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The Importance of the Teacher–Researcher–Artist in Curriculum Design, Development and Assessment in Vocational Education in England

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Abstract

Set in the vocational education and training sector in England, this article draws attention to how top-down, centre–periphery approaches to curriculum design and development in vocational education fail for at least three reasons. First, they misconstrue the nature of knowledge. Second, they lead to perfunctory and fragmented approaches to curriculum design, coupled with mechanistic measures of quality and achievement, which often require little more than "one-off" and superficially assessed demonstrations of performance. Finally, they underplay the role and importance of the teacher *as* researcher *and* artist in putting the cultural resources of society to work in creative curriculum design and pedagogy. Teacher artistry is pivotal in animating and heightening the vitality of vocational curricula. It is through this artistry that teachers make theories, ideas and concepts in vocational subjects and disciplines accessible and meaningful to all learners in coherent ways in the contexts of their learning and their lives. The consequences of the epistemic *faux pas* underpinning centre-to-periphery models of curriculum design and development are highlighted in this article in vocational tutors' accounts of experiences of problems and issues in curriculum design, development and assessment encountered in their practice. Participants in the research teach in a variety of vocational education settings, including Apprenticeships and Higher-Level Technical Education; English Language at General Certificate of Secondary Education (GCSE) level; Health and Social Care; Information and Communications Technology; Construction (Plumbing); Digital Production, Design and Development and High-Tech Precision Engineering. Data are analysed and reported through systematic, thematic analysis This article draws upon qualitative data derived from a study funded by the Education and Training Foundation (ETF) in England over a two-year period from 2021 to 2023. The research population consists of a group of eight practitioner–researchers working in three colleges of Further Education (FE) and one Industry Training Centre (ITC) in England. All of the teachers of vocational education reported here volunteered to participate in the study. Research methods include semi-structured interviews, analysis of critical incidents and case studies produced by practitioner–researchers from across the FE and Skills sector in England.

Keywords: forms of knowledge; curriculum design and development; theory-practice relationships; teacher–researcher–artist; multimodal assessment; vocational education

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1. Introduction

Two research questions frame this small-scale, qualitative research study. The first is, 'How can teachers of vocational education in England be supported in implementing

Awarding Body (AB) specifications in engaging and educationally sound ways?' The second is, "How can assessment in vocational education be extended to recognise different forms of knowledge in more authentic ways?" These questions are linked. Both are important because the gap between the well-intended aspirations of curriculum designers and writers of AB specifications and the consequences of implementation in practice by teachers of vocational education in England is not only widening but also becoming increasingly obvious (Keep, 2006, 2007, 2015; Biesta, 2024; Coffield, 2024). The persistence of this gap is a troubling issue for education leaders and teachers of vocational education across England. It also a matter of concern for the main ABs in England including *Assessment and Qualifications Alliance (AQA)* and *Pearson Edexcel, Oxford Cambridge and RSA (OCR),* and what was originally the *Northern Council for Vocational Education*, now known nationally by its acronym (*NCFE*). In addition, this gap costly in terms of its political, financial and educational consequences and casualties. This research, conducted in the Further Education and Skills sector in England from 2021 to 2023, aims to deepen understanding of the nature and consequences of this gap and to locate the reasons for its persistence.

This research was funded by the Education and Training Foundation (ETF) in England. All of the vocational teachers who contributed to this study were at the time or had been previous participants in a national Practitioner Research Programme (PRP) funded by the ETF over the past eight years. All are teachers of vocational education in England. The eight research participants in the study responded to an invitation to participate in this small-scale research project. The focus of the study is firmly upon issues in curriculum design, development and assessment in vocational education in Apprenticeship, Higher Technical qualifications and teachers of General Certificate of Secondary Education (GCSE) English (a core component of Apprenticeships and Higher Level Technical Qualifications). The research population for this study consists of eight teachers of vocational education teaching apprenticeships and higher-level technical qualifications in three colleges of Further Education (FE), one college in the South East, one college in South West one college in North East of England and, one vocational tutor working in a large Engineering Apprenticeship Industry Training Centre (ITC) in the North West of England. All of the research participants made the decision to opt in to this study, and their participation was entirely voluntary.

Research methods include case studies, analysis of critical incidents, focus groups and semi-structured interviews. Findings suggest that teachers of vocational education are now widely regarded (and have come to see themselves) as implementers of AB specifications with little or no room for creative curriculum design and assessment, nor any tolerance of curriculum design, development and adaptation in context. It may be wise at this point however to note that even blueprints have their tolerances. The article concludes that there is a pressing need to restore the role of teachers in the vocational education sector in England to that of teacher–researcher–artist (Stenhouse, 1975; Biesta, 2024). Given the genesis of this research and its UK/Anglo-centric focus, it may also be worth explaining for the international reader some key terms as they are used in England. In this context, the term 'Further Education' (FE) is used to describe education below degree level for people above school age. Sometimes the term Further Adult and Vocational Education (FAVE) is used to describe the same sector to emphasise the inclusion of Adult Learning in post-16 education. The FE sector in England includes any study after secondary education, that is not part of higher education at a university or Higher Education Institute (HEI), that is not taken as part of an undergraduate degree. Courses range from English and mathematics at General Certificate of Secondary Education (GCSE) level to Higher National Diplomas (HNDs) and other technical level qualifications. The term 'vocational education' is used in England to describe education related to a career. For an educational offer to be considered

'vocational', it means that it is related to a specific kind of work or profession. 'Vocational education' can be offered and situated in an FE college, in an employer's Industry Training Centre (ITC), in the workplace, or in a combination of all three.

