Title

Opportunities and barriers with Vocational Education in a Secondary School in Wales: Teachers' Perspectives.

An investigation exploring the benefits and challenges teachers face when integrating vocational education/qualifications into the curriculum with recommendations of strategies to overcome the barriers.

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Declaration Form

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Name of the Programme of Study: Masters In Educational Studies

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DECLARATION

I certify that the whole of this work is the result of my individual effort, and that all sources have been acknowledged.

Signed .....KEdwards..... (Student)

Date .....01/01/25.....

DECLARATION

I am satisfied that this work is the result of the Student's effort.

Signed ..... (Lecturer)

Date .....

Abstract

This study explores the opportunities and barriers encountered by teachers in establishing vocational education within a secondary school context in Wales, aiming to generate actionable solutions for educational practice. Grounded in the evolving discourse on educational relevance (Hartas, 2010), the research adopts an interpretivist paradigm and employs a mixed-methods case study approach to capture the lived experiences of educators. Through the integration of quantitative data from exam entry statistics, qualitative insights from a questionnaire and semi-structured interviews with key stakeholders, the investigation delves into the complexities surrounding vocational education, highlighting the significance of social interactions and context (Thomas, 2022). Key findings reveal both the potential benefits such as enhanced student engagement and employability and substantial challenges, including entrenched stigma and inadequate institutional support. The study emphasizes the need for professional development and community engagement to foster an inclusive educational environment, ultimately aiming to inform policy and practice in Welsh vocational education. By addressing these critical aspects, the research aspires to contribute to a more equitable educational landscape, ensuring that all students can access high-quality vocational pathways and reach their full potential.

Key Words

Vocational, Education, Secondary Schools, Qualifications,

Contents

Contents

Introduction

The term 'vocation' refers to a type of work that one feels compelled to do, a calling to a specific job. Vocational education however, does not necessarily refer to education for a job that is a vocation. Vocational education is concerned with skills and knowledge to prepare learners for employment. According to the most recent United Kingdom (UK) Census, 18.2% of people in the United Kingdom have no qualifications and apprenticeships form the highest qualification for 5.3% of the population (ONS, 2023). It is therefore questionable whether the education system in the UK is suitable and providing a valuable inclusive education. With these statistics in mind it comes as no surprise that Vocational education is a topic that is widely debated and sometimes argued to be the potential solution (Psacharopoulos, 1997). Sainsbury (2016) explained that there was a need for vocational education to fix the UK's productivity problem, which is preventing economic growth, a productivity problem which he believed derived from a poorly trained workforce.

Haynes (2008) provides a comprehensive explanation of how vocational education has become increasingly important in the UK insinuating that the increase in vocational education at comprehensive level is a result of the UK historically performing less favourably against other European counties with reference to post-16 education and training. According to Machin and Vignoles (2006) it was this underperformance that prompted UK policy changes which actioned qualification reforms. The Green paper, 14-19 highlighted that vocational education is often undervalued and called for a range of vocational options for qualifications to be available for Secondary school students in the UK that have clear routes for progression into employment or higher education (DFES, 2002). Despite the introduction of GCSE courses in vocational subjects (DfE, 2015) many have made clear the stigma already present and remaining regarding the term 'vocational' for many involved in education (Haynes, 2008; Rodeiro and Vitello, 2020). Vocational education was often associated with those secondary students that are seen as less "academically endowed" (Tshabalala and Ncube, 2014, p10) or those who are unable to access academic subjects (Rodeiro and Vitello, 2020) and often treated as the inferior qualification (Bursnall et al., 2019). This profile of learner have often been offered vocational education in secondary school as an option for studies that will encourage gaining skills useful for future employment or adult life rather than pursuing an academic route (Psacharopoulos, 1997). This approach reflects the British class system of the early to mid-20th century, where working-class children were typically directed toward technical and vocational education while middle and upper-class children were steered toward

academic grammar schools, a division formalized by the Education Act of 1902 which established this two-tier secondary education system (Stephens, 1999). This class-based educational segregation was further entrenched by the tripartite system following the Education Act of 1944, which sorted students into grammar, secondary modern, and technical schools based on an examination taken at age eleven, with working-class children predominantly allocated to secondary modern and technical schools (Barber, 1994).

The DfE (2015) introduced Technical Awards, vocational qualifications that teach practical skills and applied knowledge which came alongside other qualification reform in the UK. Hyland (2002) note that despite various curriculum reforms and the increased range of vocational options for young learners, there remains a gap between what is seen to be academic versus what is vocational. This historic divide has been characteristic of the education system in the UK. Shavit and Muller (2000) explain that the majority of secondary school systems differentiate between academic and vocational education and it is generally accepted that vocational education prepares students for the working world whereas academic education prepares students for higher education. This idea was backed by Oates (2004) who explained the widening vocational/academic divide in secondary schools with the growth of vocational education. However despite this growth, there is a distinct lack of literature to assess the impacts of implementing vocational education on secondary school teachers (Dalton and Smith 2004). Dalley-Trim et al., (2007) also highlighted that the literature that is present surrounding Vocational Education was sparse with concerns to it being research informed. Dalton and Smith (2004) make it clear that an increase in vocational education in secondary schools may pose a considerable challenge that could have a significant impact upon educators, a problem that had been previously highlighted by Kennedy (1993) with very little progress made. Research in this area is needed as schools in Wales embark on curriculum reform with Curriculum for Wales (2020) and the introduction of new qualifications from 2025. This research seeks to bridge the gap and add to the depth of the literature surrounding the topic of vocational education in secondary schools for which there appears to be a distinct lack of research informed literature (Dalton and Smith 2004; Dalley-Trim et al., 2007).

As an experienced secondary school teacher embarking on a new challenge in my career as Area of Learning (AOLE) Lead for Vocational Studies, exploring the opportunities and barriers that may be faced when implementing vocational education and qualifications will prepare me for the next chapter of my professional development. By examining the opportunities and barriers, the

researcher will develop a more in depth understanding of implementation of vocational education in their own context and will therefore be more prepared to explore and implement any recommendations to overcome any challenges. This in turn will benefit the current students in the school and future students who will gain access to a vocational curriculum implemented by research informed practice (Nelson and Campbell 2017).

The research will be conducted as an exploratory case study approach (Yin 2009) investigating one state Secondary Education school in South Wales. Cohen, Manion and Morrison (2018) explain that case study research embraces multiple methods for data collection and analysis and allows for a flexible approach to research. Yin (2009) notes that a case study provides a context with real life situations and people which enables the reader to gain a more in-depth understanding of the theories, ideas or principles being presented. This study aims to explore vocational education in one secondary school exploring both the opportunities and benefits that it can present and the barriers or challenges that arise as a result of its implementation. The researcher wishes to explore the views of educators to identify and suggest potential recommendations to overcome any barriers faced. The research will use a mixed methodology with both qualitative and quantitative data (Parvaiz et al,. 2016) from questionnaires, interviews, and school subject tracking systems. This approach allows for triangulation which not only adds depth to the investigation but also supports the mitigation of bias (Fusch et al,. 2018).

The case study school, based in South Wales is a mixed comprehensive with over 1100 students. The catchment area consists of multiple locations which are classed as areas of deprivation according to the Welsh Index of multiple deprivation (2019). It has been noted in studies that learners in area of high deprivation respond well to vocational education and learning (Cajic-Seigneur and Hodgson, 2016). This claim is supported by Colley et al,. (2003) who attribute this to the social and cultural capital that students are able to gain from vocational education supporting the need to understand vocational education more deeply in this context.

The researcher recognises that any findings will be context specific to the research school and whilst some of the findings may be transferable, they cannot be consistently transferable to different school environments and alternative contexts. The small number of participants may be a limitation of the study and could lead to a less comprehensive idea of the topic in question. However, it is hoped that this investigation will add to the existing literature in this area and provide a context which may be helpful for schools in similar situations. This investigation aims to

explore the benefits and challenges of integrating vocational education into the curriculum of a Welsh secondary school, with a specific focus on teachers' perspectives and experiences. By identifying both the opportunities and barriers, this research seeks to propose evidence-based strategies for enhancing vocational education implementation, ultimately contributing to a more equitable educational system in secondary schools in Wales.

Aims and Objectives

Aims: To investigate the benefits and challenges teachers face when integrating vocational education/qualifications into the curriculum in a Welsh secondary school, and to propose strategies to overcome these barriers.

Objectives of Research Activity:

1. To explore the perceived benefits of vocational education for students from the perspective of secondary school teachers in Wales.
2. To identify and analyse the challenges and barriers teachers encounter in integrating vocational education into the curriculum.
3. To collect teachers' suggestions and recommendations for overcoming the identified challenges and barriers.
4. To propose evidence-based strategies and recommendations for educators to enhance the integration of vocational education in Welsh secondary schools.

Literature Review

Introduction

The purpose of this literature review is to enhance the researcher's knowledge concerning Vocational Education and to identify and understand the gaps in literature so that this research can build upon current knowledge in the topic area and ensure a comprehensive understanding in the research context. Exploring the history of educational system in the United Kingdom (UK) and delving more deeply into educational policy and curriculum reform will provide a substantial grounding to explore vocational education and qualifications in the Welsh context for research. Once the opportunities and barriers of vocational education have been discovered through this literature review, any gaps in the topic area will be identified so that this research study can be tailored to attempt to bridge these gaps.

Education in the United Kingdom

It is important to note that before the 19th century, the UK had no national system of education that was publicly funded. Formal educational opportunities for children were limited to grammar, charity and 'dame' schools (Barber., 1994) and it wasn't until the introduction of the Education Act (1870) that legislation was available to outline education provision for children in the UK. Compulsory education in the United Kingdom (UK) was then subject to major changes due to the Education Act (1944) and Education Reform Act (1988). The Education Act (1944) ensured that secondary education was free and the minimum school leaving age rose from fifteen in 1948 to sixteen in 1973. Barber (1994) explains that Local Educational Authorities (LEAs) had the responsibility for the organisation of secondary schools in their areas. Most followed the recommendations of Sir William Spens in the Spens Report (1938) and established a tripartite system: grammar, secondary modern and technical. Oates (2004) claims that the academic-vocational divide which is notably documented in literature stems from these policy reforms.

Currently, most Secondary Education in the UK is provided via state-funded schools which can be comprehensive or selective. Comprehensive schools enrol students regardless of their academic ability whereas selective schools such as grammar or independent often are able to select students, sometimes based on academic ability (Bursnall et al., 2019). Bursnall further explains that at the end of compulsory secondary education, students are expected to undertake exams and achieve Level 2 qualification, in the form of General Certificates of Secondary Education (GCSE) or an

equivalent Level 2 vocational qualification such as Technical awards (DfE, 2015). Rodeiro and Vitello (2020) note that for the majority of students at comprehensive level, vocational qualifications comprise only a limited proportion of their studies as much greater emphasis is placed upon academic GCSEs rather than vocational qualifications. A commitment to a comprehensive secondary education has ensured that vocational education and qualifications are present at Key Stage Four (KS4) in schools across the UK and this is also the case in other countries such as the USA and Sweden. However, there remains a pressing issue to recognise vocational education as equal alongside academic education (Kennedy, 1993) and break the longstanding perceived vocational-academic divide.

Historically, with regards to post-16 training and education retainment, the United Kingdom has performed poorly compared to many other European countries which has led to a spotlight on the curriculum for students aged 14+ (Haynes., 2008). The Green Paper, 14-19 called for a wider variety of high-quality vocational education options that provided clear routes for progression into both employment and further education (DfES., 2002). The reassessment of strategies concerning the comprehensive education system saw an increase in the availability of vocational options for post-14 qualifications with government initiatives that encourage all stakeholders, students, teachers, parents and carers to consider the opportunities that vocational education can bring (Haynes., 2008). Qualifications in vocational subjects were introduced as new GCSEs for the following subjects: Applied art and design; Applied business; Engineering; Health and social care; applied ICT; Leisure and Tourism; manufacturing and Applied Science, although the term 'vocational' was not used due to the negative associations with the word on peoples' perceptions of the qualifications (Haynes., 2008).

Vocational Education in Wales

Education in Wales is devolved in the UK and the Curriculum for Wales (CfW) (2020) saw curriculum reform. The Curriculum for Wales (2020) stems from the national mission to improve education preparing learners with the skills, experiences and knowledge that are essential for employment and lifelong learning. Also key to this mission is the Future Generations Act Wales (2015) which promotes a holistic approach to skills development that values practical, work-related learning as crucial to economic and social progress. The Act recognizes vocational education as an essential pathway for developing a skilled, adaptable workforce, challenging traditional academic-only

models of educational success. Sainsbury (2016) had expressed concerns that the educational system was failing to allow student to develop the skills that employers are seeking and the aims of the national mission seem to address this. The CfW aims to provide a balanced and broad education through the shared vision of the four purposes. The curriculum is driven designed in pursuit of the four purposes to create learners who are:

- Ambitious, capable and ready for learning;
- Enterprising, creative and ready to actively partake in life and work;
- Ethical and informed citizens of the world and Wales;
- Healthy, confident individuals who are ready to be valued members of society leading fulfilling lives.

Alongside the 4 purposes, the Areas of Learning and Experience (AoLEs) all incorporate vocational elements into their curriculum. These are notably present in every AoLE but particularly prevalent in the Science and Technology, Health and Wellbeing and Humanities AoLEs. The CfW (2020) includes vocational education as an integral piece of the curriculum and recognises the importance of vocational education in preparing students for further education and future employment. It is aimed that vocational education and qualifications are equally valued as the academic and focusses on skills development that are highly valued in both academic and vocational contexts such as problem solving, creativity, literacy and digital competency. There is a large focus on real-world learning contexts and experiences and its flexibility allows for local curriculum adaptions to incorporate vocational education relevant to a school's community (CfW 2020). In 2025, qualifications reform is due to take place in Wales as a result of the curriculum reform, however more recently, studies have shown substantial increases in both the value and uptake of vocational qualifications (Rodeiro and Vitello, 2023) and vocational education is claimed to be a substantial element of many students' secondary educational experiences. Assessing the barriers and opportunities of vocational education in schools seems imperative now at a time where curriculum and qualification reform coincides with increased uptake and value of vocational qualifications. To implement vocational education well, we need to deeply understand it. Dalley-Trim et al., (2007) has noted a considerable increased focus on literature that explores vocational education in schools particularly in relation to the career pathways of students but also highlighted that the majority of literature is not based on research. The Welsh Government encourage all teachers to be research and literature informed, developing and researching innovative practices and techniques and

engaging in action research and includes these skills in the professional teaching standards (Welsh Government, 2017). This research will ensure that the researcher is meeting the standards of a highly effective practitioner in Wales.

Opportunities

Opportunities for vocational education have been noted in the literature and will be broadly grouped into three themes further explored in this section. The opportunities for students; the opportunities for schools and the education system and the opportunities for the broader economy and society.

Opportunities for students

Muir (2013) noted that headteachers and school leaders recognised the value of vocational qualifications explaining that they provide a strong foundation for the working world, further education or training and that they are motivational for young people. This was backed by Sheilds and Masardo (2015) who claimed that the BTEC vocational qualifications for age 14-16 are marketed for their flexibility noting their suitability for both progression into higher education as well as entry into employment. Further research then found that upper secondary vocational education has been promoted and valued as having a positive impact on job achievement for students (Harris and Clayton., 2020) and vocational qualifications prepare learners for jobs (Tshabalala and Ncube., 2014).

Barnett and Ryan (2005) noted that the increase in vocational education has led to benefits identified by teachers such as improved student motivation and confidence, a finding backed again by Muir (2013). Vocational education also has been shown to have a positive effect on attendance with students by reducing absenteeism drawing students into school (Barnett and Ryan., 2005).

Opportunities for schools

Psacharopoulos (1997) explains that vocational qualifications offer secondary schools' viable options for students who are less academically suited so that they can acquire skills useful to them in life. As well as suiting the academically challenged, Haynes (2008) highlights the beneficial nature of vocational courses for those from economically disadvantaged areas and claims that they are perceived by schools in these areas to be a method to reengage disaffected learners. This correlates with the findings of other researchers that vocational education increases student motivation and confidence (Muir., 2013; Barnett and Ryan., 2005).

Muir (2013) does note that due to the government's decision to remove some Key Stage 4 vocational qualifications from counting in school performance league tables, vocational provision in schools has now become more limited. The removal was a reaction to deter schools from entering students for qualifications which did not provide a sound basis for further education or training due to the excessive weighting these qualifications were given in school performance league tables, a finding from the Wolf report (2011). Instead, this seems to have had a negative effect as many valuable vocational courses are now no longer offered in schools because they do not count in league performance tables. Of course, the blame could be placed here on schools for 'playing the league table game' rather than providing effective inclusive educational options for all students (Wolf report, 2011).

Opportunities for society

Psacharopoulos (1997) explains that vocational education is often seen as the solution to many issues in society and the economy, some of which conflict and contradict each other including youth unemployment and provision for those less academically able. On the other hand, Wallenborn and Heyneman (2009) claim that many advocates of vocational education make exuberant claims about it which aren't necessarily truth such as vocational education preventing youth alienation, lowering anti-social activities and reducing youth unemployment. The possible variables that could affect these societal problems other than just vocational education are endless indicating these claims could be easily refuted. Moreover, Holmes, Murphy and Mayhew (2021) explain the UK's NEET (Not in Employment, Education or Training) rate has steadily fluctuated between 14% and 20% since 1990 again raising questions on the claims of Wallenborn and Heyneman (2009) concerning vocational education preventing youth unemployment.

Holmes, C., Murphy, E. and Mayhew, K. (2021) What accounts for changes in the chances of being NEET in the UK? Journal of Education and Work, 34(4), pp.389-413.

More recent literature from Harris and Clayton (2020) explain that vocational education and qualifications aid with economy growth and support, often reduces levels of unemployment and aids the fight of social inclusion. Sainsbury (2016) concurs expressing his concern that without establishing effective vocational education in the UK, our economy will be held back allowing our economic competitors to advance much further.

Barriers

Barriers to vocational education have also been recorded in literature and will be broadly allocated into five themes for the purposes of this literature review: resource constraints and operational barriers; teacher preparedness and training; perceptions and stigma; the vocational-academic divide and issues with curriculum integration.

Resource constraints and operational barriers.

Tshabalala and Ncube (2014) posit that many of the challenges that teachers face when implementing vocational education are due to resource constraints or operational barriers referring to a lack of equipment, shortage of textbooks or specialist rooms as well as the inadequate provision of time.

Shavit and Muller (2000) suggest that with vocational qualifications, less time is devoted to actual teaching or instruction backing the previous findings from Oakes (1985). However, when exploring the current guided learning hours for both vocational and GCSE courses, the guided learning hours is the same standing at 120hours (Pearson n.d. and Eduqas 2023). Dalton and Smith (2004) also highlight curriculum time restraints as being a barrier to the effective delivery of vocational education. This may be the case at younger levels of schooling where core subjects are often given priority, perhaps preventing a solid grounding in subjects at an early age, however at examination level, aged 14+ where options are concerned, schools tend to give equal curriculum time to all option subjects, GCSE or vocational in nature.

