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The vocation education in China and England: an extended literature view  
Bingyu Zuo

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University of Glasgow

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## Summary

The purpose of this dissertation is to compare and contrast specific aspects of VET in England and China, hoping to explore the pros and cons of VET in the two countries and to find suggestions that are adapted and suitable to both contexts, filling the research gap of comparison of VET systems in these two countries. This dissertation achieves its purpose using an inductive approach based on the perspective of post-positivism to expand the literature review on the situation of vocational education in China and England.

With carefully designed searching strategies, three themes are identified from relevant literature, which are: qualifications in vocational education, apprenticeships and teacher training. Discussion around these three themes found a series of common features as well as issues between China and England, including: an aim for a standardised system, low social acceptance and recognition, performativism and an overall neglect of the holistic development of students; as well as quality issues in VET educational practices, apprenticeships and teacher training. In addition, issues unique to each country are also identified, such as the over-emphasis on the paradigm of standardisation and excessive assessment and evaluation in England and the overall defects in legal and institutional development in China.

After more in-depth discussion and analysis, this dissertation proposes for more focus on the underlying causes of issues in VET for future researches, such as exploring the dimensions that affect the recognition of VET qualifications in society and industry. This dissertation also puts forward some suggestions for the development of VET from the standpoint of policy makers, for instance both countries should invest more in VET and pay more attention to details in reforms and policy implementation to guarantee the effectiveness of VET teaching, apprenticeships and teacher training. This dissertation encourages England to simplify the VET system to facilitate the navigation of teacher and student.

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# 1. Introduction

Vocational education (hereafter as VET) is a generalised designation applied to schools, institutions, and educational programmes that specialize in the skilled trades, applied sciences, modern technologies, and career preparation (Education Reform, 2018). It comprises formal, nonformal, and informal education, and takes place in a huge range of institutes such as schools, public and private college, tertiary education institutions, community projects, home, and the workplace (UNESCO 1972).

According to the UK's government (2016), a wide variety of vocational qualifications are available at all levels. For students after 16, it is not compulsory to attend school full-time. Students can choose to take part-time study or training and carry out at least 20 hours of work or voluntary activities per week instead. In addition, there is also another option of starting an apprenticeship or traineeship. This is known as post-secondary or post-compulsory education and it is one of the main components of VET in England. Together with other programmes such as on-the-job training and vocational adult education, it forms a relatively well-established national skills system.

Table 1 Qualification of England

Level	Qualification
Entry level qualifications	entry level award, entry level certificate (ELC), entry level diploma, entry level English for speakers of other languages (ESOL), entry level essential skills, entry level functional skills, Skills for Life.
Level 1	first certificate, GCSE - grades 3, 2, 1 or grades D, E, F, G, level 1 award, level 1 certificate, level 1 diploma, level 1 ESOL, level 1 essential skills, level 1 functional skills, level 1 national vocational qualification (NVQ), music grades 1, 2 and 3
Level 2	CSE - grade 1, GCSE - grades 9, 8, 7, 6, 5, 4 or grades A*, A, B, C, intermediate apprenticeship, level 2 award, level 2 certificate, level 2 diploma, level 2 ESOL, level 2 essential skills, level 2 functional skills, level 2 national certificate, level 2 national diploma, level 2 NVQ, music grades 4 and 5, O level - grade A, B or C
Level 3	A level, access to higher education diploma, advanced apprenticeship, applied general, AS level, international Baccalaureate diploma, level 3 award, level 3 certificate, level 3 diploma, level 3 ESOL, level 3 national certificate, level 3

	national diploma, level 3 NVQ, music grades 6, 7 and 8, T Level, tech level
Level 4	certificate of higher education (CertHE), higher apprenticeship, higher national certificate (HNC), level 4 award, level 4 certificate, level 4 diploma, level 4 NVQ
Level 5	diploma of higher education (DipHE), foundation degree, higher national diploma (HND), level 5 award, level 5 certificate, level 5 diploma, level 5 NVQ
Level 6	degree apprenticeship, degree with honours - for example bachelor of the arts (BA) honours, bachelor of science (BSc) honours, graduate certificate, graduate diploma, level 6 award, level 6 certificate, level 6 diploma, level 6 NVQ, ordinary degree without honours
Level 7	integrated master's degree, for example master of engineering (MEng), level 7 award level 7 certificate, level 7 diploma, level 7 NVQ, master's degree, for example master of arts (MA), master of science (MSc), postgraduate certificate, postgraduate certificate in education (PGCE), postgraduate diploma
Level 8	doctorate, for example doctor of philosophy (PhD or DPhil), level 8 award, level 8 certificate, level 8 diploma

Source: Government of England, 2023 at: <https://www.gov.uk/what-different-qualification-levels-mean/list-of-qualification-levels> (last access: 10 Aug 2023)

According to the Vocational Education Law of the People's Republic of China (the National People's Congress (NPC) of the People's Republic of China, 2022), VET within the school system is also the core of the entire Chinese VET system. Comparatively speaking, VET schools in China is more complicated. According to the law, VET schools in China is divided under stages of primary, secondary and tertiary. Students graduating from primary and general secondary schools can opt for vocational education, while students in vocational and technical education can also take a unified examination for all students and switch to general education.

Table 2 Qualification of China

Age	VET system
15-18	Secondary vocational schools.
19+	Vocational school of Higher education and polytechnic.

Source: the National People's Congress (NPC) of the People's Republic of China (2022) At:

<http://www.superlht.com/zhuantifanwen/gongwenfanwen/2022/0709/51192.html> (last access: 10 Aug 2023)



The purpose of this dissertation is to compare and contrast specific aspects of VET in the two countries, hoping to explore the pros and cons of VET in the two countries and to find suggestions that are adapted and suitable to both contexts.

This chapter will provide some background information on the systems of vocational education in England and China as a general context for this dissertation. It will introduce the specific research sub-questions, explain the significance of the research and its limitations as well as outline the structure of the dissertation.

### **1.1 Conceptual definition**

Although the term has now been increasingly replaced by other, more specific terms (Education Reform, 2018), this dissertation will still use this term for clarity and disambiguation.

VET is a generalised designation (Education Reform, 2018), thus in different countries, vocational education often has distinctive assessment frameworks in specific practice. In England, for example, the entire vocational technical skills system is known as the UK Technical and Vocational Education (hereafter as TVET), while formal education within the education system is Further Education (hereafter as FE) which is an important part of TVET. Post-compulsory education is also used in some research settings (e.g., Halsall and Cockett, 1996). A similar situation also exists in China. Specific stages of VET are using instead of VET including secondary vocational and technical education, higher vocational and technical education.

For clarity this dissertation will use VET when describing vocational skills and knowledge related education as a whole, and when presenting some of the relevant research findings from Central England and China, the appropriate terminology will be used depending on the scope of the research.

## **1.2 Background**

Understanding the background of VET in the world as well as in the binational context is very helpful in understanding the literature summarized in this dissertation. This section will present the context of VET on a global scale.

### **1.2.1 VET in general**

Vocational education is regarded as an important component in promoting economic growth in general and addressing youth unemployment in particular and is considered to be an initiative that the government should widely pursue (UNESCO, 2018). It has also been argued that VET can also contribute to society's response to public affairs by engaging in the design of product and community practice, such as the design of medicines and equipment by VET faculty and students, and participation in medical care during COVID-19 (Majumdar and Araiztegui, 2020). According to this perspective, vocational education has flourished from the middle of the 20th century to the present day and is today widely present in education and production systems (Billett, 2011)

Despite the fact that Germany, Switzerland and other countries have reputable VET systems both internally and externally, overall, according to the results of many studies, there are many problems with the development and migration of VET in various countries (Pilz and Li, 2020).

VET 'perhaps more than any other area of the curriculum, has had to struggle, both within the educational community and with society at large' (Ogden, 1990, p. 245). VET faced challenges from industrial restructuring, world demographic changes, the economic crisis and many other factors (Miriam, 2018). Overall, under such difficulties, VET has a low social status, few resources and do not fully realise the promising vision described at the beginning of this section. (Stalder, 2022). In the following section, this dissertation will briefly explain the challenges and issues arising from VET in the context of England and China.

### 1.2.2 VET in England

Prior to the twentieth century, vocational education was not given much importance in England and the country was in a cycle of low skills, low wage, and low production (Halsall and Cockett, 1996). In order to reverse this situation, the government of England has since made a number of reforms; the Department for Education (DfE) (2010) published the importance of Teaching: The Schools White Paper, which reformed the content, assessment, size and progression requirements of vocational qualifications.

The UK government (2021)'s policy Build Back Better also reiterates the need for greater investment in VET and a focus on lifelong learning, citing reforms to the content of T level qualifications, apprenticeship standards, and the introduction of a levy on businesses for apprenticeships.

In 2022, the Department for Education released the Skills and Post-16 Education Act, which set out a comprehensive range of initiatives, including the merger of the two VET qualification bodies, Institute and Ofqual, and the strengthening of the government's intervention in VET where needed.

Overall, vocational education in England is almost certainly one of the most transformed education systems (Daley et al., 2015). Feather (2013), Coffield (2008) and Hodgson (2015) all point out that the government in England has made frequent and severe reforms to VET. Misselke (2022) points out that such reforms as the Department for Business, Innovation and Skills and some of the Department for Education's policies are, for the most part, blind responses to phenomena or the embodiment of responses to certain needs. For example, the Department for Education's policy (2021) measured the Net Present Value of Further Education in England and set an objective of enhancing social cohesion in the face of the economic crisis for VET. Such a request seems to have had little effect and has been repeatedly accompanied by different concrete measures in policy reforms since 2006, in 2007, 2011, 2013 and 2019 (Misselke, 2022). We will discuss the problems posed by such frequent changes in detail in the literature review section.

### **1.2.3 VET in China**

Similar to the UK, China has been described by The World Bank (2012) as a low-skill, low-income country. In 2015, China issued the Decision of the State Council on Accelerating the Development of Modern Vocational Education, which, in addition to continuing to propose the development of vocational education, set a hard requirement that half of the education at higher level will need to be vocational education. This was considered the strongest ever push for VET, leading to another round of active debates on VET.

However, VET in China is still in a state of flux, and the most basic laws and regulations related to all aspects of VET teaching, apprenticeships, teacher training, etc. are not yet well developed (He et.al 2016, Shi et al., 2023, Xue and Li ,2022 etc.). This can lead to many problems, as we will see in more detail in the subsequent literature review on China.

### **1.3 Research question**

Based on the above background on VET in China and England, this dissertation will focus on the following sub-questions: VET policies in China and England. This dissertation will concentrate on the following sub-questions: a) How do qualification system of VET differ in China and England; b) How do apprenticeships differ in China and the UK; c) How do teacher training of VET differ in China and England.

As stated in the introduction, VET is important in contemporary society. Improving and developing the status of VET is an inevitable need in today's overall environment of intense competition and rapidly changing technology and industry. There have been many studies extensively comparing VET policies and status in various countries (eg. Fortwengel, et al., 2019, Ertl and Kremer 2006, Ante, 2016 etc.). However, there exists a gap in studies on China and England together in terms of specific VET performance. Meanwhile, Chinese researchers are also keen to compare and contrast China's and other countries' VET policy systems (Xue and Li ,2022), but less attention has been paid to the real state of VET.