In this article, the term, 'curriculum design' is used to denote the hard task of working out what the curriculum is meant to be *for*, its purpose, before deciding how to realise its purpose in practice in coherent, meaningful and educationally sound ways (Biesta, 2024; Coffield, 2014). The term 'teacher–researcher–artist' is also used in this article to reflect the centrality of Stenhouse's argument that all well-founded curriculum research and development rests upon the work of teachers; 'It is not enough that teachers work should be studied: they need to study it themselves' (Stenhouse, 1975, p. 144), hence the use in this article of the term teacher–researcher. Stenhouse (1975), Elliott (1998) and Biesta (2024) also draw attention to the importance of teacher artistry in putting the cultural resources of society to work in enabling learners to grasp the 'epistemic architectures' (theories, ideas and concepts) underpinning a subject of discipline, hence the use in this article of the term teacher–researcher–artist (Kemmis, 2009). In a previous paper, I argued that notions of "what works" and "toolkits for success" in education seriously misconstrue the nature of educational practice and the processes through which educational practice changes and improves. The focus of this small-scale, qualitative study is upon issues surrounding curriculum research, design and development in programmes of vocational education training in the English system of education. It is written against a restless backdrop of policy change in England (Gregson, 2023). While many point to issues and failings in the system, the solutions they propose are different. The recent launch of the Post-16 Education and Skills White Paper not only aims to create a "... prestigious Further Education sector through which opportunity can flow. In every village, town and city we will grow high quality study pathways and qualifications at all skill levels empowering people not just to get by—but to get on." (Department for Education, Department for Work and Pensions, Department for Innovation Science and Technology, UK Government, 2025, p. 4). With reference to this most recent Labour Government and their older policy initiatives, Bewick (2025) offers some interesting reasons and some new perspectives surrounding why successive Labour Governments' policy ambitions regarding skills development have been met with mixed success. He also ventures some reasons why they failed. Working in government at the time, he recalls how some ministers and policymakers inside Whitehall attempted to shift the 'skills agenda' spotlight away from preoccupations with supply-side concerns (qualifications) and focus its glare upon the failings of the demand-side (employers) in the market. He detects serious attempts to redirect policy towards tackling structural inequalities and power imbalances in the labour market, including employers' persistent failure to commit to investing in training. He explains that the intention here was to move the focus away from a purely supply-side focus on skills planning, exhortations to reason, appeals to employer voluntarism and qualifications development. He concludes by challenging some common perceptions of the Tony Blair era, including the academic literature, which positions Blair's approach to skills as a continuation of the policies of the previous Thatcherite neoliberal political administration. Such arguments, he contends, overlook the importance of Blair's establishment of Sector Skills Councils (SSCs) consisting of local employers, worker representatives, local education institutions and industry experts. It is the failure to hold employers to account in investing in vocational education and training he argues, together with the absence of an infrastructure which encourages and enables employers and trade unions to work collaboratively in skills planning, that Bewick sees as the major obstacle to the success of the latest Post-16 Skills White Paper (October 2025). Richmond (2025) makes a similar point in relation to the relatively recent establishment of Skills England. Here he points to the importance and benefits of upskilling and reskilling

the workforce as a contributor to driving economic growth. He also draws attention to long-standing worries about the low level of skills and employer investment in training that has hampered the UK economy for years. He also expresses some misgivings and envisages an uphill struggle for the new agency Skills England, bearing in mind the huge list of responsibilities it has been given regarding cross-government coordination, as well as its location within the Department for Education itself, to the extent that Skills England has been dubbed by some as 'a Swiss army knife of an agency.' In the best-case scenario, he notes, the future for Skills England could be promising if it manages to generate and distribute high-quality data on skill shortages and labour markets at national, regional and sub-regional levels, galvanising employers and providers to work closer together through a better understanding of which courses at different levels will lead to the best outcomes for learners. If at the same time, Skills England can offer funding to establish new initiatives, partnerships and programmes that address the most complicated and systematic skills challenges across the country and remove barriers to economic growth, then the future could be bright. On gloomier note he points out that in the worst-case scenario, if Skills England struggles to become a respected voice within government and is largely ignored by other departments and organisations who see little value in engaging with it given their other more pressing priorities, then the future could be considerably bleaker. Richmond goes on to point out that the lack of independence from ministers means that Skills England is unable to express its own opinions or ideas regarding how to improve the skills system, relegating it to a bland supporting role in conversations around skills and training. He draws attention to how no funding is available for Skills England to drive changes outside government, leaving the agency with little more to offer other delivery partners and providers than examples of good practice, together with some words of encouragement. He also detects early rumblings of fractious relationships and tensions in Strategic Authorities regarding what they consider to be Skills England's interference in their own plans for skills and economic growth. He notes that this new agency begins its journey in the context of a post-16 education landscape littered with uncertainty, with many critical decisions, including the design of the growth and skills levy and the future of further and higher education funding and regulation, still undecided. Richmond concludes that against this unsettled backdrop, Skills England faces many different challenges, including the stark warning of the failure of its two predecessor organisations, the Institute for Apprenticeships and Technical Education (IfATE) and the UK Commission for Employment and Skills (UKES). Their demise he cautions, serves to demonstrate, among other things, how quickly ministers and civil servants can lose faith in such institutions if they fail to deliver what is required and expected of them.