Dalton and Smith (2004) also noted that vocational teachers and coordinators highlight a lack of time as being a barrier to the delivery of vocational qualifications explaining that the administrative tasks associated with these are onerous and time consuming. Many coordinators also oversee multiple vocational qualifications at once alongside their regular teaching commitments and duties. Dalton and Smith (2004) also note that lack of availability of appropriate teaching materials for the delivery of vocational education. For many BTEC Tech qualifications, there is just one available textbook alongside materials provided by the qualification's provider, Pearson. This in turn causes additional pressure on teachers who often are tasked with the creation of all teaching resources and materials to be able to effectively deliver these vocational qualifications (Malley et al., 2001). Some specialist vocational educators have provided resources and materials online for teachers, often attached to a cost, however Dalton and Smith (2004) noted that teachers who had explored

these often discovered that they were not suitable for the needs and abilities of their students. Wallenborn and Heyneman (2009) describe some structural barriers to vocational education including limited outdated resources and a lack of updates on content, equipment and infrastructure needed to effectively deliver vocational education.

Lack of funding and insufficient finances have been noted as a significant obstacle for vocational qualifications (Tshabalala and Ncube., 2014 and Peng, Wang and Yan., 2023). The cost of vocational qualifications is a significant barrier for secondary schools with schools therefore viewing vocational education as a costly burden rather than an integral part of the curriculum (Dalton and Smith., 2004). Vocational GCSEs also cost more per head for schools and often have centre registration fees in addition to entry fees. Barnett and Ryan (2005) have also highlighted the cost of resources needed for vocational education leading to additional costs for schools. The need for ICT for example highlights how resource intensive vocational qualifications can be which is costly to schools planning their curriculum.

Teacher preparedness and training.

Dalton and Smith (2004) express the vast gap in literature that considers how vocational education and qualifications can impact upon secondary school teachers. With the increase in qualification provision for students age 14+ as outlined by the Welsh Government with the upcoming qualification reform, it appears that research and literature in this area have not yet caught up with current developments.

Teachers have highlighted that there are stark differences in the assessment preparation and teaching approaches for Vocational Qualifications and GCSEs (Child and Vitello, 2018). Dalton and Smith (2004) even go as far as to posit that a substantial change in pedagogy is required and that there is an expectation by schools and qualification providers that teachers can and will adapt their academic teaching experience to be able to teach vocational programs. Again, this argument was supported by Haynes (2008) who highlighted a lack of staff professional development as a barrier to delivering vocational qualifications in schools. Without teacher training that supports the pedagogical delivery of vocational qualifications, many children could be disadvantaged with concerns to achievement.

Tshabalala and Ncube (2014) highlight a lack of expertise amongst teachers as being a challenge when implementing vocational education. Bolhuis (2006) and Dalton and Smith (2004) both highlight that teachers are not prepared well enough to understand the expectations of teaching vocational education. Both have called for teacher education to better prepare teachers for teaching vocational education and qualifications. Yet to date, there remains no initial teacher education (ITE) pathway that trains student teachers to deliver vocational studies in secondary schools in Wales (Welsh Government n.d.). Post Graduate Certificate in Education (PGCE) provision remains grounded in original subjects formed around the old curriculum (Welsh Assembly Government, 2008) of English, Maths, Science (Biology, Chemistry, Physics), History, Geography, Religious Education, PE, Art and Design, Music, Drama, Design and Technology and Welsh and Modern Foreign Languages. The only PGCE pathways that could be considered vocational are Business Studies and Health and Social Care, both of which have limited providers in Wales. There are no PCGE options for other vocational subjects or the Welsh Baccalaureate. In Wales, the Post Compulsory Education and Training (PCET) qualification enables individuals to teach in the further education (FE), adult learning, and vocational sectors. PCET allows you to specialize in teaching a wide range of subjects based on your academic background, vocational qualifications, or industry experience including several vocational subjects but that qualification does not qualify you to teach in a secondary school environment (Estyn., 2023).

Professional development opportunities for teachers delivering vocational education and qualifications are also sparse again supporting the arguments made by Bolhuis (2006) and Dalton and Smith (2004) that teachers are not adequately prepared. Dalton and Smith (2004) noted that many teachers identified that the most useful type of support was through subject associations where collaboration with other vocational teachers was offered. Teachers helping teachers without any formal training in place for the subject. Furthermore, very few teachers that teach vocational subjects specialise in the subjects they deliver (Tshabalala and Ncube., 2014) which is a barrier against the effective implementation of vocational provision. Barnett and Ryan (2005) express that this critique of the learning experience quality with vocational education is not new and have previously highlighted a lack of qualified and enthusiastic vocational teachers. Dalton and Smith (2004) suggested that secondary school teachers who deliver vocational qualifications are often regarded as being deficient in the experience and knowledge of the workplaces outside of an educational establishment and are therefore not adequately prepared for delivering such courses.

It could be stated that this seems to be a rather presumptuous claim. Callan (2003) had previously stressed the importance of collaboration between teachers and the workforce industries to ensure that students are gaining the generic skills required through vocational education. Yet Dalton and Smith (2004) discovered that vocational teachers and co-ordinators have very little opportunity to collaborate or contact industry as part of their teaching role due to workload, other curriculum demands, administrative demands and costs and fundings issues. Peng, Wang and Yan (2023) also note teacher capacity and limitations as a significant barrier to implementing vocational education effectively.

Perceptions and stigma

Sainsbury (2016) highlighted that vocational education has been frequently defined by what it is not rather than what it is, i.e., the academic alternative. Dalley-Trim et al., (2007) make clear that vocational education has long been seen as a soft option and has low status and remains limited because of the perception that it is for lower ability students.

Dalton and Smith (2004) recognised that teaching colleagues who did not teach vocational education tend to regard vocational qualifications as being those for lower achieving students. Supporting this, Wallenborn and Heyneman (2009) state that the main problem with vocational education in school is not teaching it but rather the assumptions of the profile of student that should study it, again the lower achieving or less academic. On the other hand, Dalley-Trim et al (2007) saw more optimism from teachers with their perceptions of vocational education suggesting that teachers saw the need for meaningful learning experiences for all. However, Child and Vitello (2018) explain that many teachers attribute vocational qualifications to specific student types or characteristics such as those who are not likely to progress to formal academia. Rodeiro and Vitello (2020) concur suggesting that for those who are disengaged or of low attainment, vocational qualifications seem to be the recommended route, however they do note that this claim has been highly scrutinised as one of the main criticisms of vocational education (Wolf., 2011). It appears that despite this criticism being highlighted by many scholars over time, perceptions of vocational education have not really changed, altering established perceptions can be a challenging process.

Sheilds and Masardo (2015) note that students who follow a vocational education pathway to achieve vocational qualifications are notably more likely to be those from demographic groups

associated with lower academic outcomes. This finding was again backed by Rodeiro and Vitello (2020) who claim its unsurprising that empirical research has found students following vocational pathways are more likely to come from a disadvantaged economic background and be lower achievers. The causal link they attribute to this is the perceptions of teachers regarding what type of learner is best suited to vocational qualifications. However, Tshabalala and Ncube (2014) highlight that a barrier to vocational education has always been the students' negative attitudes and a lack of parental support which can be linked to disadvantaged economic backgrounds. This seems rather presumptuous and one would suggest that this instead is multifaceted issue with numerous causal factors rather than a single definitive cause.

Harris and Clayton (2020) explain that vocational education is perceived to be the less favourable option for learning or qualifications compared to traditional academic GCSEs. Students and parents often associate academic education as the route to better jobs and higher incomes leading to negative perceptions of vocational education. This competition with academic subjects is a major challenge for vocational education (Tshabalala and Ncube., 2014). Learners themselves have also expressed some uncertainty with vocational qualifications including questioning their purpose and value (YouGov, 2023) which leads onto the ongoing debate of the vocational-academic divide.

Vocational-Academic Divide

Shavit and Muller (2000) maintain the existence of an academic-vocational divide in most secondary schools with two pathways, the academic with paths to university or further education and the vocational preparing students for entry into the working world. Haynes (2008) noted that the vocational-academic divide was often worsened by the perceived problems that come with vocational qualifications including assessment/content issues and targeting of less able students. Barnett and Ryan (2005) explain that despite the attitude that vocational education is best suited for those who aren't academic, it is not actually clear that this education suits that type of students' educational needs. Several reports have made clear that vocational education may be a poor option choice for those more academically challenged or low achieving students (Kirby., 2000). Despite this, Haynes (2008) postulates that vocational qualifications were often targeted to a specific student profile such as those who are c/d borderline, disaffected, poor attenders, at risk of exclusion or those of a lower ability range. This was backed by the findings of the Office for

Standards in Education's (Ofsted) who also discovered that the targeted student profile for these qualifications were mainly those who were lower attaining (Ofsted, 2004). Furthermore, Rodeiro and Vitello (2020) explain that those in the field of vocational education and policy have argued the case of vocational educations claiming that it is undervalued and often treated as second best to academic qualifications by all involved, students, parents and educators. This negative perception often acts as a deterrent for higher achieving students despite their interest or aptitude for vocational subjects.

Shavit and Muller (2000) posit that vocational pathways are often followed by those who are academically weaker which means that these students are often not surrounded by academically stronger students depriving them of any positive effects being with higher ability students could bring. Vygotsky (1978) notes the benefits of having a more knowledgeable other (MKO) in learning environments for students. Those following educational pathways may be disadvantaged due to the lack of MKOs in their classes. Sheilds and Masardo (2015) also discovered an academic-vocational division with student perceptions with students noting the differences in rigour with qualifications. Shavit and Muller (2000) had previously expressed concerns over students noting that vocational qualifications are less worthy that academic qualifications further reducing their perceived abilities and aspirations.

Curriculum integration

Haynes (2008) notes that a key difficulty with vocational qualifications can be harmonising the timetables and teaching periods. An argument also brought about by Abrahams (2018) who noted the term 'blocking system' whereby students were unable to opt for certain vocational subjects due to them being assigned to pre-assigned timetable blocks. Haynes (2008) further highlights that withdrawal of available vocational courses when option numbers were low is a problem with vocational education in schools. At GCSE level, the high number of compulsory subjects allows for very little flexibility when it comes to option subjects and other vocational study options (DfES., 2002). This claim was supported by Abrahams (2018) who found that the national curriculum requirements limited students' choices for study.

Dalton and Smith (2004) explain that vocational education and qualifications in secondary schools are often not regarded as an integral part of the curriculum and instead perceived as an additional

subject. Peng, Wang and Yan., (2023) note that curriculum misalignment is often an issue when implementing vocational qualifications stressing the importance of aligning vocational education with the curriculum. Having explored the Curriculum for Wales (2020) and understanding that the main aim of the curriculum is to produce individuals that are reflective of the four purposes, I am inclined to suggest that curriculum alignment is not an issue in this case study school. Criticisms concerning the robustness of vocational qualifications have been noted (Wolf, 2011). There have also been concerns noted over the capacity of vocational qualifications to prepare students for further education, the world of work or university (Rodeiro and Vitello., 2020).

Strategies to overcome barriers

After exploring the barriers to implementing vocational education in comprehensive schools, naturally there is a need to explore strategies and ideas to overcome these barriers for both teachers teaching vocational education and schools that are incorporating it into their curriculum.

Peng, Wang and Yan., (2023) suggest recommendations to overcome some of the challenges that are faced when implementing vocational education. They suggest teachers can improve students' motivation through mentorship and rewards to incentivise. This idea links back to the learning theory of Pavlov and behaviourism which is outlined well by Clarke (2004) as using rewards to positively incentivise children to learn. This application of Pavlov's theory helps create positive learning associations in classrooms but one must acknowledge the need to develop intrinsic motivation for long-term educational success. Deci, Koestner and Ryan (1999) summarised the dangers of external rewards and their effect on extrinsic motivation for learning, there is a real danger that students associate learning with rewards and this may affect their motivation negatively longer term.

Kennedy (1993) notes that for vocational education to be effective in schools, there needs to be a breakdown of the barriers that hold the academic-vocational divide. A broader range of vocational education needs to be present that provides pathways both to work and further education. Rodeiro and Vitello (2020) concur indicating that vocational qualifications at Key stage 4 need to be broad encompassing a whole occupational group or industry rather than a specific occupation. This also highlights the need for professional development for teachers is needed to ensure that vocational education is delivered effectively (Peng, Wang and Yan., 2023).

Bennell (2009) postulates that implementing vocational education in schools requires a substantial financial commitment and the support and dedication from all key stakeholders. Bursnall et al., (2019) agree stressing the importance of investing financially in students to overcome the barrier for young people to progress in education. Vocational education requires curriculum alignment and integration allowing vocational education to be in line with industry developments and academic progress (Peng, Wang and Yan., 2023). They stress that collaboration with industry is essential and that external funding should be sought as financial support to provide any equipment needed.

Conclusion and Future Research Directions

Concluding this literature review, the benefits and opportunities associated with vocational education are extensively documented. While the barriers to vocational education are also well recognized, there is a notable absence of recommended strategies that schools can employ to address these challenges.

Harris and Clayton (2020) emphasize the need for robust, high-quality research within the vocational education sector. Much of the existing literature on this topic is outdated and often lacks a research-based foundation. This study seeks to address this gap by using a case study approach to investigate vocational education in a school setting. Similarly, Rodeiro and Vitello (2020) highlight a research gap concerning the new vocational qualifications available to students completing their comprehensive education, specifically mentioning qualifications like Technical Awards and certificates. This research aims to contribute to the field by examining the benefits and challenges of integrating these vocational qualifications into the curriculum of a secondary comprehensive school in South Wales.

Methodology

Introduction to Methodology

Educational research is evolving continually and is often accompanied by the critique of questioning whether the research is relevant and useful to educational practice (Hartas, 2010). The methodology engaged for this research explores one specific context. Holmes (2020) explains insider research as the researcher having a "lived familiarity" with the researched. My positionality as an insider researcher hopes to explore the opportunities and challenges of establishing vocational education in this setting with the idea that any solutions identified can be implemented in the research context. Hartas (2010) explains that educational research is able to flourish when practitioner research takes place within a strong community of practice. The research school is grounded in belief that pedagogical research is a necessity and have dedicated professional development for research following the vision of the government and the practising teacher standards to have research informed educators (Welsh Government, 2017).

Research Design and positionality

Education is a complex phenomenon with many underlying disciplines and as a result, a singular research design is not always suitable to explore some of the more complex elements of education (Hartas 2010). Due to this complexity, this study will use interpretivism as a research paradigm with a mixed methods Case Study design frame as it recognises that the educational world can benefit from both quantitative and qualitative methods (Cohen, Manion and Morrison, 2018). Interpretivism aligns well with the case study approach to research because it focuses on deciphering subjective meanings and experiences within a specific context (Thomas, 2022). Oakley (2000) explains that an interpretivist paradigm analyses ideas, feelings, perceptions ideas, actions and thoughts looking for emergent patterns so interpretivism would fit this investigation exploring the opportunities and barriers of vocational education with the perceptions and views of educators. When investigating humans, their perceptions and interactions, the reality is constantly debated and renegotiated as it is constructed by each individual in a different manner so a flexible approach to research is needed which is provided by interpretivism (Oakley, 2000). A mixed methods approach will give a comprehensive and fuller understanding of the research topic and answers more complex questions meaningfully (Cohen, Manion and Morrison, 2018).

The theoretical framework that will be used is Social Constructivism as this aligns with the Case Study approach as it emphasises the importance of context as well as the importance of social interactions of shaping an individual's own practices and understanding. Insights that are deeply embedded in the cultural and social context of the research school will be highlighted by focusing on how teachers in the research school construct their own understanding of vocational education. Using Social Constructivism as a theoretical framework will aid the exploration of how teachers practices and perceptions are moulded by the educational context and their interactions. Social constructivism is closely linked to the work of Vygotsky (1978) and Bruner (1960) and aims to empower participants perspectives and ideas in the context of their lives through in-depth exploration (Hartas, 2010).

Greenbank (2003) posits that the research paradigm, methodology and epistemology are all influenced by the positionality of both the researched and the researcher. Thomas (2022) notes that with interpretivism, the researcher should understand the research situation from the position of an insider and in doing this it is important that the researcher recognises their own positionality. Exploring and acknowledging how the researchers own beliefs, values, background and the like could be influencing interpretation is important. Hartas (2010) notes that it is important that the researcher embraces reflexivity and is honest and transparent concerning their positionality and acknowledges the potential effects of this on their research. Educational research has been criticised for failing to be impartial because the conclusions and interpretations of the researcher are influenced by their values and beliefs (Hartas, 2010). As the first and only person in my family to achieve academically and attend university, my values in education are grounded by equity and social justice. I approach this research with a deep professional interest in vocational education wanting to ensure that all students have access to high quality education and achieve their potential. However, I acknowledge that this position may also introduce certain biases or preconceptions. Acknowledging the researcher's positionality and values is vital and it has been suggested that educational research should be value conscious (Abraham, 1996) as it enables a partnership between the researcher and the researched. However, to avoid bias and moderate the researcher's values, data and methodological triangulation, an unbiased sampling process and a grounded approach to data analysis must be used (Greenbank, 2003).

Research Context and Approach

A case study involves in depth research in a specific context (Thomas, 2022), in this case, the research school. The research school is a 11-16 mixed sex comprehensive with over 1100 students. The percentage indicator of children receiving Free-school meals (FSM) lies at approximately 35% which is significantly higher than the local authority average of 22% or the Wales national average of 21%. Free-school meals is often used as an indicator for household poverty. Currently, 67% of the children in Wales living in relative poverty come from a household where at least one person works (Welsh Government, 2019b.) Many of the students in the school come from a working-class background with a significant number of households classed as being below the poverty line. Egan (2020) explains the strong correlation between a disadvantaged socio-economic background and underachieving in education. The GCSE outcomes for 2024 showed that just over 44% of students gained an English language GCSE grade A*-C and just over 53% gained a Maths GCSE grade A*-C, indicating low levels of functional literacy and numeracy for many students. These levels were significantly lower that the local authority averages standing at 58% for both. The percentage of pupils with English as an additional Language (EAL) stands at around 12% again substantially higher than the local authority average of 6% and the Welsh average of and 3%. With regards to Additional Learning Needs (ALN), 23% of students are assessed as having ALN at the school with 19.5% being the local authority average and 14% being the Welsh average (My Local School, 2024). This data is reflective of the catchment area of the school and highlights the importance of the establishment having a curriculum that is inclusive for all with access to both academic and vocational qualifications via their education.

Hartas (2010) believe it pedagogically appropriate to use quantitative and qualitative methods and analyses to complement each other. Due to the planned use of an eclectic mixed methodology using both quantitative and qualitative data (Parvaiz et al., 2016), interpretivism and a mixed methodology has been chosen due to the nature of the research being in a school environment and dealing with perceptions. It is imperative to gain the insight of the teachers with their experiences of vocational education as well as investigate the statistical data available through exam entry records and triangulate these against literature findings to identify correlations (Thomas 2022). The quantitative data collected will allow for trends to be identified and highlighted and will also provide a context so that the qualitative data examined can be contextualised.

Denzin (1970, 1978) explained methodological triangulation between method (sometimes referred to as across method) exploring data from multiple sources with a mixed methodology. Denzin (2009) then explained that ideally, using between method triangulation, one is able to overcome any deficiencies or flaws in methods, overcoming any anomalies by using the best of mixed method techniques. He did however note that it does not always enhance validity but instead aims to gain a more detailed understanding of the investigative goal. As teaching is recognised as complex, many factors need to be taken into consideration such as social dynamics of schools and classes, teacher experiences and the range of vocational qualifications available as these may affect the investigative outcomes. The triangulation aims to reduce the impact of anomalies from these factors and moderate any researcher bias (Hartas, 2010). This study will use mixed methodology to allow for the triangulation of data and information identifying correlations and strengthening conclusions from the investigation (Cohen, Manion and Morrison, 2018). Flick (2004) explains that triangulation may maximise the validity of findings from investigations. Fusch et al., (2018) findings correlate explaining that triangulation adds to the depth of data collection and aids to mitigate the bias enhancing reliability.

