are not just their own culture. When I was in placement, we were studying as part of the Spanish language that we were studying, we were looking at a tone in Mexico, because it related to our topic, and being able to talk more about the culture and the way society was there. Globalization the positive side of it, it helps us all see what's similar. In society, we concentrated too much on the differences between people. But I think certainly even in education as we can look at the similar, like what makes us similar look. Another thing from the influence on education, you can read a lot of papers written by American or Canadian authors or Australian researchers, but not just from

		Scotland or from the UK. In Scotland, we're not just concentrating on Scotland in our bubble. You look at good practice from around the world. I was on a webinar, organized by Margaret Sutherlands, and it was talking about how schools had responded to COVID around the world. It was really good to have that global concept. Let's look at other countries who may be further ahead of us in terms of we've been dealing with, and what can we learn from them? The positive sides have been exposed to global. It's maybe also interesting, although this was not how we studied. For example, Montessori, that's used globally, it was started by Maria Montessori in Italy, but it has spread and it's become a global concept. Curriculum for excellence, is actually influenced by a lot of ideas, which maybe came from Montessori as well. We can adapt for your own unique cultures and the unique learning

		environments that we have, and your own counties. The opportunity to be able to share god practice and take the best of from around the world, I think is wonderful. I have been exposed to a lot of education policy, maybe from around the world. We have had many lectures, the lecturers or the professors that have been talking to us have been sharing experience of perhaps when they've travelled to different part of the world. For example, Margaret Sutherland, she talks a lot about inclusion. She invited from New Zealand. She was looking at how that linked to the Scottish curriculum and said, ok, we have maybe made good steps in Scotland. And we should look at what they're doing in New Zealand, because they've already done the research, they have the results, they have the evidence, and look at the differences that they made. About the education policy in Scotland, we are quite open to taking global ideas and saying,

		ok, let's see how that would work in Scott? Or would that work in Scotland? X has a very open mind to looking at Global Education Policy and trying to see or we only can talk about the Scottish context and not the UK. No one was saying, we are the experts, we are the best we are. They were very open to seeing. I think the programme was very open to global education policy. I gain and earn in teacher education programme. The students were very much encourage to learn. That's just what research suggests is good practice. But the main thing we were taught is be open to always reflect on practice and always look at what else is happening, pay attention to global policy, look at other countries, what are people doing? We have curriculum for excellence in Scotland. So that has to be the curriculum we follow, that has to be the guidance that we follow. But how can we

		look at global practice and make that work as part of our curriculum.