Baird et al. (2024) point to the lack of parity of esteem between vocational and academic subjects in England, alongside England's continued struggle to design higher technical qualifications and apprenticeships. They explain England's poor record in this area in terms of how vocational qualifications continue to be regarded as inferior and second-rate, to the extent that vocational education in England is regarded as being, " fine as long as it is for someone else's children" (in other words, the children of the already disadvantaged). They cite, as a case in point, the current case of T-levels to illustrate the tendency for higher level vocational qualifications in England to "morph into" academic qualifications in terms of content and assessment. They conclude that the quest for parity of esteem in the English education system between vocational qualifications, while well-intended, appears to be wrongheaded. They argue that seeking social parity through the bureaucratic mechanisms of credit frameworks can only go so far. Economic parity, they contend, cannot be resolved through the education system at all, as it depends upon the labour market. They note that nothing is being done to address these issues. In addition, they point

to how the notion of parity of esteem itself is underdeveloped. The same authors call for a cross-party consensus to build a vocational education system that will last. They draw attention to how part of the approach would need to be significant engagement with employers through stable and lasting structures, as in the case of Germany. They go on to offer several lessons that they suggest curriculum and qualification designers in England need to learn. These include the establishment of sustainable fora for sector-specific employer engagement; ensuring qualifications are not overly complex; articulating quality criteria for the qualification as part of the design process; addressing the issue of the manageability and availability of work placements; the creation of a development process that ensures vocational education and assessment expertise are harnessed; tackling the inadequacy of funding for the further education sector as that is most likely to deliver the qualifications; articulating the expectations of the qualifications in relation to different stakeholders in the system and establishing a development process that has cross-party appeal with prospects of longevity. Maintaining the focus on T-levels in England, Johnston and Johnston (2024) point out that vocational education and the development of skills are often considered to be inextricably linked and of necessary importance for successful economic development. The authors find a limited appreciation of vocational education in England today. They note that despite numerous attempts to attain parity with A-levels, this has never been achieved. They draw attention to how education is regarded as preparing people to take their place in society across a broad range of pathways and walks of life, while in vocational education the focus is regarded as being to prepare people for the workplace. The same authors conclude that the concept of vocational education is still considered lesser in terms of esteem and status and, as such, significant effort is required to enable those undertaking the new level qualifications to have parity with their counterparts in academic education. Kushner (2023) draws attention to how we now face a contemporary crisis in curriculum design and development. He locates this in the inertia of content-based approaches to curriculum design, development and assessment, which diverge ever further from a volatile world and the major social, economic and political issues we face today. More importantly, he notes, inert, overcrowded and overly complex curriculum design denies young people the opportunities and experiences they need to negotiate the complex world of ambiguity, uncertainty and responsibility for their self-determination in the twenty-first century. He argues for a re-affirmation of the European humanistic principles in curriculum design and development as a political strategy to bring the education of young people into closer alignment with the realities of their lives, including encouraging them to act as informed citizens. He identifies the starting point as a research and inquiry-based curriculum, similar to the 'Humanities Project' curriculum, introduced in the UK through the works of Stenhouse (1975, 2012) and Elliott (1991, 2012). The same body of work, he notes, acknowledges that professional practice *is* an inquiry, where the aim of the inquiry is to respond to feedback in order to constantly improve (in the case of the focus of this article) educational practice. Through the works of John Dewey, Kushner also draws attention to how students are not preparing to *become* citizens, they already *are* citizens. He concedes that there is little immediate prospect for a return to implementing Stenhouse's humanistic curriculum, which abjures literalism and insists on uncertainty and ambiguity in ways which acknowledge the student as their own theorist of life. He justifies this pessimism on the grounds that, "... the energetic Right wing will not tolerate it; the liberals will not risk it; The Left (including Social Realists) are too focused on high-stakes theoretical combat. We are in the grip of technicists who claim that there is no ideology in education'. We are stuck here for the foreseeable future." (Kushner, 2023, p. 9).

It is important to note that education policy in the UK has been devolved for some time. It is not a unified curriculum, as each nation has its own curriculum, assessment structures

and values. This article brings to the fore how misunderstandings surrounding the realities of the ways in which vocational knowledge and practice are acquired, developed and improved are operating to distort how knowledge is represented, taught and assessed in vocational education curricula in England. The theoretical framework and theory of change which mark the parameters of this study are mainly informed by the works of Dewey (1916, 1933, 1934/2005). Therefore, the project reported and discussed in this article adopts, argues for and supports an essentially pragmatic approach to educational change and improvement. From this position, the starting point for educational improvement is taken to be the educational problems encountered by teachers in their experiences of their practice, where educational change is taken to be democratic, incremental and pragmatic, moving tentatively and incrementally from the ground up toward what might plausibly be inferred to be more general. In addition, the project reported in this article challenges the usefulness of models of educational change and improvement, which are imposed upon teachers from the top-down, with little if any tolerance of curriculum adaptation in context.

1.1. Context

Over the past 50 years, governments of various persuasions in England have pursued national policies in their search for the optimum combination of central prescription and grassroots initiatives in education. A question here is why so few (if any) of these initiatives have met with any discernible success (Sarason, 1990). This conundrum leads Coffield (2025a, 2025b) to ask, if the thesis underpinning the model of educational change and improvement in England is so poor, why does it continue to be so popular? Despite wave after wave of curriculum reform in England, the practitioner–research movement of the mid-1970s did not manage to change the deep structures of educational change and improvement from inside or from the 'grassroots up'. Some of the reasons for this are discussed above, with reference to the works of Stenhouse (1975, 1981, 1987), Elliott (1998), MacDonald (1991), Carr (1998a) and Kemmis (in Carr, 1998b), Kemmis (2009) and Biesta (2020, 2022). Over a similar period, the technical–rational, centre–periphery approach to educational change and improvement has also not managed to improve education from the 'top-down' and from the outside in. Instead, an economic model of education, framed and evaluated in terms of performance indicators, outcomes and assessment criteria, is now deeply entrenched in the English system of vocational education. Colleges of FE now have annual targets and micromanaged workforces with aspirations towards 'effectiveness'. Uniformity passes for standardisation and is taken to be a prerequisite for competitive comparison. Performativity is the order of the day, and educational quality is judged with reference to league tables. The problem of curriculum overcomplexity dominates in circumstances where systematized uniformity is allowed to masquerade as quality. Most recently, this is leading the Office for Standards in Qualifications (Ofqual) in England to reconsider the future of Outcomes-Based Qualification Design (OBQD). In the face of all of this, Elliott (1998, p. 35) invites us to consider how we might move beyond this impasse, which the experiences of two waves of curriculum reform in England should have taught us that we are in. He also reminds us that neither teacher-driven nor state-driven curriculum design and development appear to work in practice.