Participants and Data collection methods

Hartas (2010) notes that focus needs to be placed on the research as the enquiry rather than the methods to avoid research being reduced to a method. Research methods need to be carefully chosen to ensure that they are beneficial to the research rather than just a collection of activities that suit the method. Within the Case study method chosen for this research, three methods will be utilised to gather appropriate data for the enquiry, questionnaires; interviews and secondary data analysis.

A questionnaire has been chosen as a data gathering technique due to its flexible and adaptable nature and its ability to provide a broad range of data (Hartas, 2010). A questionnaire can include both open and closed questions providing data from a quantitative and qualitative perspective (Gillham 2008). Questionnaires can also be provided digitally which is ideal for this research where the respondents, a convenience sample of teachers, work in a busy school environment and are not all available and accessible at the same time (Cohen, Manion and Morrison, 2018). Nesbary (1999) notes that online questionnaires are able to provide a researcher with data much faster than other data gathering methods and guarantee anonymity, confidentiality and informed consent. Hartas

(2010) claims that there a large misconception that questionnaires are simple, prone to bias, easy to conduct and have limited applicability. Hartas instead claims that questionnaires when planned and instigated effectively are able to produce meaningful data.

A common problem with questionnaires is the low take up and lack of detail or thick data that they provide (Cohen, Manion and Morrison, 2018). Participants will be a convenience sample consisting of the teachers at the research school with the hopes that participation take up will be reasonable, three reminders will be sent via email to maximise responses (Cohen, Manion and Morrison, 2018). A mix of open and closed questions will provide opportunities for thick/rich data. However, the researcher must be aware that respondents may not feel encouraged to provide honest accurate answers, especially if it portrays themselves in a negative light or questions processes in their work establishment, to combat this the researcher will ensure that the questionnaire is anonymous and optional and all respondents are aware of this. It has also been noted that closed ended questions tend to have a lower validity or can be misinterpreted by the respondent (Thomas 2022) therefore these questions will be kept to a minimum and be as clear as possible with wording.

Interviews are described by Hartas (2010) as a very versatile method of data generation which can be used to address a wide range of purposes. Two interviews, one with a headteacher and the other with the Lead Teacher for Vocational Studies will be conducted. Semi-structured Interviews (SSIs) have been chosen as a research method due to the flexibility that this affords for the researcher (Cohen, Manion and Morrison, 2018; Hartas, 2010). Using both closed-ended and open-ended questions followed with why or how questions to delve further into responses allows the researcher to gain more in-depth information from the interviewee and a deeper insight into the chosen topic (Adams 2015). Interviews as a research method can be time consuming, especially when transcription and coding are used (Hartas, 2010) so the researcher hopes to limit this by only partaking in two interviews and using Microsoft Teams to interview for its transcription properties. Adams (2015) recommends that an hour should not be exceeded for a SSI to ensure both interviewer and interviewee remain focused and do not become fatigued. Limiting the interview time can also aid with response and participation rates as people are more likely to devote their time if it is specified in length (Cohen, Manion and Morrison, 2018; Hartas, 2010). Critics of interviews have noted that their reliability can be questioned due to the position of the interviewer

as a ‘co-producer’ of knowledge (Hartas, 2010). By acknowledging the researcher’s positionality and using a mixed method approach with triangulation the researcher hopes to limit this.

Data analysis

Data gathered through the questionnaire and the interviews will be analysed via thematic analysis which provides a more general method to identify reoccurring themes and categories using codes (Hartas, 2010). Statistical secondary data will also be collected during this research project and analysed as it will be readily available from the research school and easily gathered. The data will be Vocational Qualifications entry statistics gathered from the schools own tracking system which will have been anonymised. To analyse the examination entry data, the mean, median, mode and range will be calculated in the hopes of identifying trends (Cao 2021) in the qualifications opted for. As this is secondary data, its credibility and validity are increased as it will have been subject to its own verification processes at the examination boards of each qualification (WJEC and Pearson). All data will be anonymised for the research and all names removed, the students and or school will be referred to as numbers/letters to protect confidentiality (Thomas 2022).

Ethical Considerations

A full application for ethical approval at UWTSD has been completed and is attached as appendix three. BERA ethical guidelines (2024) and the University guidelines for ethical research; UWTSD Research, Ethics and Integrity code of professional conduct and practice (2022) have been consulted and adhered to. Following these guidelines, ethical risks of this investigation have been identified and suggested managements of risk outlined.

The effects of research on participants must be considered and researchers should take every step to ensure that participants dignity is preserved as human beings (Cohen, Manion and Morrison, 2018). As participation in this project is voluntary, risk to participants is relatively low. Ongoing informed consent will be sought from all participants (Thomas, 2022) and questionnaire questions can be omitted to avoid any discomfort. Participants may be concerned about being identified with negative responses, therefore all results will be anonymised and any identifiers related to their roles removed in the reporting of the study (Hartas, 2010). Participants may also feel compelled to take part due to knowing the researcher so to minimise this risk, prospective participants will be contacted via their professional email addresses.

During interviews, a power imbalance may affect the authenticity of responses (Cohen, Manion and Morrison, 2018) so in order to minimise the impact of this, the voluntary nature of participation will be reinforced as well as the commitment by the researcher to confidentially and consent forms will be distributed to all participants. Participants may also fear judgement or stigmatisation impacting upon their willingness to share certain experiences and viewpoints. Ground rules for equality and respectful interaction will be established and all participated will be encouraged to share their unique perspectives. The interviewer will ensure that a supportive and non-judgemental environment is fostered and assure all participants that their perspectives are valuable, respected and will be treated with sensitivity. Before the interview, the research will be fully explained and the right to withdraw/refuse to answer specific questions will be offered. The consent form will stress the need for confidentiality and no personal questions will be asked.

Reputational damage to the researcher could be caused if the research is carried out unethically. By the adherence to BERA (2024) guidelines and by following the proposed actions of informed consent, anonymity and the right to withdraw, this risk should be minimised. The research could risk lacking integrity if the questionnaire does not generate a sufficient number of responses. To mitigate this, the questionnaire will be sent as a Microsoft form with questions ensuring that any data can be of use in addressing the research questions.

There is a minor risk of reputational damage of the university should the research be carried out unethically. The researcher will ensure that the research is conducted ethically and represents the results honestly. Compliance with all ethical, legal and professional frameworks, obligations and standards as required by the Education Workforce Council (EWC), the statutory body for teachers and the University's Research Integrity and Ethics Code of practice (2022).

All research data will be stored password protected on UWTSD OneDrive. UWTSD encryption tools will be used to ensure the security of data is maintained. In addition, firewalls and intrusion detection/prevention systems are in place on the UWTSD devices to protect against unauthorized access. When data is no longer needed it will be securely deleted. Through signed consent forms, participants will understand the security measures put in place and how their data will be encrypted and protected.

Limitations

It is recognised that there are limitations to this investigation. The case study approach researching in one individual school gives a specific context and therefore results cannot be generalisable (Cohen, Manion and Morrison, 2018). Also due to the location of the study, it is recognised that the findings may not reflect the situation in other places across Wales or in the United Kingdom. Due to the small sample size of participants and convenience sampling, the researcher may not gain an accurate or full reflection of teacher perspectives and the study will not be generalisable. As this is not a longitudinal study, it is therefore only reflective of a snapshot in time and long-term trends or patterns may not be able to be identified.

Due to my own positionality as Area of Learning Lead for Vocational Studies, my own researcher bias may influence the data collected and interpretation (Thomas, 2022). It is important that I recognise my position of wanting to ensure an inclusive, equitable education for all. Striving for the best educational opportunities for the students under my supervision will automatically lead to a positive attitude towards vocational education. One must be open to all viewpoints and ideas even if they do not align with my own educational philosophy.

The researcher also notes that the study may be constrained by the limited stakeholder input only assessing the viewpoints of teachers. It is recognised that the holistic education of a child incorporates the input from several stakeholders such as parents, support and administrative staff, policy makers and the children themselves. This mirrors the ideas of Bronfenbrenner (1979) who viewed child development as a complex system of different relationships which all interlink at multiple levels in the surrounding environments. It is also noted that with educational research, there is a shelf life or an ‘expiration date’ due to the ever-changing nature of the social and educational phenomena being researched (Berliner, 2002, p20).

Results and Analysis

Primary data Questionnaire and Interview Analysis

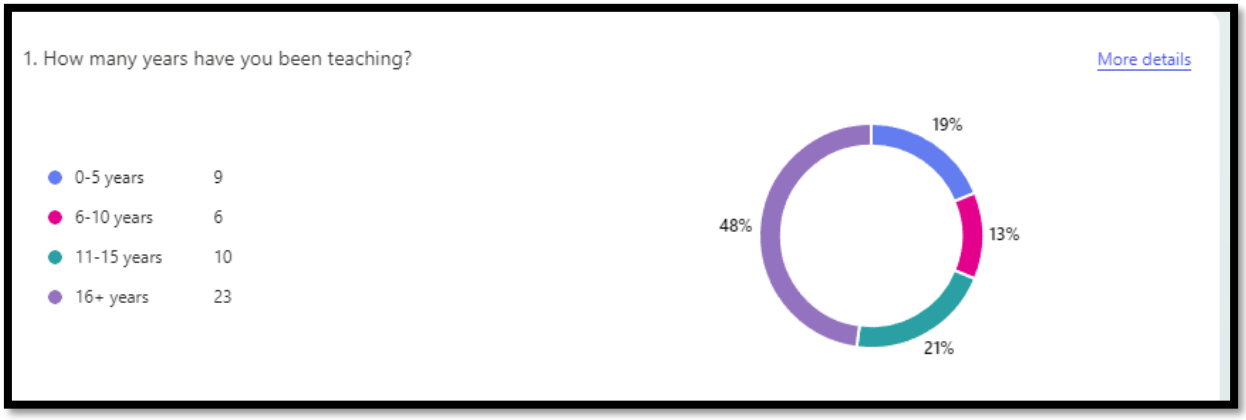

Figure 1 – Pie chart showing the profile of teaching experience within the sample.

A questionnaire administered via Microsoft Forms was used to collect primary data from teaching staff at the case study school. A copy of the questionnaire and total results are attached as appendix four. A total of 48 responses were received, representing approximately 74% of the school's teaching staff. This is a significantly high proportion of the school teaching staff indicating that the findings from the questionnaire are valid and representative of the school. The school is characterized by a highly experienced population, with the majority of teachers having over 10 years of teaching experience, and nearly half of the respondents possessing more than 16 years in the profession as can be seen from figure 1.

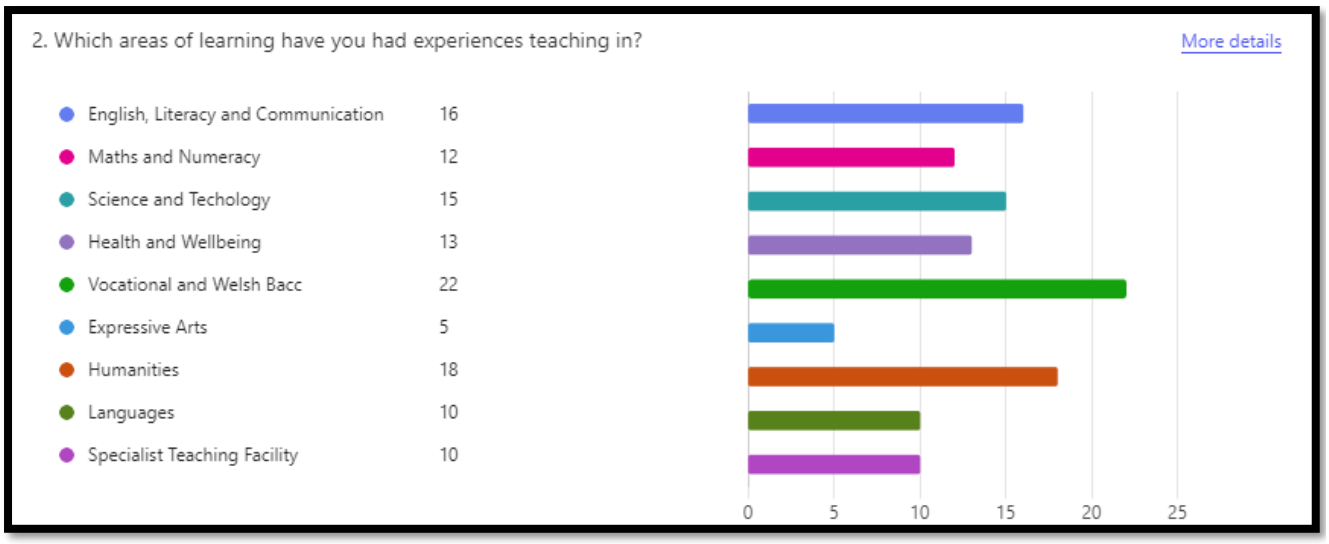

Figure 2 – Graphical representation of the breadth of subjects taught by sample.

As a result of this extensive experience, it could be assumed that many teachers would have at some point in their careers have taught outside of their specialised subjects. As can be seen in figure 2, approximately 46% of respondents (22 individuals) have had experience teaching a vocational subject including the Welsh Baccalaureate. This is particularly significant given the previously noted absence of specialized PGCE or teacher training pathways in vocational education, indicating these teachers acquired their vocational teaching expertise through professional development and practical experience. Therefore, this would suggest that due to the vast

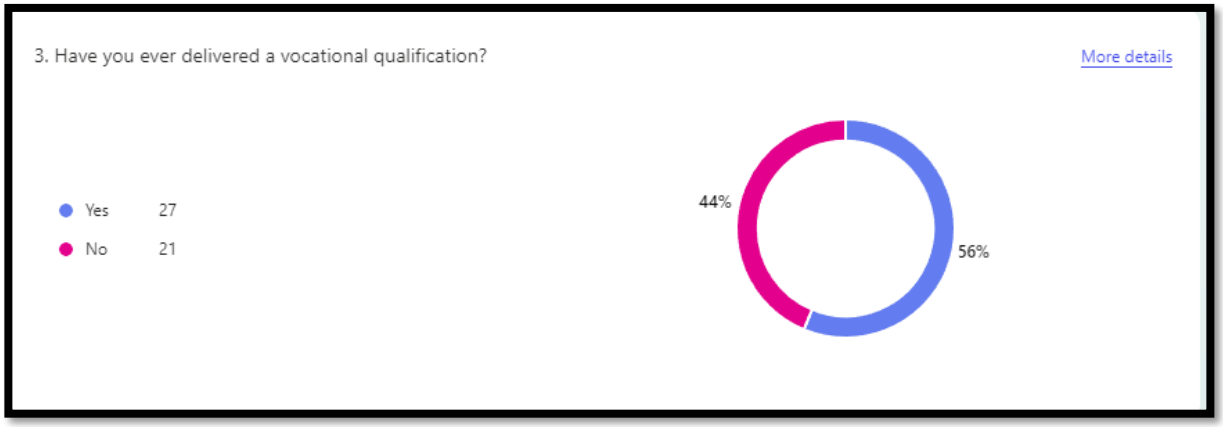

Figure 3 – Pie chart showing the percentage of respondents that have delivered a vocational qualification.

experiences of the teachers in the survey that the results presented would be highly valid due to their breadth of experience. Figure 3 also highlights that 56% of the respondent teaching staff have delivered at least one vocational qualification during their career correlating with figure 2 and again supporting the validity of the results as the participants would have had direct experience. This extensive hands-on experience lends considerable credibility to the survey responses.

However, it is important to acknowledge potential sampling limitations within the study. The school's staffing profile, characterized by higher numbers of core subject teachers (English, Mathematics, and Science) relative to other faculty areas, could potentially skew the results if these departments are disproportionately represented in the response data. To mitigate this potential bias, the survey methodology was designed to capture teachers' experience across multiple areas of learning, rather than solely their primary faculty affiliation.

Additionally, two key stakeholders in the case study school were interviewed using a semi-structured method. The organised questions (attached as appendix 5) were pre-prepared but not all questioned were used due to the semi-structured nature and the length of both interviews. Full responses can be found in the triangulation table attached as appendix 6. Both stakeholders hold more than 16 years of teaching experience each and have had experience in both teaching and leading or managing vocational qualifications.

Theme 1: Curriculum for Wales (CfW) Integration

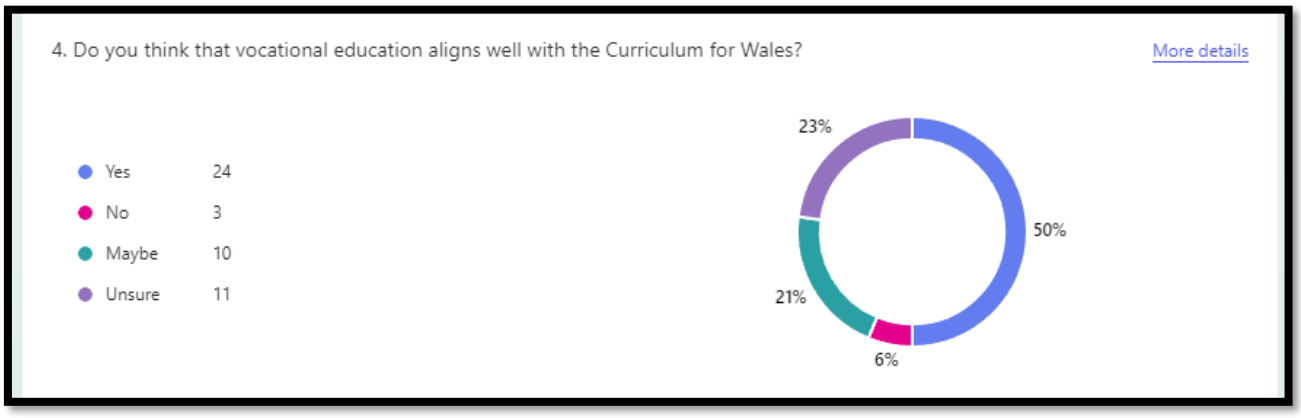

Figure 4 – Pie chart for vocational education and curriculum for Wales alignment.

Figure 4 reveals that half of the survey participants (24 respondents) identified positive alignment between vocational education and the Curriculum for Wales (2020). This finding is particularly noteworthy when considered alongside Figure 2, which indicates that 22 staff members possessed direct experience in vocational subject delivery. This parallel suggests that respondents with practical vocational teaching experience were more confident in assessing this curricular alignment. The significant proportion of 'unsure' or 'maybe' responses regarding this alignment merits careful consideration. These responses may reflect either limited familiarity with vocational education delivery or partial understanding of the Curriculum for Wales framework. The data suggests a tendency among teaching staff to focus their engagement with the Curriculum for Wales (2020) primarily within their specialist subject areas, potentially limiting their ability to evaluate its broader applications across different educational contexts.

The alignment between vocational subjects and CfW was strongly reinforced in the interviews, where participant A emphasized how vocational education naturally incorporates the core elements of CfW, particularly noting that the Welsh Baccalaureate "was clearly designed around the 4 purposes.". They highlighted how vocational qualifications inherently support cross-curricular skills development, with participant A noting that "CfW is centred around the cross curricular skills of literacy, numeracy and digital competency, vocational qualifications cover it all." However, stakeholder B did emphasise the importance of careful implementation, suggesting that schools must be "judicious in their selection of courses" to ensure practical elements can be properly facilitated and authentic contexts maintained for student engagement.

