Research Paper

Peng Chen, Geoff Hayward, Carsten Schmidtke and Xinan Tong*

Integration Between Academic and Vocational Education in England: Historical Review

https://doi.org/10.1515/wvte-2025-0012
Received June 4, 2025; accepted August 29, 2025; published online September 23, 2025

Abstract: The integration of vocational and academic education serves as an effective pathway to bridge the divide inherent in the vocational-academic dichotomy and represents a critical initiative for advancing educational modernization. This study systematically examines the historical evolution and development models of vocational-academic integration in the UK. Findings reveal that since the establishment of a vocational education system in the 19th century, its integration with academic education has progressed through six distinct phases: a pre-1944 divergence period, the replacement of the tripartite system with comprehensive secondary schools (1944–1970s), the introduction of National Vocational Qualifications Under New Vocationalism in the 1980s, the formation of a triple-track system with General National Vocational Qualifications in 1990, the gradual construction of unified frameworks post-2000, and the post-2015 transition from T Levels to the Advanced British Standard. Integration manifests in diverse forms, encompassing both the pluralistic models of comprehensive schools and the progressive unification of qualification frameworks. The driving forces behind this integration in the UK stem not only from inter-party political contestation but also from underlying economic imperatives. Currently, the UK is advancing the convergence and alignment of

***Corresponding author: Xinan Tong**, School of Education Science, Jiangsu Normal University, Xuzhou, China, E-mail: 15957175042@163.com
Peng Chen, School of Education Science, Jiangsu Normal University, Xuzhou, China, E-mail: chenpeng0530@163.com
Geoff Hayward, School of Education, University of Cambridge, Cambridge, UK, E-mail: gfh22@cam.ac.uk
Carsten Schmidtke, School of Leadership, The University of Southern Mississippi, Hattiesburg, USA, E-mail: cswded@uark.edu

vocational and academic education through the Advanced British Standard. Drawing lessons from the British experience, other nations may promote educational equity by establishing comprehensive secondary schools and creating national qualifications frameworks to facilitate vocational-academic integration. Additionally, implementing credit transfer mechanisms can offer personalized developmental pathways, thereby narrowing socioeconomic disparities in education and supporting the construction of a skills-oriented society.

Keywords: integration between academic and vocational education; secondary education; England

1 Introduction

In terms of educational routes, nowadays, it is known that there is academic education and vocational education division in most countries, according to their different purposes. Pring and other researchers (2009, 17) cleared that "academic" refers to those theoretical studies which are regarded as intrinsically worthwhile and then "studied for their own sake" rather than for their relevance employment; while "vocational" usually refers to those studies which are relevant to employment both because of the skills and knowledge which they cover and because of the motivation for undertaking them. However, more than a century ago, Emile Durkheim argued that it was more important to study secondary education as a unity than the wide range of subjects and division of pedagogical labor of which it was composed (Wiborg 2009, VII). A recent study by the OECD (Organization for Economic Co-operation and Development) also points out that there are certain problems with the "academic-vocational" dichotomy. The binary opposition between academic and vocational fields is flawed because some courses are both academic (highly intellectually demanding) and vocational (preparing students for specific occupations) (OECD 2022, 99). In the practice, the comprehensive secondary school, as a foremost form of unity secondary education, was designed to serve all in a local community and has an open enrollment policy irrespective of the different social, religious or ethnic backgrounds (McCulloch and Crook 2008).

Integration means "the making up or composition of a whole by adding together or combining the separate parts or elements; combination into an integral whole: a making whole or entire" (OED Online: Oxford English Dictionary 2025). The comprehensive secondary school which combined the academic, vocational and general education was born in the early twentieth century in the U.S. under the support of the progressive movement, and was introduced into Europe after

World War II. After more than twenty years, the new systems of comprehensive secondary schools were being established in Britain and parts of Western and Northern Europe by the 1970s (Henkens 2004). At the beginning of the 21st century, the comprehensive high school remains the predominant form of secondary school in much of the world, especially in Scandinavian areas (McCulloch and Crook 2008, 120). The establishment of comprehensive high schools aims to promote educational equity, weaken the labeling effects caused by school categorization, and enable students' multi-dimensional free development (Xu 2024). The important thing kept in mind is that the comprehensive secondary school plays an important role in integrating academic education and vocational education.

Comprehensive schooling's real intention was always to develop a "classless" society (Piers 2024), and the great hope of the comprehensive educational movement must be that it would unite the people (Sharp 1973, 116), as the result of pressure from an uneasy alliance of groups and individuals with a range of ideologies, interests and visions for the future (Benn and Simon 1972, 8). Therefore, some researchers argued the integration between academic and vocational education is a political issue and the result of the controversy among different policy prerogatives or political parties (Pring and Walford 1997; Wiborg 2009; Crook 2013; McCulloch 2016). Perellon (2003) reminded that when we are studying the organization of national systems of education, not only a separation between "academic/scientific" and "vocational/professional" should be perceived, but more importantly, the sharing among different levels of policy prerogatives (federal, cantonal and regional levels) could also be considered. Wiborg (2009, VIII) concluded that the key to understanding the development of comprehensive (integrative) or uneven (separate) education, is to be found in the strength of social democratic political parties and whether they could establish alliances with the liberal parties. More or less, in England, since the birth of vocational and technical education at the end of the nineteenth century, there have been integration elements between academic and vocational education, especially from the 1960s to the 1970s.

To systematically trace the historical evolution of vocational-academic education integration in the UK and elucidate the formative logic behind its distinct manifestations across different phases, this study primarily employs the historical genetic method. Originating from biological research, the genetic method refers to a dynamic, experimental, and comprehensive research approach that utilizes various specific techniques to examine objects at their points of origin (Lou 1986). The historical genetic method retains this fundamental research logic while emphasizing the unity of history and logic – where "history" denotes the objective existence and development of the world, and "logic" represents its conceptual existence within human thought (Li 2015). Centered on "historical becoming" as its analytical core, this methodology treats "genesis" as a gradual process, focusing on the

dynamic evolution of phenomena across temporal dimensions. It reveals the intrinsic coupling between phenomena and their historical contexts through a developmental lens. The progression of vocational-academic education integration in the UK is neither static nor fragmented; rather, it undergoes continuous reshaping alongside shifts in social structures, political imperatives, and educational paradigms. Consequently, it inevitably assumes distinct manifestations or practical implementations during different historical epochs. The historical genetic method aptly enables the deconstruction of these evolving interrelationships between vocational and academic education by reconstructing the historical backgrounds and pivotal events of each phase. Concurrently, this study is underpinned by documentary research, which involves systematically reviewing literature on the history of British vocational education, the broader history of British education, and vocational-academic education integration, alongside relevant policy legislation. This multi-dimensional historical corroboration provides robust evidentiary support for the processual analysis undertaken via the historical genetic method, ensuring that interpretations of the historical configurations of integration remain firmly grounded in empirical historical foundations.

Building on the methodological framework outlined above, this study reviews the history of integration between academic education and vocational education since the end of the 19th century in England, concludes the constant behind the integration or separation between academic and vocational education in the history, informs the future development for the secondary education in England and enlightens other countries in the world. Therefore, the questions of the research are: what has been happening in the relationship between academic education and vocational education at the secondary level in England? Are there any other integration forms between academic and vocational education? What are the constants behind it and are there some other reasons causing the integration, besides the political element? What education lines should be accepted for England in the future? What enlightenment could be learnt for other countries from England?

2 The Stages of Academic and Vocational Education Integration in England

In the following research, the historical genetic method was used. The history of integration between academic and vocational education is proposed to be based on the beginning of the vocational education institutions. Green and Lucas (1999) present that the historical development of Further Education (vocational and technical education) in England experienced the five periods of the 20th century, 1900–1944, 1940s–1970s, 1970s and 1980s, and the 1990s. However, the integration

of vocational and academic education is not an independent domain; it fundamentally reflects the relationship between vocational and academic education. Consequently, its practice remains closely tied to the evolution of vocational education. Therefore, building upon Green and Lucas' framework of historical stages, this paper focuses on the dynamics of integration between academic and vocational education, proposing a revised six-stage periodization of vocational education history: before 1944, 1944–1970s, 1980s, 1990s, 2000–2015, and after 2015, during each of which, integration or separation between academic and vocational education was going on to different extent, in different forms.