In 2025, curriculum design and development in Apprenticeship and Technical Education in England remain in a state of instability and constant flux, with little evidence of consensus. Since the 1980s, in the absence of high and continuing employer investment in and commitment to training, the locus of control over curriculum content, curriculum design and assessment now resides almost exclusively in the hands of the state and ABs. Vocational education in England exemplifies a continuing crisis between state concerns for equity and social justice. Qualification pathways and provision continue to proliferate and

grow in their complexity. Policy in vocational education struggles in supporting growth in a labour market characterised by constant change and shifts in labour demand, at a time when the call for ever increasing efficiency and the rationalisation of vocational qualifications remains strident. In 2025, heated debates surrounding the outcome of a contested social settlement about what matters in the vocational education context in England, including what vocational education is *for*, show no signs of abating. Regulatory bodies in vocational education such as the Office of Qualifications and Examinations (Ofqual) face the difficult task of maintaining oversight and navigating competing interests and priorities of FE colleges, ITCs and employers, as well as the changing imperatives of the Office for Standards of Education, Children's Services and Skills (Ofsted). Qualifications which tie learning outcomes to the workplace have not resulted in the yields that policy professionals seek. Vocational education is blamed for skills mismatches, weak links between education and the labour market and declining outcomes for young people. (OECD, 2016). Contributions from the following authors also influence the theoretical perspectives adopted in the study.

1.2. Literature Review

While the focus of this article is UK–Anglo-centric, the phenomenon of the failure of education reform is not. Sarason (1990) notes that in the USA over the last 40 years, top-down, centre–periphery notions of "what works", which frame education in terms of learning 'outcomes' or 'objectives' via models of change imposed from the centre to the periphery, are doomed to predictable failure. He draws attention to how the epistemic assumptions and axioms upon which centre–periphery and outcomes-based education reforms in the USA, which he and others had for so many years assumed to be valid, he concedes . . .it turns out. . .in the long run. . .are not.

Stenhouse (1987); Carr (1998a, 1998b); Elliott (1998); Kemmis (2009); Barone and Eisner (2012) and Biesta (2020, 2024) are critical of the same approaches to curriculum design and development in England. They note how these are serving to distort knowledge, while also denying the importance of the artistry of teachers. The role of the teacher–researcher–artist, in representing and making the epistemic structures and architectures of disciplines and subjects accessible to all learners by the pedagogic use of arts and aesthetic experience, they argue, is paramount in the justification of an education worthy of the name. The idea of the curriculum as an innovative pedagogic 'experiment' finds prominence in the work of Elliott (1998), who underscores the role of teacher as researcher and creative and experimental innovator. For Elliott, the role of education in contributing to the development of society is to establish a community of educated people who are capable of, and committed to, deploying its cultural resources to promote their own and other people's well-being. Planning the curriculum by objectives, he contends, distorts the nature of knowledge and leaves little room for the use of culture as a medium for the development of our thinking and the thinking of others in relation to the things that matter in life. By standardizing and predetermining learning outcomes 'objectives, inhibit the expression of individuality and creativity in learning and thereby prevent young people from personally appropriating culture as a resource for making sense of experience." (Elliott, 1998, p. xiv).

Kemmis also argues that centre-to-periphery models overlook the nature of educational practice and different forms of knowledge involved in the acquisition and development of the skills, qualities of mind and character which underpin the ability to do a job well for its own sake. He also notes how they underestimate the processes through which practice changes and improves in real time, in real-world situations. The deep irony here (as Kemmis notes) is that despite the apparent recognition among theorists regarded as being at the forefront of educational research, that practitioners are not mindless minions

performing in accordance with the diktats and theories of others, "... or the apparent recognition that practice and theory develop reflexively and together", many researchers "... still proceed to study practice 'from the outside', believing that the insights won in the intellectual struggle of the postgraduate seminar at the invitational international conference, will produce changes in the educational practice of teachers who attend neither." (Kemmis in Carr, 1998a, pp. 2–3). That is why, Kemmis argues, teachers need to be not only systematic and trustworthy researchers but also artists in curriculum design, creative pedagogy and assessment. A central point here is that approaches to curriculum design and development and the improvement of educational practice, including the inclusion or exclusion of the artistry of the teacher in curriculum design, are pivotal in the organisation and micropolitics of educational research, curriculum design and development as well as in approaches to educational change and improvement. Schön (1971) cautions how centre–periphery systems are prone to failure and are typically characterised by staff exhaustion, information overload and high levels of micromanagement, which, combined with other quality assurance measures, place pressures upon the centre which are impossible to sustain.

MacDonald highlights how successive legislative frameworks in England are based upon a bogus notion of merit and choice in systems of state education, framed in terms of the standardization of the curriculum and outcomes-based measures of assessment, based upon dubious views about what counts as quality, inclusion and social justice in education.