As China has partly borrowed from the VET system in England while lagging behind a little in terms of development, a literature review and comparison of VET in England and China, shall not only provide an in-depth understanding of the current state and problems of VET in these two countries, and gain some insights into the promotion of VET development from them, but also reveal similarities and differences of similar systems at different stages. Studying England as a similar predecessor could also generate more implications for the future development of VET in China.

#### **1.4 Framework**

On the framework of this dissertation, the second chapter will describe the research methodology and search strategy used in this dissertation. This chapter will also introduce the methodology of extended literature review, and explain the process of data collection and analysis. Limitations of the methodology will also be assessed. The next chapter will be the extended literature review which will synthesise and critically assess current studies exploring vocational education in China and England. This will be followed by a discussion chapter exploring the aforementioned research sub-questions. Finally, a concluding chapter will make suggestions and provide a summary of key findings in relation to the topic.

## **2 Methodology**

In this chapter on methodology, I will first explain the overall research approach of this dissertation. After that, I will present the extended research review as the chosen research method and its strengths and weaknesses. Finally, I will explain the research strategy and research ethics in this thesis.

### **2.1 Research Paradigm**

The research perspective most suited for the current study is postpositivism. Postpositivism is built on some premises of positivism. Positivism is a

deterministic philosophy which stresses the effects of causes on outcomes (Mackenzie and Knipe, 2006). It is materialistic and undergirded by a belief that there is no real difference between essence and phenomenon (Guba and Lincoln, 1994). That means knowledge exists without subjectivity and we can acquire the knowledge through observation and analysis. Positivists aim to produce universalising generalisations, believing that theory can predict outcomes and emphasising the importance of objective facts irrespective of context, therefore relying heavily on quantitative methods.

Postpositivism inherits the above beliefs but differs from positivism in that it admits the limit of the acquisition of true knowledge. The limitations may come from “basically flawed human intellectual mechanisms and the fundamentally intractable nature of phenomena” (Guba, and Lincoln, 1994, p. 105). However, they still adhere to their ontology, they “hold steadfastly to the goal of getting it right about reality, even though we(they) can never achieve that goal” (Mittwede, 2012, p. 26). Therefore, postpositivist tend to triangulate methods incorporating both quantitative and qualitative data to navigate within the reality tempered by our own values and life experience.

Such a paradigm is reflected in this dissertation in that the literature search will be conducted with comprehensive reference to existing literature from both qualitative and quantitative research. Meanwhile, much statistical evidence will be used for reference. This is because there is no absolute, universally applicable approach to research and both quantitative and qualitative approaches have limitations, as well as specific strengths in different research contexts. This is the challenge of acquiring true knowledge according to postpositivism. Therefore, this dissertation will consider the findings of different research methods in an integrated manner, with an aim to present a comprehensive overview of the topic.

## **2.2 Research Approach**

In logic, there are two broad methods of reasoning: deductive and inductive approaches. Deductive reasoning works from the more general to the more

specific while inductive reasoning works the other way round, moving from specific observations to broader generalizations and theories (Trochim, 2023). The former implies designing research based on a theoretical perspective, hoping to guide research and practice through theory, or to test theory through experimentation. The latter, on the other hand, tends to start with specific phenomena to summarise and generalise laws.

This dissertation will take an inductive approach because exploring vocational education in the first place is a very complex research problem. An inductive approach means that it does not start with a theory or hypothesis that it sets out to prove or disprove. Instead, it will undertake an analytical survey and synthesis of existing literature in order to gain a comprehensive overview of the topic. It will then attempt to answer the aforementioned research sub-questions based on the gathered data. Therefore, the research will move from the specific to the general as it explores specific themes to discover generalizing patterns.

### **2.2.1 Extended Literature Review**

Extended literature review, also known as a narrative literature review, or a traditional literature review, is a common type of literature review. A literature review is a systematic way of synthesizing existing research, which gives it an advantage over a single study in terms of comprehensiveness and practicality, laying the foundation for advancing theory and gaining knowledge (Snyder, 2019). An extended literature review can easily conceptualise the subject matter of the study as it does not rely solely, or mostly, on quantitative findings (Rozas and Klein, 2010). Compared to other literature review approaches, such as systematic literature reviews, an extended literature reviews is more suitable for a postgraduate study to provide a more comprehensive overview of a topic (Rozas and Klein, 2010).

### **2.2.2 Advantage of Extended Literature Review**

There are many advantages for using extended literature review. It is desk-based, thus saving the time and costs of conducting primary research. Through the process of gathering extensive

collection of findings from relevant qualitative and quantitative studies, it can provide a good overview of a particular field of research. It also enables researchers to identify any gaps in existing literature, i.e., any topics that researchers haven't fully explored or areas that are under-researched. It enables researchers to access very up-to-date and contemporary literature on their topic of interest. Moreover it allows researchers gather relevant data together and present it in new ways, offering fresh insights into a topic.

### **2.2.3 Shortcoming of Extended Literature Review**

Extended literature review also has its drawbacks, namely the subjectivity of the author. In searching and processing the corresponding research literature, researchers may be conditioned to select research material that reflects their pre-existing assumptions and make biased inferences (Paré and Kitsiou, 2017). Inevitably, even with the intentional avoidance of subjectivity, they rely to some extent on the judgement/subjectivity of the researcher who must decide which articles to include and which to omit.

It also does not allow the researcher to gain the same depth of insight into a topic/general research experience that conducting primary research might. Existing studies may be limited or inadequately address aspects of the topic that the researcher is interested in - this may limit their ability to provide valid answers to their research sub-questions.

Compared to other methods including systematic literature reviews, a further shortcoming of the extended literature review is that it is rigorous and it is possible to miss/overlook studies that are significant even if subjectivity is disregarded. That is because the success of an extended literature review depends on the databases consulted and the search terms used - if these are sub-optimal, the articles returned may omit important studies.

Extended literature reviews also suffer from weaknesses in timeliness and replicability. As new articles are continually appearing, they can soon become out of date; even if the search strategy is replicated, it is unlikely to generate the same results.



However, compared to other approaches such as meta-studies, extended literature reviews are better at encompassing research objects with different methods, contexts and premises (Paré and Kitsiou, 2017). In the current dissertation, because VET in the two countries have different contexts and approaches, an extended literature review is more appropriate.

### **2.3 Search Strategy**

The search phrases "vocational education" and "China", and "vocational education" and "England" were initially used. Synonyms and relevant keywords for vocational education were also used including "further education", "skill system", "technical and vocational education and training", "post-compulsory education", "vocational colleges", "apprenticeships" and "teacher training". Glasgow University Library, EBSCO, ELSEVIER, JSTOR, DOAJ, Google Scholar, CNKI and library of Southwest University were used.

These libraries and databases are selected by their merits. Glasgow University Library's database was used as it aggregates various educational and social science databases and allows for advanced searching. Elton B. Stephens Company (EBSCO) was used as it has a reputation for publishing high-quality, peer-reviewed articles relevant to this topic. ELSEVIER, claimed by themselves as a global leader in information and analytics, was used because it has a wide range of studies relevant to this dissertation. JSTOR (short for Journal Storage) is a digital library containing current issues of journals in the humanities and social sciences thus can be helpful for this dissertation. Directory of Open Access Journals (DOAJ) commits to ensuring quality content is freely available online for everyone thus is also a convenient source for this dissertation. Google Scholar is an enormous database with a very large number of articles, which is very helpful as a complement to other platforms.

CNKI (National Knowledge Infrastructure) is one of the most prestigious thesis repositories in China, supported by various departments of the Chinese government, while library of Southwest University is also an excellent repository with a rich collection and considerable search capabilities. The

reason for using CNKI and library of Southwest University is the general lack of English literature related to VET in China as well as a relative lack of actual surveys and quantitative analyses. CNKI, therefore, provides some supplement of Chinese literature in places where English literature is relatively lacking, i.e., apprenticeship and teacher training in the latter part of this dissertation.

Similar search strategies were used to obtain both English and Chinese Literature. The search was limited to the categories of education, economics and social sciences, and also by the location within China and England. Additionally, to make the results as relevant as possible to the current educational situation, only articles published within the last 20 years were used. The reason for choosing this time range is that, as stated in the introductory chapter, both China and England embarked on ambitious reforms of vocational education in later 2000, laying down the basic pattern of VET in both countries at present.

In addition, as VET tends to cover a wide range of topics in academic research, the search will be conducted with the exclusion of studies outside the scope of the current research aim. I will mainly use papers related to post-secondary (compulsory) education in England and vocational secondary schools and specialist universities in China. Papers related to VET outside the academic system, such as adult universities will not be used as these systems are not the main components of the VET system in both countries. The case may be different in the two countries, however, as vocational programmes in general education are legally defined as part of vocational education in China, but not in England.

The initial search yielded 194 articles. (Review Process will be written after finishing process of literature) Firstly, literature that is too early for the study is excluded and there were 162 articles left. Second, literature (28) that was too limited in its research (e.g., studying the student profile in a class of a specific VET) was excluded because it was not broadly representative. Finally, 134 articles were left.



## 2.4 Ethics

The study draws on BERA's 2018 ethical guidelines and the University of Glasgow's Code of Good Practice in Research. BERA's ethical guidelines sets out five key principles, including requirements for different perspectives, integrity, respect for individuals, groups and communities, social responsibility, maximising benefits, and minimising harm. The University of Glasgow's Code of Good Practice in Research, meanwhile, also sets out the honesty, adherence to disciplinary norms and standards, transparency and open communication, and Care and respect for all participants as request.

BERA's 2018 ethical guidelines provides additional guidance at more specific levels as well. Firstly, with regard to interests, under Article 30, researchers should not engage in work that could be perceived as a conflict of interest or in work where their own interests or commercial interests could compromise the objectivity of the research.

Secondly, with regard to the content of the research, Article 60 stipulates that researchers should describe the extent to which their data collection and analysis techniques, and the inferences to be drawn from the results of the research, are reliable and meet the criteria and markers of quality and integrity within the context and scope of the methodology, theories and philosophy of research that they have chosen. Article 72 also states that educational researchers should communicate research findings and their practical implications in a clear and straightforward manner. BERA also sets out requirements for data from research. According to Article 67, all sources of information should be disclosed. Article 68 states that substantial digital content is protected by copyright and should not be freely reused or altered unless express permission is granted. Under Section 77, researchers are prohibited from falsifying, distorting, suppressing, selectively reporting or sensationalising the evidence or results of their research.

In order to fulfil these ethical requirements this dissertation has a number of considerations. Firstly, the paper identifies a valuable and ethical research aim and appropriate research paradigm, post-positivism and research methodology, with an extended literature review (as described in the methodology section).

This dissertation has also been carefully designed with a sampling strategy that will collect the highest possible quality of research findings from different perspectives in order to provide a comprehensive response to current scholarship. The literature review will ensure that the ideas of authors are cited accurately and faithfully with the same standards of critique applied as far as possible in terms of methodology, target audience, sample size, contextual factors, philosophical paradigms, etc. This dissertation will consult the weight of the literature, ensuring the conclusions align with those of the majority of consulted studies. At the same time, recognise and remain open to any gaps in the literature that makes it difficult to fully answer the research questions.

In order to be as transparent as possible so that others can replicate the search in future, the literature search process for the literature review will be documented in detail. By doing so, I hope to achieve as much transparency as possible in reflecting the different interests. All the sources of literature and data are taken from publicly available databases and digital content that may be infringing will not be used to avoid possible infringement of rights. The authors of this dissertation are not stakeholders related to vocational education, so there is no question of self-interest. It is hoped that such an endeavour will result in adherence to disciplinary norms and standards and valuable research for the society.