This study extends the examination of the integration between academic education and vocational education to the present day, mainly informed by the implied perspective of Kerckhoff and others' (1996: 12). They contend that the comprehensive reorganization of the 1960s–1970s constituted merely one phase within Britain's evolutionary trajectory of educational restructuring – a process commencing in the 19th century and persisting through the 1990s. Building on this historical continuity, the present study anticipates that vocational-academic integration will persist within vocational education development throughout the 21st century. Furthermore, 2015 is identified as a critical juncture in Britain's vocational-academic integration trajectory, principally attributable to the Conservative Party's electoral victory and subsequent initiation of Brexit. This withdrawal process catalyzed and enhanced national emphasis on cultivating domestic skilled talent, thereby reducing reliance on the EU workforce. Consequently, skills-oriented vocational education gained heightened policy prioritization. Exemplifying this shift, the post-election Conservative government prioritized advanced technical training in vocational education to address STEM skills shortages (Acquah and Malpass 2015). The imperative of skills development for workforce localization likewise directly propelled integration efforts. During subsequent tenure, the Conservative government's T-Level Action Plan established a new developmental benchmark for vocational education while expanding student mobility between academic and vocational pathways. These measures cumulatively advanced vocational-academic integration through policy continuity. Accordingly, this study incorporates two post-2000 phases demarcated by 2015 within its diachronic examination of British vocational-academic integration.

2.1 The Birth of Vocational Education and Its Separation with General Education Before 1944

During the 19th century, due to the lack of state intervention, the school system developed into a patchwork of schools controlled by the voluntary bodies (Wiborg 2009, 40), in which the Mechanics' Institutes were the main strand of the early

vocational education organization, providing a diversity of technical and vocational education courses (Hall 1994). The first Mechanics' Institute was founded in Edinburgh in 1821, beginning a development which was to lead to the establishment of technical colleges later in the century, which in turn offered a foundation for the birth of the FE sector in the 1990s. By the mid-nineteenth century there were 610 Institutes with a membership of more than half a million. The chief aim of the Institutes was to teach "useful knowledge" but they "failed" in their purpose primarily due to the lack of literacy among those who needed such knowledge (Musgrave 1970, 65). Moreover, although Mechanics' Institutes offered numerous scientific courses and lectures, which were open to people of all classes, most participants were middle-class professionals who could understand the advanced scientific knowledge in the courses (Walker 2016). This phenomenon also led Mechanics' Institutes to start a process of separating general education, scientific education, and technical education, which – reinforced by the intense political and educational debates about technical education later in the century – created divisions between vocational and academic studies that bedevil the system to this day (Hyland and Merrill 2003, 6–7).

The essentially "voluntarist, ad hoc and fragmented nature" of educational developments in the early nineteenth century was later questioned and criticized when Britain's position as the "foremost industrial nation" (Musgrave 1970, 144) was threatened in the 1867 Great Exhibition. To help the country keep pace with the international competition, following the report of the Royal Commission on Scientific Instruction in 1884, a Technical Instruction Act was passed by Parliament in 1889. Then, the funding of these new institutions was helped by the so-called "whiskey money" released through the 1890 Local Taxation Act (Hyland and Merrill 2003, 8–9). However, in spite of all these positive developments, technical education in England at the end of the nineteenth century remained "intellectually narrow and institutionally marooned between school and work. It never acquired a status comparable with that achieved in certain other continental states. Its form became characterized by a historical absence – the lack of a legitimized notion of general culture and general education with which technical skills are framed. In the later days, further education colleges would find it hard to break out of this mould and to rectify this absence" (Green and Lucas 1999, 14–15).

Furthermore, when the governments began to intervene in education toward the end of the 19th century, they were not proposed to link different school types together into a coherent system, and believed that children from different classes should be educated separately (Wiborg 2009, 10). Hence, the secondary school system was never made a subject for a thorough reorganization during the last part of the nineteenth century, and was divided into three distinct types of public, grammar and proprietary school, that corresponded closely with the stratification of

the middle class and upper class. The aristocracy, gentry, and some of the wealthy industrialists sent their children to the public schools; the wealthy middle class, including the poorer gentry and the majority of greater manufacturers used the endowed grammar schools and the proprietary schools; and the lower middle class, which consists of smaller tradesmen and farmers, used the less prestigious grammar schools if they could afford it (Wiborg 2009, 121).

The 1902 Balfour Act hardly changed this, even though it created the first secondary schools that were soon to allow a trickle of working-class children access through scholarships. Both the state secondary schools and the old private grammar schools were kept as separate as possible from the elementary schools to discourage the notion that the majority of children could obtain a secondary (academic) education, which reinforced the parallel system of education (Wiborg 2009, 10). The unification of the education system had only been partially achieved, without making any serious attempt to integrate the different parts into a single structure. The limited number of scholarships provided for secondary schools implies that exclusion of the working class from secondary education was almost total (Wiborg 2009, 43). The Fisher Education Act of 1918 made provision for a system of part-time education for all young people up to the age of 18 who were not in full-time education, but the original plans were never fully implemented, mainly because of the hostility of parents and employers to the day-release elements of the system combined with the economic downturn in the 1920s. However, the junior technical schools providing post-elementary VET did expand to cater for around 30,000 students by 1937, though they never achieved parity of status with academic secondary schooling (Hyland and Merrill 2003, 9).

Kerckhoff and others (1996, 12) argued that the ideal of providing parallel schools for secondary-age children emerged in the late 1930s, when the dominant view of educational policy-makers was that no reorganization should affect the status or integrity of grammar schools but should be carried through by the creation of separate secondary schools. Therefore, the authors of the most influential of the inter-war report on education, conclude that children's secondary education should be determined by the ability, and it was possible to distinguish between academic children, who would benefit from a traditional examination-orientated education in a grammar school, and the less able, who would benefit from courses of practical instruction in a modern school (Hadow 1926). In 1943, when the Norwood Report was issued, the tripartite model of secondary education, including grammar school, technical school and secondary modern school, was reinforced in England. Consequently, the vocational and technical education conducted in modern and technical schools, was separated from the academic education in the grammar school.

2.2 From Tripartite to Comprehensive Schools from 1944 to the 1970s

In England, the shift from the selective school system toward a more egalitarian and coherent education system only began well after World War II, and there was almost nothing prior to the war that was propitious for the development of comprehensive education (Wiborg 2009, 8). Especially, the selective secondary tripartite system was transformed into a comprehensive system during the 1960s and 1970s, which was a significant stage of integration between academic and vocational education in England.

In 1944, the Education Act was passed in order to provide free secondary education for all. However, it did not mean that all children would enter the same kind of common schools. On the contrary, after the 1945 White Paper, Excellence in Schools, was published, a rigid, tripartite system of education – with grammar schools, secondary modern schools, and secondary technical schools – was developed, in a similarly class-divided manner as the mid-nineteenth-century school system was organized (Wiborg 2009, 11). When the Labor Party started the government in 1945, even though a door had arguably been left open by the Act for common secondary education, they did not take this up and instead set about establishing a selective tripartite system. A key element of this selective secondary education was the 11-plus examination, which determined the type of school a pupil would attend. However, secondary modern schools and grammar schools dominated secondary education, and secondary technical schools never became popular, with their number even falling to fewer than 100 by 1970 (Bolton 2012).