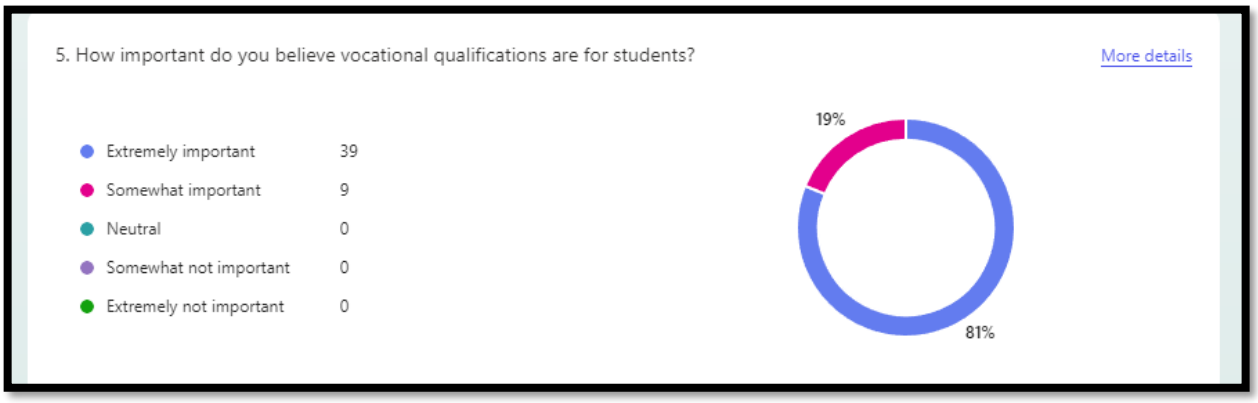

Figure 5 – Pie chart indicating teachers' thoughts on the importance of vocational qualifications.

Figure 5 presents compelling evidence regarding staff perceptions of vocational qualification importance. An overwhelming majority of participants (81%) classified student access to vocational qualifications as 'extremely important', complemented by the remaining respondents (19%) who deemed it 'somewhat important'. The significance of these findings is further emphasized by the complete absence of negative responses, with no participants indicating vocational qualifications to be unimportant at any level. This unanimous recognition of value demonstrates the integral role that vocational qualifications are perceived to play in students' educational pathways during their qualification years.

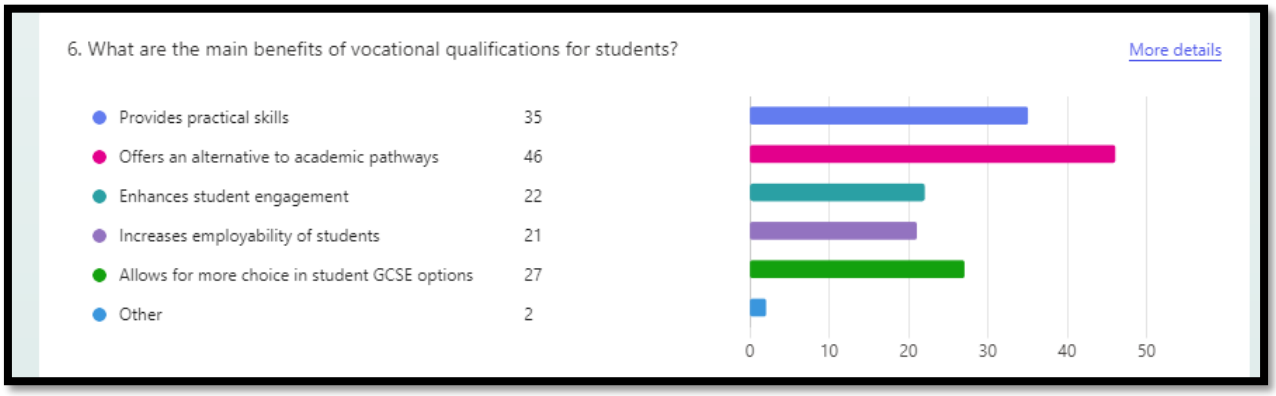

Figure 6 – Graph showing the benefits of vocational qualifications.

The literature review provided valuable insights into the primary benefits and challenges encountered by teachers delivering vocational qualifications. These findings informed the development of response options in the questionnaire, which was subsequently administered to investigate the experiences within the case study school. Respondents were permitted to select multiple benefits and challenges that aligned with their professional experience.

Analysis of the data, as illustrated in Figure 6, reveals compelling patterns in teachers' perceptions of vocational education benefits. An overwhelming majority (96%) of respondents identified vocational qualifications as providing an essential alternative to traditional academic pathways. Nearly three-quarters (73%) of teachers emphasized the value of practical skill development through vocational courses. Additionally, more than half of the respondents (56%) recognized that the inclusion of vocational qualifications enhanced the breadth of options available to students at GCSE level, thereby providing greater curriculum choice. A significant proportion (43% and 46%) of staff indicated that vocational qualifications enhance student engagement and increases student employability. These levels align again with the proportion of teachers that had delivered vocational qualifications indicating that perhaps these insights would not be noticed by staff who have not taught vocational qualifications.

This quantitative data was supported by interview findings, where participant A highlighted the "wide range of vocational options" available to students, noting how these qualifications have evolved from being perceived as solely for "more challenged students" to becoming widely accepted alternatives to GCSEs. In addition to this, a unique advantage of vocational qualifications was identified by participant B in their practical application, being "the only ones that teach learners employment skills of writing a CV, applying for jobs and interview preparation." This practical focus was particularly valued given the school's demographic context, where many students come from working-class families with strong connections to vocational and apprenticeship pathways.

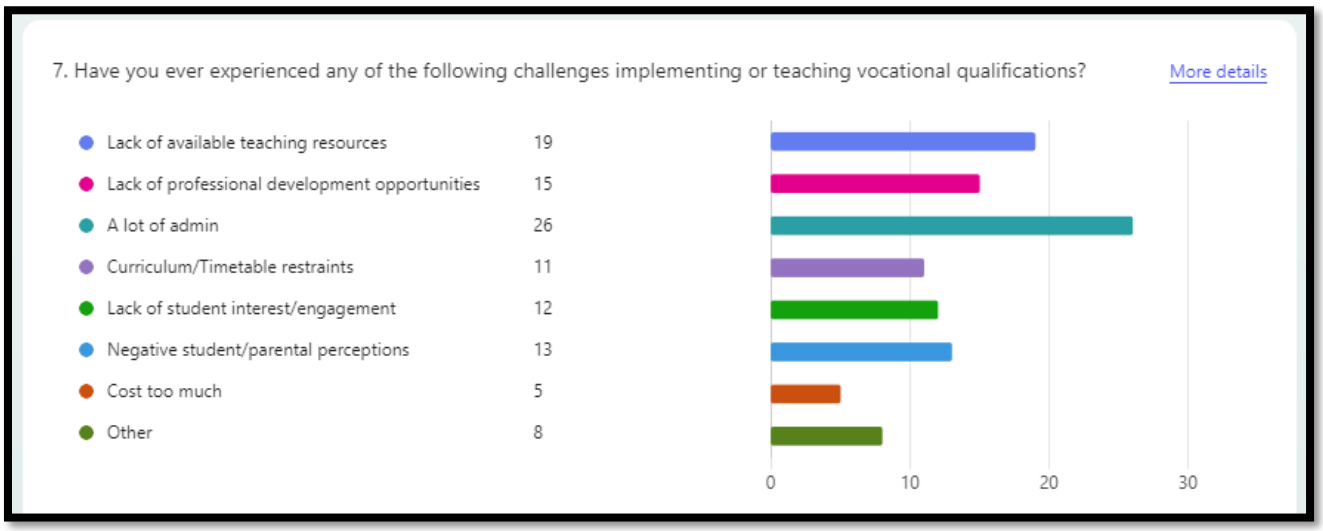

Figure 7 - Graph showing the challenges that teachers had faced delivering vocational qualifications.

The analysis presented in Figure 7 highlights administrative burden as a pronounced challenge in vocational qualification delivery within the case study school. A substantial majority (54%) of respondents identified administrative duties as a significant barrier to effective vocational education provision. These findings were strongly corroborated by both interview participants, who described substantial administrative burdens, including complex student registration processes, time-consuming centre certification requirements, and extensive documentation needs for assessment plans, sampling, and moderation. This finding also aligns with the researcher's personal experience of the complex paperwork associated with vocational qualifications, a perspective that will be critically examined in the subsequent discussion section. The data further reveals a consistent pattern of challenges experienced by teaching staff. With the exception of cost, other identified barriers were reported by between 23% and 40% of respondents, indicating a multifaceted landscape of challenges in vocational education delivery.

An intriguing pattern regarding the perception of cost as a barrier to vocational education delivery was identified. The data indicates that the majority of respondents did not identify cost as a significant challenge, which may be attributed to limited exposure to financial aspects of qualification management. This finding can be contextualized by understanding that qualification entry processes and associated costs typically fall under the remit of area leads and examinations officers, rather than classroom teachers. Detailed analysis of individual response data through

Microsoft Forms yields additional insights. The five participants who identified cost as a concern shared two significant characteristics: all possessed more than 16 years of teaching experience and had direct experience in delivering vocational qualifications. This correlation strongly suggests these respondents held either senior leadership positions or teaching and learning responsibility roles, positions that would naturally involve greater awareness of budgetary considerations.

Other challenges highlighted by interview participants included the need for consistent computer access in every lesson, difficulties in timetabling specialized staff and challenges in maintaining student engagement when multiple vocational subjects are scheduled consecutively. Stakeholders identified persistent absenteeism as a significant barrier, noting how it can cause students to "lose focus of what they are learning and why." The challenge of providing effective catch-up sessions was also highlighted.

Theme 4: Strategic Recommendations

The final questions in the questionnaire were open ended answers where participants could freely comment. The participants were asked to note any changes or strategies they felt could help to overcome the barriers with vocational education and they were also asked if they would like to add any further comments on their experiences with vocational education.

A large proportion of the changes or strategies outlined by respondents were aimed on a macro level at the Welsh Government. Some suggestions for examination boards on a meso level were also provided in additional to school level changes and strategies on a micro level. Figure 8, created by the researcher using the questionnaire data summarises some of the responses regarding changes or strategies that may help to overcome barriers with vocational education.

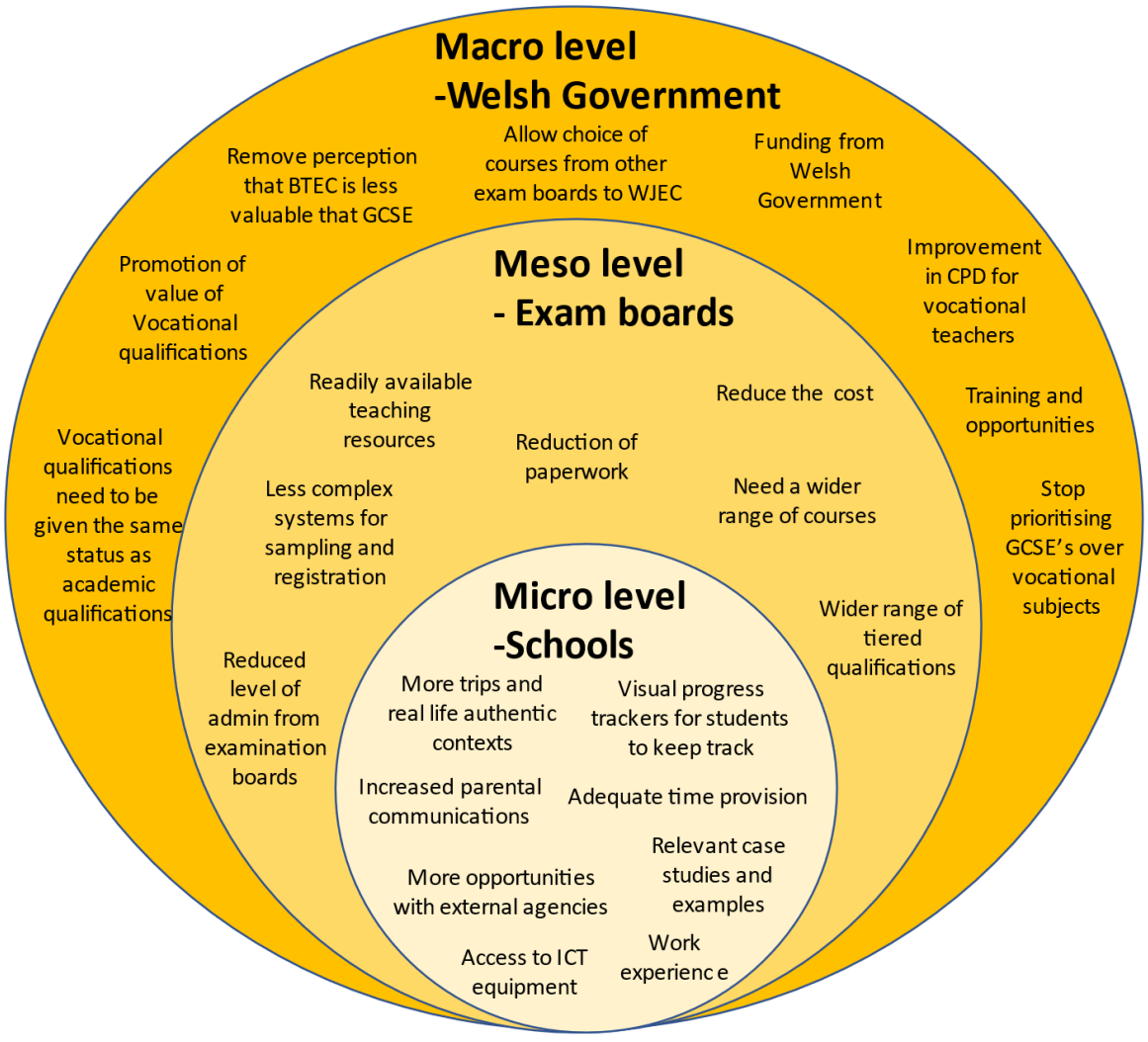

Figure 8 – Summary of responses noting the changes or strategies to overcome vocational education barriers on a micro, meso and macro scale.

From figure 8, it is clear that multiple school-level strategies that could potentially mitigate barriers to vocational education delivery. While these micro-level interventions—including external agency partnerships, work experience opportunities, enhanced time allocation, educational visits, and authentic learning contexts—may improve vocational education provision, they address only one layer of the existing challenges. At Meso level, with exam boards, there remains an additional tier

of constraints that persist beyond school-level control. Mainly encompassing significant administrative and documentation requirements that continue to burden educators despite local interventions and systemic limitations regarding qualification costs and the restricted range of available qualifications.

The data suggests that many proposed solutions to overcome these barriers are fundamentally dependent on macro-level government intervention. Critical factors such as funding allocation, professional development provision, alternative examination board restrictions, and the perceived status of vocational qualifications relative to academic pathways remain contingent upon government policy and response. This indicates that while school-level strategies are valuable, comprehensive improvement in vocational education delivery requires substantial policy reform at the governmental level.

Interview participants also mirrored many of these proposals including ideas of curriculum development with the expansion of vocational options in response to examination reform, exploration of alternative qualification providers beyond WJEC and the development of more challenging content for high-achieving students. Pedagogical enhancement was also noted by interviewees with suggestions that there is a need for implementation of specialized vocational pedagogy, professional development for non-specialist teachers and the integration of external speakers and workplace visits to enhance authenticity.

The final question allowed for respondents to openly add any views, details or experiences with vocational education with a free type space. Many of the responses support the findings shown in figure 8 as well as interview summaries. Figure 9 summarises the viewpoints of teachers.

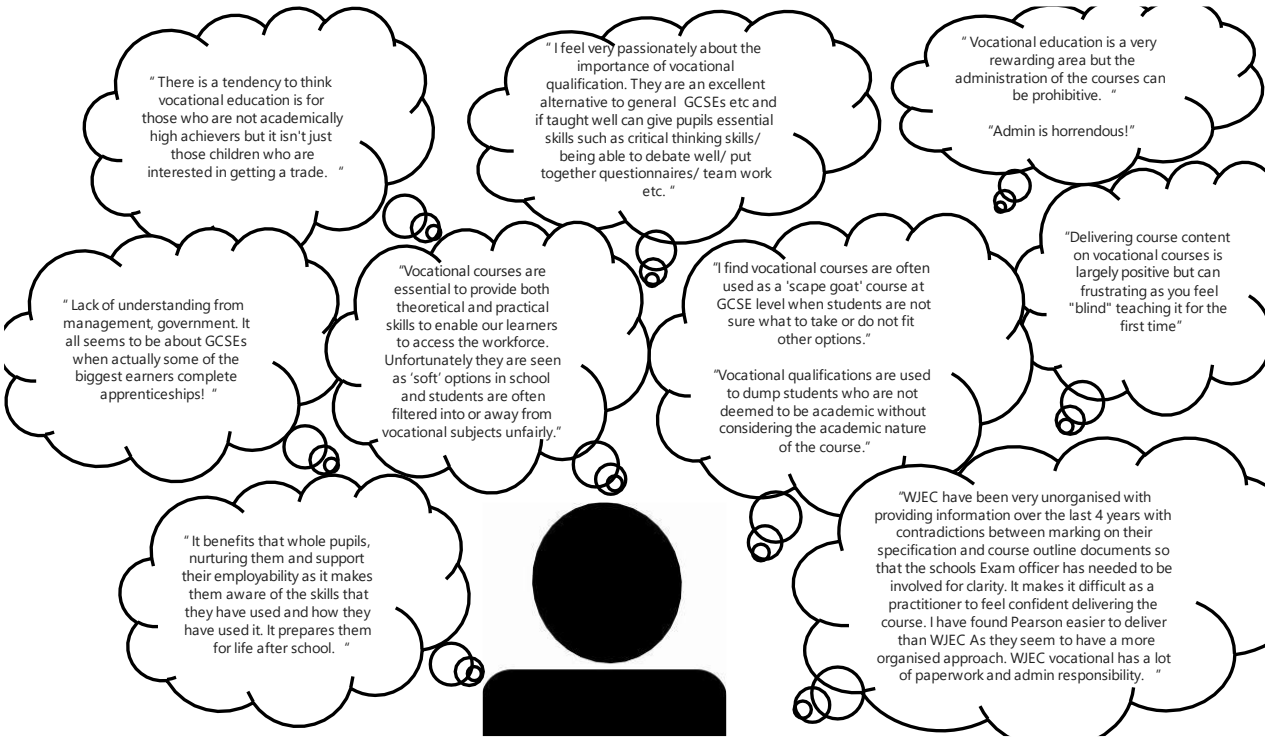

Figure 9 – Summary diagram showing the viewpoints of teachers that responded to the questionnaire.

Many of these viewpoints allign with the key themes identified in the literature review and will be discussed in further detail in the following discussion section.

Secondary qualification data analysis.

Secondary data gathered from the local authority qualification analysis was provided by the case study school. This data provided information on the qualification types that are provided at the school as well as a breakdown of student number entries and performance. The researchers position in the school as Area of Learning Lead for Vocational provision and Welsh Baccalaureate meant that a significant analysis was undertaken of this data as part of the school's yearly standards review process. This analysis included the disaggregation of data with a breakdown of subjects, grades, more able and talented students (MAAT), additional learning needs (ALN) and English as an additional language (EAL) students. It must be noted that the in-depth knowledge acquired from this analysis could have an impact upon the secondary results presented in this section. In an attempt to minimise this, the researcher has only included very basic relevant information to this study and has omitted any data that is not directly relevant.