## **2.5 Conclusion**

To conclude this chapter, this study will be based on postpositivism, adopting an inductive research approach. Extended literature review, conducted using various databases, is the research approach of this paper. Although an extended literature review may have several disadvantages, these can be limited or overcome by the rigorous adherence to the required ethical standards for

educational research. To answer the dissertation sub-questions in more depth requires us to gain a more comprehensive understanding of the subject of vocational education, which is precisely the strength of the extended literature review.

## **3 Literature Review**

Most of the studies used case studies, interviews and other qualitative methods. In general, there is less research on VET apprenticeships and teachers in China (Xue and Li ,2022).

At the start of the study, the following themes were identified as appropriate sub-topics for investigation: a) how do the VET qualification systems compare in China and England and what are the main issues; b) how and why do the structure and delivery of apprenticeships differ in China and England; c) what are the similarities and differences between teacher training programs for teachers of VET in both countries? These three themes cover a wide range of vocational education in both countries and reflect the current research concerns. Discovering more about each of these aspects of VET would afford the researcher considerable insight into this type of education.

### **3.1 Qualifications system**

Qualifications system is one of the main focuses of research on VET. It includes selection of the teaching content, classification of the different teaching levels. In the process of designing the system, policy makers create the basic framework of vocational education. As will be shown later, qualifications also played a very important role in the development of vocational education. The current literature review draws from a wide range of literatures and elicits three representative issues of qualification systems: inefficiency of the qualifications system, restrictions on student development and low recognition.

#### **3.1.1 Qualifications system in China and England**

As an overview has already been given in the introductory chapter, the various

criticism on the current system of vocational education qualifications in England will be hereby directly presented. Historically, as stated in the introductory chapter, since the beginning of the 21st century both England and China have embarked on a series of qualification reforms in an attempt to promote the development of VET. Such efforts have been criticised by research in both countries, which has explored or demonstrated potential and existing issues with such efforts. These researches will be next presented in more detail.

### **3.1.1.1 Qualifications System of England**

To provide some detailed criticism on qualifications system in England, Raffae (2014) argued that the design of the qualification system is driven too much by the government instead of by the interest of employers and its position and objectives are not yet clear. Gambin and Hogarth (2018), based on their case study, argued that policies are now too blindly guided by the global market competition and ignoring the actual needs of the national industry and students. Fortwengel et al. (2019) even argued that undue government intervention and complex new systems have created many practical impediments to particular aspects of education, such as hindering the development of apprenticeships. Isaacs (2005), more radically, suggested that the qualifications system in England is designed to conceal inevitable failures due to the overly complex and conflicting requirements within it.

Misselke (2022), after conducting fieldwork in two VET providers, concluded that the convoluted and repetitive policies of TVET reforms in England have left teachers confused and have triggered performativism and managerialism. Spours et al.'s (2009) case study of one institution revealed that, from a different perspective, frequent policy changes and the ensuing performance appraisals have consumed a considerable amount of energy of the teaching unit. Baldwin et al. (2020) also concluded that FE programmes in England are riddled with an overabundance of assessment arrangements by citing the report of the DfE-commissioned Working Group for 14-19 Reform.

For example, the Office for Standards in Education's VET Handbook (2023) includes guidelines for inspecting all aspects of the VET system, including the timing, frequency, type, and scope of inspections and context. In terms of the content of inspections, the manual provides specific guidance on the dimensions of planning, effectiveness, quality of education, behaviours and attitudes, personal development, leadership and management, and even includes sub-judgments on the contribution of colleges and designated institutions to meeting skills and needs.

Raffe (2014) also suggested that such a system is difficult for students to understand and utilise. For example, City & Guilds (2023), a vocational education provider in the UK, can offer qualification training in more than 10 categories, including Single Subject Qualifications, Traineeships, ILM qualifications, Professional Recognition Awards. Countless qualifications such as National Vocational Qualifications (NVQs), apprenticeships in various trades, language skills, international workplace competencies.

Baldwin et al. (2020)'s report also supports this claim by demonstrating the complexity and lack of transparency of the network of academic and vocational qualifications. Fisher and Saunders (2017), for example, suggested that terms such as Learning and Skills Sector (LSS), the Lifelong Learning Sector (LLS), the Further Education and Skills System (sometimes referred to as 'the sector'), and the Education and Training Sector (ETS), can be confusing for all stakeholders. Such confusion, coupled with an ever-changing qualification system, means students simply do not know what they are going to learn and do afterwards (Higham 2013).

Dalby and Noyes (2018), on the other hand, pointed to the heavy-handedness of such policies, and the changes in ongoing environmental and funding conditions, business competition, and conflicts of interest that they provoke as the main reasons for the ineffectiveness of a range of policies in practice. Orr (2020), who indicated that FE is an 'exemplar of policy failure' (pp. 508), also suggests that policy in England has long raised concerns about VET but has so

far failed to deliver. Petrie (2015, p2) figuratively refers to the 'technological side of education' as the 'Cinderella' from 'at least 1935', meaning that the prince of Cinderella, that is to say the rise of real VET, has yet to arrive (Augar, 2018).

With regard to the content of the qualification itself, Avis et al. (2012) suggest that England tends to favour a generic model, the VET system is designed to be based on a predetermined set of criteria addressed in their programme and assessed by inspection for competence in practice in a very narrow sense. Such narrowness was also observed by Higham (2013).

### **3.1.1.2 Qualifications system of China**

As for China, the Chinese qualification system is relatively more stable, but less developed. Chinese vocational qualification system had borrowed heavily from England (Kuhlmann et al. 2021), thus it displays some similar trends, such as a centralised system and focuses on narrow definitions of vocational skills, which will be introduced later.

Overall, Xue and Li (2022a) pointed out that China's vocational education qualification system is not yet adequate, with only 18 categories compared to more than 300 in general education. Liu (2014) suggested a few detailed points: a) the deployment of vocational education is not rigorous and is not implemented in practice; b) the concept of VET is not well-divided; c) relevant systems and laws and regulations are also very imperfect. Wu and Liu (2023) made a similar point, as does Xiong (2013), who additionally mentions the lack of regulation of vocational education qualifications. This lack of relevant systems and oversight implies a number of potential problems with regard to the quality of VET, the impact of harmonization and accountability among education providers, or the existence of regional variations in standards

Tang and Shi (2016) pointed out that the Chinese qualification system focuses too much on the development of teaching materials, and neglects



implementation of curriculum reform concerned about the real circumstances in VET institutions. These have created many practical problems, since many VET providers are simply unable to teach accordingly because of the poor facilities, outdated teaching equipment and lack of teaching staff (Guo and Lamb, 2010).

This suggests that more investment is needed for the future development of VET in China. This lack of resources may be due to the relatively low investment in VET. According to the Ministry of Education's 2022 data, the average annual per-pupil funding for VET in secondary education in China is 23,470 yuan, slightly lower than the 24,854 for regular high schools and significantly even lower than the 39,220 for higher education, where the total investment is 16,397 billion yuan, while the total funding for VET in higher education is only 339.2 billion yuan. This is clearly a disproportionately small funding considering that VET students in higher education account for nearly 39% of the total number.

Xue and Li (2022b) additionally mentioned that there is limited engagement with enterprises, leading to a lack of professional guidance and input into the design and delivery of qualifications, subsequently resulting in limited differentiation between courses thereby decreasing their attractiveness. Such problem seems to lead vocational education students astray, which may explain why, as Hansen (2013) has observed, some students and parents may find this kind of education undesirable. Students of VET, unfortunately, therefore have often received training that was of poor quality or irrelevant in focus, (e.g., geared toward exam preparation). Some studies have also found that VETs lack systematic expertise and are very focused on practicing technical aspects of competence in a narrow sense, (Pilz and Li, 2012; Bünning et al., 2022) which could also be the result of a lack of rationalization of specialization.

As students enter vocational institutions, they are faced with admission exams that tend to be uniformly focused on theoretical knowledge, ignoring practical skills (Kuhlmann et al., 2021, Xue and Li, 2022b). In addition to neglecting the

vocational skills, assessment of Chinese VET also often lacks uniform and standardised measure (Wu and Liu, 2023). Yang and Chia (2023) made a similar point, and also argued that China lacks any specialised vocational education exam.

Xue and Li (2022b) also mentioned that students do not have the chance to participate in vocational aptitude tests after actual enrolment apart from a few professional capacity tests which limits their capacity to develop self-knowledge and to chart the course of their future career.

Li et al. (2023) additionally pointed out that vocational qualification exams in China tend to be extremely uniform and static in standards, which is incompatible with the pluralistic, dynamic and fast-changing nature of the society in which those graduating will deploy their skills, thus resulting in a disconnect between education and the marketplace. Zhang (2021) also mentioned this conflict between the need for specialization and universal applicability and argues that this needs to be balanced by social governance and market regulation, which would be hard for Chinese VET to achieve due to its centralized system and the lack of market participation. He additionally mentioned that national qualifications from VET are not recognised by many companies, which, similar to England, tend to recruit graduates from general education. For example, factory technician positions may prefer to recruit undergraduate electronics and mechanical undergraduates rather than VET students in related programs.

### **3.1.2 Impact on Student Development**

VET undoubtedly has the potential to play an important role in the development of students. According to the aforementioned research, however, its current impact in both China and England is not favourable. It should be noted that the overall research on China is less extensive and more limited, whereas literature on VET in England is more comprehensive in coverage.

### **3.1.2.1 Impact on Student Development in England**

Policies in England are directed toward a common agenda, marked by shared standards and regulatory frameworks (Avis, 2011). For example, VET in England focuses on problem-solving in specialized areas at the expense of other vocational competencies and other generic competencies, including career and personal lives (Brockmann, 2008).

Howcroft's (2017) survey, using an opportunistic (also known as emergent) sampling, provided some evidence revealing that many schools are willing to forgo the teaching of generic skills and knowledge in order to invest more resources in training students to passing assessments and achieving required qualifications. Esmond and Atkins (2020) concluded from their case study that socialisation skills, language education (as opposed to the English language requirements of the exams) are currently neglected by vocational educational providers.

Vidal and Vitello (2021) concluded from their analysis of the National Pupil Database (NPD) database that such narrowly-focused VET has a significantly negative effect on a student to receive higher education. Further, Webb et al. (2016), after analysing the literature, also pointed out that the over-specialised and idiosyncratic vocational education qualification system in England creates barriers to students' future academic and vocational achievements, which in turn hinders social mobility. Building on this, Wolf (2011) argue that such narrow qualification requirements will limit the socio-economic contribution that vocational education can make.

In contrast, in Germany's VET system, which is renowned overseas, the students train at companies whilst attending school at the same time, so that they learn both general academic education and vocationally-specific knowledge. This duality enables students to have a broader range of future options (Rifai, 2014).

Fleckenstein and Lee (2017) analysed the hierarchical division of vocational qualifications in England, suggesting that there is an overabundance of Level 2 qualifications (e.g., O-level, intermediate apprenticeships, GCSE and CSE) which are not recognised in the labour market, while higher Level 3 (e.g., A-level, T-level, advanced apprenticeships, NVQ) qualifications are virtually monopolised and difficult to access. At the same time, private colleges providing vocational education are too loosely regulated in England, leading to an overall decline in quality (Fleckenstein and Lee, 2017). One possible practical manifestation of this would be the lack of intellectual challenge built into the delivery of VET, particularly high achievers (Baldwin et al., 2020)

In terms of overall outcomes, Hippach-Schneider (2013) found several surprising outcomes in relation to vocational education in England; he gathered the views of business representatives who generally believed that there was no significant difference in professional competence between VET graduates and those from academic pathways in several industries. Fisher and Simmons (2010) concluded that vocational education in England now suffers from inflated grades, produces a filler curriculum equipping students with a merely theoretical understanding of specific trades rather than the technical proficiency to become skilled workers.