Despite the absorption of tripartism into the mainstream thinking of policymakers, the 1944 Education Act certainly did not close the door on multilateral or comprehensive education. But in requiring LEAs to submit detailed development plans for scrutiny, the new ministry did not specify that non-selective secondary schools would be unacceptable. Therefore, this at least left the way open for local initiative, and what limited progress was made in the immediate post-1944 years towards bringing in comprehensive schools as the result of local LEA action (Kerckhoff et al. 1996, 17). It was only after Labor left office in 1951, with criticism of selection mounting and public support for comprehensive education growing, that the Labor Party abandoned the selective, tripartite education system and eventually adopted a policy of promoting comprehensive education. The first moves came at the local level. By 1960, the number of pupils being educated in comprehensive schools was less than 5 % of the secondary school population. Only during the 1960s did a growing demand for egalitarian education emerge. Between 1960 and 1964, one quarter of all LEAs made major changes in their selection procedures (Chitty 2004, 29). And when the Labor Party took office in 1964, it promised to abolish the

Eleven Plus and establish comprehensive education. However, it did not manage to introduce an act to abolish the selective secondary education, instead, it issued a "circular 10/65", which encouraged local education authorities to transition to non-selective education (Bolton 2012). But the government issued guidance suggesting not a single model but rather several models of comprehensive organization, consequently, the implementation of comprehensive education followed a very uneven course during the following years.

Pring and Walford (1997, 1) analyzed that no matter who was in power, the proportion of students attending comprehensive schools rapidly increased during the 1970s. For example, an increasing number of pupils became enrolled in comprehensive schools up to 70 % in 1975 (Wiborg 2009, 206). During the Conservative government from 1970 to 1974, comprehensive schooling was no longer a pivotal policy issue in the reorganization of British education. Thatcher's first action, as Secretary of State for Education, was to cancel Circular 10/65 and issue 10/70, which left LEAs free to choose whether or not to adopt a comprehensive school system. However, ironically, by the end of her occupation the number of comprehensive schools had doubled and over 60 percent of pupils were enrolled in them (Crook 2013). After the Labor government was elected in 1974, the LEAs were required to reorganize along comprehensive lines again, and the Education Act of 1976 decreed that admission to secondary schools was to be nonselective. However, in the 1970s, although there was still a commitment to comprehensive ideals, there were no coherent plans for taking the education of the working class to higher levels (Wiborg 2009, 207).

During the period of the 1960s and 1970s, two kinds of comprehensive schools emerged— sixth-form colleges and tertiary colleges, contributing to the integration between academic and vocational education. As far as the sixth-form colleges, the potential need for them was noted as early as 1938 in the Spens Report (Schagen et al. 1996), but it was not until 1966 that the first was established in Luton, followed soon by Southampton and Scunthorpe, and by 1993, 116 colleges in 52 LEAs had been opened, catering for almost 25 % of the country's sixth-form students (Smithers and Robinson 2000, 2). Some of the sixth-form colleges grew as part of the comprehensive reorganization of secondary education, often created from existing grammar schools. Most of the sixth-form colleges were formed partly for the educational reasons, to offer young people the services of a broader range of curriculum options and a greater degree of freedom. However, their attraction also lay in the fact that they were seen as a more cost-effective option. To respond to the diverse needs of a wide range of student enrollments, the curriculum of sixth-form colleges covers a relatively broad scope, incorporating a series of practical, pre-vocational, and even vocational courses; however, academic courses

remain the core (Macfarlane 2015), which also makes them still bear the heritage of elite education.

The tertiary colleges, a type of typical comprehensive secondary institutions, first of which was opened in 1970, came about as a particular response to the comprehensive reorganization of schools of the 1960s. The original concept was that a single college would be the sole provider of education for those aged 16 and above in a certain area, thereby creating a highly cost-effective and fully comprehensive "tertiary" education system (Macfarlane 2015). There were mainly two kinds of tertiary colleges: "sole providers" and a merger of a sixth-form school and an FE college. But many observers defined a tertiary college as a college which offered a tertiary "entitlement curriculum", which means some colleges designated as sixth-form colleges but offering a tertiary curriculum may effectively be tertiary colleges, even though they fell under school regulations (Tomlins and Miles 1991, 5). Definitions vary for the phrase "curriculum entitlement", but in the context of tertiary reorganization, it usually includes some attempts to bridge the academic/vocational divide and to offer students a curriculum which is designed to meet their needs by providing individually tailored support. Therefore, tertiary colleges were seen by many to offer the best institutional organization to lessen the gap between academic and vocational provision. The number of tertiary college inaugurations peaked during the 1980s, however it has shown a reduction from 1990 onwards (Tomlins and Miles 1991, 5–6).

2.3 The Development of NVQs Under the New Vocationalism in the 1980s

Since 1979, comprehensive schooling has no longer been the key for the reorganization of education in England. Neoliberal policies began to erode comprehensive education by promoting a greater diversity of school types and by allowing greater use of selection, streaming, and setting (Wiborg 2009, 11). During the period from 1979 to 1988, when the Conservative government was in office, it passed numerous education acts in an attempt to return to selection in state schools, to support private education, to introduce market forces into education via parental choice and school diversity, and to reduce the cost of education altogether. Especially, Thatcher's first education secretary declared that comprehensive education was no longer the national policy, and various forms of selection were creeping over the past decade (Wiborg 2009, 207). Therefore, the movement towards comprehensive schooling was decisively rolled back during the 1980s.

To some extent, the comprehensive education during the 1960s and 1970s had been making the secondary education more academic rather than helping students find a job after leaving schools. Furthermore, as a result of the intensified economic

crisis since the late 1970s, the youth unemployment rate was on the rise. So in order to respond to wider social and economic demand, there was a reform movement towards a single vocational framework, which was supposed to harmonize academic and vocational education. Hodgson and Spours (2003, 9) also argued that the foremost factor shaping this reform was the economic recession and the rise in youth unemployment, rather than the education and training system itself.

Theoretically, during the 1980s, the national 14–19 educational system was characterized by ad hoc expansion of programs and new pre-vocational development linked to the "New Vocationalism" (Hyland and Merrill 2003, 141). Different from Old Vocationalism towards the expressed needs of employers, New Vocationalism is orientated towards developing students' capacity and disposition to learn (Bourner et al. 2011). In this sense, New Vocationalism provides an integration opportunity for individual development in academic and vocational capacity, another kind of integration between academic and vocational education.

There were a series of initiatives the youth unemployment under the New Vocationalism, three of which were landmarks. The first was the publication of A Basis for Choice in 1979, which proposed the rationalization of the disparate unemployment initiatives with a single "framework of preparation", which eventually led to the creation of Certificate of Pre-Vocational Education (CPVE) in 1985. The second was the publication of the New Training Initiative (NTI) in 1981, which spawned the Youth Training Scheme, and could be seen as setting out a new agenda for thinking about the design of qualifications for the outcomes-based standards of a new type, and eventually resulted in the development of National Vocational Qualifications (NVQs) in the late 1980s (Hodgson and Spours 2003, 10). The third was the publication of Technical and Vocational Education Initiative (TVEI) in 1983, which aimed at full-time learners. There was a strong call from a mixture of academics and politicians for a more applied and vocationally-relevant curriculum for all learners by the mid-1980s (Hodgson and Spours 2003, 10).

One of the major impacts of the New Vocationalism was that it moved to a policy of rationalizing vocational qualifications within a national framework from an association with the proliferation of qualifications at the beginning. It was the founding of the National Council for Vocational Qualification (NCVQ) in 1986 that resulted in a NVQs system to be developed. NVQs were "competence-based", and each NVQ was given a title and a level to place it in the NVQ Framework, which showed how qualifications relate to each other so that people could progress through the system. The primary purpose of the NVQ Framework was to facilitate transfer and progression within occupational areas, which was being achieved by grouping together those qualifications that are similar in their statements of competence. The unit design of NVQs and the rational structure of the framework let people meet their training needs within a flexible system built on national

standards. It not only provides a horizontal occupational classification map, but also classifies occupational skill levels vertically (Gu and Li 2018). As individuals master skills with increasingly higher requirements, they can also continuously expand the boundaries of their own capabilities. The NVQ system could be seen as the beginning of the creation of a national two-track qualification system (academic track and vocational track), which aimed to replace the piecemeal vocational qualifications and vocational initiatives (such as BTEC and RSA) that characterized the previous era (Hodgson and Spours 2003, 11).