For the year 2023-2024, the vocational provision provided by the research school included the following qualifications:

WJEC GCSE Health and Social Care and Childcare (Single Award)
BTEC Level 2 Extended Certificate in Teamwork and Personal Development in the Community
Pearson Level 1 Introductory Certificate in Vocational Studies
BTEC Personal Growth and Wellbeing
WJEC GCSE Business
BTEC L2 Extended Certificate in Enterprise Skills
BTEC L2 Award in Home Cooking Skills
WJEC Skills Challenge Certificate (Level 1/2)
WJEC Welsh Baccalaureate (Level 1/2)
BTEC L2 Hospitality and Catering

For the year 2024-2025, the vocational provision offered was expanded to include:

BTEC TECH Award in Travel and Tourism
Agored Cymru Level 2 Awards in Personal and Social Education

WJEC GCSE Business was also withdrawn from provision following the standards review due to the students underachieving on the course significantly compared to the vocational option of Enterprises skills. Vocational provision in the case study school is expanding but the numbers of students entered and opting for the qualifications are capped due to timetable restraints and staffing provision.

For 2024, the local authority core data set provides the results for vocational subjects at the case study school. For the purposes of this investigation, the following table 1 has been created by the researcher in an attempt to collate and summarise the relevant data from the local authority or ease of analysis. Each vocational subjects' results have been outlined and rounded to the nearest whole number, English Language and Mathematics are also included as they are a measure that impacts on Welsh Baccalaureate achievement but all other subject results have been omitted.

As can be seen from the results in Table 1, vocational provision in the school is performing well with all students studying the courses gaining at least a level 1 vocational qualification. Many qualifications have a level 2 pass rate of 100% indicating the success of the courses currently being delivered. Students at the case study school appear to perform significantly better in BTEC subjects rather than GCSE subjects. This could be attributed to the high levels of coursework involved in

Subject	BTEC/GCSE	A*-C (level 2)	A*-G (level 1)
English language	GCSE	44%	95%
Mathematics	GSCE	53%	97%
Welsh Baccalaureate	BTEC	41%	58%
Skills Challenge	BTEC	66%	100%
Business	GCSE	43%	100%
Health and social care	GCSE	63%	100%
Enterprise	BTEC	100%	100%
Teamwork	BTEC	100%	100%
Vocational studies	BTEC	N/A – level 1 course	100%
Personal Growth	BTEC	100%	100%
Home cooking	BTEC	100%	100%
Hospitality and Catering	BTEC	100%	100%

Table 1 – GCSE and BTEC qualification results for the year of 2024

these subjects or because these students are not able to effectively showcase their learning in examinations.

On average, each subject has two classes in the year group and most of these vocational classes contain an average of around 25 students. The Welsh Baccalaureate and Skills challenge certificate is delivered to the entire cohort averaging around 220 students every year. Students can only gain the Welsh Baccalaureate Qualification if they achieve the Skills Challenge Certificate in addition to Mathematics and English GCSE. Analysis of figure 10 reveals that the attainment of Mathematics and English GCSE acted as a significant barrier to Welsh Baccalaureate achievement. At Level 1, 42% of learners were unable to secure their Welsh Baccalaureate qualification due to not meeting the required standard in these core subjects. This pattern was also evident at Level 2, where 25% of learners failed to achieve their Welsh Baccalaureate qualification due to the academic constraints.

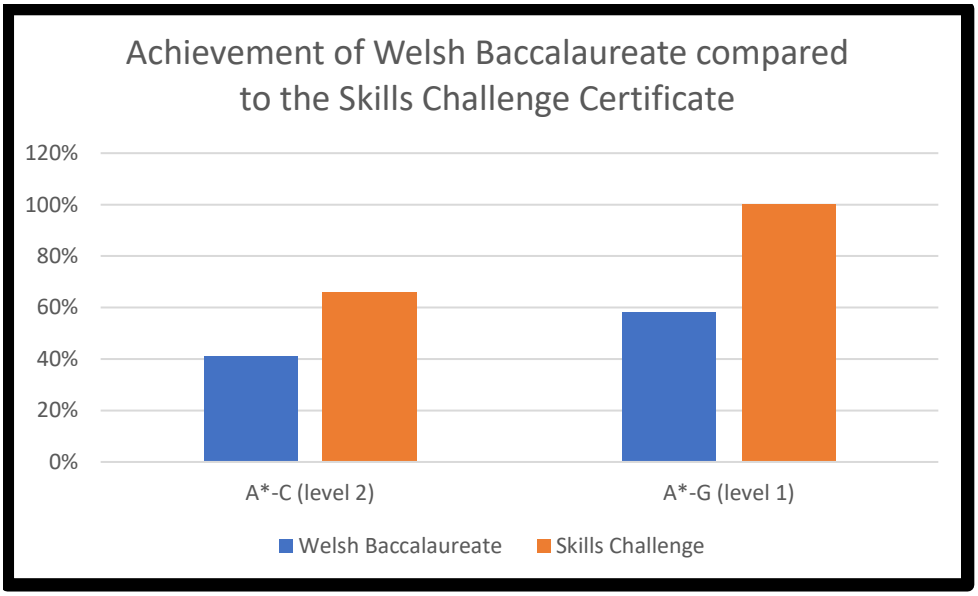

Figure 10 - Graphical representation of the achievement of Welsh Baccalaureate compared to the Skills Challenge certificate.

The current assessment framework appears to narrowly define academic competence, primarily through GCSE Maths and English subject performance. This approach overlooks the comprehensive skill development demonstrated by qualifications such as the Skills Challenge certificate, which effectively integrates numeracy, literacy, and digital literacy skills within its holistic assessment framework. The All-Wales Core Data Set (AWCDS) (Welsh Government, 2024) presents data that compares the school average point score to Wales, the graphs attached as appendix eight show that the school is overperforming against the Welsh average for achievement in the Skills Challenge certificate, yet underperforming in both Maths and English GCSE compared to the Welsh average again supporting the findings above. Furthermore, as this is a national qualification it could be fair

to comment that this may be the case in many other schools across Wales and would form an interesting future research study.

Discussion

Introduction

The literature review yielded several significant themes within four key domains: The Curriculum for Wales; opportunities presented by vocational education; barriers presented by vocational education and potential mitigation strategies for the barriers. This discussion chapter examines these emergent themes in conjunction with the empirical findings from the primary research. To ensure methodological rigor and enhance the validity of the findings, data triangulation was employed, with a comprehensive synthesis matrix provided in Appendix Six.

Curriculum for Wales

Firstly, the Curriculum for Wales (2020) aligns well with vocational education due to the skills and experienced that are provided. The results from the questionnaire showed that 50% of participants agreed with the alignment and just 6% did not with the remaining being unsure. This is an indication that perhaps not every participant possesses the knowledge to judge this alignment. Interestingly, when analysing numbers instead of percentages, the population that had no experience with vocational education were the equivalent to those who chose maybe or unsure indicating a potential correlation. Both interviewees, both of which were experienced in vocational education suggested that the alignment was clear with one stating “it was clearly designed around the 4 purposes”.

A questionnaire participant also suggested a strategy to overcome barriers as “more trips and real-world situations” which mirrors the authentic context pedagogical principle in the CfW (2020). When exploring the Welsh Baccalaureate in particular, a vocational qualification for which every student is entered for during their secondary education in the case study school, the alignment is clear. To highlight this alignment, the following diagram (figure 11) has been created using information from the Curriculum for Wales (2020) and the WJEC Welsh Baccalaureate specification (2022). The challenges for the Welsh Baccalaureate are in direct alignment with the 4 purposes and all grounded in a cross curricular approach incorporating literacy, numeracy, digital competency and Welsh Language skills. It is the researchers view that these skills and challenges are a vital element to the students in Welsh Education achieving their potential and ensuring that the four purposes are realised for each child.

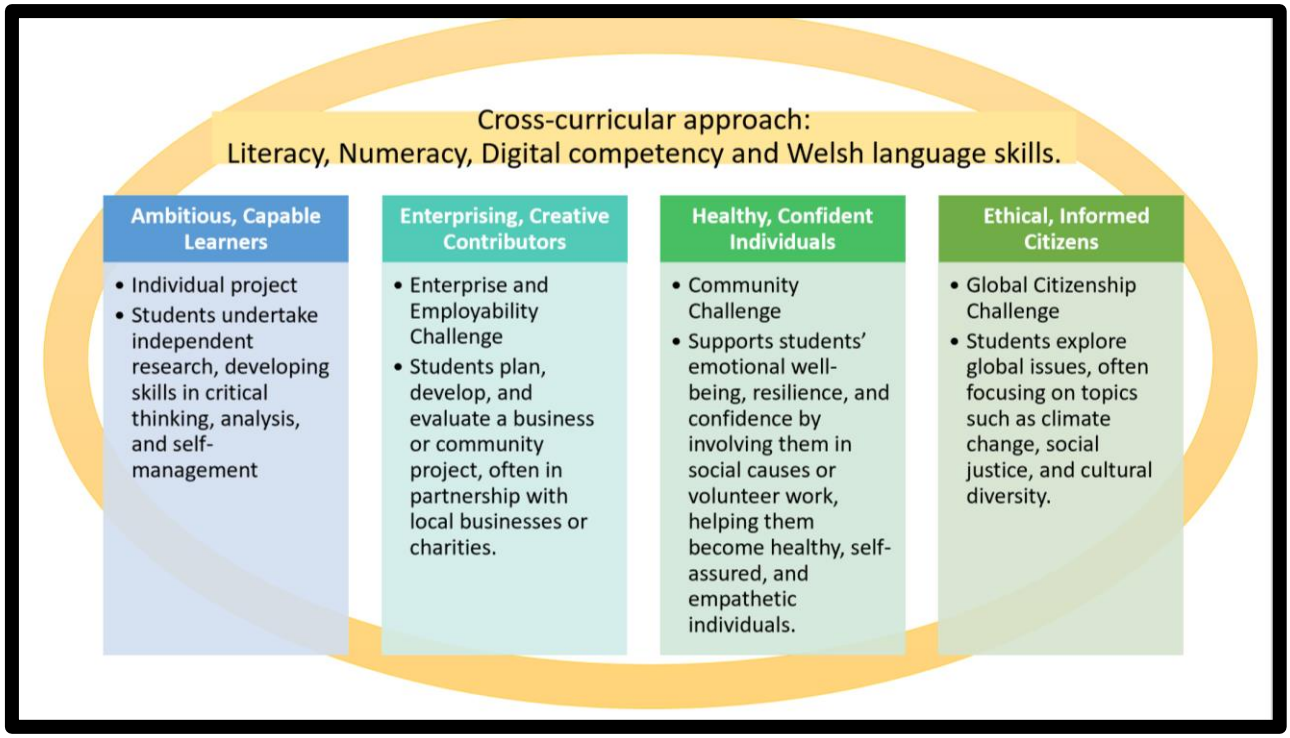

Figure 11 – Diagram created to show the alignment of the Welsh Baccalaureate with the Curriculum for Wales (2020)

Opportunities

Analysis of the literature revealed four predominant themes regarding the opportunities afforded by vocational education. Harris and Clayton (2020) emphasize its crucial role in preparing learners for workforce integration, while both Muir (2013) and Barnett and Ryan (2005) identify enhanced student motivation and attendance as significant outcomes. Furthermore, Psacharopoulos (1997) positions vocational education as a viable alternative pathway to traditional academic achievement. From a macroeconomic perspective, Sainsbury (2016) demonstrates the correlation between robust vocational education systems and positive economic growth, including reduced unemployment rates.

Vocational education prepares learners for the working world (Muir, 2013), therefore it is important to have insight from some of the specifications of vocational qualifications. The appendix seven contains images of the unit content and learning outcomes that were taken from the Teamwork specification (2021) and Vocational award specification (2021). As is clearly visible, the content in many of the vocational qualifications provided does prepare learners for the working world with key elements covered such as writing a CV, applying for positions and interview skills.

Questionnaire data revealed that 43% of participants agreed that vocational education does prepare students for the working world. This was also highlighted by their comments which included statements such as “it prepares them for life after school”, “support their employability as it makes them aware of the skills that they have” and “enable our learners to access the workforce.”. The 100% pass rate for both of these qualifications as outlined in the secondary data indicates that learners are successful in undertaking these tasks preparing them for future employment. Harris and Clayton (2020) suggested that vocational education had a positive impact on job achievement which would correlate with the curriculum of these qualifications. These opinions and ideas were also shared by interviewee B who stated “Vocational qualifications are the only ones that teach learners employment skills of writing a CV, applying for jobs and interview preparation”. This finding mirrors the ideas of Muir (2013) who noted that school leaders recognised that vocational qualifications provide a strong foundation to the working world.

The integration of vocational education yields significant positive outcomes in student development, as evidenced by both academic literature and empirical findings. Barnett and Ryan (2005) and Muir (2013) identified enhanced student confidence, attendance, and motivation as key benefits of vocational education provision. This theoretical perspective is substantiated by the quantitative data collected, which demonstrates exceptional academic achievement with a 100% pass rate across five Level 2 courses and nine Level 1 courses (Table 1). Qualitative data from stakeholder interviews further corroborates these findings. As participant A noted: "The achievements of all students in the vocational qualifications is commendable and I think this is reflective of the effort that teachers put into their lessons to ensure student progress, it doesn't go unnoticed." Additionally, survey data revealed that 46% of respondents perceived vocational education as having a positive impact on student motivation. This was reinforced through qualitative responses that emphasized motivation and the importance of nurturing the "whole pupil". This holistic approach to student development through vocational education aligns with the pedagogical principles outlined in the Curriculum for Wales (2020), highlighting the synergy between current educational policy and vocational provision.

96% of survey participants identified a benefit of vocational qualifications as being an alternative to academic qualifications with some claiming they were “vital” to engaging students. Haynes (2008) stressed the benefits of vocational education for learners from economically disadvantaged areas,

the survey results indicate that the educators at the school have an in-depth knowledge of what is beneficial to the students they teach. This was then further supported by qualitative data from interviews such as “our catchment area is made up highly of working class families who value apprenticehsips and vocational qualifications as it is the route many of the parents took themselves”. One would question by this finding if we are naturally limiting a lot of students due to their natural acceptance of a vocational pathway, are we as a society and a school preventing students from reaching their true potential, making them a product of their environment. Colley et al., (2003) explore Bourdieu's (1986) concept of cultural capital and provide empirical evidence of how cultural capital shapes learning trajectories. Students’ cultural capital significantly shapes their educational experiences and influences their future paths. Cultural capital, such as family knowledge, social connections, and familiarity with educational norms, plays a key role in how well students can understand, navigate, and succeed within academic systems.

This idea can be further supported by another statement from stakeholder A who noted “often students that opt for these subjects are eager to get into the world of work, I mean some already work weekends and holidays with family members getting paid”. This questions the purpose of the education, which according to the CfW (2020), is preparing learners with essential skills, experiences, and knowledge for employment and lifelong learning. Harris and Clayton (2020) noted that a benefit of vocational education is the growth of the economy and the reduction in levels of unemployment, maybe both can work together in conjunction. The qualifications gained by children in the study school are vital to their futures. The following graph (figure 12) taken from the AWCDS (Welsh government 2024) for the school shows that there were no children who did not achieve any qualifications in the school for the last two years.

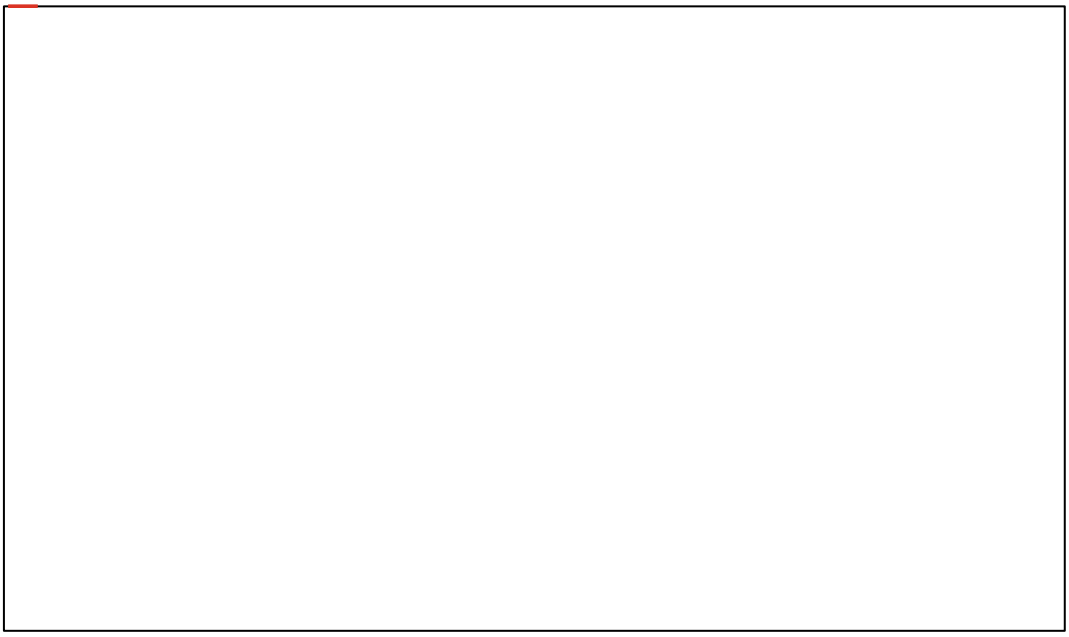

Figure 12 – Graph to show the percentage of pupils who did not achieve a GCSE in the study school and Wales in 2024.

This is a significant finding when compared to the latest census data where it was recorded that 18.2% of people in the United Kingdom have no qualifications (ONS, 2023). The latest statistics show that 5.4% of young people in Wales are not in education, employment, or training (NEET) (Welsh Government, 2023). In contrast, the study school reports a significantly lower NEET rate of 3%. This notable difference may be attributed to the fact that no students at the case study school left without obtaining qualifications. It must be recognised that this is a small scale, short term study so the impacts upon unemployment and economy growth cannot be measured fully. A longitudinal study would be needed for more conclusive results, however the small amount of data available does support the findings of Harris and Clayton (2020).

Barriers

Dalton and Smith (2004) highlighted the administrative tasks associated with vocational qualifications claiming they are onerous and time consuming. This issue was also highlighted by several respondents in the primary data with comments such as “Admin is horrendous” and references made to “paperwork”, “form-filling” and “red-tape”. A substantial majority (54%) of respondents identified administrative duties as a barrier (figure 7). This was also mirrored in responses from interviewees with claims it is a “constant administrative job”. Interviewee B

explained that processes are “time consuming” detailing that there are Lead Standards Verifier meetings every year to ensure that the centre is validated and can deliver the qualifications. Prior to the meeting the lead is required to provide school and department policies for internal quality assurance on Registration and Certification; Safeguarding; Malpractice, appeals and complaints; Equality and Diversity; Recognition of Prior Learning (RPL) and Health and Safety.

Dalton and Smith (2004) highlight curriculum time restraints which was also mirrored in interviews, timetabling appears to present significant challenges as vocational subjects require “computer access” and in addition to this end up with more non-specialists timetabled to teach them because “there is no other teacher available at that time”. Eleven questionnaire respondents also felt curriculum and timetabling restraints posed an issue for vocational subjects a barrier previously noted by Haynes (2008). Abrahams (2018) introduced the term “blocking system” where students are blocked from taking their chosen options due to specific option blocks. The study school also uses option blocks for GCSE and not all subjects are in each block meaning this issue could be faced by the students there preventing students from choosing their preferred option subjects. This blocking and timetabling system also presents difficulties when attempting to engage with work based contexts for placements and work experience (Peng, Wang and Yan, 2023).