> 'It's a 'fixed' market, driven by the values of possessive individualism and negative interdependence, a competition in which the winners are known in advance, the losers left with only their own apparent shortcomings to blame'. (MacDonald, in Ruddock, 1991, p. 2)

Elliott (1998) and Ball (2008, 2018) trace the origins of problems in curriculum design and development in England to functionalist–reductionist preoccupations with minimalist "performative" standards and notions of assessment based on the memorisation and recall of instrumental learning outcomes measured in pen-and-paper examinations. Stenhouse (1981, 1987) points to the underestimation and ultimate neglect of the embodied and multisensory nature of human learning as raising persistent and troubling issues in practice in educational contexts. Carr (1998a, 1998b) illustrates how older and more coherent concepts of forms of knowledge have now been pushed to the margins of discourses surrounding curriculum design, development and pedagogy, replaced by a binary construal of knowledge which not only separates theory from practice but also disconnects practice from research. Sennett (2009), Eisner (2002) and Dewey (1934/2005) remind us of the importance of the epistemological potential of our embodied selves. They point out that the acquisition and development of different forms of knowledge and the creative growth of our minds have always been multisensory, originating in the body and its senses.

Awarding Body (AB) programme specifications in vocational education in England tend to reduce aspects of occupational competence to atomised and discrete roles, functions, units, elements and criteria for success. These are generally framed in terms of knowledge, skills and assessment to be taught, acquired and assessed in largely prescriptive ways. Notions of quality and educational improvement are encapsulated in terms of "standards" and (perhaps most tellingly) "standardization". The process of change is regarded as being quasi-mechanical or clockwork. The mechanism is structural and operated using policy and financial "levers" and "drivers". Success is construed and measured in terms of learning 'objectives' or 'outcomes'. The focus is upon control, compliance and uniformity. Tips and techniques for "best practice" are produced and disseminated with the intention of standardizing, predicting and controlling learning. The assumption here is that occupational competence can be reduced to discrete lists of knowledge, skills and behaviours. It is also

important to note how the logic here is that "best" practice is "best" in all situations and contexts and "what works" . . .works everywhere. . .and all the time.

Elliott (1998) offers the idea of an alternative, 'pedagogically driven' curriculum model in the form of innovative 'curriculum experiments', which he argues are not only preferable to but also more realistic and useful than their technical–rational counterparts. According to Elliott (1998), education can only meet the challenge of social change if it enables all learners to appropriate the cultural resources of society in a form which enables them to take the responsibility for actively shaping the social conditions of their existence. He illustrates how a 'pedagogically driven' model of curriculum design and development begins in teachers' experiences of educational practice and in the pedagogic problems they encounter in the contexts of their classrooms. From this perspective, "good" practice is regarded as being context-attuned, discerned, distilled and developed by teachers' experiences of practice. He reminds us that it is vocational teachers who understand and know the deep structures and epistemic architectures that underpin the subjects that they teach. It is vocational teachers who also know how they came to understand the subjects they teach for themselves in deeply personal ways. That is how and why teachers can and should make curricula accessible to all learners by putting the cultural resources of society to work for pedagogic purposes, Stenhouse (1987), Elliott (1998), Kemmis (2009) and Biesta (2024).

The reasoning or logic underpinning a 'pedagogically driven' approach to curriculum design and educational improvement, Elliott (1998) points out, is pragmatic. In the role of teacher–researcher–artist, teachers conduct systematic investigations into their own practice, creatively researching the problems they encounter in their educational practice from the inside and at a grassroots level. The rationale here is not a search for generalisable 'rules' and "best practice" to be applied by all teachers in all contexts. Instead, the intention is to offer creative, pragmatic, authentic and trustworthy insights into the epistemic architectures of vocational and educational practice and educational improvement in the contexts of their work. Note how the language framing the 'pedagogically driven' approach to curriculum design and development and educational change and improvement is articulated in terms of "good" (not "best" nor 'excellent" or even "perfect") practice. The use of the term "good" here is deliberate. This use of the word "good" not only acknowledges the importance of the capacities of the teacher to exercise imaginative and practical wisdom in the educational judgments that they make, it also admits the moral dimension of education, which requires teachers to act in the interests of all learners and in the pursuit of the greater common good in the educational contexts in which they work. The assumption underpinning the 'pedagogically driven' approach is that problems of curriculum design and development cannot be reduced to problems about means and techniques but must always be considered in relation to which educational ends are desirable or undesirable (Biesta, 2024).

From this point of view, curriculum, design, development and pedagogy cannot and should not be overly prespecified or highly prescribed at the centre and distributed to the periphery for regimented implementation by teachers. MacDonald (in Ruddock, 1991) strongly advises national educational policy authorities to set curriculum content and specifications in broad terms while leaving localities to mediate and modify the curriculum in light of local needs. This, they argue, would allow for a needed flexibility in curriculum design, development and pedagogy, within a given range of tolerance. Stenhouse (1975, 1981, 1987), Elliott (1998) and Kemmis (2009) also note that curricula are best viewed not as highly prescriptive straitjackets for teachers or in the interests of making education "teacher-proof", but as resources to help teachers to exercise artistry in reconstructing, expressing and creatively representing the architectures of the epistemic structures of the subjects they teach. This includes the nature of the discipline's tenure upon knowledge. This involves drawing upon cultural forms that make these epistemic structures and

architectures accessible to learners in ways which support a deep understanding of the nature of what is to be learned. The guiding principle underpinning this 'pedagogically driven' approach is that education can only meet the challenge of social change if it enables all learners to appropriate the cultural resources of society in a form which enables them to take the responsibility for actively shaping the social conditions of their lives. Elliott (1998) points out that curricula are representations of knowledge that teachers use for the purposes of teaching. He illustrates that curricula are the languages teachers use to talk about things and events in the world. As such, they imply what Bruner (1986, p. 125) calls 'a stance',

> '. . . a point of view about the use of the mind in relation to these things and events. The curriculum as the language of education not only refers to things in the world and its content but also marks the stance the teacher is to adopt towards the use of the student's mind in relation to them'. (Elliott, 1998, p. 22)

'Stances' taken toward knowledge underpinning curricula either invite teachers to express and extend their powers of understanding in the ways they represent knowledge to learners (curricula for teachers to grow in) or they imprison teachers as transmission devices, mindless functionaries or foot soldiers. Kemmis (in Carr, 1998a) notes how knowledge is presented as little (if anything) more than inert information. In contrast, in 'pedagogically driven' curriculum development, the role of the teacher–researcher–artist as insider and agent of change is valued and harnessed.