Furthermore, in the year of 1986, the General Certificate of Secondary Education (GCSE) was introduced, as a national common single 16+ examination to replace the O level and the Certificate of Secondary Education (CSE). Because in the earlier years, the comprehensive school in England ran two different examinations, O level for the most able, while the CSE for the lower achievers, which effectively ensured different curricula for different groups of children (Wiborg 2009, 10). Therefore, the establishment of GCSE was another sort of integration in secondary education, giving the egalitarian educational opportunity to the children from different groups. Besides, in 1988, the government introduced AS examination as a means of broadening the educational experience of A-level students, however, many did not see this innovation as moving towards a closer bond between academic and vocational courses (Tomlins and Miles 1991, 8).

2.4 Integration Under GNVQ and a Triple-Track in the 1990s

As mentioned above, from the end of the 1970s, there has been a reform movement trying to harmonize academic and vocational education via constructing a unified curriculum and qualification framework in England. This trend was further strengthened during the 1990s. Firstly in 1991, the FE White Paper, Education and Training for the 21st Century, stated that the government wanted to remove the remaining barriers to equal status between the so-called academic and vocational routes, and they wanted academic and vocational qualifications to be held in equal esteem (Tomlins and Miles 1991, 6). The Further Education Campaign Group of colleges (1993, 7) launched a new manifesto in 1993 calling for “a single curriculum framework for post-16 education, embracing academic and vocational routes within a fully developed system of credit accumulation and transfer”. In a subsequent manifesto of 1995, the Association of Colleges (1995) took up the quest for a single structure of qualifications to “bring academic and vocational courses within a common framework”, to “provide parity of esteem for equal attainment regardless of subject area or intended destination”. The unitary curriculum framework is clearly intended to reduce wastage, increase choice, and improve equality of opportunity (Frankel and Reeves 1996, 30).

However, the White Paper did not include any indication of intended reform of the A-level system, leading some commentators to regard that the dual system of vocational and academic routes would be perpetuated in effect (Tomlins and Miles 1991, 9–10). Furthermore, under this White Paper, other than a common curriculum or qualification framework, a triple-track qualification system came to be established. Besides A levels and NVQs, General National Vocational Qualification (GNVQ), a new form of integrating academic and vocational education on qualification level, was introduced in the 1992/1993 academic year, which had some of the design features of NVQs, but was aimed at the 16–19-year-olds in full-time education, many of whom could not or did not want to take A levels (Hodgson and Spours 2003, 14). GNVQ provided them with not only an opportunity for the labor market, but also a chance to enter higher education through getting A-level course assessment. The introduction of GNVQs and the further development of NVQs from 1991 to 1995 were meant to offer a broad vocational foundation for either work or further study. There was much lobby for the creation of a more unified curriculum during this phase, but the triple-track was firmly embedded (Hyland and Merrill 2003, 141–142).

Following the 1991 White Paper, the Conservative government had not intended further immediate reform of post-compulsory qualifications, however, by the mid-1990s, it was becoming clear that the ambiguous achievement targets outlined by National Advisory Council for Education and Training Targets (NACETT) would not be reached without further changes (Hodgson and Spours 2003, 17). As a result of many pressures, in 1995, the Dearing review on the qualifications for 16–19-year-olds was conducted, in which, there were recommendations to create a more accessible and clearer national qualification framework with a common grading system between A levels and broad vocational qualifications, and to reform the Advanced GNVQ into a smaller and more manageable vocational qualification that was more aligned with A levels (Dearing 1996, 10). The Dearing approach to reform envisaged a system of qualification tracks in which learners took "distinctive" courses with a clear identity but which, at the same time, provided an opportunity to change direction and to combine elements of academic and vocational study (Hodgson and Spours 2003, 18).

The Dearing review contained a recommendation to consolidate the three-track system of academic, general vocational and work-based vocational awards (Dearing 1996, 10). Therefore, after the Dearing review of qualifications, there was emphasis on developing linkages between the different tracks through overarching certificates, modularization and underpinning key skills. In response to Dearing, the departments for education and employment were brought together as the DfEE in 1996, which paved the way for more coherent thinking and planning across the erstwhile divide of education and training. This was reinforced in 1997 by the

merging of the School Curriculum and Assessment Authority and the National Council for Vocational Qualifications to become the Qualification and Curriculum Authority. Hard on its heels, came the rationalization of the main eight examining and validating bodies into three unitary awarding bodies: Edexcel, AQA and ACR. Finally, the funding and organization of all post-16 secondary education and training provision was brought under a single national body, the Learning and Skill Council (LSC), together with a Common Inspection Framework which covers all providers in the LSC sector (OFSTED/ALL 2000, 8).

However, it was still the case that the basic structure of the three-track qualification system changed little. Within the new structure, qualifications were still grouped into the three categories of "general" (GCSE and A-level), vocationally related (GNVQ and National Diplomas) and "occupational" (NVQs). This merely reframed the threefold split of the 1956 White Paper on Technical Education: "technologist, technicians and craftsmen". Tripartite separation, in the view of many of us in further education, tends to shore up the academic/vocational divide and constrains freedom of choice for students (Smithers and Robinson 2000, 75). A major stumbling block to this attractive scenario could well be the "golden" A-levels. Priestley (2003) argued that this was associated with the very great support that A level has attracted within the elites of the Conservative administrations between 1979 and 1997. Furthermore, the New Labor also seemed anxious to avoid appearing to pose any threat to "the gold standard" of A-levels. Consequently, the eventual policy outcome of the Dearing review was that while A-levels had been repackaged as modules they were still to retain their integrity. This compromise runs the risk of reinforcing the divisive education system which still persisted in England (Smithers and Robinson 2000, 76).

Fortunately, as far as the comprehensive school in this stage, drawing on the data from the survey, Benn and Chitty (1999, 13) showed that 30 years after the famous Department of Education circular 10/65 heralded comprehensive reform, the myth of fixed potential has not disappeared. Setting the scene with a broad historical sweep, they concluded that the struggle for comprehensive education that began in the nineteenth century with primary schools, and was fought in the twentieth over secondary education, would in future extend to the comprehensive reform of the college sector. For example, in 1993, when the government declared its intention to provide a grammar school in every town, another of its publication noted with statistics that 90 percent of state secondary pupils in Britain were in comprehensive schools (HMSO 1993). According to the statistics collected by Smithers and Robinson (2000, 1), there were totally 63 tertiary colleges established by 1993, which were seen by many to offer the "best institutional organization" to lessen the gap between academic and vocational provision (Tomlins and Miles 1991, 6). Furthermore, the development of comprehensive education could partially be attributed to

the development of City Technology Colleges and Grant Maintained Schools, which were the new forms of attempting to return selective education to the comprehensive system since the end of the 1970s.

2.5 Towards a Unified Framework: From Curriculum 2000 to QCF and RQF After 2000

The effect on curriculum and qualification of the 1991 White Paper was felt for the rest of the decade, until the introduction of New Labor's Curriculum 2000 reforms with their stress on "linkages" rather than distinction between the three qualification tracks (Raffe et al. 1998). The Curriculum 2000 reforms were designed to encourage the offering of broader packages of qualifications at advanced levels with learners typically studying more subjects and being able to mix general and vocational qualifications within a single program. It involved splitting the old A Level into two modular parts – the AS (Advanced Subsidiary) normally taken in the first year of the study and the higher level A2 taken in the second year, which together made up the full A Level. Broad advanced-level vocational qualifications, Advanced GNVQs, were refashioned into Advanced Vocational Certificates of Education (AVCEs) or Vocational A levels which were structurally aligned with the new AS/A2 qualifications to encourage mixed study programs. A key Skill Qualification in Communication, Application of Number and IT was introduced and was intended to be taken by all advanced-level learners alongside the AS/A2s and AVCEs (Hodgson et al. 2005).

Curriculum 2000, from one perspective, constituted the development of a "modernized and aligned track-based system", and from another perspective, could be seen as a preparatory stage in the formation of a more "unified and all-through system for lifelong learning" (Hodgson and Spours 2003, 31–32). So it may appear to be specifically responsive to idiosyncratically English problems, but was a wider cross-national drive to "unify" the upper-secondary level of education systems and to bring academic and vocational learning together, and was potentially a stage towards a more durable reform and a more unified 14+ curriculum and qualifications system. However, Hodgson and Spours (2003, 31–32) even characterized Curriculum 2000 as a process of political compromise – more track-based than unified, focused on qualifications rather than curriculum, and incremental rather than strategic. It meant that the reform of advanced-level qualifications could be interpreted more as an attempt to modernize an old system rather than lay the basis of a new one.