### **3.1.2.2 Impact on Student Development in China**

In China, relatively little research has been conducted on the development of vocational education of students (Xue and Li, 2022). However, some of the studies undertaken also point to the difficulties that Chinese VET students experience in their academic development. Yi et al.'s (2018) longitudinal survey of 12,000 students in 118 VET institutions found that 90% of students significantly failed to make progress in all knowledge levels, and that the sector was dogged by passive idleness, high dropout rate, and high dissatisfaction. The survey of Loyalka et al. (2016) directly showed that, from a correlation analysis point of view, vocational education in China is directly and positively correlated with dropout rate and decline in academic performance. Wu and Xu (2023) also

identified elevated rates of dropout as an important problem in VET.

Additionally, Wu and Liu (2023) also suggested that vocational education produces students purely for qualification exams without adapting to the needs of society, which could be the reason for their poor performances.

### **3.1.3 Recognition of the VET Qualifications**

Recognition of vocational education is the key to its sustainable development and a focus of research. In general, recognition of VET is low both in terms of macro-level perceptions and competitiveness in the labour market in both China and England, as illustrated below.

#### **3.1.3.1 Recognition of the VET Qualifications System in England**

Misselke (2022) suggests that changing policies have led to a continuing decline in public trust in, and recognition of VET. Perennial surveys such as Baldwin (2020), Atkins and Flint (2015), Raffe (2014) and Fisher and Robin (2010) have shown that the society still has a relatively poor impression of VET and perceives it to be a second choice for those who failed academically.

This view is present in more practical contexts, as mentioned in 3.1.2.1, the finding of Fleckenstein and Lee (2017) and Raffe (2014) both suggested that Level 2 qualifications, the mainstream qualification achieved in vocational education, are scarcely recognised by the labour market. Raffe's (2014) research on qualifications above Level 2 also found that, even with more advanced vocational education qualifications, the returns to students in terms of employment and earnings are still lower than similar levels in school leavers. Hippach-Schneider's (2013) findings even suggested that companies prefer to recruit general education students, even when vocational and general education students are indistinguishable in terms of their competencies to the job.

Such a situation perhaps explains why, with a report from the Department for Business, Innovation and Skills (2016) showing that many VET providers are

looking for the power to customise qualifications, or to work strongly with qualification awarding organisations to design qualifications that meet the needs of employers.

### **3.1.3.2 Recognition of the VET Qualifications System in China**

For China, there is a generally undebatable consensus that the recognition of vocational qualifications is low (Wu and Liu, 2023; Cheng and Han, 2023; Li and Sheldon, 2014; Schulte, 2012; Dempsey and Tran, 2017.). Even students in VET themselves hold a negative impression of vocational education and consider themselves inferior (Wang, 2021). Hao and Pilz (2021) suggested that most of students who enter vocational education only do so as a springboard to return to general education.

Such a negative impression cannot be disconnected from the disadvantaged outcomes that graduates of VET face. From their analysis of interviews with employers, Li and Sheldon (2014) indicated that employers believe too few vocational education students possess sufficient knowledge and adequate employability skills. Indeed, reflecting on the labour market, we see graduates of VET receiving low incomes and enjoying limited upper mobility (Koo, 2015). Many other researchers, such as Bünning et al. (2022) Tang and Shi (2016) and Liang (2020), also supported the claim that vocational education students are less competitive in the labour market. Yang and Zhou (2021) concluded that the returns on investment into VET in China are low, with no significant advantages over other secondary qualifications. Liang (2020) and Zhao et al. (2022) both conducted more detailed quantitative studies and found that VET in China is suffering from a threshold effect, that is to say only a small amount of investment is needed to generate a return, but the return is small and will not grow with continued investment.

This threshold effect can be explained by the findings of Wang and Wang (2023). They used the national CFPS database to suggest that, in China's labour market, VET acts as a label that makes graduates unconditionally less valuable than other applicants. Yang and Chia (2023) adopted a cultural perspective,

suggesting that China is influenced by the pursuit of academic achievement, and the civil service positions tied to it, stressing the urgent need to promote vocational skills and increase respect for productive labour.

Bünning et al. (2022), on the other hand, pointed out that theoretical research on vocational education is weak, curriculum plans are unclear and the model of training in such institutions is merely a combination of general professional education and teacher education. This has led to low academic recognition and even scepticism about the implementation of these curriculum plans (Bünning et al., 2022).

This unfortunately suggests that, to date, there seems unlikely to be any contemporary developments afoot with the foresight and influence to change public entrenched perceptions on the supposed inferiority of VET, without a major new turn around such as effective and powerful reforms.

### **3.2 Apprenticeships in VET**

Apprenticeships is an important opportunity for vocational education students to experience exposure to vocational practice. However, apprenticeships in both England and China are, to varying extents, problematic. Comparatively, the development of apprenticeships in China is slightly less advanced, but shares similar problems.

#### **3.2.1 VET Apprenticeships in England**

Fleckenstein, and Lee (2017) stated that one of the major problems with apprenticeships is the lack of employers. Actually, the UK government has attempted various initiatives, mentioned in the introduction, in order to encourage employers to participate in apprenticeships programmes. However, as this section will demonstrate, apprenticeship remains unappealing for employers.

Firstly, apprenticeships are inherently inefficient. Fortwengel et al. (2019) pointed out that many vocational education apprenticeships suffer from overall

quality issues and relatively low business acceptance. Mazenod (2015) suggested that apprenticeships schemes in the UK are conceptualising apprenticeships as training rather than education, offering limited access to knowledge-based qualifications, low levels of general educational content. Ante (2016) suggested that there is a lack of co-ordination of apprenticeships in England in terms of work practices. Hogarth et al. (2011) reports that: (a) the quality of provision is uneven across sectors; (b) completion rates are low; and (c) progression beyond level 2 qualification is limited.

Esmond (2017)'s quantitative research also validates the inefficiencies of apprenticeships, noting that the majority of students in current apprenticeships rely on incidental learning to advance themselves. Esmond (2017) additionally notes that apprenticeships in England also have some high-quality learning opportunities, but they are essentially available to high-achieving VET students with more resources, which undermines equity.

Second, despite the Government's ambitious set of reforms and the design of vast new systems such as adopting degree apprenticeships (Powell and Walsh, 2018), apprenticeships still accounted for a very small number of those employed, and participation in apprenticeships was declining. Gambin and Hogarth (2018), for example, noted that, after a series of new reforms in England, particularly the introduction of the apprenticeships levy - which requires large companies employing apprentices to pay a bill to the government - there has been no significant rise in the number of people in apprenticeships, and companies have also tended to favour training their employees only.

The final and most significant impact on employer motivation is that employers do not directly profit from apprenticeships. According to Ante (2016), there is no credible commitment to an employment relationship at the end of apprenticeships. IFF Research's (2017a and 2017b) surveys of both employers and trainees have shown that, a year after the end of an apprenticeship, around 40 percent of trainees have left their employers. That may be because it has long been suspected that too many apprenticeships are being used to certify



existing skills rather than provide new ones (Great Britain. National Audit Office (NAO), 2012).

It is worth noting that there are also studies that accuse employers of abusing apprenticeships. Green (2015) points out that because of lax regulation of apprentices' wages, employers may see apprentices as exploitable cheap labour.

### **3.2.2 VET Apprenticeship in in China**

VET apprenticeships in China suffer from similar problems to those in England, specifically a lack of employers and an overall low quality and insufficient quantity.

In terms of the quality of apprenticeships, Shi et al. (2023) concluded that China's apprenticeship system suffers from the same issue in design as the VET qualification system in England, causing numerous problems arising from different policy sources, insufficient local policy support, and inadequate employer involvement in school-enterprise co-operation. Guo and Lamb (2010) also pointed out that the level of training provided by firms is low whether measured in terms of its occurrence, intensity, accessibility or cost. They suggested that this is partly due to the lack of detailed legislation requiring firms to provide training, which aids the both employers and employees chose to be perfunctory about apprenticeships.

Even when in place, the content of the training in apprenticeships tend to be problematic. Zhou and Lu (2023) found, in their empirical study, that apprenticeships in many companies are mostly repetitive and offer limited opportunities for teaching or skill development. Zuo and Xu (2023) also mentioned that apprentices often do not have the opportunity to be exposed to hands-on production, but instead are required to devote themselves to menial tasks. These characteristics are extremely similar to the situation in England. They also stated that apprenticeships lacked effective educational evaluation and supervision, and mentors of apprentices often lacked professional competence and teaching experience.

Employers of apprentices are also in short supply in China (Luo et al., 2023, Zuo and Xu, 2023), but for slightly different reasons than in England. Firstly, there are strict requirements on the reputation and size of organisation that can offer apprenticeships; however, many renowned organisations have no incentive to participate in apprenticeships schemes as they have no shortage of quality staff (Zhang, 2021). Secondly, there also exists a general reluctance of employers to offer apprenticeships, and although the state hopes to improve this with heavy subsidies, the subsidy application is too complex for employers and the approval process is too long (Qiu, 2023). Luo et al.'s (2023) survey also indicated that the subsidy is a key factor in the willingness of employers to participate in apprenticeships, and that the probability of employers participating in apprenticeships will drop if they cannot be subsidised or if the subsidy is too low. The lack of motivation for businesses is also mentioned by Zuo and Xu (2023). Shi et al. (2023) similarly emphasised this, adding that it is not only the inducements for employers that are inadequate, but also incentives for students. In addition, Zhou and Lu (2023) found that firms were only willing to train their own employees, as in England, and it remains to be seen whether this is related to the ability of apprenticeships to retain talent in the organisation.

### **3.3 Training of VET teachers**

Teachers are the direct providers of vocational education and are the foundation of educational activity, therefore skilled and professional teachers are needed to fulfil this agenda (Lloyd and Payne, 2009). However, both China and England appear to be underperforming in terms of teacher preparation training for vocational education.

#### **3.3.1 Training of VET teachers in England**

With a stronger affinity with neo-liberalism than China, England surprisingly has a very centralised system of vocational teacher training. According to the

Department for Education (2022) guidance, usually the VET teacher in England needs to have a Level 3 trade qualification, or a Level 2 English and maths competence or evidence of an equivalent level of competence, and sometimes a teaching qualification or a level 5 FE teaching apprenticeship.

In fact, VET teachers in England often holds specific qualifications particular to their trade or industry, but not necessarily an academic degree, making it difficult to fill vacancies for English and Maths teachers, although not those for teachers of specific occupations (ET Foundation, 2022: 52). However, Orr and Simmons (2010) also point out that such a teacher-practitioner duality turns VET teachers into 'bureaucratic' staff, as they often need to rely on bureaucratic means to take control of the curriculum and carry out their educational work.

Although the criteria for recruiting VET teachers are not so strict, a study by Hanley and Orr (2019) still found that VET teacher recruitment is less attractive compared to other career choices, and that some recruitment agencies set up for FE in which even themselves become part of the problem, e.g., they are both expensive and ineffective.