The knowledge of practitioners is respected, and teachers are regarded as being knowledgeable about practice because they know it from the inside. Practitioners are not at the periphery of the change process but at its centre. The art of the teacher is to express the epistemic architectures of the discipline and the nature of its tenure upon knowledge in a form that makes this accessible to learners including an understanding of the nature of what is to be learned. Stenhouse (1987) argues that curriculum designers, developers, educational researchers and teacher educators need to understand the art of the teacher because they are in many ways they are the epistemic gatekeepers of access to their subject. He points out that teaching music is about the teacher understanding the nature of music and having the skill to teach it in a way that is true to their understanding. He notes that teaching tennis is about understanding the logic and psychology and techniques of the game and about expressing that understanding through skill in teaching tennis. Similarly, he describes how the teaching of French requires the teacher's ability to express an understanding of language and culture in general, including French language and culture. In the same way, the teaching of wrought ironwork as a craft requires the teacher's ability to express a relationship of material to fitness for use and to concepts of beauty in metalcraft. For Stenhouse,

> '. . . a mainstream tradition of teaching is an expression of knowledge. . . of the discipline or field of knowledge; it is always to 'teach' the epistemology of that discipline, the nature of its tenure on knowledge'. (Stenhouse, 1987, p. 447)

Stenhouse argues that whether teaching is concerned with knowledge that we associate with the disciplines, with the arts or with practical skills, teachers should aspire to give learners insights into the epistemic architectures—the structures and status of what they learn.

Hamilton (1998, p. 78) detects the continuing presence of, ". . . the shadowy yet persistent empiricist and positivist inheritance of British educational research". He describes as the, "Silence of the Shadows', which he argues still looms menacingly over the credibility and status of both teacher-artistry and practitioner-research in education. Hamilton draws attention to how in empiricist–positivist research, discussions of theory are often separated

from discussions of practice, methodology and method. He notes how educational research of this kind fails to provide authentic, coherent and holistic accounts of practitioners' experiences of engaging in the research endeavour.

For Stenhouse (1987), all art rests upon research, and the purpose of the teacher–researcher–artist is to improve and develop the quality of their teaching. In response to the question of what counts as research, Stenhouse (1981) defines research as systematic self-critical inquiry grounded in curiosity coupled with a desire to understand,

> '. . . but it is a stable, not a fleeting curiosity, systematic in the sense of being sustained by a strategy . . . And fundamental to such a persistence sequential inquiry is a sceptical [*sic*] temper of mind sustained by critical principles, a doubt not only about received comfortable answers, but also one's own hypotheses.' (Stenhouse, 1981, p. 103)

Stenhouse (1987) declares teaching as an art, where art is taken to be an exercise of skill expressive of meaning. From this perspective, the painter, the poet, the musician, the actor, the dancer, the composer, the architect, the plumber, the bricklayer, the engineer, etc., all express meaning through skill. From this standpoint, this view of knowledge is one that comes to infuse the teachers' perception of subject matter and their judgment of the performance of students. In this way, his view of knowledge of the subject and its status becomes revealed, by teaching, to the student.

> 'Such a perception of knowledge develops and deepens through the career of a good teacher, and it is the product of the teacher's personal construction and reconstruction of knowledge'. (Stenhouse, 1987, p. 447)

It is important to note that for Stenhouse, there can be no curriculum development without the development of teachers as artistic and systematic researchers of their own practice.

At this point, it is also only fair to point out that practitioner-research is sometimes given a bad name. Such criticisms tend to centre upon practitioner-research not being as systematic, robust, credible and trustworthy as research conducted in Higher Education (HE). Sometimes this criticism is deserved. Sometimes it is not. For example, as Hamilton argues above, qualitative research is often judged against inappropriate empiricist–positivist standards. On the other hand, it is not difficult to find many examples of large-scale (often expensive) empiricist–positivist quantitative research studies which have had little or no discernible impact upon educational practice. Stenhouse (1987, p. 451) points out that in an age of accountability, educational research will be held accountable for its relevance to practice, a relevance that can only be validated by practitioners. He points out that only the teacher can change teaching. This means that in-service teacher- development must be the development of the teacher–researcher–artist. This requires the development of understanding expressed in performance, in and through teacher research and artistry. From this perspective, the purpose of any endeavour in curriculum design, development and research is the enhancement of the art of teaching, of understanding expressed in artistry and performance. Crucial here is the desire of the teacher–researcher–artist (note, not the mindless functionary, nor the foot soldier) to improve their art.

For Stenhouse, education is essentially a practical art.