In 2004, when the Tomlinson report was published, it recommended a new 14–19 framework by replacing the qualification and learning system, which could reconcile academic and vocational studies in a learning program, including a core

literacy, ICT, numeracy, an expected project, common skills and a recognition of wider activities. The report did not discard the existing NVQs, GCSEs and A levels but suggested they became a "component" of the new learning and qualification framework, which promoted a cross-subject culture where academic learners have the opportunity to study a vocational subject and vice versa. Ideologically, it might have encouraged learners to cross the existing academic and vocational divide. Unfortunately, the following government response did not show much support for the proposal, but it did nevertheless initiate the 14–19 reform in the following years (Armitage et al. 2011, 6).

Following the report, in 2005, the *14–19 Education and Skills* white paper proposed a "radical reform of the system of the 14–19 education" (DfES 2005, 1) via the implementation of learning around core functional skills but still alongside existing GCSEs and A levels. And then the "specialized" 14–19 Diploma was to provide the needed vocational and academic bridge (Armitage et al. 2011, 7). The Diploma intended to offer progression between learning lines, from the vocational to the academic at different levels, and this flexibility was a "selling point" for the qualification and therefore more motivating for the "alternative" learner for whom the standard vocational or academic system is not working. Ideologically, the 14–19 Diploma presents itself as holistic, inclusive and flexible. It was designed to bridge the gap between academic and vocational studies and can be accessed at any age between 14 and 19. As a result of flexibility, it acted as a flagship for the 14–19 reform, and was made attractive to both learners and educationalists in later years (Armitage et al. 2011, 11–14).

During the premiership of Blair (1997–2007), the attempt to simplify the system of qualification into three major tracks (academic, pre-vocational and vocational training) which, at three levels could be seen as somehow "equivalent", was to be achieved in part by no longer funding students who might pursue alternative qualifications such as BTEC national awards, and also by withdrawing the encouragement for the International Baccalaureate to be an entitlement in every local authority. However, the legacy of the Blair era would see an even more confusing array of qualifications, at different levels, than it had inherited, such as GCSE/A Level, Vocational GCSE/A Levels, International Baccalaureate, 17 lines of Diploma, BTEC Awards, OCR National Qualification, NVQs, and Levels 2 and 3 Apprenticeships. The academic and vocational divide, as one of the problems, was deep-rooted, economically and socially, and the solutions could well be but a continuation of a long line of "reforms" which do not work (Pring 2008).

Fortunately, a further unified framework, Qualification and Credit Framework (QCF), was introduced by the Office of Qualifications and Examinations Regulation (Ofqual) in 2008, as a replacement of the NQF (National Qualification Framework) for vocational qualifications. The framework was designed to include a wide range

of vocational and other qualifications. By 2010, it was proposed to include NVQs, BTEC, City Guilds, OCR, Functional Skills qualifications, Foundation Learning Tier, Apprenticeships, etc. (Tait 2025). By 2013, it had been extended to include GCE A Levels, GCSEs and Diplomas (UCAS 2025). It means the QCF would be proposed to include all of the qualifications in a single framework, which would coordinate the relationship between academic and vocational education. In the framework, it encompasses three types of qualifications of awards, certificates, and diplomas, each of which has 1–8 levels, and each qualification is made up of units and each unit has a credit value (Wallace 2015). QCF provided a number of improvements of a more clear and transparent national qualifications framework, improved recognition and status for vocational learning/qualifications, and integration with HE qualifications and credit system (Tait 2025).

However, the QCF was withdrawn in September 2015, since it was no longer in operation, and the new Regulated Qualification Framework (RQF) was introduced in England in October 2015. RQF will provide a single, simple system for cataloguing all qualifications regulated by Ofqual. As Jeremy Benson, Executive Director for Vocational Qualifications, explained, the RQF should help people understand all the qualifications they regulate, general and vocational in England, and its intention is to improve consistency around how awarding organizations describe the size and challenge, or demand, of the qualification they offer. Compared with the QCF, the level descriptions are more outcome-focused, covering both academic and vocational qualifications, and setting out the "skills" and "knowledge and understanding" expected. Qualifications can serve a wide variety of different purposes and assess very different skills and knowledge (Benson 2015). It is like a bookcase in a library, with qualifications indexed by their "level" and "size" (Ofqual 2025). In other words, QCF constructs a more unified qualification framework than any other qualification before, and it links secondary and higher education, integrates the academic, vocational and training routes, providing the broadest options for all of the learners in the lifelong learning times.

Besides, although Blair announced the need of moving to the "post-comprehensive era" (Franklin and McCulloch 2025), the comprehensive secondary education is still under development in the 21st century. First of all, by the end of 2014, there were 93 sixth-form colleges providing a wide range of general and a smaller number of vocational qualifications mainly for 16–19-year-olds in England (Hodgson 2015, 3). Furthermore, there are some more distant cousins of comprehensive high schools emerging in the new century, such as university technical colleges, free schools, studio schools and academies, in which the university technical colleges (UTCs) are in relatively good development since the first was opened in 2010, which integrate technical, practical and academic learning and create the environment where students can thrive and develop the abilities industry needs. There

had been 39 UTCs launched and 55 more would be opened by 2017 (UTCs 2025). In addition, the good or outstanding general further education colleges were able to enroll 14–16-year-olds onto full-time provision since September 2014, which made the boundaries between the pre-16 and post-16 sectors less clear (Ofsted 2025). At last, the "comprehensive federation" collaboration system between schools and FE colleges other than a single "comprehensive school" established was arranged by the Labor Party since 2002, in order to provide an "entitlement" to a wide range of qualifications and opportunities in education and training post-14 (Pring 2008). All forms above contribute to the integration between academic and vocational education in different ways.

2.6 From Dual Emphasis to Merged Pathways: The Evolution of T-Levels into the Advanced British Standard Since 2015

Following the Conservative Party's electoral victory in 2015, the Cameron administration prioritized economic recovery and enhancing national competitiveness. Skill shortages were identified as a critical constraint on UK productivity growth, particularly after the 2016 Brexit referendum. The increased costs associated with visas for highly skilled workers and other requirements following Brexit contributed to declining corporate productivity (Sargent 2023). In this context, the government sought to reduce reliance on EU labor through enhanced domestic skills development. Consequently, under the leadership of then Prime Minister David Cameron, the government formally released the *Post-16 Skills Plan* in July 2016, aiming to reform the UK's technical education system for students aged 16 and above while improving the alignment between skills training and economic demands. The plan emphasized that technical and academic pathways should share common foundational elements: all students under 16 should study core academic subjects within a broad and balanced curriculum (Department for Education 2016, 16). It proposed that technical and academic routes should not constitute completely segregated pathways, advocating for transitional curricula between the two tracks to facilitate student mobility across different educational options (Department for Education 2016, 20).

Building on this foundation, the government under Prime Minister Theresa May advanced the 2017 *T Level Action Plan*, which constituted a continuation of the earlier *Post-16 Skills Plan*. This initiative sought to further reform the UK's vocational education system while enhancing the alignment between technical talent development and economic demands, while also serving as a significant policy measure to promote the integration of vocational and general education. T Levels are vocational or technical qualifications for 16–19-year-olds, positioned as an alternative to A Levels, continuing the legacy of the 1990s-era General National Vocational

Qualifications (GNVQs) and the early-2000s 16–19 Diplomas (Anderson 2018). Typically undertaken after completing GCSEs, T Levels integrate practical workplace experience with knowledge-based learning, coexisting with apprenticeships and A Levels to provide students with tripartite options: hands-on practice, academic progression, and specialized certification (Britannia 2025). The T Level initiative substantially elevated the status of vocational education in the UK, operationally actualizing the reform principle of "parity of esteem" between vocational and academic pathways. The policy explicitly advocated the principle that genuine mutual recognition between these two educational tracks can only be achieved when vocational education attains equivalent social prestige to academic education.