The government's 2018 research report 'Teaching, Leadership and Governance in Further Education' identifies a number of measures designed to address the "variable" (2018: 12) quality of teaching across the sector. These include mandatory CPD, mentoring and coaching (2018:45), frequent observations of teaching by management, adherence to a set of professional standards and the requirement that teachers become "reflective practitioners" (2018:44). Nevertheless, such recommendations arguably do not go far enough in addressing issues that unfortunately plague the sector, such as staff burnout, low staff retention and excess workload (Ofsted, 2019). Moreover, the report itself acknowledges the need for greater evidence-based research into the impact of teaching qualifications on professionalising the sector (2018:97).

Avis et al. (2012), who have researched this deeply, suggest that - in common with VET per se - the training for VET teachers is limited by a standard-driven

agenda, with the emphasis on compliance with standard measures and regulatory frameworks, confinement to a narrowly technical and limited curriculum, and an obsession with rigid generic pedagogies. This puts VET teachers in a position of prioritising inspection and assessment at the expense of engaging with important educational and socio-economic issues. These points have been made previously by Avis et al. (2011), when such limitations were seen as emanating from the rigidly standards driven agenda of VET. Avis et al.'s (2010) survey of universities in England provided evidence to support these conclusions and suggested that the UK has been criticised for complex but inefficient professional standards, managerialism and performativism in VET.

Misselke (2022) conducted interviews with teachers of VET and revealed that the development of generic rather than specialised models for different professions has left teachers increasingly stressed and feeling disconnected from their profession, undermining their self-awareness. Similarly, Esmond and Wood (2017), also pointed out that dual qualification system (teachers having both vocational and educational qualifications) VET teachers are facing the ordeal brought about by the conflict between the two modes of identity and practice, and that VET teacher training needs to be adapted in terms of organisational arrangements, and resource allocation in order to improve the situation of VET teacher.

However, England's emphasis on specific occupational competencies is not completely unwarranted. For instance, Hamilton Broad (2015) has demonstrated in considerable detail how vocational teachers are continually obliged to maintain the currency of their vocational knowledge while ensuring its breadth by participating in circular networks that expansively incorporate classroom, workshop and digital space. This ability to manage dual professional identities - as educators and professionals practicing trades - ensures they maintain the ability to deliver professionally-relevant courses, based on valuable vocational knowledge, skill and experiential networks. This may explain the finding of Lucas and Nasta (2010), the poor professional development of FE teachers is not only due to the failure of the institutions

that are supposed to play a moderating role, but also to the fact that FE teachers themselves do not identify with the status of a generalist teacher. Lucas and Nasta (2010) explain that there are also divisions between large FE colleges, adult education providers and sixth form colleges. This in turn reflects the diversity of higher education, the tensions between different disciplines and vocational specialisms, and the division of labour between the large number of full-time and part-time teachers (Lucas and Nasta, 2010).

Excluding the controversy over whether or not there is an over-emphasis on professional competence, another problem lies with the disadvantaged circumstances of VET teachers receiving professional training. 90% of trainees are employees, some of whose positions are unstable, while some received government grants to train (Avis et al, 2012). Ertl and Kremer (2006) stated that on-the-job training is often hampered by lack of time, heavy teaching loads, teacher turnover, lack of equipment and conditions, inefficient communication as well as information exchange with qualification developers. Tedder and Lawy (2009) identified problems in teacher training at a more specific level: firstly, the lack of definition of FE leads to a lack of basis for conducting training, and secondly, there is a lack of guidance for training to develop to ensure conformity with required teaching standards and the normative behaviours expected of teachers.

### **3.3.2 Training of VET teachers in China**

Vocational education training in China is much less developed than in England. Li (2016) concluded after a survey of universities that the overall design of training programmes for VET teachers were, to a considerable extent, problematic in terms of goals, recruitment, treatment and pre-employment training, and professional title system, (which refers to the teacher's accreditations based on their academic achievements). Similarly, He et al. (2016) also mentioned that the laws related to vocational education are too general, the evaluation system is unreasonable, the legal status, reputation and salary of VET teacher are low, and the certification method lacks diversification

Specifically on certification, Xue and Li (2022a) summarised that, to date, the country has not introduced any standards of VET teacher qualification examination, and has not yet formulated the management system of the teaching force. The lack of targeted implementation of reforms suited to vocational education has led to a shortage of its teachers.

The evidence of issues in Chinese VET teacher training will be further detailed below. The shortage of VET teachers has clearly made the teacher-student ratio in vocational education disproportionate and, as Xue and Li (2022a) pointed out, far from meeting the national standard requirements, where the vast majority of existing teachers' qualifications do not meet the national standard, that is to say, a master's degree. Bünning et al. (2022) suggested that, due to the high educational requirements (master's degree) for new teachers and the competitive salaries offered by companies, less than 20% of bachelors are able or willing to work in secondary vocational schools. Zhao (2016)'s data presents the same picture: that high-performing and talented students often eschew the vocational education sector. Vocational education teachers tend to be composed of students from related subject or former private sector staff. Only 20% of these teachers come from vocational education training programmes.

That means in China a huge portion of teachers are employed without possessing a teacher-training qualification training thus they often either lack teaching skills and confidence, or theoretical knowledge of relevant pedagogical foundations, which means they are only able to perform the role sub-optimally to the detriment of their students. (Wu and Liu, 2023). Such a lack of professional accreditation is also discussed by Xue and Li (2022b), who argue that this makes it difficult for teachers to display competence and gain respect in the position of vocational education teachers. Kuang (2014) makes a similar point about the lack of qualified people in both the fields of vocational education and educational training and argued that lack of certification it makes training less specialized.

It is worth noting that in England, as mentioned in 3.3.1, there is not such a

high level of general academic qualifications required of VET teachers, nor has there been any literature on the lack of certification it makes training less specialized.

In addition to purely academic requirements, there are also special dual-qualified teachers in China, that is to say teachers with both a professional degree and a teaching qualification. Bünning et al. (2022) stated that, although dual-qualified teachers are ideal VET teachers from the government's standpoint, they make up less than one-third of the overall teaching force. This figure is favourable compared to just over 20% in Shanghai according to data from a survey conducted by Kuang (2014)'s survey. Kuang (2014) also reported that 82% of teachers entered the vocational education teaching profession directly after university; less than 20% had experience of working in a business and an even smaller proportion had experience of working in a related field. Kuang (2014) concluded that the sample shows that vocational education as a whole is underrepresented, with low vocational and teaching competencies. Also worth noting is that Shanghai is already one of the most economically developed cities in China, with a comparatively greater number of more educational resources; this suggests that the standing of vocational education is likely to be worse in other regions.

This lack of accreditation may contribute to the lack of esteem generally in which vocational education is held mentioned in 3.1.3.1 as it is not perceived as a professional and proper career choice.

VET teacher training also faces many difficulties on a specific level. Xue and Li (2022a) point out that, firstly, there is an overall lack of funding due to lack of government attention to this educational sector. Secondly, the existing opportunities for teacher training are very limited; even some long-serving teachers have never attended training, and there is a tendency towards formality in both training and assessment, which means that both the providers and receivers of VET teacher training are intentionally or unintentionally not seriously involved in the process, resulting in ineffective training. At the same

time, Xue and Li (2022a) also found that most of these training opportunities are short-term, which means long-term, macro planning aspects are missing, leading to unsatisfactory results. In addition, the training methods also lack diversification, with heavy reliance on theoretical training and very few practical opportunities. Enterprises also do not want to use their own resources to train teachers to occupy productive positions, thus would only offer laborious and basic positions (Xue and Li, 2022a).

Moreover, Kuang (2014) observes that the provision of teacher training is uneven and of variable quality across institutions and that the management, evaluation, and training of vocational teachers in China are oriented towards their general (academic) education and narrow competency in vocational skills (Kuang, 2014).

Perhaps largely part because of these problems, Zhang, et al., (2022)'s regression analyses came to the startling conclusion that even the measures put in place by the VET providers intended to support the teacher were counterproductively found to have actually negatively impacted their professional competence. Xue and Li's (2022a) research even found that many teachers continued to carry heavy teaching loads during their training period, which may have impacted the effectiveness of the training. Kuang (2014) also acknowledged that vocational teachers are under tremendous work pressure during training.

This section presents findings from the literature related to binational VETs on three themes, and the next section will be a comprehensive discussion of these findings.

## **4 Discussion**

This section will summarize, interpret and attempt to explain the findings of the literature review chapter. It will also discuss the limitations and implications of the study, and finally propose some suggestions for future research.



#### 4.1 Summary of Findings

As illustrated in the last section, there are a number of themes which can be seen to emerge from this reading. In this paper, we will focus on the similarities and differences between the England and China in three areas of vocational education, qualification systems, apprenticeships and teacher training.

Firstly, the qualification systems for VET. For England, there are a large number of problems with vocational education accreditation qualifications. For example, the complexity of VET qualification (Raffe, 2014, Gambin and Hogarth 2015 and Fortwengel et al., 2019) which increases the difficulty of choice for students on the one hand, and confuses teachers and employers on the other (Misselke, 2022, Spours et al., 2009, Baldwin et al., 2020, Dalby and Noyes 2018).

In addition, the qualifications have unreasonable criteria with conflicting aims; they impose compulsory requirements for advanced levels of literacy and numeracy grades; and they are overstructured, which makes teaching and learning very complicated (Isaacs, 2005). Moreover, qualifications in general follow a set of predetermined criteria, supplemented by a plethora of educational evaluations and other instruments that narrowly limit the content of education (Avis et al., 2011 and Higham, 2013).

In China, the qualification system and evaluation system of the qualification system of VET are not perfect and lack of unified standard (Shi et al., 2023). For example, the professional design of VET institution is imperfect (Xue and Li ,2022a), the relevant systems and laws and regulations are lacking (Wu and Liu, 2023) and inspection is not in place (Xiong, 2013). Meanwhile, the design of the curriculum is detached from the practical conditions of VET in China such as the lack of resources and manpower (Tang and Shi 2016 and Guo and Lamb 2010).

There are other common features of VET qualification system in China (Wu and Liu, 2023 etc.) and England (Misselke, 2022 etc.), such as the lack of recognition

of vocational education degrees in many sectors of the labour market. Specifically, according to interview of employers there is a prevailing perception among employers that graduates from VET in industry (Li and Sheldon, 2014) and economics (Hippach-Schneider, 2013) are not prepared for work and lack technical skills. Furthermore, even though employers find that there is no significant difference in the work ability of students graduating from conventional academic pathways and vocational education, employers are more likely to recruit graduates from academic pathways (Wang and Wang 2023; Hippach-Schneider, 2013).

Secondly the apprenticeships system exists in both China and England should be considered. Since the twenty-first century, the UK's government has been pushing hard for its apprenticeship system, hoping to supplement the UK's high-quality workforce (UK Government, 2021, Department for Education 2010, Department for Education, 2022). However, instead of expanding as much as hoped under the government's ambitious plans, the number of students (Gambin and Hogarth, 2018) and businesses (Fleckenstein, and Lee, 2017 and Fortwengel et al., 2019) enrolling in apprenticeships were both falling. For example, following the apprenticeships levy reforms of 2016, the number of apprenticeships fell from around 4.5 million to less than 4 million in just one year and the companies' own employees in apprenticeships rose about 10% (Gambin and Hogarth, 2018).

Apprenticeships in England also lack the component of a credible employment commitment between employers and learners (IFF Research. 2017a and IFF Research. 2017b), which may also contribute to the lack of motivation for students to participate in them.