Lack of funding and insufficient finances were also noted as significant barriers (Tshabalala and Ncube., 2014 and Peng, Wang and Yan., 2023). When exploring the cost of GCSE qualifications versus academic qualifications, there is a noticeable difference with a standard GCSE costing between £40 and £50 and a BTEC or vocational award costing between £75.50 to £100 (Pearson n.d. and Eduqas 2023). Schools also must pay a centre registration fee each year in addition to entry costs. In the primary data, cost did not appear significant to many main scale teachers without any leadership responsibility whom as previously explained have no financial involvement with qualifications, however, cost was mentioned by both interviewees who had significant experience and leadership responsibilities.

Barnett and Ryan (2005) cost of resources needed for vocational education leading to additional costs for schools e.g. computers. Whilst the primary data did not highlight the cost of resources, a lack of resources appeared in questionnaire responses with comments such as “better equipment”, “more facilities with ICT”. With tight budgets in schools and a country in economic recession, these barriers are unsurprising. Heyneman (2009) commented on the lack of equipment and

infrastructure needed to teach vocational qualifications, it appears that funding remains an issue years later.

Child and Vitello (2018) expressed concerns over the differences in the teaching and assessment of vocational qualifications and Dalton and Smith (2004) suggested a change in pedagogy is required. One interviewee discussed pedagogy stating that they believed it would be “worth exploring vocational pedagogy” as the skills to deliver the vocational courses are different to examinations. Many statements from questionnaire participants noted a lack of preparedness, resources and training. One respondent even stated that they felt “blind” teaching it at first and others called for “clear assessments” and “exemplar materials” with 15 respondents identifying it as a barrier (figure 7).

Just 27% of the questionnaire respondents identified perceptions as a barrier for vocational qualifications. This is a relatively low percentage, however when analysed alongside the context of the study school, it appears to not be as anomalous. Interviewee A stated “our catchment area is made up highly of working class families who value apprenticehsips and vocational qualifications as it is the route many of the parents took themselves”. The location of the study school and its catchment area could have influenced this trend. This contradicts the literature that highlights students’ negative attitudes and a lack of parental support which can be linked to disadvantaged economic backgrounds (Tshabalala and Ncube., 2014). Qualitative summaries from respondents noted the need to “remove the stigma”and “negative perceptions” associated with vocational qualifcations by “educating students and parents” inferring this barrier is not yet overcome.

It has been well documented in literature that vocational education is seen to be the academic alternative (Sainsbury 2016) or the soft-option, for lower ability students (Dalley-Trim et al., 2007). This was echoed in the qualitative primary data with respondents discussing it as the “easy” or “soft” option with one respondent stating “Pupils see the BTEC as an easier option or for those less academically inclined.” Dalton and Smith (2004) observed that teachers who did not specialize in vocational education often perceived vocational qualifications as being suited for lower-achieving students. However, this perspective was not reflected in the qualitative primary data collected for this study. Interestingly, 96% of respondents identified a key benefit of vocational education as “offering an alternative to academic pathways.”

The phrasing of this statement is crucial. While it does not explicitly refer to a "less academic" route, the interpretation of respondents' intentions remains unclear. Without qualitative data to provide context, it is difficult to determine whether respondents were implying a non-academic pathway or simply acknowledging vocational education as an alternative route unrelated to academic ability. In hindsight, the wording of this question was somewhat ambiguous and may have influenced how respondents interpreted and answered it.

Several scholars have noted vocational education as being second best, or the least favourable option (Harris and Clayton., 2020; Rodeiro and Vitello., 2020), a clear academic-vocational divide exists in the educational system (Shavit and Muller., 2000). This divide is seemingly less prominent in the study school with many respondents noting that it is unfortunate when vocational education is seen to be less important than GCSEs and that change is needed. Participants stressed that "they need to be promoted as an important alternative to normal education rather than for 'naughty' kids" and disliked that students were "often filtered into or away from vocational subjects unfairly." Child and Vitello (2018) and Wallenborn and Heyneman (2009) had both warned about assumptions of student profile with vocational subjects which seems to remain a barrier in the research school.

Barnett and Ryan (2005) explain that it is not actually clear vocational education suits lower ability or academically challenged students and could therefore be a poor option choice (Kirby., 2000). One questionnaire participant stated "It all seems to be about GCSEs when actually some of the biggest earners complete apprenticeships!". There, appears to be the fundamental flaw in this discussion, the major barrier is actually society and the excessive weighting that it puts on academia and qualifications. Children cannot progress and succeed unless they have qualifications. This idea was then further supported by interviewee A who stated "society is built around qualifications, we need to get these students as many as they can get, vocational education helps them achieve" and the same interviewee also stated "year 11 have had a shock this year with the college talks when they have found out the qualifcation requirements for the courses they want to do".

Placing excessive emphasis on passing qualifications risks disadvantaging students who are less academically inclined or come from economically disadvantaged backgrounds, limiting their

opportunities to reach their full potential. Colley et al. (2003) highlighted how dominant educational practices often marginalize working-class students, but this marginalization extends further, affecting those with additional learning needs and those who do not excel in traditional academic pathways. Some of the most successful individuals globally possess few or no formal qualifications, illustrating that success cannot solely be measured by grades or certificates. Instead, education should adopt a holistic approach, as emphasized in the Curriculum for Wales (2020), valuing diverse skills, personal development, and lifelong learning over narrow academic metrics.

Suggested strategies

Peng, Wang and Yan., (2023) suggested mentorship and rewards to positively incentivise and engage learners. There was mention of motivation and engagement highlighted through the questionnaire, however most reported that they use student achievements, progress trackers, marks and pupil voice rather than intrinsic rewards. Staff align more with Deci, Koestner and Ryan (1999) who warned against rewards due to their effect on motivation long term.

Kennedy (1993) and Rodeiro and Vitello (2020) both emphasised the need for a broader range of qualifications. This again is supported by the findings from the primary data with staff stating that students would benefit from “a wider range of vocational options”. This is highlighted as problematic by one interviewee who explained that the Welsh Joint Exam Board (WJEC) do not provide adequate options and schools are therefore forced to seek alternatives from different examination bodies. Qualifications Wales, the independent regulator, collaborates with WJEC to promote equity, inclusivity, and bilingualism in education. Schools are encouraged to use WJEC qualifications where available to ensure fair opportunities, particularly for Welsh-medium learners. However, the limited vocational options offered by WJEC compels schools to seek alternatives, placing Welsh-speaking students at a disadvantage.

Peng, Wang and Yan (2023) highlighted the need for professional development for teachers who deliver vocational qualifications. The responses from the primary data also suggest that this is a valid recommendation with teachers explaining there is “limited CPD” in the subject area and a need for “training and opportunities” as they are “non-specialists”. Figure 7 highlights these difficulties with around 31% of responses highlighting a lack of professional development as a barrier.

The qualitative primary data reveals a need for economic funding with teachers stating “financial demands” of courses are an issue and stating that a reduction to the costs or funding would improve vocational education in schools. Bursnall et al., (2019) and Bennell (2009) both stressed the importance of financial investment to improve provision.

Conclusion and Recommendations

In conclusion, the primary impediments to effective vocational education fundamentally emerge from entrenched sociocultural constructs, which simultaneously represent the most complex and resistant barriers to systemic transformation. These deeply embedded cultural perceptions of vocational education as less academic, combined with social hierarchies, challenge the intrinsic value and legitimacy of vocational pathways, often positioning them as less prestigious than traditional academic trajectories.

A main concern is that the current education system appears to be fundamentally flawed in its approach to measuring student achievement. Placing excessive emphasis on GCSE qualifications creates a rigid framework that disproportionately disadvantages students who are less academically inclined or come from economically disadvantaged backgrounds. One might then question the purpose: is it to measure success against other educational systems or to evaluate the success of individual students?.

The qualification system effectively becomes a gatekeeper, preventing students from accessing further and higher education opportunities due to entry requirements. This approach does not measure true potential or individual capability, but instead perpetuates existing social inequalities. Consequently, students are judged by a narrow set of academic criteria that fail to recognize their diverse talents, skills, and potential for success. The result is a systemic failure that limits social mobility and potentially undermines the prospects of students who do not conform to traditional academic measures of achievement. A more holistic, inclusive approach to education is urgently needed to support all students.

Recommendations for Strengthening Vocational Education Provision

School-Level Recommendations

Based on the research findings, the following recommendations are proposed to enhance and strengthen vocational education within the case study school:

1. Implement comprehensive professional development for staff to enhance staff competency in vocational pedagogies and expand the scope and accessibility of vocational qualifications by implementing a more diverse range of courses that cater to varied student interests and abilities thereby ensuring inclusive vocational education provision supported by Haynes (2008) and Peng, Wang and Yan (2023).
2. Establish and nurture strategic partnerships with local industry stakeholders, further education colleges, and training providers to strengthen current provision create authentic learning environments that align with the experiential learning principles outlined in the Curriculum for Wales (2020) and facilitate clear progression pathways into post-16 vocational education aligning with findings from Callan (2003) and Peng, Wang and Yan (2023).
3. Design and implement targeted initiatives to challenge existing perceptions and eliminate stigma associated with vocational education through systematic engagement with students, parents, and school leadership as outlined by Harris and Clayton (2020) and Rodeiro and Vitello (2020).
4. Establish enhanced administrative support systems through consultation with senior management to streamline documentation processes within the Area of Learning, enabling teachers to prioritize instructional delivery and assessment activities supported by the findings of Wallenborn and Heyneman (2009) and Dalton and Smith (2004).

System-Level Recommendations for Welsh Education

The following recommendations are proposed for consideration at the national level to strengthen vocational education across Wales. It should be noted that these recommendations need to work in conjunction together due to the qualification requirements for further education.

1. Establish specialized Post Graduate Certificate in Education (PGCE) programmes or equivalent teaching qualifications that focus specifically on vocational education pedagogy and delivery methodologies as supported by Bolhuis (2006) and Dalton and Smith (2004).
2. Institute comprehensive reforms of the Welsh 14-16 vocational qualification framework to ensure alignment with the foundational principles and objectives of the Curriculum for Wales (2020) and the Well-being of future Generations Act (2015) which has been previously highlighted by Sainsbury (2016).
3. Develop and implement a sustained national campaign to promote awareness and understanding of vocational education's value among key stakeholders, including students, parents, educators, school leaders, and broader community members as supported by Rodeiro and Vitello (2020) and Harris and Clayton (2020).

Further research

Whilst this research offers a comprehensive review with some valuable insights of the case study school and many recommendations are transferable or generalisable into different contexts, further research into this enquiry is recommended to enhance its impact and validity. A more extensive longitudinal investigation that incorporates multiple educational establishments and teachers across Wales would provide more comprehensive approach yielding more robust and comprehensive findings. Such an expanded methodology would strengthen the validity of the conclusions and potentially compel examination boards and Welsh Government policymakers to implement evidence-based reforms. Furthermore, broadening the stakeholder perspective to include learner voices and parental/guardian input would facilitate the development of a more holistic theoretical framework. This multi-stakeholder approach would provide a more nuanced and sophisticated understanding of vocational education delivery and its impact within the Welsh educational landscape.

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Appendices

Appendix One - Timeline

Date	Action	Completion/Progress
Mid July 24	Title confirmed Complete ethics form Reading around topic – identify themes	Complete Complete Complete
End July 24	Introduction draft Aims and Objectives	Complete Complete
Mid August 24	Methodology draft Identify paradigm etc Consent forms and information letter written	Complete Complete Complete
End August 24	Literature review draft Questionnaire and Interview Questions prepared	Complete Complete
Mid Sept 24	Consent forms and information letter sent out	Complete
End Sept 24	Collect data	Complete
Mid Oct 24	Results analysis	Complete
End Oct 24	Results presentation	Complete
Mid Nov 24	Discussion	Complete
End Nov 24	Conclusions and recommendations	Complete
Mid Dec 24	Edits	
End Dec 24	Complete final draft	
Jan 25	Submit final dissertation	

Appendix Two - Consent form and information letter

PRIFYSGOL CYMRU
Y Drindod Dewi Sant
UNIVERSITY OF WALES
Trinity Saint David

Participant Identification Number:

PARTICIPATION CONSENT FORM
Project Title: Opportunities and barriers with Vocational Education in a Secondary School in Wales: Teachers' Perspectives.
Name of Researcher: Kathryn Edwards

Please initial box

1	I confirm that I have read and understand the information sheet dated 01/10/24 for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	
2	I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.	
3	I understand that any information given by me may be used in future reports, articles or presentations by the research team.	
4	I understand that my name will not appear in any reports, articles or presentations.	
5	I agree to take part in the above study.	

Name of Participant	Signature

You may decline to participate in this study. You may end your participation in this study at any time. If you decide to remain anonymous, maintaining your anonymity will be a priority and every practical precaution will be taken to disguise your identity. If you prefer anonymity, there will not be any identifying information on audiotapes or transcripts of this or any interview. No-one will hear any audiotapes or see any transcripts without your prior consent. All materials generated from this or any interview will remain confidential.	When completed please return in the envelope provided (if applicable). One copy will be given to the participant and the original to be kept on the file of the research team at:
	NAME & ADDRESS OF RESEARCHER

Researcher Kathryn Edwards	Signature KEdwards

PRIFYSGOL CYMRU
Y Drindod Dewi Sant
UNIVERSITY OF WALES
Trinity Saint David

Participant Identification Number:

PARTICIPANT INFORMATION SHEET

Project Title: Opportunities and barriers with Vocational Education in a Secondary School in Wales: Teachers' Perspectives.

Dear Participant:

My name is Kathryn Edwards and I am studying in the School of Education and Humanities.

I would like to invite you to participate in my research project. This project will explore vocational education in a secondary school and aims to identify the opportunities and barriers from teachers perspectives.

Attached to this letter is a short questionnaire developed by myself which will explore vocational education and qualifications. I believe your opinions will be extremely helpful to me.

Through your participation in the questionnaire and/or interviews, I hope to ascertain your views on the opportunities and barriers of vocational education.

All questionnaires will be kept strictly confidential to the researchers involved and at **NO** time will individual questionnaires be released to the general public. This gives you a chance to express your views on your programme a confidential and anonymous forum and still be able to make a difference. Your participation in this study is completely voluntary so you can withdraw from the questionnaire at any stage.

Our questionnaire should take about 5 minutes to complete, but there is no time constraint. There are also no right or wrong answers.

After careful and precise analysis of the data obtained from this questionnaire, I will be happy to provide you with a copy of the findings at your request. The results of this questionnaire will hopefully enhance my understanding of vocational education and will be stored on a password protected OneDrive.

We thank you in advance for your time and participation. If any questions do arise, feel free to contact me at your convenience.

NAME & ADDRESS OF RESEARCHER

Appendix Three - Ethics form

APPLICATION FOR ETHICAL APPROVAL

RESEARCH STUDENTS This form is to be completed by the student within **SIX** months for full-time students and **TWELVE** months for part time students, after the commencement of the research degree or following progression to Part Two of your course. Once complete, submit this form via the ***MyTSD Doctoral College Portal*** at (https://mytsd.uwtsd.ac.uk). This document is also available in Welsh.
RESEARCH STAFF ONLY All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk , with the title 'Ethical Approval' followed by your name.
STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/module leader.

In order for research to result in benefit and minimise risk of harm, it must be conducted ethically. A researcher may not be covered by the University's insurance if ethical approval has not been obtained prior to commencement.

The University follows the OECD Frascati manual definition of **research activity**: "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications". As such this covers activities undertaken by members of staff, postgraduate research students, and both taught postgraduate and undergraduate students working on dissertations/projects.

The individual undertaking the research activity is known as the "principal researcher".

Ethical approval is not required for routine audits, performance reviews, quality assurance studies, testing within normal educational requirements, and literary or artistic criticism.

Please read the notes for guidance before completing ALL sections of the form.

This form must be completed and approved prior to undertaking any research activity. Please see Checklist for details of process for different categories of application.

SECTION A: About You (Principal Researcher)

1	Full Name:		Kathryn Lucie Edwards			
2	Tick all boxes that apply:		Member of staff:	/	Honorary research fellow:	☐
	Undergraduate Student	☐	Taught Postgraduate Student	☒	Postgraduate Research Student	☐

3	Institute/Academic Discipline/Centre:	Institute of Education and Humanities
4	Campus:	Swansea SA1
5	E-mail address:	
6	Contact Telephone Number:	
	For students:	
7	Student Number:	
8	Programme of Study:	Masters in Educational Studies
9	Director of Studies/Supervisor:	Sue James / Joanna Holmes

SECTION B: Approval for Research Activity

1	Has the research activity received approval in principle? (please check the Guidance Notes as to the appropriate approval process for different levels of research by different categories of individual)	**YES**	☒	**NO**	☐
				Date	
2	If Yes, please indicate source of approval (and date where known): ***Approval in principle must be obtained from the relevant source prior to seeking ethical approval***	Research Degrees Committee	☐		
		Institute Research Committee	☐		
		Other (write in)	☒	**Joanna Holmes**	

SECTION C: Internal and External Ethical Guidance Materials

	Please list the core ethical guidance documents that have been referred to during the completion of this form (including any discipline-specific codes of research ethics, location-specific codes of research ethics, and also any specific ethical guidance relating to the proposed methodology). Please tick to confirm that your research proposal adheres to these codes and guidelines. You may add rows to this table if needed.	
1	**UWTSD Research Ethics & Integrity Code of Practice**	☒
2	**UWTSD Research Data Management Policy**	☒
3	British Educational Research Association (2024) *Ethical guidelines for educational research*. 5th edn. Available at: Ethical Guidelines for Educational Research, fifth edition (2024) | BERA	☒

SECTION D: External Collaborative Research Activity

If there are external collaborators then you should gain consent from the contact persons to share their personal data with the university. If there are no external collaborators then leave this section blank and continue to section E.

1	Institution					
2	Contact person name					
3	Contact person e-mail address					
4	Is your research externally funded?		**YES**	☐	**NO**	☐
5	Are you in receipt of a KESS scholarship?		**YES**	☐	**NO**	☐
6	Are you specifically employed to undertake this research in either a paid or voluntary capacity?	Voluntary	**YES**	☐	**NO**	☐
7		Employed	**YES**	☐	**NO**	☐
8	Is the research being undertaken within an existing UWTSD Athrofa Professional Learning Partnership (APLP)?	If YES then the permission question below does not need to be answered.	**YES**	☐	**NO**	☐
9	Has permission to undertake the research has been provided by the partner organisation?	(If YES attach copy) If NO the application cannot continue	**YES**	☐	**NO**	☐

Where research activity is carried out in collaboration with an external organisation

10	Does this organisation have its own ethics approval system?	**YES**	☐	**NO**	☒
	If Yes, please attach a copy of any final approval (or interim approval) from the organisation (this may be a copy of an email if appropriate).				