The educational reform in the UK, represented by T Levels, originated from the massive demand for skilled talent in the labor market (Zhang and Gu 2020). A chronic shortage of technical talent has long plagued the nation. In 2014, only 36 % of British adults held intermediate vocational qualifications, ranking 25th among 32 OECD countries (UK Commission for Employment and Skills 2015, 12). Data from the 2017 Employer Skills Survey (ESS) revealed that while job vacancies outside Wales increased significantly compared to 2015, 33 % of these openings remained unfilled due to workforce skill gaps – a phenomenon classified as Skill-Shortage Vacancies (SSVs) (Department for Education 2018, 11). Meanwhile, the well-established academic education system does not have an advantage in cultivating skilled personnel, and may even block students from accessing vocational education benefits. Specifically, youths lack opportunities to obtain middle-to-high-level vocational qualifications, and employer skepticism about vocational education quality contributes to over 400,000 16–24 year-olds remaining unemployed (The Independent Panel on Technical Education 2016, 6). Therefore, the UK's T Levels initiative fundamentally emphasizes parity between academic and vocational education through specialized vocational curricula, aiming to enhance vocational education quality and social recognition as a foundation for integrating academic and technical pathways.

Officially launched in 2020, T Levels have undergone iterative reforms during their implementation, most notably the structural adjustments to Level 2 qualifications effective from August 2024. These reforms aim to ensure the rigor, purposefulness, and outcome-driven nature of all Level 2 credentials, whether students progress to Level 3 studies or transition directly into Level 2 skilled employment (Department for Education 2024). This evolution explicitly positions T Levels as a critical mechanism for bridging academic and vocational pathways, systematically addressing both educational progression and workforce readiness. Crucially, the T Level framework now guarantees formal academic recognition for vocational learners through mutually convertible assessment standards with A Levels. For instance, the highest T Level distinction ("Distinction*") is academically equated

to the top A Level grade ("AAA*"), with both credentials translating to 168 UCAS Tariff Points – the standardized metric for higher education admissions (Department for Education 2023a, 2023b). This equivalence establishes robust articulation mechanisms between vocational training and university entry requirements.

While T Levels have significantly advanced vocational education and the integration of academic and vocational pathways in the UK, establishing high-quality vocational routes equivalent to academic ones may lead to vocational education shifting towards academic orientation, blurring its core objectives (Yoshihei 2024). In other words, T Levels were originally designed to enhance students' vocational literacy and secure progression pathways, yet their implementation may become constrained by traditional mindsets among schools and teachers, resulting in path dependency on academic education. However, the education system must not solely focus on producing research-oriented talent; it must also address labor market challenges and prepare students for future careers. Vocational education, with its employment-focused curriculum, serves as a critical bridge between school and work, equipping students with adaptability to evolving skill demands in early careers and professional development (OECD 2023, 73). Nevertheless, upon completing education, not only vocational students but also academically trained graduates must navigate the vast professional landscape to find suitable roles. Thus, cultivating vocational competencies – especially relevant workplace skills – is essential for all students, who should have the right to receive foundational vocational education during their schooling to facilitate a smoother transition into the workforce.

Addressing perceived shortcomings in T Levels' integration of vocational and academic pathways, the UK's former Prime Minister Rishi Sunak emphasized, "I want to build on our Conservative achievements and take a long-term decision to address the problems with our 16 to 19 education system" (Marwa 2023). In October 2023, the Conservative government unveiled *A World-Class Education System: The Advanced British Standard* (*ABS*), proposing the convergence of technical and academic education – a pivotal initiative in advancing the UK's vocational-academic integration agenda. The ABS synthesizes the strengths of A Levels and T Levels into a unified qualification framework. Under this standard, most students will pursue at least five subjects (including majors and minors), with enhanced flexibility to combine technical and academic disciplines, thereby expanding career pathway options (GOV. UK 2023). Specifically, the ABS introduces five transformative features for 16–19-year-olds: (1) Extended instructional hours to close the gap with international peers; (2) Breadth-with-depth curriculum balancing wide subject exposure and specialized competency development; (3) Mandatory mathematics and English study until age 18 to strengthen core skills and employability; (4) Integrated pathways accommodating academic, technical, or hybrid trajectories; (5) Simplified transition mechanisms at age 16 for educational track selection (Department for Education

2023a, 2023b, 9). This systemic convergence transcends the UK's traditional binary divide between academic and vocational tracks, institutionalizing their interdependence. The ABS enables all learners to simultaneously harness the "skill dividends" of vocational training while acquiring essential cultural literacy – the foundational competencies required for professional success.

3 Conclusions

In conclusion, since the establishment of vocational education provisions in the 19th century, the integrational relationship between vocational education and academic education has experienced six different periods: (1) vocational education was established, separated gradually from the general education before 1944; (2) the comprehensive secondary school was introduced, reducing the tripartite situation of grammar, modern and technical school in the secondary level from 1944 to the 1970s; (3) in 1980s, the NVQs emerged under the New Vocationalism, aiming on developing students' comprehensive competency; (4) the GNVQ was introduced, composing a triple-track with A levels and NVQs together in 1990; (5) from 2000, it has been going on gradually to the unified framework under the Curriculum 2000, QCF and RQF; (6) and the post-2015 transition of T Levels to the Advanced British Standard epitomizes the era-defining trend of convergence and systemic integration between dual education pathways. In each period, the integration between academic and vocational education manifests different characteristics. FE or vocational and technical education, as an important education provider in England, has played its own role during the past years, but more or less, the relationships between it and general education, especially in the secondary level, has been happening to a different extent.

On the types of integration between academic and vocational education in England, there are two primary types: comprehensive secondary education and a unified curriculum and qualification framework. Firstly, only on the comprehensive secondary schools, have many forms emerged in the history. When comprehensive education started to emerge during the 1960s and 1970s, there were sixth-form colleges and tertiary colleges, and then other kinds of comprehensive high school opened, such as city technical colleges in the 1980s, and university technical colleges, free schools, academies and studio schools after 2010. Although as Franklin and McCulloch (2025) said, the comprehensive high school had been on the death in the new century all over the world including the England, but its many distant cousins remained alive, and the ex-form of sixth-form colleges and tertiary colleges were still under development in the new century, which constituted the multi-forms of comprehensive secondary education. Furthermore, as another type of integration between academic and vocational education, the unified curriculum

and qualifications framework have been playing a more and more important role since the 1980s in England. After the NVQs were introduced in the 1980s, vocational education gradually enjoyed the equal esteem with academic education in parallel, and then GNVQs linked the academic and vocational education in the 1990s, providing broad options for the secondary students. Especially from 2000, the framework of Curriculum 2000, QCF and RQF, and the Advanced British Standard offer a much more integrational role between academic education and vocational education. And under the single framework, the "comprehensive federation" collaboration between schools and colleges could be seen as another kind of comprehensive education, as well as one type of integration between academic and vocational education.

However, why the integration has to emerge, and why the integration between academic and vocational education manifests in different types? Some researchers such as Pring and Walford (1997), Perellon (2003) and Wiborg (2009) argued that as a political issue, the integration of academic-vocational education depends particularly on the dynamics of contention between the Labor Party and the Conservative Party. Since in most cases, the Labor Party advocates for comprehensive education, while the Conservatives hold opposing positions. From the historical analysis in the paper, the political element did play an important role in integrating the academic and vocational education. After 1945, when the Labor Party succeeded in election, it issued the Education Act, aiming to provide free secondary education for all, which left open for the common secondary schools. In 1964 they were in office again, and embarked on a far-reaching program of establishing the single comprehensive secondary schools, serving all of the students regardless of their backgrounds, and then the sixth-form colleges and tertiary colleges were opened respectively. Following the turn of the 21st century, the Labor government rolled out a series of initiatives during its tenure (2000–2010), including the Curriculum 2000 reforms, the Tomlinson Report, and the QCF, continuously advancing the integration and mutual recognition of vocational and academic education. On the opposite side, when the Conservatives were in office from 1970 to 1974 and from 1979 to 1997, they claimed that the comprehensive school was no longer the pivotal issue and pursued a more selective education route. It should be noted that despite implementing education measures promoting vocational-academic integration during the Conservative Party's over a decade in office (post-2010), these initiatives did not stem primarily from a direct intent to integrate the two education systems. Rather, they represented indirect consequences for education following the government's Brexit decision.