In China, however, apprenticeships are at an early stage of development and are mainly based on irregular and flexible working arranged by VET providers and students themselves since the relevant laws, regulations and systems are quite piecemeal (Shi et al., 2023). Apprenticeships in China also lack employer involvement (Zuo and Xu 2023; Shi et al., 2023), although for slightly different

reasons than in England. Employers in China are reluctant to participate in apprenticeships because of restrictions on firms and the fact that companies themselves are not short of talent (Zhang, 2021), difficulties for employers in obtaining subsidies (Qiu, 2023; Luo et al., 2023) or want to keep their business secret (Kuang, 2014).

In addition to the lack of employers, there are some commonalities between China (Guo and Lamb, 2010) and England (Fortwengel et al., 2019; Ante, 2016, and Hogarth, 2011 etc.). For instance, the low quality of apprenticeships currently offered. Another commonality is that companies in both countries often prefer to train and employ staff internally rather than accept a young VET student into their ranks (Gambin and Hogarth, 2018; Zhou and Xu, 2023).

Finally, VET teacher training in China and the England were compared. VET teacher training in the UK is relatively well developed, accepting more diverse qualifications and focusing on professional competence (ET Foundation, 2022; Hanley and Orr, 2019) while VET teacher training in China suffers from a serious lack of legal and institutional development and an inadequate system (Li, 2016; He et al., 2015; Xue and Li, 2022a).

Both countries also have similar phenomena in VET teacher training. For example, in training practice both design and implementation are also characterised by a lack of professional models, well-developed curriculum items and reliance on incidental learning (Xue and Li, 2022a; Misselke, 2022; Esmond, 2017). There is also the problem that VET teacher training in both countries is characterised by a predominantly generic model with a narrow definition of vocational competence (Kuang, 2014; Avis et al., 2012). In addition, vocational teachers in both China (Xue and Li, 2022a; Kuang, 2014) and England (Ertl and Kremer, 2006) reported that their burdens, such as the teaching and administrative load, were heavy and affected the effectiveness of their training.

Overall, VET in both China and England had many problems in certain areas and had much in common. As mentioned earlier, VETs in both countries face a lack

of resources, low recognition, and low output on all sides. England seems to be ahead of China from the perspective of government-driven practices in the development of VET. At the same time, both seem to intend to adopt a centralised model of strong government intervention. The status quo in England illustrates for us the potential risk that good intentions do not necessarily produce practical results, but can create burdens for the education system.

#### **4.2 Research Limitations**

In addition to some of the limitations rooted in the research methodology already mentioned in the methodology section, such as the subjectivity of the researcher and the limitations of the search methodology, there are a number of other factors that limit the discussion in this dissertation.

For example, many of the studies on English vocational education are mainly qualitative with limited sample sizes and may not therefore reflect the overall picture or allow for generalisations to be made from their findings. Moreover, there are a wide range of further education qualifications in England, but the available research tends to focus on a particular trade or school, which makes it difficult to ascertain a comprehensive overview of the sector. In China, although there is a considerable amount of quantitative research on qualifications, there is a relative lack of both qualitative and quantitative research on apprenticeships, which is probably related to the less developed nature of vocational education in China. Moreover, vocational education in China is relatively diverse, existing at several stages of education and varying greatly between institutions in different regions, which makes it difficult to make generalisable conclusions. In addition, the demographics of the two countries are very different, as are their employment environments and cultural attitudes, which make it challenging to unproblematically transpose lessons from one country onto the other.

Secondly, this study does not differentiate according to the wide array of courses offered by VET providers. Although many of the observations made in relation to VET are generalised from the literature review, there is a possibility

that some bias may exist in results, as the specific situation is not delineated according to the full range of trades or industries, which means this dissertation cannot offer a more nuanced subject-specific discussion of VET.

Another limitation is that this dissertation focuses very much on specific aspects of VET (e.g., teacher training, apprenticeship, qualifications) and there are other themes it overlooks such as: student engagement and progression, collaboration with employers and communities, managerial structures and inspections etc. Even within the themes of this dissertation, these researches tend to focus on the historical and philosophical model of apprenticeship with reference to Confucianism/quantifies statistics on apprenticeships/interviews masters/managers of firms offering apprenticeships rather than giving insight into the subjective experiences of apprentices.

In addition, due to requirement of university to look only at academic literature published in English language, there are potentially many Chinese studies that are overlooked. Finally, as this dissertation is a time-limited postgraduate project, it is necessarily limited in terms of the amount of research material it can encompass and the analytical expertise of the researcher.

In terms of results, what this dissertation may be able to do is to summarise the current situation of VET in both countries in relation to various themes, which will contribute to cross-cultural understandings of VET and finally reveal some possible insights. Further questions, such as the causes of some of the phenomena that have emerged, are less addressed in this dissertation and can only be answered through further analyses available in the existing literature. There are also some questions that cannot be answered by this dissertation due to the lack of relevant literature and research. For example, why VET qualifications in both countries are still often undervalued, or even unrecognised by companies compared to those held by school leavers of other sectors, and the reasons for the issues relating to the unintentionally negative impacts of attempts of VET providers to provide professional development opportunities for VET teachers in China. This leads me to a discussion on a

particular topic. This leads to my discussion of a topic being incomplete.

### **4.3 Research significance**

As described in the introduction, England has been making a major push to improve the low status and underperformance of its vocational education and has been introducing many reforms in educational practice. Such initiatives are perceived to be centralised and to strengthen the influence of government. However, the government's efforts are too lacking in vision and comprehensive deployment. As can be seen in 1.2.2, such a varied and complex VET system, and the high degree of policy churn, has unfortunately produced a culture of managerialism and performativism. When many of these policies are translated into educational practice, there is considerable pressure facing individual institutions to conform to a generic paradigm of uniform, abstract standards, a narrow concept of vocational education, often tailored toward enhancing student employability rather than teaching them to become trade and occupation professionals, and other very specific issues that affect the effectiveness of VET. The various stakeholders - students, parents, employers and society per se - are still uninspired by VET, nor does it enjoy a reputation of being significantly effective. Indeed, a chronological study of the state of VET in England, since its vigorous reform at the beginning of the twenty-first century, warns of the dangers of alternating government administrations blindly enacting policy changes and the importance of taking into account possible difficulties in designing and implementing them.

China, too, is making great efforts to develop its vocational education, particularly with its recent introduction of mandatory requirements. However, the actual development of vocational education is still at an exploratory stage and unevenly enacted, with no concrete and comprehensive system in place in all regions. It may be that China's current efforts to standardise and centralise vocational education, as described in the Introduction, are intended to improve the social standing of VET. However, analysis of the current state of English vocational education represents a timely wake-up call for VET policymakers in

China.

Many of the problems that currently exist in China still exist in England. The source of some of the issues faced by China's VET system, despite the continued efforts of policy-makers, can be identified as rooted in their failure to take a long-term perspective view and develop sustainable, practical policies. Without a significant change in direction, it could lead to a future for VET in China that looks startlingly similar to the scenario as in England - a gamut of complex and rapidly-enacted policies divorced from the realities of college life, tired and overwhelmed teachers and students, and disillusioned employers.

#### **4.4 Suggestions for Future Research**

After much analysis and discussions, this dissertation attempts to suggest possible valuable future research directions for VET research in England and China respectively.

For England, we have already seen in the 1.1 some issues that are worth exploring for future research are: a) the complex and rapidly-changing VET policies and the subsequent disruption caused; b) ways to address the many quality problems across the sector; c) reasons for and ways to address, the low social status of VET. Future research may be able to further explore the reasons behind these interrelated phenomena. For example, by exploring VET-related stakeholders' understanding of VET policy, and the factors that influence the extent of acceptance of the policy, it may also be possible to explore the specifics of the low status of VET-related topics and identify reasons for this. Regarding the poor reputation of VET, the various factors that influence the low recognition of VET in the society can also be further explored.

For China, there are some similar issues that deserve future research. For example, a) the incomplete legal and institutional construction of the VET system; b) overall quality assurance issues pertaining to VET; c) low societal recognition of VET. Subsequent research could be less theoretical and more oriented to exploring empirical issues in actual VET practice, such as an in-

depth study of the actual faculty and equipment in VET providers in order to facilitate the design of programmes from a curricular and pedagogical point of view. The specifics and causes of the low quality of VET-related instructional delivery, and the various factors that influence the low recognition of VET in society, could likewise be the direction of research.

The findings of this dissertation provide some inspiration for future research and policies. For example, reforms to VET need to take into account the actual effects of implementation, administrative and educational costs, and consider how to ensure that VET improves in fulfilling its role of preparing students to enter the workforce. In addition, from a long-term perspective, it seems that some of the current problems in vocational education need to be examined more from the perspective of those outside of vocational education. The lukewarm attitude towards apprenticeships and qualification systems in both settings, where it is widely believed that there is no big difference in professional abilities between general school leavers and vocational students, suggests that there are variables beyond mere professional abilities that influence the way society makes judgements. These factors may include higher expectations of the so-called "general competence" of the average school graduate, or they may be the result of simple screening practices. Behind such a phenomenon, there may also be socio-industrial and demographic influences that deserve to be explored in subsequent research and policy to better understand the current state of vocational education and promote its development.

## **5 Conclusion**

To summarise, after a literature review, this dissertation examines VET in China and England in relation to three themes, namely qualifications, apprenticeships and teacher training. Many commonalities were found, such as VET in both countries aiming for a standardised system, low social acceptance in both, performativism, quality issues in the practice of VET education per se, apprenticeships and teacher training, and VET neglecting the holistic



development of students.

In addition to this, the VET system in England suffers from an over-emphasis on the paradigm of standardisation and excessive assessment and evaluation. China's VET, on the other hand, reflects more of the overall imperfections in legal and institutional development.

This dissertation explores and compares the situation of vocational education in the two countries in a comprehensive and specific way. The situation in England and China is unique in that China's VET system is to a certain extent modelled on the English model, while the overall construction of the VET system is relatively late compared to that of England. The comparison of such perspectives has not been done by other studies and may provide some insights into VET in both countries.

Both the UK administration (Department of Education, 2016) and China's government (the National People's Congress (NPC) of the People's Republic of China, 2022) have attached great importance to the development of VET. Based on the results summarised in the literature review, this dissertation presents some possible recommendations for VET. The recommendations are presented as follows.

Firstly, both countries should investigate in more depth the effect and state of the implementation of VET policy and carry out reforms. One of the aims of the reform should be to improve the quality of all aspects of VET in general, to improve the design of teaching and learning, to optimise departmental co-ordination and school-enterprise communication. In addition, for England, this should be used to reduce formalism and excessive performance appraisal, while for China, more consideration should be given to the feasibility and practicality of the policy at the grassroots level of VET. VET's promotion of students' all-round development should also be safeguarded, and appropriate teaching and learning contents should be set up and their implementation should be guaranteed through bespoke systems and policies.

Secondly, both countries should try to improve the reputation of VET and increase opportunities available to VET graduates and teachers, as well as encouraging the public to participate in VET. Doing so should help boosting the income of the corresponding trades and guaranteeing the employment commitment of apprenticeships. This will not only enhance the recognition of vocational education, but will also likely increase people's motivation towards VET.

In order to encourage VET teachers to participate in training and to guarantee the effectiveness of VET teachers training, the teaching tasks of VET teachers should also be adjusted. CPD opportunities should also be rationalised to make them available to teachers and institutions that really need them.