SECTION E: Details of Research Activity

1	Indicative title:	Opportunities and barriers with Vocational Education in a Secondary School in Wales: Teachers' Perspectives.		
2	Proposed start date:	September 2024	Proposed end date:	January 2025
	Introduction to the Research (maximum 300 words per section) **Ensure that you write for a <u>Non-Specialist Audience</u> when outlining your response to the points below:** *Purpose of Research Activity* *Proposed Research Question* *Aims of Research Activity* *Objectives of Research Activity* Demonstrate, briefly, how **<u>Existing Research</u>** has informed the proposed activity and explain *What the research activity will add to the body of knowledge* *How it addresses an area of importance.*			
3	**Purpose of Research Activity** An investigation exploring the benefits and challenges teachers face when integrating vocational education/qualifications into the curriculum with recommendations of strategies to overcome the barriers. (this box should expand as you type)			
4	**Research Question** What are the opportunities and barriers with Vocational Education in a Secondary School in Wales from Teachers' Perspectives? (this box should expand as you type)			
5	**Aims of Research Activity** **Aim:** To investigate the benefits and challenges teachers face when integrating vocational education/qualifications into the curriculum in a Welsh secondary school, and to propose strategies to overcome these barriers. (this box should expand as you type)			

6	**Objectives of Research Activity** 1. To explore the perceived benefits of vocational education for students from the perspective of secondary school teachers in Wales. 2. To identify and analyse the challenges and barriers teachers encounter in integrating vocational education into the curriculum. 3. To collect teachers' suggestions and recommendations for overcoming the identified challenges and barriers. 4. To propose evidence-based strategies and recommendations for educators to enhance the integration of vocational education in Welsh secondary schools. (this box should expand as you type)
	Proposed methods (maximum 600 words) Provide a brief summary of all the methods that **may** be used in the research activity, making it clear what specific techniques may be used. If methods other than those listed in this section are deemed appropriate later, additional ethical approval for those methods will be needed. You do not need to justify the methods here, but should instead describe how you intend to collect the data necessary for you to complete your project.
7	A mixed methods approach (Cohen, et al., 2017) will be utilised to gather both quantitative and qualitative data that will be analysed and interpreted by the researcher as follows: - Semi-structured Interview with Headteacher and vocational teacher Both interviews will be conducted via Microsoft Teams. The record function on Teams will be used (in agreement with participants). The purpose of this will be to access the "transcribe" function to generate accurate meeting notes. All data will be securely stored and controlled using encryption (UWTSD). Consent will be sought via consent form prior to the interview. Data use and right to withdraw will be articulated at the start of the interview up until the point of data analysis (October 2024). Raw data will be destroyed upon completion of the research project (BERA, 2024). - Questionnaire for secondary school teachers The questionnaire is intended to generate data relating to the perceptions of teachers in a Welsh Secondary school with regards to Vocational Education and Qualifications with a particular emphasis on their perceived barriers and opportunities. The questionnaire will be generated using Microsoft Forms and request for participation sent via school email. As a Microsoft Outlook Tool, the

	form will be encrypted with a password, via UWTSD cloud access and HWB regulations. All responses will be anonymous. The only personal data requested will be current role/status (e.g. teacher/ NQT, Head of Department, etc). A consent form, outlining the purpose methods and use of research data will be included within the Microsoft form. The right to withdraw will be clearly articulated in line with BERA (2024) and will be available up until the point of data analysis (October 2024). - Secondary data for vocational qualifications Secondary data collected from the school will provide the researcher with information and data regarding what vocational subjects and qualifications are offered at the school and the numbers/profiles of students that opt for these subjects. This is provided via the school-based student tracking data enabling the researcher access to a profile of students, including cognitive ability, barriers to learning, age, gender, eFSM (Free school meal) status, and ALN (Additional Learning Needs) provision. This data will be used to identify trends within the students who are completing vocational qualifications. Breakdown of learners into specific groups for information is standard practice within educational establishments and organisations (WAG, ERW and the Local Authority: All Wales Core Data Sets – Annual; www.mylocalschool.com , et al., and students are aware that data is scrutinised in this way. All data will be anonymised by the school before being given to the researcher and personal details removed in line with GDPR. (this box should expand as you type)
	Location of research activity Identify all locations where research activity will take place.
8	(this box should expand as you type)
	Research activity outside of the UK

	If research activity will take place overseas, you are responsible for ensuring that local ethical considerations are complied with and that the relevant permissions are sought. Specify any local guidelines (e.g. from local professional associations/learned societies/universities) that exist and whether these involve any ethical stipulations beyond those usual in the UK (provide details of any licenses or permissions required). Also specify whether there are any specific ethical issues raised by the local context in which the research activity is taking place, for example, particular cultural and/or legal sensitivities or vulnerabilities of participants. If you live in the country where you will do the research then please state this.
9	*(this box should expand as you type)*

10	Use of documentation not in the public domain: Are any documents **NOT** publicly available?	**NO**	☒
		YES	☐
11	If Yes, please provide details here of how you will gain access to specific documentation that is not in the public domain and that this is in accordance with the current data protection law of the country in question and that of England and Wales. *(this box should expand as you type)*		

	Does your research relate to one or more of the seven aims of the Well-being of Future Generations (Wales) Act 2015?	**YES**	**NO**
12	A prosperous Wales	☐	☒
13	A resilient Wales	☐	☒
14	A healthier Wales	☐	☒
15	A more equal Wales	☐	☒
16	A Wales of cohesive communities	☐	☒
17	A Wales of vibrant culture and thriving Welsh language	☐	☒
18	A globally responsible Wales	☐	☒
19	If YES to any of the above, please give details:		
	(this box should expand as you type)		

SECTION F: Scope of Research Activity

	Will the research activity include:	YES	NO
1	Use of a questionnaire or similar research instrument?	☒	☐
2	Use of interviews?	☒	☐
3	Use of focus groups?	☐	☒
4	Use of participant diaries?	☐	☒
5	Use of video or audio recording?	☒	☐
6	Use of computer-generated log files?	☐	☒
7	Participant observation with their knowledge?	☐	☒
8	Participant observation without their knowledge?	☐	☒
9	Access to personal or confidential information without the participants' specific consent?	☐	☒
10	Administration of any questions, test stimuli, presentation that may be experienced as physically, mentally or emotionally harmful / offensive?	☐	☒
11	Performance of any acts which may cause embarrassment or affect self-esteem?	☐	☒
12	Investigation of participants involved in illegal activities?	☐	☒
13	Use of procedures that involve deception?	☐	☒
14	Administration of any substance, agent or placebo?	☐	☒
15	Working with live vertebrate animals?	☐	☒
16	Procedures that may have a negative impact on the environment?	☐	☒
17	Other primary data collection methods. Please indicate the type of data collection method(s) below.	☐	☒
	Details of any other primary data collection method: (this box should expand as you type)		

If NO to every question, then the research activity is (ethically) low risk and **may** be exempt from **some** of the following sections (please refer to Guidance Notes).

If YES to any question, then no research activity should be undertaken until full ethical approval has been obtained.

SECTION G: Intended Participants

If there are no participants then do not complete this section, but go directly to section H.

	Who are the intended participants:	YES	NO
1	Students or staff at the University?	☐	☒
2	Adults (over the age of 18 and competent to give consent)?	☒	☐

3	Vulnerable adults?	☐	☒
4	Children and Young People under the age of 18? (Consent from Parent, Carer or Guardian will be required)	☐	☒
5	Prisoners?	☐	☒
6	Young offenders?	☐	☒
7	Those who could be considered to have a particularly dependent relationship with the investigator or a gatekeeper?	☐	☒
8	People engaged in illegal activities?	☐	☒
9	Others. Please indicate the participants below, and specifically any group who may be unable to give consent.	☐	☒
	Details of any other participant groups: (this box should expand as you type)		

	Participant numbers and source Provide an estimate of the expected number of participants. How will you identify participants and how will they be recruited?	
10	How many participants are expected?	2 interview participants Maximum 50 questionnaire participants *(this box should expand as you type)*
11	Who will the participants be?	Teachers in a Welsh Secondary school - Pentrehafod Headteacher of Pentrehafod School – Matthew Goulding Area of Learning Vocational Lead Teacher – Dawn Howells *(this box should expand as you type)*
12	How will you identify the participants?	Purposive sample for interview – headteacher and vocational subject lead teacher. Convenience Sample for Questionnaire – teachers in Pentrehafod School. Questionnaires will be distributed through an online link via Microsoft forms which allows for anonymised responses digitally via HWB (Welsh school education platform). *(this box should expand as you type)*

	Information for participants:	**YES**	**NO**	**N/A**
13	Will you describe the main research procedures to participants in advance, so that they are informed about what to expect?	☒	☐	☐
14	Will you tell participants that their participation is voluntary?	☒	☐	☐

15	Will you obtain written consent for participation?	☒	☐	☐
16	Will you explain to participants that refusal to participate in the research will not affect their treatment or education (if relevant)?	☒	☐	☐
17	If the research is observational, will you ask participants for their consent to being observed?	☐	☐	☒
18	Will you tell participants that they may withdraw from the research at any time and for any reason?	☒	☐	☐
19	With questionnaires, will you give participants the option of omitting questions they do not want to answer?	☒	☐	☐
20	Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	☒	☐	☐
21	Will you debrief participants at the end of their participation, in a way appropriate to the type of research undertaken?	☒	☐	☐
22	If NO to any of above questions, please give an explanation			
	(this box should expand as you type)			

	Information for participants:	**YES**	**NO**	**N/A**
24	Will participants be paid?	☐	☒	☐
25	Is specialist electrical or other equipment to be used with participants?	☐	☒	☐
26	Are there any financial or other interests to the investigator or University arising from this study?	☐	☒	☐
27	Will the research activity involve deliberately misleading participants in any way, or the partial or full concealment of the specific study aims?	☐	☒	☐
28	If YES to any question, please provide full details			
	(this box should expand as you type)			

SECTION H: Anticipated Risks

	Outline any anticipated risks that may adversely affect any of the participants, the researchers and/or the University, and the steps that will be taken to address them. If you have completed a full risk assessment (for example as required by a laboratory, or external research collaborator) you may append that to this form.		
1	Full risk assessment completed and appended?	Yes	☐
		No	☒
2	Risks to participants		

	For example: sector-specific health & safety, emotional distress, financial disclosure, physical harm, transfer of personal data, sensitive organisational information	
	Risk to participants: Risks to participants of this research project are low as participation is voluntary. Participants may be concerned about being identified with negative responses. Participants may feel compelled to take part if they know the researcher. In interviews there may be a power imbalance which could affect authenticity of responses. In interviews participants may fear judgement or stigmatization, impacting on their willingness to share certain experiences. *(this box should expand as you type)*	*How you will mitigate the risk to participants:* Participation is voluntary and ongoing consent will be sought. Questionnaire questions can be omitted to avoid any discomfort. The questionnaire results will be anonymised through the Microsoft form, and any identifiers related to role removed in the reporting of the study such as how long the teacher has been teaching/ subjects they teach. Prospective participants will be contacted via their professional email addresses. The voluntary nature of participation will be explained as well as the commitment by the researcher to confidentiality about who has/has not taken part. Consent forms will be distributed to all participants In interviews, I will establish ground rules for equality and respectful interaction and encourage all participants to share their perspectives. Interviewer will ensure to foster a supportive and non-judgemental environment, and assure participants that their perspectives are valuable, respected and will be treated with sensitivity. During the interviews, research will be fully explained. Right to withdraw and/or not to answer specific questions will be offered. Also, the consent form will stress the need for confidentiality. No personal questions will be asked.

		(this box should expand as you type)
3	If research activity may include sensitive, embarrassing or upsetting topics (e.g. sexual activity, drug use) or issues likely to disclose information requiring further action (e.g. criminal activity), give details of the procedures to deal with these issues, including any support/advice (e.g. helpline numbers) to be offered to participants. Note that where applicable, consent procedures should make it clear that if something potentially or actually illegal is discovered in the course of a project, it may need to be disclosed to the proper authorities	
	The project does not involve gathering data of this kind. Should any participant at any point disclose any sensitive information I will follow appropriate procedures as laid out in the university's policy. *(this box should expand as you type)*	
4	Risks to the investigator For example: personal health & safety, physical harm, emotional distress, risk of accusation of harm/impropriety, conflict of interest	
	Risk to the investigator: There is a risk that there may be reputational damage if the research is carried out unethically. There is a risk that the questionnaire will not generate a useful number of responses and therefore would lack integrity. *(this box should expand as you type)*	*How you will mitigate the risk to the investigator:* The risks will be managed by adhering to the BERA 2024 guidelines and following the plan of informed consent, anonymity and right to withdraw. The questionnaire will be sent as a microsoft form and any data will be of use in addressing the research questions. *(this box should expand as you type)*
5	University/institutional risks For example: adverse publicity, financial loss, data protection	
	Risk to the University: There is a minor risk of reputational damage to the university if the research was carried out unethically.	*How you will mitigate the risk to the University:* I will conduct the research ethically and represent the results honestly. I will always comply with the

	(this box should expand as you type)	ethical, legal and professional frameworks, obligations and standards as required by the Education Workforce Council (the statutory body for teachers) and the University's Research Integrity and Ethics Code of Practice. *(this box should expand as you type)*
6	Environmental risks For example: accidental spillage of pollutants, damage to local ecosystems	
	Risk to the environment: As the questionnaire will be conducted online, there are no risks to the environment. *(this box should expand as you type)*	*How you will mitigate the risk to environment:* *(this box should expand as you type)*

	Disclosure and Barring Service			
	If the research activity involves children or vulnerable adults, a Disclosure and Barring Service (DBS) certificate must be obtained before any contact with such participants.	YES	NO	N/A
7	Does your research require you to hold a current DBS Certificate?	☐	☒	☐
8	If YES, please give the certificate number. If the certificate number is not available please write "Pending"; in this case any ethical approval will be subject to providing the appropriate certificate number.	E0562502594		

SECTION I: Feedback, Consent and Confidentiality

1	Feedback What de-briefing and feedback will be provided to participants, how will this be done and when?
	Feedback to participants will be made available upon request after January 2025 by means of sharing the study findings via the dissertation write up.

	(this box should expand as you type)
2	Informed consent Describe the arrangements to inform potential participants, before providing consent, of what is involved in participating. Describe the arrangements for participants to provide full consent before data collection begins. If gaining consent in this way is inappropriate, explain how consent will be obtained and recorded in accordance with prevailing data protection legislation.
	Consent will be gathered using Microsoft forms to gather consent from all participants. Participation may only take place upon receipt of the signed consent form, and it will not be possible to proceed with the survey unless consent is obtained. Participants will be reminded of their right to withdraw at any stage of the data collection process up to point where data is analysed. During the interviews, interviewers will remind participants of the purpose of the research. Additionally, the notetaker will not record any personal details which could disclose the identity of individuals or schools *(this box should expand as you type)*
3	Confidentiality / Anonymity Set out how anonymity of participants and confidentiality will be ensured in any outputs. If anonymity is not being offered, explain why this is the case.
	All participation data will remain anonymised and confidential. No names or identifying features will be included in the report from the investigation. *(this box should expand as you type)*

SECTION J: Data Protection and Storage

	Does the research activity involve personal data (as defined by the General Data Protection Regulation 2016 “GDPR” and the Data Protection Act 2018 “DPA”)?	YES	NO

1	*"Personal data" means any information relating to an identified or identifiable natural person ('data subject'). An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person. Any video or audio recordings of participants is considered to be personal data.*	☐	☒
	If YES, provide a description of the data and explain why this data needs to be collected:		
2	*(this box should expand as you type)*		
	Does it involve special category data (as defined by the GDPR)?	YES	NO
3	***"Special category data"** means sensitive personal data consisting of information as to the data subjects' –* *(a) racial or ethnic origin,* *(b) political opinions,* *(c) religious beliefs or other beliefs of a similar nature,* *(d) membership of a trade union (within the meaning of the Trade Union and Labour Relations (Consolidation) Act 1992),* *(e) physical or mental health or condition,* *(f) sexual life,* *(g) genetics,* *(h) biometric data (as used for ID purposes),*	☐	☒
	If YES, provide a description of the special category data and explain why this data needs to be collected:		
4	*(this box should expand as you type)*		

	Will data from the research activity (collected data, drafts of the thesis, or materials for publication) be stored in any of the following ways?	YES	NO
5	Manual files (i.e. in paper form)?	☐	☒
6	University computers?	☐	☒
7	Private company computers?	☐	☒

8	Home or other personal computers?	☐	☒
9	Laptop computers/ CDs/ Portable disk-drives/ memory sticks?	☒	☐
10	"Cloud" storage or websites?	☒	☐
11	Other – specify:	☐	☒
12	For all stored data, explain the measures in place to ensure the security of the data collected, data confidentiality, including details of backup procedures, password protection, encryption, anonymisation and pseudonymisation:		
	UWTSD encryption tools will be used to ensure security of data is maintained. In addition, firewalls and intrusion detection/prevention systems are in place on the UWTSD devices to protect against unauthorized access. When data is no longer needed it will be securely deleted. Through signed consent forms, participants will understand the security measures put in place and how their data will be encrypted and protected. *(this box should expand as you type)*		

	Data Protection		
	Will the research activity involve any of the following activities:	YES	NO
13	Electronic transfer of data in any form?	☒	☐
14	Sharing of data with others at the University outside of the immediate research team?	☐	☒
15	Sharing of data with other organisations?	☐	☒
16	Export of data outside the UK or importing of data from outside the UK?	☐	☒
17	Use of personal addresses, postcodes, faxes, emails or telephone numbers?	☐	☒
18	Publication of data that might allow identification of individuals?	☐	☒
19	Use of data management system?	☐	☒
20	Data archiving?	☐	☒
21	If YES to any question, please provide full details, explaining how this will be conducted in accordance with the GDPR and Data Protection Act (2018) (and any international equivalents, where appropriate):		
	Data will be retained only for the duration of the research, and this will be promptly deleted on completion. All participants will be reminded of their rights under GDPR including the right to access their data and deletion of their data. No data will be collected until ethics is approved via the UWTSD ethics review board. The researcher will be guided on GDPR compliance and data protection principles to ensure that they are aware of their responsibilities regarding data handling. *(this box should expand as you type)*		
22	List all who will have access to the data generated by the research activity:		
	Kathryn Edwards Joanna Holmes		

	(this box should expand as you type)		
23	List who will have control of, and act as custodian(s) for, data generated by the research activity:		
	Kathryn Edwards *(this box should expand as you type)*		
24	Give details of data storage arrangements, including security measures in place to protect the data, where data will be stored, how long for, and in what form. Will data be archived – if so how and if not why not.		
	Data will be stored password protected on university onedrive and will be deleted once research is complete. Once data analysis is complete the survey data will be removed. The dataset will not be archived as it is only part of a research project. *(this box should expand as you type)*		
25	Please indicate if your data will be stored in the UWTSD Research Data Repository (see https://researchdata.uwtsd.ac.uk/). If so please explain. (*Most relevant to academic staff)*		
	This dataset will not be stored in the research data repository. *(this box should expand as you type)*		
26	Confirm that you have read the UWTSD guidance on data management (see https://www.uwtsd.ac.uk/library/research-data-management/)	**YES**	☒
27	Confirm that you are aware that you need to keep all data until after your research has completed or the end of your funding	**YES**	☒

SECTION K: Declaration

	The information which I have provided is correct and complete to the best of my knowledge. I have attempted to identify any risks and issues related to the research activity and acknowledge my obligations and the rights of the participants**.** In submitting this application I hereby confirm that I undertake to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice which is published on the website: https://www.uwtsd.ac.uk/research/research-ethics/		
1	**Signature of applicant:**	K Edwards	**Date:** **09/07/2024**

For STUDENT Submissions:

2	Director of Studies/Supervisor:	Joanna Holmes	**Date: 26/07/2024**
3	Signature:	J Holmes	

For STAFF Submissions:

4	Academic Director/ Assistant Dean:		**Date:**
5	Signature:		

Checklist: Please complete the checklist below to ensure that you have completed the form according to the guidelines and attached any required documentation:

☒	I have read the guidance notes supplied before completing the form.
☒	I have completed **ALL RELEVANT** sections of the form in full.
☒	I confirm that the research activity has received approval in principle
☐	I have attached a copy of final/interim approval from external organisation (**where appropriate**)
☐	I have attached a full risk assessment (where appropriate) *ONLY TICK IF YOU HAVE **ATTACHED A FULL RISK ASSESSMENT***
☒	I understand that it is my responsibility to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice.
☒	I understand that before commencing data collection all documents aimed at respondents (including information sheets, consent forms, questionnaires, interview schedules etc.) must be confirmed by the DoS/Supervisor, module tutor or Academic Director.