But are there any other reasons to promote the integration between academic and vocational education, besides the political point? Definitely yes. As the data showed, by the end of Thatcher's tenure as Secretary of State for Education in 1974,

the number of comprehensive schools doubled that in 1970 and over 60 percent of pupils were enrolled in the comprehensive schools, even though she proposed a selective school structure (Wiborg 2009, 206–207). And moreover, during the long periods of Conservatives in the 1980s and 1990s, comprehensive secondary schools were still under development. Beyond these, the T-Levels and Advanced British Standard initiatives implemented by the Conservative government have emerged as substantive measures driving the integration of vocational and academic education in the UK in recent years. On the other hand, since 1945, there have been more opportunities for the Labor Party to develop a more comprehensive educational system like that in Scandinavia, but they missed. Especially, after 1997, when the Liberal Democrats were in office, they largely continued the policies established in the era of Thatcherism, and maintained the divided school structures, other than revitalizing their former education agenda of comprehensive reform. Because the New Labor believed that comprehensive education was in need of modernization and that it should be achieved by promotion of diversity between the secondary schools and through the private and voluntary sector sponsors (Wiborg 2009, 208). Wiborg (2009) argued that it partly resulted from class backgrounds of the Liberal Party who was essentially aristocratic and its extreme liberal ideology which thought public education should be class-based and a private matter. However, the researchers in this paper believed that another element behind this is the economic point to some extent, which could still explain the coming of the single qualifications framework on one side.

No matter which party is in power, an important task for them is to develop the national economy, which demands a well-educated workforce, including the technical labor. When the secondary education was too academic to train skilled workers for the labor market, the NVQs emerged in the 1980s. But the skilled workers still need the development of other soft competencies such as disposition, so the New Vocationalism as the supporting theory, which opens the door to the development of a more and more single curriculum and qualifications framework, and Curriculum 2000, QCF and RQF were introduced successively. Consider, for instance, how the T-Levels and Advanced British Standard initiatives spearheaded by the Conservative government fundamentally represent strategic responses to Brexit's cascading impacts on the UK's labor market and economic trajectory. This has precipitated a recalibrated educational focus on vocational dimension and its systemic integration within academic pathways. On the other side, a broad social element could be another cause for the introduction of a unity qualifications framework. With the development of modern learning society, the Internet+, MOOC and Cloud Computing Technology are entering the education area, in which learners don't need to choose just one certain educational provider or way among plenty of learning resources, and they can choose what

kinds of academic and vocational education they want, depending on their temporal and spatial conditions. The national curriculum and qualifications framework provides a widely optional or transferring opportunity for the learners between academic and vocational education. Particularly following the 2016 Brexit referendum, the nation's intensified efforts to advance academic-vocational integration through structural reforms aimed at strengthening indigenous talent cultivation for skilled professions, thereby stabilizing the domestic economy, further corroborate this assertion.

What will it be in the future in England? It must be multi-types under a single curriculum and qualifications framework. With the introduction of RQF and the Advanced British Standard and the development of many kinds of comprehensive schools, the integration between academic and vocational education will carry on in the new era. It could have some change depending on the government party, but the overarching goals of adapting to the demands of a learning society and serving economic development are irreversible. As long as political agendas serving specific class interests persist – unless a coalition government is established – this dynamic of contention will not disappear. And the recommendation for other countries where there is a pronounced secondary education tracking system, is that, some kind of comprehensive college should be established, in order to meet the learning demand of all the classes in a single unit, which shows the symbol of equalitarianism in education. Especially in countries where children from disadvantaged families still lack equal access to academic education compared with their peers from upper-class families, vocational education often becomes their only viable path. Therefore, the comprehensive secondary high school is a good way to reduce the gap between different-level families. Finally, for countries that have not yet established a unified qualifications framework, constructing a national curriculum and qualifications system by drawing lessons from the British experience constitutes another crucial revelation for promoting the integration of academic and vocational education. The nation could establish an educational framework or curricular content featuring a mutually accredited mechanism across vocational and academic education tracks. This would enable students to select majors or minors in either academic or technical programs according to their aptitudes, while ensuring the simultaneous provision of knowledge-based academic curricula and career-oriented technical courses that address future professional requirements.

Research ethics: Not applicable.
Informed consent: Not applicable.
Author contributions: P Chen: Conceptualization, Writing-Original Draft, Writing-Review and Editing. Hayward G: Conceptualization, Writing-Review and Editing.

Schmidtke C: Conceptualization, Writing-Review and Editing. X Tong: Writing-Review and Editing.

Use of Large Language Models, AI and Machine Learning Tools: None declared.

Conflict of interest: The author states no conflict of interest.

Research funding: It is declared that this academic achievement is done on the sponsorships from the Post-funding Project of China National Social Science "The Centennial Discourse Changes of China's Policy on the Integration of Industry and Education" (Grand Number: 24FJKB008).

Data availability: Not applicable.

References

Acquah, D. K., and D. Malpass. 2015. "The Technical Baccalaureate: Providing Excellence in Vocational Education?" *Assessment in Education: Principles, Policy and Practice* 24 (1): 96—117.

Anderson, A. 2018. "A View on the Most Change in Vocational and Technical Education in England for a Generation." *Higher Education, Skills and Work-Based Learning* 8 (2): 113—6.

Armitage, A., G. Donovan, K. Flanagan, and S. Poma. 2011. *Developing Professional Practice 14—19*. London: Routledge.

Association for Colleges. 1995. *A Manifesto for Further Education*. London: AfC.

Benn, C., and C. Chitty. 1999. "Comprehensive Education Myth: Educational Potential Is a Fixed Quantity." In *Modern Educational Myths: The Future of Democratic Comprehensive Education*, edited by B. O'Hagan. London: Kogan Page.

Benn, C., and B. Simon. 1972. *Half Way There (2nd, ed)*. Harmondsworth: Penguin.

Benson, J. 2015. "Explaining the RQF." https://ofqual.blog.gov.uk/2015/10/01/explaining-the-rqf/ (accessed March 11, 2025).

Bolton, P. 2012. "Education: Historical Statistics." https://core.ac.uk/outputs/74377934/?utm_source=pdf&utm_medium=banner&utm_campaign=pdf-decoration-v1 (accessed July 23, 2025).

Bourner, T., S. Greener, and A. Rospigliosi. 2011. "Graduate Employability and the Propensity to Learn in Employment: A New Vocationalism." *Higher Education Review* 43 (3): 5—30.

Britannia. 2025. "The Complete Guide to T-Levels: What You Should Know." https://britannia-study.com.my/uk-boarding-school/t-levels#elementor-toc__heading-anchor-1 (accessed March 5, 2025).

Chitty, C. 2004. *Education Policy in Britain*. New York: Palgrave Macmillan. Commission for Employment and Skills.

Crook, D. 2013. "Politics, Politicians and English Comprehensive Schools." *History of Education* 42 (3): 365—80.

Dearing, S. R. 1996. *Review of Qualification for 16—19 Year Olds*. Hayes, London: School Curriculum and Assessment Authority.

Department for Education(UK). 2016. *Post-16 Skills Plan*. London: Department for Education.

Department for Education(UK). 2018. *Employer Skills Survey 2017*. London: Department for Education.

Department for Education (UK). 2023a. "Introduction of T Levels." https://www.gov.uk/government/publications/introduction-of-t-levels/introduction-of-t-levels (accessed March 6, 2025).

Department for Education (UK). 2023b. *A World-Class Education System: The Advanced British Standard*. London: Department for Education.

Department for Education (UK). 2024. “T Level Action Plan: 2023 to 2024.” https://assets.publishing.service.gov.uk/media/6627c087d29479e036a7e68e/T_Level_Action_Plan_2023_to_2024.pdf (accessed March 6, 2025).

DfES. 2005. *Education and Skills White Paper*. London: TSO.