For policymakers in England, the VET system should be optimised through reform. Not only should it enhance transparency and simplify its complex system of qualifications to minimise confusion among the public and avoid the drain on resources caused by periodic policy iterations.

For China, perhaps the most obvious problem is the imperfection of the overall structure, and the regional unevenness of VET quality. The government can further promote the VET system with reference to lessons gleaned from studying various international VET systems and applying the recommendations of relevant research.

## Reference list

Ante, C. & Springerlink (2016). *Europeanisation of Vocational Education and Training*, Springer International Publishing.

Augar, P. 2019. Independent panel report to the review of post-18 education and funding. Post-18 education and funding review panel.

- Avis, J., Canning, R., Fisher, R., Morgan-Klein, B. & Simmons, R. (2011). 'Vocational education teacher training in Scotland and England: policy and practice'. *Journal of vocational education & training*, 63, 115-127.
- Baldwin, J., Raven, N., Webber - Jones, R. & Springerlink (2022). *Managerial Cultures in UK Further and Vocational Education: Transforming Techno-Rationalism into Collaboration*, Cham, Springer International Publishing.
- Billett, S. 2011. Vocational Education: A Field and Sector of Education. In: BILLETT, S. (ed.) *Vocational Education: Purposes, Traditions and Prospects*. Dordrecht: Springer Netherlands.
- Billett, S. & Springerlink (2011). *Vocational education: purposes, traditions and prospects*, New York;Dordrecht;, Springer.
- British Educational Research Association (2018). *Ethical Guidelines for Educational Research, fourth edition*. at <https://www.bera.ac.uk/publication/ethical-guidelines-for-educational-research-2018> (last access: 12 Mar 2023).
- Broad, J. H. (2016). 'Vocational knowledge in motion: rethinking vocational knowledge through vocational teachers' professional development'. *Journal of Vocational Education & Training*, 68, 143-160.
- Bünning, F., Spöttl, G., Stolte, H. & Springerlink (2022). *Technical and Vocational Teacher Education and Training in International and Development Co-Operation: Models, Approaches and Trends*, Singapore, Springer Nature Singapore.
- Cheng & Han. (2023). Exploration of high-level apprenticeship talent cultivation mode with Chinese characteristics based on SWOT analysis. *Education and Career*, 2023, No.1033(09):27-35.

- City & Guilds (2023). *Qualification-explained*. at <https://www.cityandguilds.com/qualifications-and-apprenticeships/qualifications-explained> (last access: 9 Aug 2023)
- Coffield, F. (2008). 'Just suppose teaching and learning became the first priority – London'. *Learning and Skills Network*.
- Dalby, D. & Noyes, A. (2018). 'Mathematics education policy enactment in England's Further Education colleges'. *Journal of vocational education & training*, 70, 564-580.
- Daley, M., Orr, K. & Petrie, J. (2015). *Further education and the twelve dancing princesses*, London, Institute of Education Press.
- Department for Business, Innovation and Skills (2016). *Understanding the Further Education Market in England*. at [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/544310/bis-16-360-fe-market-england.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/544310/bis-16-360-fe-market-england.pdf) (last access: 12 Aug 2023)
- Department for Education of England (2018). Teaching, leadership and governance in Further Education Research report at [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/680306/Teaching\\_\\_leadership\\_and\\_governance\\_in\\_Further\\_Education.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/680306/Teaching__leadership_and_governance_in_Further_Education.pdf) (last access: 12 Aug 2023)
- Department of Education of England (2022) Guidance: Teach in further education at <https://www.gov.uk/guidance/teach-in-further-education#find-a-teaching-qualification> (last access: 12 Aug 2023)
- Department of Education of China (2023). *National Statistical Bulletin on the Development of Education of 2022* at: [https://www.gov.cn/govweb/lianbo/bumen/202307/content\\_6890116.htm](https://www.gov.cn/govweb/lianbo/bumen/202307/content_6890116.htm) (last access: 9th Aug 2023)

- Dempsey, K. & Tran, L. T. 2017. Internationalization with VET Character: Key Emerging Issues. In: TRAN, L. T. & DEMPSEY, K. (eds.) *Internationalization in Vocational Education and Training: Transnational Perspectives*. Cham: Springer International Publishing.
- Duan, H. et al. (2023). The traditional crisis of apprenticeship system with Chinese characteristics under the perspective of modernisation process and the way to solve it. *Vocational and Technical Education*, 2023, 44(04):18-23.
- Education & Training Foundation (2022). *FE TEACHER RECRUITMENT AND THE LANDSCAPE OF FEat*: [https://www.et-foundation.co.uk/wp-content/uploads/2022/06/ETF003\\_Teacher\\_Report\\_v6.pdf](https://www.et-foundation.co.uk/wp-content/uploads/2022/06/ETF003_Teacher_Report_v6.pdf) (last access: 12 Aug 2023)
- Ertl, H. & Kremer, H. H. (2006). 'Curricular Reform and College-Based Innovation in Vocational Education and Training in England and Germany'. *Research in comparative and international education*, 1, 351-365.
- Esmond, B. (2018). "They get a qualification at the end of it, I think': incidental workplace learning and technical education in England'. *Journal of vocational education & training*, 70, 193-211.
- Esmond, B. & Atkins, L. (2020). 'VET realignment and the development of technical elites: learning at work in England'. *International journal for research in vocational education and training*, 7, 193-213.
- Esmond, B. & Wood, H. (2017). 'More morphostasis than morphogenesis? The 'dual professionalism' of English Further Education workshop tutors'. *Journal of vocational education & training*, 69, 229-245.
- Essay, G. (2015). 'UK apprenticeships: opportunity or exploitation?'
- Feather, D. (2013). 'Has Cinderella Become so Fragmented That She Can No Longer Identify her Area of Expertise'. *European journal of education*, 48, 586-596.

- Fisher, R. & Saunders, M. 2017. International Students and Further Education Colleges in England: The Context, Policy Tensions, and Some Aspects of Practice. In: TRAN, L. T. & DEMPSEY, K. (eds.) *Internationalization in Vocational Education and Training: Transnational Perspectives*. Cham: Springer International Publishing.
- Fisher, R. & Simmons, R. (2012). 'Liberal conservatism, vocationalism and further education in England'. *Globalisation, societies and education*, 10, 31-51.
- Fleckenstein, T. & Lee, S. C. (2018). 'Caught up in the past? Social inclusion, skills, and vocational education and training policy in England'. *Journal of education and work*, 31, 109-124.
- Fortwengel, J., Gospel, H. & Toner, P. (2021). 'Varieties of institutional renewal: the case of apprenticeship in the US, England, and Australia'. *Journal of vocational education & training*, 73, 71-94.
- Gambin, L. & Hogarth, T. (2021). 'Employers' behavioural responses to the introduction of an apprenticeship levy in England: an ex ante assessment'. *Journal of vocational education & training*, 73, 476-501.
- Gove, M. 2010. The Importance of Teaching the Schools White Paper 2010. London: TSO Information & Publishing Solutions.
- Great Britain. National Audit, O. (2012). 'Adult apprenticeships: estimating economic benefits from apprenticeships.
- Guba, E. G. & Lincoln, Y. S. (1994). 'Competing paradigms in qualitative research'. *Handbook of qualitative research*, 2, 105.
- Guo, Z. & Lamb, S. (2010). *International comparisons of China's technical and vocational education and training system*, London;Dordrecht, Springer.

- Halsall, R. & Cockett, M. (2012). *Education and training 14-19: chaos or coherence?* London, Routledge.
- Hanley, P. & Orr, K. (2019). 'The recruitment of VET teachers and the failure of policy in England's further education sector'. *Journal of education and work*, 32, 103-114.
- Hansen, M. H. & Woronov, T. E. (2013). 'Demanding and resisting vocational education: a comparative study of schools in rural and urban China'. *Comparative education*, 49, 242-259.
- Hao, T. & Pilz, M. (2021). 'Attractiveness of VET in China: a study on secondary vocational students and their parents'. *Journal of Education and Work*, 34, 472-487.
- He, Z., Xie, L. & Li, Y. 2017. On the Improvement of School-Enterprise Cooperation (SEC) in China. In: PILZ, M. (ed.) *Vocational Education and Training in Times of Economic Crisis: Lessons from Around the World*. Cham: Springer International Publishing.
- Higham, J. J. S., Kremer, H. H. & Yeomans, D. 2013. Exploring Intermediate Vocational Education and Training for 16-19-Year-Olds in Germany and England. In: DEITMER, L., HAUSCHILDT, U., RAUNER, F. & ZELLOTH, H. (eds.) *The Architecture of Innovative Apprenticeship*. Dordrecht: Springer Netherlands.
- Hippach-Schneider, U., Weigel, T., Brown, A. & Gonon, P. (2013). 'Are graduates preferred to those completing initial vocational education and training? Case studies on company recruitment strategies in Germany, England and Switzerland'. *Journal of Vocational Education & Training*, 65, 1-17.

- Hodgson, A. (2015). *The coming of age for FE?: reflections on the past and future role of further education colleges in England*, London, Institute of Education Press.
- Hogarth, T., Gambin, L. & Hasluck, C. (2012). 'Apprenticeships in England: what next?'. *Journal of vocational education & training*, 64, 41-55.
- Howcroft, D. (2017). 'Graduates' vocational skills for the management accountancy profession: exploring the accounting education expectation-performance gap'. *Accounting education (London, England)*, 26, 459-481.
- Isaacs, T. (2013). 'The diploma qualification in England: an avoidable failure?'. *Journal of vocational education & training*, 65, 277-290.
- Koo, A. (2016). 'Expansion of vocational education in neoliberal China: hope and despair among rural youth'. *Journal of education policy*, 31, 46-59.
- Kuang, Y. (2014). 'Problems and Trends Regarding Vocational Teachers in China'. *Chinese education and society*, 47, 38-46.
- Liang, Y. (2020). Changes in the rate of return of secondary vocational education in China since the 1990s-analysis based on CHNS data. *Education Academic Monthly*, 2020, No.337(08):3-9+31.
- Li, J. 2017. *What Does It Mean to Be Vocational Teachers in China - Results from a Survey Among Chinese Vocational Teachers*. Springer International Publishing.
- Li, J. & Springerlink (2013). *Pre-vocational education in Germany and China: a comparison of curricula and its implications*, Wiesbaden, Springer VS.
- Li, Y. & Sheldon, P. (2014). 'Collaborations between foreign-invested enterprises and China's VET schools: making the system work amid localised skill shortages'. *Journal of Vocational Education & Training*, 66, 311-329.



- Li, Z., Zheng, J. & Xiong, J. (2023). 'Examining Project-Based Governance of Higher Vocational Education in China: A Case Study'. *Higher education policy*, 36, 250-269.
- Li, Y. and Zhou, J. (2021). Research on the impact of secondary vocational education on farmers' income in China--an empirical analysis based on CLDS2016. *Journal of Henan Institute of Science and Technology*, 2021,41(10):37-44.
- Lloyd, C. & Payne, J. (2012). 'Raising the quality of vocational teachers: continuing professional development in England, Wales and Norway'. *Research Papers in Education*, 27, 1-18.
- Luo, T. et al. (2023) Research on the cost sharing mechanism of participating subjects of apprenticeship system with Chinese characteristics - based on the perspective of three-party evolutionary game. *Education and Career*,2023, No.1028(04):76-82.
- Loyalka, P., Huang, X., Zhang, L., Wei, J., Yi, H., Song, Y., Shi, Y. & Chu, J. (2016). 'The Impact of Vocational Schooling on Human Capital Development in Developing Countries: Evidence from China'. *The World Bank Economic Review*, 30, 143-170.
- Lucas, N. & Nasta, T. (2010). 'State regulation and the professionalisation of further education teachers: a comparison with schools and HE'. *Journal of vocational education & training*, 62, 441-454.
- Mazenod, A. (2016). 'Education or training? A comparative perspective on apprenticeships in England'. *Journal of vocational education & training*, 68, 102-117.
- Minglun, W. (2017). 'An Empirical Analysis of the Development of China's Higher Vocational Education'. *Chinese education and society*, 50, 429-440.