RESEARCH STUDENTS ONLY Once complete, submit this form via the **MyTSD Doctoral College Portal** at (https://mytsd.uwtsd.ac.uk).
RESEARCH STAFF ONLY All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk , with the title 'Ethical Approval' followed by your name.
STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/module leader.

Appendix Four – Questionnaire link and results

Questionnaire link:

https://forms.office.com/e/n3iLj2piW8?origin=lprLink

Results:

https://forms.office.com/pages/designpagev2.aspx?analysis=true&origin=EmailNotification&subpage=design&id=Ug4_TzS3ZEGUCRtgHRR5k1zoe7JXbUlPgA0DOyWEXX9UM01GQkNUVFlQSEc4NlZMN0pJMVFKSTVITi4u

Appendix Five - Interview schedule and questions

Interviewee	Date	Time	Complete
Stakeholder 1	20/09/24	9.00	Yes
Stakeholder 2	27/09/24	11.00	Yes

1. Can you tell me about your teaching background and experience with vocational education?
2. What are your views about the vocational qualifications offered by our school?
3. How well do you feel vocational education fits with the curriculum for Wales?
4. What are the main benefits of vocational qualifications for us as a school?
5. What do you believe are the main benefits of vocational education for students?
6. Have you encountered any challenges trying to integrate vocational qualifications into the curriculum?
7. What type of student tend to choose vocational qualifications?
8. How do students generally perceive vocational courses and qualifications?
9. Are there any significant barriers that vocational qualifications pose?
10. How do you think vocational education could be improved in our school?
11. Is there anything you would like to add concerning vocational education in our school?

Appendix six – Triangulation table

Theme	Key ideas from literature review	Primary data	Quotes Questionnaire – black Interview - purple	Secondary evidence
Curriculum for Wales	Alignment of vocational education with CfW with real	50% yes	More trips and real-world situations. “it was clearly designed around the 4 purposes” (Welsh Baccalaureate) ”CfW is centred around the cross curricular skills of literacy, numeracy and digital	Welsh Bac and Skills Challenge certificate align with CfW and 4 purposes.

	life authentic contexts (CfW 2020).		competency, vocational qualifications cover it all." "Vocational education is a big part of the CfW offer moving forward. However, I still think schools need to be judicious in their selection of courses, and make sure that they are able to facilitate the practical element to ensure authentic contexts and maintain engagement."	
Opportunities	Preparing learners for working world (Harris and Clayton, 2020)	44%	I feel very passionately about the importance of vocational qualification. They are an excellent alternative to general gcses etc and if taught well can give pupils essential skills such as critical thinking skills/ being able to debate well/ put together questionnaires/ team work etc. It benefits that whole pupils, nurturing them and support their employability as it makes them aware of the skills that they have used and how they have used it. It prepares them for life after school. Vocational courses are essential to provide both theoretical and practical skills to enable our learners to access the workforce. "Vocational qualifications are the only ones that teach learners employment skills of writing a CV, applying for jobs and interview preparation etcetera"	Teamwork qualification & Vocational qualification – CVs, applications, interviews Welsh Baccalureate – questionnaire, data analysis
	Increased student motivation and attendance (Muir, 2013 and Barnett and Ryan, 2005)	46%	Vocational education is a very rewarding area but the administration of the courses can be prohibitive. It benefits that whole pupils, nurturing them and support their employability as it makes them aware of the skills that they have used and how they have used it. It prepares them for life after school. To engage pupils, continuously show the progress and share marks e.g. coursework	100% level 1 and 2 for many courses

			with the class so they can either see their progression and what their target is or their need to improve with certain projects. "the achvievements of all students in the vocational qualifications is commendable and I think this is reflective of the effort that teachers put into their lessons to ensure student progress, it doesn't go unnoticed" "It allows for greater flexibility and breaks traditional stereotypes that success in only achievable via the GCSE route. I do think we need to make sure we also cater for the top end. There are some very good higher-level qualifications linked, for example, to STEM (engineering)."	
	Alternative options to academic achievement (Psacharopoulos, 1997)	96%	The change of perception around vocational education such as BTECs and options such as construction. These are vital to engaging less academic pupils in school. "wide range of vocational options for students" "broad range of subjects offered" "people used to think that BTECs were for the more challenged students but I think it is much more accepted these days to choose a BTEC instead of a GCSE" "well the majority of our children go to college to study vocational options or apprenticsehips, A-levels are not an option for many, of course some go straight into work" "society is built around qualifications, we need to get these students as many as they can get, vocational education helps them achieve"	Travel and Tourism – Geography based
	Beneficial to economy growth and reduce		There is a tendency to think vocational education is for those who are not academically high achievers but it isn't just those children who are interested in getting a trade.	No qualifications data from AWCDS

	levels of unemployment (Sainsbury, 2016)		"often students that opt for these subjects are eager to get into the world of work, I mean some already work weekends and holidays with family members getting paid" "our catchment area is made up highly of working class families who value apprenticehsips and vocational qualifications as it is the route many of the parents took themselves"	
Barriers	Resource Constraints and operational barriers. (Dalton and Smith, 2004 and Wallenborn and Heyneman, 2009)	54%	Immediate changes - better equipment in school (easier access to IT rooms/Chrome books that fully work). Reducing the red tape and admin for teachers submitting coursework marks and sample. reduction of paperwork and more organised examination board resources A reduction in the administration documents required to enter assignments/tasks Admin is horrendous! There is a lack appreciation for the amount of admin involved in delivering vocational qualifications and this is not given the same appreciation as other more academic subjects. Vocational subjects are often not given the facilities with ICT etc and this can make delivery difficult. less admin that just seems to be about processes and form filling rather than the nitty gritty of the subject. "timetabling can be difficult because vocational options need computer access for every lesson" "I think that pupils timetables do need to be considered as they may end up having	Admin requirements for vocational courses

			several vocational qualifications in succession, and this could become a bit mundane over time. Mixing it up is best." "registering individual students and their marks for each piece of coursework on iamis is very complicated" "timetabling also means that people from other areas of learning often have to teach some vocational lessons as there is no other teacher available at that time" "the processes required for centre certification make it very time consuming as a lead verifier" "a constant administrative job between writing assesment plans, sampling and moderation requirements. Not to mention the policies and procedures that you have to ensure are in place just to verify the centre, headache" "Time. Pupil absence. Trying to go at a pace that suits all.	
	Teacher preparedness and training. (Bolhuis, 2006 and Tshabalala and Ncube, 2014)	31%	provision of clear assessments with exemplar materials. WJEC have been very unorganised with providing information over the last 4 years with contradictions between marking on their specification and course outline documents so that the schoolExam officer has needed to be involved for clarity. It makes it difficult as a practitioner to feel confident delivering the course. There is limited opportunities for CPD within the subject area - most of my experience has been teaching myself and spending lots of time researching More focused training and opportunities for teachers, appropriate support from SLT leading to young people seeing the benefits of vocational education.	New GCSEs released 2024 for WJEC – Voc isn't until 2026 No PGCE vocational/Welsh bacc Limited CPD - often out of school hours

			Delivering course content on vocational courses is largely positive but can frustrating as you feel "blind" teaching it for the first time "Keeping pupils motivated. Resources (other than a computer), so that pupils can have hands-on practical experience."	
	Perceptions and Stigma. (Rodeiro and Vitello 2020 and Harris and Clayton 2020)	27%	Change the perception that a BTEC qualification is of less importance than a GCSE qualification. Pupils see the BTEC as an easier option or for those less academically inclined. The profile of vocational qualifications needs to change. There is often a negative perception of vocational qualifications from parents, staff and employers Showing students the long term benefits/career paths for vocational education Use inspirational and relatable case studies about students who have also taken this pathway. ' t' options in school and students are often filtered into or away from vocational subjects unfairly.	Double level – GCSE and BTEC for many vocational courses provided
	Vocational-Academic Divide. (Shavit and Muller, 2000 and OFSTED, 2004)		Removing the stigma around BTEC. Educating pupils and parents in the value of the qualification. It should not be looked at as an "easy option" they need to be promoted as an important alternative to normal education rather than for "naughty" kids etc. Lack of understanding from management, government. It all seems to be about GCSEs when actually some of the biggest earners complete apprenticeships!	

			"year 11 have had a shock this year with the college talks when they have found out the qualifcation requirements for the courses they want to do"	
	Curriculum integration issues. (Abrahams, 2018 and Pen, Wang and Yan, 2023)	23%	From a subject lead perspective - inconsistent staffing. Sometimes a vocational subject has been put on a members of staffs timetable with limited consultation as it's deemed 'you don't need to be a specialist' while there are no specialists within school staff do need time to upskill themselves and make sure they have the knowledge to deliver the subject to the students. Double lessons are essential for practical courses to be able to embed skills. E.g. taking into account preparation for lessons such as changing into kit or washing/ preparing ingredients - in a single lesson there is hardly any time left to do the actual practical. I find vocational courses are often used as a 'scape goat' course at GCSE level when students are not sure what to take or do not fit other options. Vocational qualifications are used to dump students who are not deemed to be academic without considering the academic nature of the course. "Delivering whole-school is a challenge – especially in a school with significant levels of disadvantage. Persistent absenteeism can cause pupils to lose focus of what they are learning and why. Catch up sessions become a bit of an "add-on". "Likewise, when delivering wholesale "off the peg" qualifications, sometimes the work is not challenging enough for the top-end (or can be too challenging for pupils with lower levels of literacy – e.g. Individual Investigation for WBQ)"	Limited class numbers due to timetable and staffing

			"Access to business/employer engagement – this does not really suit a curriculum of 5 hours a day. It may be a better idea moving forward to consider blocks of learning, rather than lessons, so that the potential of these qualifications can be fully explored and tested."	
Strategies to overcome barriers	Professional Development for teachers (Pen, Wang and Yan, 2023)		More teaching resources available. For vocational courses to be more recognised. There is limited opportunities for CPD within the subject area - most of my experience has been teaching myself and spending lots of time researching More focused training and opportunities for teachers, appropriate support from SLT leading to young people seeing the benefits of vocational education. Training on Vocational pedagogy would improve standards and raise the bar for Students. In this way they would be more inclusive and more purposeful "vocational education needs strong organised leadership and the ability to juggle, theres a lot to keep afloat at once" "I think it is worth exploring vocational pedagogy. The skills required to deliver the courses are quite different to exam-based approaches (retrieval, etc.) Often the teachers of vocational subjects are non-or semi-specialist and therefore addressing this gap would benefit the curriculum offer moving forward."	No PGCE vocational/Welsh bacc Limited CPD - often out of school hours
	Broader range of vocational subjects and pathways to work and further		Wider range and better funding for courses A wider range of vocational options. More awareness around vocational options so people take them more seriously. More awareness of the job opportunities and skills required, put on an equal footing with other qualifications.	Increased provision over time in school

	education (Kennedy, 1993)		A greater understanding of the benefits of vocational courses for learners of all abilities Welsh Government need to put vocational education on a par with academic. Preparing for VGCSE after the academic hardly suggest WG values it. It would be better if Welsh students could access a curated selection of courses like BTEC that are already available in other parts of the UK. It would mean students could work towards a recognisable qualification that compares with others in the UK. "we need more vocational options, especially with the coming changes with examination reform" "WJEC do not offer enough suitable vocational courses for our learenrs which is why we have used Pearson for alternatives" "It depends on what is taught, how it is taught and the value placed on it. Pupils pick up quickly on the difference between learning and doing. The latter, although it will engage short-term often leads to disengagement in the end. Pupils need to see the "why" in what they are learning (and this applies to non-vocational and vocational equally)"	
	Financial investment (Bursnall et al, 2019 and Bennel, 2009)		Wider range and better funding for courses reduction in the costs Funding and Welsh Gov support If the subject area had more funding then students could benefit from engaging in a wider range of practical and off site activities. parents can afford to keep up with any financial demands of the course chosen.	Cost GCSE/Voc Cost for ingredients/equipment

	Collaboration with providers and industry (Pen, Wang and Yan, 2023)		More external opportunities to offer vocational studies for students Identifying pupils early in KS3 and working with those students developing their skills, getting them into the world of work, work experience (what happened to that?!) getting employers to work better with schools, a more flexible bespoke curriculum to allow students to leave site and work with an employer during the day. "I think its important that we concentrate on getting in external speakers to motivate the students, oh and trips to make learning more realistic, lets get them out to working environments."	Links with college and industry.

Theme	Quote
CfW	"it was clearly designed around the 4 purposes" (Welsh Baccalaureate) "CfW is centred around the cross curricular skills of literacy, numeracy and digital competency, vocational qualifications cover it all." "Vocational education is a big part of the CfW offer moving forward. However, I still think schools need to be judicious in their selection of courses, and make sure that they are able to facilitate the practical element to ensure authentic contexts and maintain engagement."
Opportunities	"wide range of vocational options for students" "broad range of subjects offered" "Vocational qualifications are the only ones that teach learners employment skills of writing a CV, applying for jobs and interview preparation etcetera" "the achvievements of all students in the vocational qualifications is commendable and I think this is reflective of the effort that teachers put into their lessons to ensure student progress, it doesn't go unnoticed" "often students that opt for these subjects are eager to get into the world of work, I mean some already work weekends and holidays with family members getting paid" "our catchment area is made up highly of working class families who value apprenticehsips and vocational qualifications as it is the route many of the parents took themselves" "people used to think that BTECs were for the more challenged students but I think it is much more accepted these days to choose a BTEC instead of a GCSE" "well the majority of our children go to college to study vocational options or apprenticsehips, A-levels are not an option for many, of course some go straight into work" "society is built around qualifications, we need to get these students as many as they can get, vocational education helps them achieve"

	"It allows for greater flexibility and breaks traditional stereotypes that success in only achievable via the GCSE route. I do think we need to make sure we also cater for the top end. There are some very good higher-level qualifications linked, for example, to STEM (engineering)."
Barriers	"timetabling can be difficult because vocational options need computer access for every lesson" ". I think that pupils timetables do need to be considered as they may end up having several vocational qualifications in succession, and this could become a bit mundane over time. Mixing it up is best." "registering individual students and their marks for each piece of coursework on iamis is very complicated" "timetabling also means that people from other areas of learning often have to teach some vocational lessons as there is no other teacher available at that time" "the processes required for centre certification make it very time consuming as a lead verifier" "a constant administrative job between writing assesment plans, sampling and moderation requirements. Not to mention the policies and procedures that you have to ensure are in place just to verify the centre, headache" "year 11 have had a shock this year with the college talks when they have found out the qualifcation requirements for the courses they want to do" "Delivering whole-school is a challenge – especially in a school with significant levels of disadvantage. Persistent absenteeism can cause pupils to lose focus of what they are learning and why. Catch up sessions become a bit of an "add-on". " "Likewise, when delivering wholesale "off the peg" qualifications, sometimes the work is not challenging enough for the top-end (or can be too challenging for pupils with lower levels of literacy – e.g. Individual Investigation for WBQ)" "Time. Pupil absence. Trying to go at a pace that suits all. Keeping pupils motivated. Resources (other than a computer), so that pupils can have hands-on practical experience. Access to business/employer engagement – this does not really suit a curriculum of 5 hours a day. It may be a better idea moving forward to consider blocks of learning, rather than lessons, so that the potential of these qualifications can be fully explored and tested."
Strategies	"we need more vocational options, especially with the coming changes with examination reform" "WJEC do not offer enough suitable vocational courses for our learenrs which is why we have used Pearson for alternatives" "I think its important that we concentrate on getting in external speakers to motivate the students, oh and trips to make learning more realistic, lets get them out to working environments." "vocational education needs strong organised leadership and the ability to juggle, theres a lot to keep afloat at once" "It depends on what is taught, how it is taught and the value placed on it. Pupils pick up quickly on the difference between learning and doing. The latter, although it will engage short-term often leads to disengagement in the end. Pupils need to see the "why" in what they are learning (and this applies to non-vocational and vocational equally)" "I think it is worth exploring vocational pedagogy. The skills required to deliver the courses are quite different to exam-based approaches (retrieval, etc.) Often the teachers

	of vocational subjects are non-or semi-specialist and therefore addressing this gap would benefit the curriculum offer moving forward.”

Appendix Seven – Vocational courses content from specifications

Learning outcomes		Assessment criteria	
1	Understand the skills and qualities needed for employment	1.1	Describe different skills required for employment
		1.2	Explain personal qualities required for employment and their importance
		1.3	Explain ways employability skills can be developed
2	Be able to review own skills, qualities and interests for career planning	2.1	Identify own skills, qualities and interests for employment
		2.2	Justify suitable career pathways to match employability skills, and interests
		2.3	Identify gaps in own skills and experience against those required for the chosen pathway
		2.4	Explain how to develop own skills and experience to match chosen pathway
3	Be able to showcase own employability skills through a CV	3.1	Describe the purpose of a CV when applying for a job
		3.2	Identify core information needed to complete a CV and how it can be used to showcase employability skills
		3.3	Present employability skills within the CV for a specified job role
		3.4	Describe own personal motivations in a personal statement
4	Be able to showcase own employability skills in preparation for an interview	4.1	Outline interview preparation considerations
		4.2	Identify potential question themes that could be asked during the interview
		4.3	Plan responses that showcase employability skills
		4.4	Identify suitable questions to ask the interviewer during an interview

Appendix 7, image 1 – Content of the Pearson BTEC Level 2 Certificate, Extended Certificate and Diploma in Teamwork and Personal Development in the Community specification (2021, pp38)

Unit content

Knowledge and skills

Benefits and purpose of developing a progression plan

- Gives direction and focus to short-term and long-term goals.
- Sets out the key steps to achieve progression goal.
- Allows for discussion with others, e.g. tutors, parents, peers.
- Gives time for reflection on what is achievable and realistic.

Finding out about progression opportunities

- Progression opportunities such as to further learning, work or apprenticeships.
- Local sources of information about potential progression routes such as colleges, careers fairs.
- Sources of advice and guidance for progression.
- Tutor advice.
- Careers advice.
- Entry requirements such as baseline entry qualifications, an entry interview, portfolio.

Setting a progression goal

- Matching own skills and behaviours with progression goals.
- Deciding on the next step, e.g. using SMART (specific, measureable, achievable, realistic, time-bound) targets.
- Using research findings to identify the requirements to meet goals.
- Setting a progression goal to work towards.

Identifying the skills and behaviours needed to meet progression goal

- Skills needed to meet progression goal:
  - transferable skills, e.g. communication, working with others, problem solving
  - employability skills, e.g. IT skills, being able to drive.
- Behaviours needed for progression goal, e.g. reliability, efficiency, being trustworthy.
- Qualifications needed for progression, e.g. level of English and maths.

Reviewing own skills and behaviours against progression goal

- Carrying out a self-audit of skills and behaviours using past experience of education and learning.
- Gathering feedback from others about own strengths and areas for improvement.
- Attitudes and behaviours needed for progression.

Creating a progression plan

To include:

- short-term and long-term progression goals
- identification of key activities needed to move towards the progression goal
- key actions to improve skills and behaviours
- key milestones to achieve goal, e.g. interview dates, application deadlines
- realistic timelines to meet goal.

Transferable skills

- Written communication: filling out application forms, progression plan.
- Managing information: from the sources used to find out about possible progression routes.

Appendix seven, image 2– Content of the Pearson BTEC Level 1 Introductory Award, Certificate and Diploma in Vocational Studies specification (2021, pp31)