Frankel, A., and F. Reeves. 1996. *The Further Education Curriculum in England — An Introduction*. England: Bilston College Publications in Association with Education Now.

Franklin, B. M., and G. McCulloch. 2025. “The Death of the Comprehensive High School? Historical, Contemporary and Comparative Perspectives.” https://www.thenationalnews.com/world/uk-news/2023/10/05/how-will-the-new-advanced-british-standard-work/?outputType=amp (accessed March 11, 2025).

Further Education Campaign Group. 1993. *A New Manifesto for a New Era*. Solihull: FECG.

GOV. UK. 2023. “New Qualifications to Deliver World-Class Education for All.” https://www.gov.uk/government/news/new-qualifications-to-deliver-world-class-education-for-all (accessed March 7, 2025).

Green, A., and N. Lucas. 1999. *FE and Lifelong Learning: Realigning the Sector for the Twenty-First Century*. University of London: Institute of Education.

Gu, X. J., and Y. P. Li. 2018. “Value Choice and Essential Regression of Reform of British Vocational Qualification Framework System.” *Vocational and Technical Education* 39 (36): 72—9.

Hadow. 1926. *The Education of the Adolescent Report of the Consultative Committee*. London: HMSO.

Hall, V. 1994. *Further Education in the United Kingdom*. London: Collins Education.

Henkens, B. 2004. “The Rise and Decline of Comprehensive Education: Key Factors in the History of Reformed Secondary Education in Belgium.” *Paedagogica Historica* 40 (1—2): 193—210.

HMSO. 1993. *Education Statistics for the United Kingdom*. London: HMSO.

Hodgson, A. 2015. *The Coming of Age for FE? Reflections on the Past and Future Role of Further Education Colleges in the UK*. London: Institute of Education Press.

Hodgson, A., and K. Spours. 2003. *Beyond A Levels: Curriculum 2000 and the Reform of 14—19 Qualifications*. London: Routledge.

Hodgson, A., K. K. Spours, and M. Waring. 2005. “Higher Education, Curriculum 2000 and the Future Reform of 14—19 Qualifications in England.” *Oxford Review of Education* 31 (4): 479—95.

Hyland, T., and B. Merrill. 2003. *The Changing Face of Further Education: Lifelong Learning, Inclusion and Community Values in Further Education*. London: Routledge.

Kerckhoff, A. C., K. Fogelman, D. Crook, and D. Reeder. 1996. *Going Comprehensive in England and Wales: A Study of Uneven Change*. London: Woburn Press.

Li, J. 2015. “Interpretation on Network Political Culture from the Perspective of Ontogeny of Marxism.” *Nanjing Journal of Social Sciences* 26 (6): 82—7.

Lou, P. M. 1986. “The Genetic Method.” *Journal of Social Sciences* 8 (10): 68—9.

Macfarlane, E. 2015. “Sixth-Form and Tertiary Colleges.” In *Handbook of Educational Ideas and Practices (Routledge Revivals)*, edited by N. Entwistle. London: Routledge.

Marwa, H. 2023. “How Will the New Advanced British Standard Work?” https://www.thenationalnews.com/world/uk-news/2023/10/05/ (accessed March 8, 2025).

McCulloch, G. 2016. “British Labor Party Education Policy and Comprehensive Education: From Learning to Live to Circular 10/65.” *History of Education* 45 (2): 225—45.

McCulloch, G., and D. Crook. 2008. *The Routledge International Encyclopedia of Education*. London: Routledge.

Musgrave, P. W. 1970. “The Definition of Technical Education, 1860—1910.” In *Sociology, History and Education*, edited by P. W. Musgrave. London: Methuen.

OECD. 2022. *Pathways to Professions: Understanding Higher Vocational and Professional Tertiary Education Systems*. Paris: OECD Publishing.
OEDC. 2023. *Education at a Glance 2023: OECD Indicators*. Paris: OECD Publishing.
OED Online: Oxford English Dictionary. 2025. "integration, n." https://www.oed.com/dictionary/integration_n (accessed March 10, 2025).
Office for Standards in Education, Children's Service and Skills (Ofsted). 2025. "HM Chief Inspector's Annual Report on Further Education and Skills 2013/2014." https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/384709/Ofsted_Annual_Report_201314_FE_and_Skills.pdf (accessed March 11, 2025).
Ofqual. 2025. "Regulated Qualifications Framework." https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/461298/RQF_Bookcase.pdf (accessed March 11, 2025).
OFSTED/ALL. 2000. *The Common Inspection Framework for Inspecting Post-16 Education and Training*. London: OFSTED.
Perellon, J. F. 2003. "The Creation of a Vocational Sector in Swiss Higher Education: Balancing Trends of System Differentiation and Integration." *European Journal of Education* 38 (4): 357—70.
Piers, L. 2024. "A Selective Portrayal of Comprehensive Education." https://historyreclaimed.co.uk/a-selective-portrayal-of-comprehensive-education/#_edn8 (accessed March 10, 2025).
Priestley, M. 2003. "Curriculum 2000: A Broader View of A Levels?" *Cambridge Journal of Education* 33 (2): 237—55.
Pring, R. 2008. "14—19." *Oxford Review of Education* 34 (6): 677—88.
Pring, R., and G. G. Walford. 1997. *Affirming the Comprehensive Ideal*. London: Falmer Press.
Pring, R., G. Hayward, A. Hodgson, J. Johnson, E. Keep, A. Oancea, G. Rees, K. Spours, and S. Wilde. 2009. *Education for All: The Future of Education and Training for 14—19 Year Olds*. London: Routledge.
Raffe, D., C. Howieson, K. Spours, and M. Young. 1998. "The Unification of Post-Compulsory Education: Towards a Conceptual Framework." *British Journal of Educational Studies* 46 (2): 169—87.
Sargent, K. 2023. "The Labor Market Impacts of Brexit: Migration and the European Union." *Economic Modelling* 121: 106196.
Schagen, S., F. Johnson, and C. Simkin. 1996. *Sixth Form Options: Post-Compulsory Education in Maintained Schools*. Slough: NFER.
Sharp, J. 1973. *Open School: The Experience of 1964—1970 at Wyndham School*. London: Dent.
Smithers, A., and P. Robinson. 2000. *Further Education Reformed*. London: Falmer Press.
Tait, T. 2025. "The Qualifications and Credit Framework (QCF)." https://www.ioe.ac.uk/QCF_Seminar_Briefing.pdf (accessed March 11, 2025).
The Independent Panel on Technical Education. 2016. *Report of the Independent Panel on Technical Education*. London: Department for Education.
Tomlins, C., and J. Miles. 1991. *Reorganizing Post-16 Education: The Tertiary Option*. Slough: National Foundation for Educational Research.
UCAS. 2025. "UK Qualifications for Entry to University or College in 2013." https://www.cache.org.uk/Centres/Documents/UK%20Qualifications-2013.pdf (accessed March 11, 2025).
UK Commission for Employment and Skills. 2015. *UK Skill Levels and International Competitiveness 2014*. London: UK.
UTCs. 2025. "Overview of UTCs." https://www.utcolleges.org/ (accessed March 11, 2025).
Walker, M. 2016. *The Development of the Mechanics' Institute Movement in Britain and Beyond: Supporting Further Education for the Adult Working Classes*. London: Routledge.
Wallace, S. 2015. *A Dictionary of Education (2nd ed.)*. Oxford: Oxford University Press.

Wiborg, S. 2009. *Education and Social Integration: Comprehensive Schooling in Europe*. New York: Palgrave Macmillan.
Xu, G. Q. 2024. “Reform Ideas for Secondary Vocational Education Under the Background of Diversification of High Schools.” *Research in Educational Development* 44 (8): 35—42.
Yoshihei, O. 2024. “Trends in the Restructuring of Vocational Education in the Reform of Qualification System at Upper-Secondary Level in England.” *Bulletins of Japan-UK Education Forum* 27: 39—53.
Zhang, Z. H., and Y. Gu. 2020. “From A-Level to T-Level: The Curriculum System Reformation with Equal Emphasis on General Education and Vocational Education in the UK.” *Studies in Foreign Education* 47 (9): 99—115.