- Misselke, L. (2022). 'What will T levels change? The portrayal of technical and vocational education in England: tensions in policy, and a conundrum for lecturers'. *Journal of Vocational Education & Training*, 74, 708-708.
- Mittwede, S. K. (2012). 'Research paradigms and their use and importance in theological inquiry and education'. *Journal of Education and Christian Belief*, 16, 23-40.
- Office for Standards in Education (2019). *Teacher well-being at work in schools and further education providers at:*  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/936253/Teacher\\_well-being\\_report\\_110719F.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/936253/Teacher_well-being_report_110719F.pdf) (last access: 10 Aug 2023)
- Office for Standards in Education (2023). *Guidance: Further education and skills handbook (2023) at:*  
<https://www.gov.uk/government/publications/further-education-and-skills-inspection-handbook-eif/further-education-and-skills-handbook-for-september-2022#skills-needs> (last access: 12 Aug 2023)
- Ogden, W. R. (1990). 'Vocational Education: A Historical Perspective'. *The High School Journal*, 73, 245-251.
- Orr, K. (2020). 'A future for the further education sector in England'. *Journal of Education and Work*, 33, 507-514.
- Orr, K. & Simmons, R. (2010). 'Dual identities: the in-service teacher trainee experience in the English further education sector'. *Journal of Vocational Education & Training*, 62, 75-88.
- Paré, G. & Kitsiou, S. (2017). 'Handbook of eHealth Evaluation: An Evidence-based Approach'. *National Library of Medicine at:*  
<https://www.ncbi.nlm.nih.gov/books/NBK481583/> (last accessed: 12 Aug 2023)

Petrie, J. (2015). 'Introduction: How Grimm is FE?'. *Further education and the twelve dancing princesses*, 1-12.

Pilz, M. & Li, J. (2012). 'What Teachers in Pre-vocational Education Should Teach and What They Actually Teach: A Comparison of Curricula and Teaching in Germany and China'. *Research in comparative and international education*, 7, 226-247.

Pilz, M. & Li, J. (2020). *Comparative vocational education research: enduring challenges and new ways forward*, Wiesbaden, Springer VS.

Powell, P. & Walsh, A. (2018). 'Whose curriculum is it anyway?: Stakeholder salience in the context of degree apprenticeships'. *Higher education quarterly*, 72, 90-106.

Preckler Galguera, M. 2018. Contextualization of TVET in Education. In: PRECKLER GALGUERA, M. (ed.) *Globalization, Mass Education and Technical and Vocational Education and Training: The Influence of UNESCO in Botswana and Namibia*. Cham: Springer International Publishing.

Preckler Galguera, M. & Springerlink (2018). *Globalization, Mass Education and Technical and Vocational Education and Training: The Influence of UNESCO in Botswana and Namibia*, Cham, Springer International Publishing.

Qiu, T. (2023). Skill cultivation of modern industrial workers: development path, dilemma and way out-Observations based on apprenticeship practice in a manufacturing enterprise. *China Vocational and Technical Education*, 2023, No.848(16):89-96.

Raffe, D. (2015). 'First count to five: some principles for the reform of vocational qualifications in England'. *Journal of Education and Work*, 28, 147-164.

- Research, I. F. F. R. U. o. W. I. f. E. (2016). 'Apprenticeships evaluation 2015: employers'.
- Richardson, W. (2007). 'In search of the further education of young people in post-war England'. *Journal of vocational education & training*, 59, 385-418.
- Rifai, F. (2016). 'The German Dual Vocational Education and Training System Evaluate the transfer into the Jordanian educational System'.
- Schulte, B. (2013). 'Unwelcome stranger to the system: vocational education in early twentieth-century China'. *Comparative Education*, 49, 226-241.
- Shi, Y. et al. (2023). Research on apprentices' human capital investment policy in the context of apprenticeship system with Chinese characteristics. *China Vocational and Technical Education*, 2023, No.836(04):81-88.
- Spours, K., Hodgson, A., Brewer, J. & Barker, P. (2009). 'Improving progression for younger learners in further education colleges in England'. *Journal of vocational education & training*, 61, 431-446.
- Stalder, B. E., Choy, S. & Le, A. H. 2022. The Standing of Vocational Education: A Global Concern with Diverse Meanings and Implications. In: BILLET, S., STALDER, B. E., AARKROG, V., CHOY, S., HODGE, S. & LE, A. H. (eds.) *The Standing of Vocational Education and the Occupations It Serves: Current Concerns and Strategies For Enhancing That Standing*. Cham: Springer International Publishing.
- Stalder, B. E., Choy, S. & Le, A. H. 2022. The Standing of Vocational Education: A Global Concern with Diverse Meanings and Implications. In: BILLET, S., STALDER, B. E., AARKROG, V., CHOY, S., HODGE, S. & LE, A. H. (eds.) *The Standing of Vocational Education and the Occupations It Serves: Current Concerns and Strategies For Enhancing That Standing*. Cham: Springer International Publishing.

Tang, N. & Shi, W. 2017. Youth Employment and Technical and Vocational Education and Training (TVET) in China. *In: PILZ, M. (ed.) Vocational Education and Training in Times of Economic Crisis: Lessons from Around the World*. Cham: Springer International Publishing.

Tedder, M. & Lawy, R. (2009). 'The pursuit of 'excellence': mentoring in further education initial teacher training in England'. *Journal of vocational education & training*, 61, 413-429.

The Office for Standards in Education (2019). *Teacher well-being at work in schools and further education providers at:*  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/936253/Teacher\\_well-being\\_report\\_110719F.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/936253/Teacher_well-being_report_110719F.pdf) (last access: 12th Aug 2023).

The Office for Standards in Education (2023) *Guidance: Further education and skills handbook (2023)* access:  
<https://www.gov.uk/government/publications/further-education-and-skills-inspection-handbook-eif/further-education-and-skills-handbook-for-september-2022#skills-needs> (available at: 12 Aug 2023)

University of Glasgow (2023). *Code of Good Practice in Research at:*  
[https://www.gla.ac.uk/media/Media\\_490311\\_smxx.pdf](https://www.gla.ac.uk/media/Media_490311_smxx.pdf) (access: last access: 16 Mar 2023).

Vidal Rodeiro, C. & Vitello, S. (2023). 'Progression to post-16 education in England: the role of vocational qualifications'. *Research Papers in Education*, 38, 164-186.

Vidal Rodeiro, C. & Vitello, S. (2023). 'Progression to post-16 education in England: the role of vocational qualifications'. *Research Papers in Education*, 38, 164-186.

- Wang, G. (2022). 'Stepping into the labour market from the VET sector in China: student perceptions and experiences'. *Studies in Continuing Education*, 44, 392-408.
- Wang, G. (2022). '“Stupid and lazy” youths? Meritocratic discourse and perceptions of popular stereotyping of VET students in China'. *Discourse: Studies in the Cultural Politics of Education*, 43, 585-600.
- Wang, G. & Wang, Z. (2023). 'Vocational education: a poor second choice? A comparison of the labour market outcomes of academic and vocational graduates in China'. *Oxford review of education*, 49, 408-427.
- Webb, S., Bathmaker, A.-M., Gale, T., Hodge, S., Parker, S. & Rawolle, S. (2017). 'Higher vocational education and social mobility: educational participation in Australia and England'. *Journal of vocational education & training*, 69, 147-167.
- Webb, S., Bathmaker, A.-M., Gale, T., Hodge, S., Parker, S. & Rawolle, S. (2017). 'Higher vocational education and social mobility: educational participation in Australia and England'. *Journal of vocational education & training*, 69, 147-167.
- Wolf, A. (2011). 'Review of vocational education'. *London: DfE*.
- Wu and Xu. (2023). How to reduce the dropout phenomenon in apprenticeship: Perceptions and explorations from the international community. *China Vocational and Technical Education*, 2023, No.844(12):61-68
- Woronov, T. (2015). *Class Work : Vocational Schools and China's Urban Youth*, Palo Alto, UNITED STATES, Stanford University Press.
- Wu, M. & Liu, P. (2023). 'German “duale ausbildung” vocational education and its enlightenment to China’s vocational education'. *SHS Web of Conferences*, 166, 1001.

- Xiong, J. (2013). 'Institutionalization of Higher Vocational Education in China: A Neoinstitutionalist Perspective'. *Frontiers of education in China*, 8, 239-265.
- Yang, Y. & Chia, Y.-T. (2023). 'Reflection on China's higher vocational education entrance examination: lessons from the imperial examination in modern China'. *Asia Pacific education review*.
- Yi, H., Li, G., Li, L., Loyalka, P., Zhang, L., Xu, J., Kardanova, E., Shi, H. & Chu, J. (2018). 'Assessing the Quality of Upper-Secondary Vocational Education and Training: Evidence from China'. *Comparative education review*, 62, 199-230.
- Zhang, H. (2021). 'An Institutional Dilemma in China's Skills-development System: Evidence from Two Apprenticeship Reforms'. *The China Quarterly*, 248, 1103-1128.
- Zhang, Z., Tian, J., Zhao, Z., Zhou, W., Sun, F., Que, Y. & He, X. 2022. Factors Influencing Vocational Education and Training Teachers' Professional Competence Based on a Large-Scale Diagnostic Method: A Decade of Data from China. *Sustainability* [Online], 14.
- Zhao, H. et al. (2022). A new species of the genus *Pseudosciaena* (Coleoptera, Staphylinidae) from China. (2011). Has financial investment in vocational education narrowed the urban-rural income gap? --An analysis based on panel threshold effects. *Journal of Soochow University (Education Science Edition)* (04), 105-115.
- Zhou, H. & Lu, X. (2023). How to improve apprentice enterprise retention rate? --An empirical analysis based on the concept of vocational identity. *Science and Technology of Chinese Colleges and Universities*, 2023, No.413, No.414(Z1):114-120.

- Zhao, Z. & Xue, P. 2022. TVET Teacher Training in Transformation in China. *In: B NNING, F., SP TTL, G. & STOLTE, H. (eds.) Technical and Vocational Teacher Education and Training in International and Development Co-Operation: Models, Approaches and Trends.* Singapore: Springer Nature Singapore.
- Zhao, Z., Zhang, Z. & Rauner, F. 2017. KOMET-Based Professional Competence Assessments for Vocational Education and Training (VET) Teachers in China. *In: PILZ, M. (ed.) Vocational Education and Training in Times of Economic Crisis: Lessons from Around the World.* Cham: Springer International Publishing.
- Zuo, Y. and Xu, H. (2023). Realistic Dilemma, Practical Orientation and Mode Construction of Vocational Education Undergraduate Talent Cultivation - Based on the Perspective of High-level Apprenticeship System with Chinese Characteristics. *Modern Education Management*, 2023, No.395(02):94-103