> 'In an essentially practical art, like education, all the research and all the in-service education we offer should support that research towards performance on the part of the teacher. For there is in education no absolute and unperformed knowledge. . . Educational knowledge exists in and is verified or falsified in its performance'. (Stenhouse, 1987, p. 453)

Each of the approaches to educational change and improvement discussed above has its champions and each has its critics. On the one hand, authors such as Sarason (1990),

Kemmis (in Carr, 1998a), Kemmis (2009), Carr (1998a, 1998b) and Elliott (1998) locate the problem of the failure of education reform in the imposition of an objectives-driven model educational change which moves from the centre to the periphery and is imposed from the top down upon teachers. The above authors are critical of top-down, centre–periphery approaches to curriculum design and development on the grounds that they deny the importance of the artistry of teachers in curriculum design and development. The same authors reserve their strongest criticism for the adoption of the objectives model of socially engineering educational change introduced in England in the 1980s. Such approaches to educational change and improvement they consign to 'predictable failure', on the grounds that these approaches misconstrue and misrepresent the nature of knowledge and practice; underestimate the limitations of empiricist–positivist approaches to curriculum research, design and development in educational improvement; underplay the role of culture in education; omit of the role of democracy in education; and adopt a technocratic and authoritarian language and view of educational change and improvement (Coffield, 2025a; Biesta, 2020, 2022, 2024). In contrast, those who support the legitimacy of the use of functional-analysis, together with empiricist–positivist approaches to curriculum design in educational research and improvement, argue the opposite. Curriculum design and development, they contend, can and should be the responsibility of centrally located, specialist curriculum design 'experts' employed by Awarding Bodies. The contention from this point of view is that teachers are not equipped with the knowledge and skills required for robust curriculum research and design and therefore cannot be trusted with responsibility for the conduct of these roles. A key point here is that teachers as insiders are too invested in their practice to be able to be objective about it; therefore, the results of their curriculum research and their attempts at curriculum design are, 'unscientific', unreliable and therefore need to be standardised and micromanaged in practice.

What these perspectives have in common is that despite considerable investment in each of these theories of change and approaches to curriculum research, design and development in England over many decades, neither has been particularly successful in improving educational practice on a larger scale or in sustained or sustainable ways. This is one of the reasons why this article is important. The central argument presented here is that we need to find new and better ways to go about curriculum research, design, development and educational improvement in England in the interests of good education and the wider common good. And we need to do it soon. This article offers insights and invites UK and international readers to contribute to discourses surrounding what a teacher–researcher–artist approach to curriculum research, design, development and pedagogy might look like in practice.

2. Materials and Methods

As explained above, this is a small-scale, mixed-method, qualitative research study, funded by the Education and Training Foundation from 2021 to 2023, conducted by a team of teacher educators working in an English university with experience and backgrounds in the field of vocational education at the University of Sunderland. This article is offered as an invitation to extend a conversation surrounding issues in curriculum design and development in vocational education in England and perhaps more widely. The research was carried out in collaboration with eight practitioners from a potential research population of approximately 200 FE teachers supported by the PRP over the past 8 years, teaching in a range of subjects and disciplines and in a range of geographic locations in the Further Education and Skills sector across England. Subjects taught included Health and Social Care, Construction (Plumbing), ICT, Engineering and English Language. The research population consists of eight teachers of vocational education working in three FE

colleges in England, one in the South East, one in South West and one in the North East of England, and one vocational tutor working in a large Engineering Apprentice Industry Training Centre (ITC) in the North West of England. The focus of the study is upon issues encountered recently in curriculum design, development and assessment in programmes of Apprenticeships and higher level Technical training in England. Data reported and discussed in this article offer some insights into important and pressing issues in this field of study.

Sources of data are drawn from case studies produced by research participants (as they worked with colleagues in their colleges and in the ITC) as they prepared to implement new programme specifications prescribed by a number of different Abs. An intention of the study in relation to programmes of Apprenticeships and Technical education and training was to explore how thee might be planned and taught in less fragmented, more educationally sound, coherent and authentic ways. Other sources of data include analysis of critical incidents, focus groups, semi-structured interviews, field notes taken during curriculum design and development workshops and accounts of sector-practitioners' experiences of implementing AB-devised centre–periphery programme specifications. Participants in the research were asked to share their accounts of experiences of implementing new Apprenticeship and Technical specifications centrally devised by ABs. In semi-structured interviews participants were asked to recall critical incidents and events in the implementation process. Methods employed involved beginning with a the literature search which began with a key-word search of the literature followed by a literature review. Key terms such as 'curriculum research'; 'curriculum design and development'; 'curriculum planning'; 'vocational education'; and 'cross curriculum planning' were employed. This led to the identification of several key texts, of which three (Adelman, 1989; Banks, 2007; Harden, 2000) were identified by the University Research Team as being relevant to this study. These three texts were selected as pre-reading prior to participation in two Curriculum Design and Development Workshops. The research population includes teachers of Construction (Plumbing) in an FE College in the South East of England; teachers of GCSE English Language and Literacy working in vocational education contexts in the South East and in the North East of England; a teacher of Health and Social Care in the North East of England; a teacher of ICT and Communications in the South West of England; and a vocational tutor in a large Industry Training Centre for Engineering Apprentices in the North West of England. This research is conducted in accordance with the guidelines for ethical educational research set out by the British Educational Research Association (BERA, 2024). All of the research reported here has been approved by the University of Sunderland Research Committee. All of the participants in the research were volunteers. All the participants in the study were provided with an Informed Consent Form and a Research Information Sheet, in which it was made clear that they were under no pressure to participate in this research and they had the right to withdraw from the study without adverse consequences. The same documents also made it clear that participants' identities would be protected and anonymised in research and protected in accordance with the BERA (2024). The same documents also provided participants with written assurances that all data would be collected, stored and curated in line with the UK Data Protection Act (2018). Subsequently, data generated from the above sources are analysed in the study using systematic, reflective thematic analysis (Clarke & Braun, 2017; Nowell et al., 2017). This involved adopting a systematic six-step approach to thematic analysis as similarly advocated by Clarke and Braun (2017) and Nowell et al. (2017). These six stages included immersion in the data;the identification of codes using Multiple-Coders (MCs); the maintenance of a data diary/logbook to record changes and shifts in patterns of codes and changes in coding; the construction of a frequency table of codes supported by linked direct

quotes from research participants; the clustering of codes into subthemes and themes, the distillation and discussion of themes; and the identification and discussion of findings and recommendations.

3. Results

This section of the article reports the most important findings from this small-scale, qualitative study. As discussed above, each of these findings is derived from the systematic reflexive thematic analysis of the respective data sets from each project (Clarke & Braun, 2017; Nowell et al., 2017). Themes and subthemes were clustered and visualised in the form of spider diagrams, extracts from narrative accounts and case studies, including direct quotes from research participants and extracts from case studies written by the vocational teachers who participated in the research.

An overarching finding of this research is that FE colleges and ITCs in England are investing and working hard to help teachers of vocational education to implement AB specifications in educationally sound ways. For example, one participant in the research involved in teaching Engineering Apprentices writes,

> 'My employer has invested significantly in the development of the infrastructure required to support the design and delivery of programs of learning which meet a multitude of industry needs. These include meeting the basic skills requirements involved in going into the high-tech precision engineering business, meeting the standards of vocational education being delivered at this level, so that the efficiency and efectiveness of staff, as vocational training operations scale up. I am also involved in improving standards of teaching in a role which touches upon many areas of practice in this field, but where the main focus is upon enhancing digital teaching/digital capability on a national scale.'

3.1. Programme Specifications Misconstrued as Curriculum

An important finding of this study is that many teachers of vocational education are more deeply caught up in the grip of top-down, objectives-based, centre-to-periphery approaches to curriculum development than might be anticipated. Overriding pressures to demonstrate compliance with AB specifications are pushing sector practitioners into positions where they have come to regard and accept themselves simply as implementers of atomised programme specifications prescribed by ABs. From this perspective, teachers of vocational education regard themselves as having neither the right, the knowledge, the skills nor the ability to put the cultural resources of society into the design and development of the curricula they teach. Many practitioners are of the impression that ABs have left little if any room for indeed the exercise of creativity and imagination on the part of vocational teachers regarding curriculum design and development. In this respect, the teachers of vocational education involved in the study are cast in the role of passive, biddable and "mindless foot soldiers" in the process of curriculum design and development (Kemmis, 1998). A consequence of this is that participants in the research report that they find themselves unintentionally pushed into positions which require the misrepresentation of different forms of knowledge in the curriculum in terms of long and discrete lists of knowledge, skills and behaviours as set out in prescriptive AB programme specifications, which (at least on the face of it) separate theory from practice and encourage "teaching to the test". It is a finding of this study that the reductive grip of functional analysis in approaches to curriculum design and development in vocational is strong and difficult to loosen. This clearly has important implications for teachers charged with responsibility for curriculum design and development in vocational education in England.

3.1.1. Assessment: Why Are We Assessing That Kind of Knowledge in That Way?

The above question is adapted from a direct quote made by a vocational tutor participating in the study. It draws attention to the frustrations and ironies involved in being required to use paper-based examinations to measure forms of knowledge that do not lend themselves to be measured in pen-and-paper tests. Indeed, one of the teachers from FE College ABC in a collaborative curriculum planning workshop in the project asked, "Why are we measuring *that* kind of knowledge in *that* way?" A finding of this study, therefore, is that assessment strategies in vocational education need to be able accommodate more multimodal and more authentic ways of assessing different forms of knowledge and different ways of knowing in both Further Education (FE) colleges and in industry training contexts than they do at present.

3.1.2. Issues in Curriculum Research Design and Development: Awarding Bodies

A participant recalls their experiences of implementing AB specifications for a higher-level technical qualification in College G as follows:

> The college team was made up of some subject specialists who had been tutors at the college for several years (approximately collective 50 years of teaching at the same institution) each of the subject specialist was given an area or theme of the higher-level technical qualification to consider and plan for its delivery. It became apparent from looking at the resources provided by the Awarding Body that there is a lot to cover. Indeed, the specification stipulated much more content than the qualifications which had previously been taught. At the time there was not much by way of guidance from the Awarding Body around how to structure the curriculum or any recommendations regarding how the specified curriculum content set out in the specification document should be put into practice. Everyone seemed to have a different view of what would work in practice. The fact that these qualifications were assessed by pen-and-paper examinations was also a daunting prospect to some of the team who had "never taught to an exam before". The qualifications staff at the college had taught previously were assessed by coursework only. There was a palpable sense of fear of how students might cope with these exams. There was also a sense that there was nowhere to hide and we would need to ensure that the students who enrolled onto the course were sufficiently suitable and robust enough to endure this mode of assessment and be able to learn and successfully deal with all that this tougher specification demanded. (Extract from College G Case Study)

A finding of the research suggests that Awarding Bodies (ABs) and other gatekeepers of standards of quality and assessment in vocational education, in the interests of not 'overcrowding' curriculum content should work more closely and more flexibly with sector practitioners and the research community in setting curriculum specifications out in broad terms which can be adapted in context and in practice.

3.1.3. Collaborative Curriculum Planning in Action

A finding of this study is that opening up practical collaborative and cooperative workspaces in the project, in which teachers can experience moments where they engage in collaborative curriculum planning development, is pivotal in supporting coherent and meaningful curriculum planning and development. In these spaces, teachers of different disciplines and subjects can work together to "see" where similar concepts and ideas appear in different subjects and in different areas of the curriculum in ways which encourage practitioners to collaboratively and cooperatively engage in coherent and integrated curriculum planning.

4. Discussion

This section of the article discusses key findings from the research relation to the literature from this field of study.

4.1. Programme Specifications Misconstrued as the Curriculum

Data from this study suggest that a consequence of functionalist–reductionist curriculum planning is that this opens an apparent disconnect between the coherent and meaningful acquisition and development of the different forms of knowledge. Participants in the research present accounts in the case studies that describe how they experienced difficulties in representing theoretical and practical knowledge in coherent and meaningful ways in their curriculum plans for Apprenticeship and Technical training.

For example, a participant in the research from FE College H writes of Health and Social Care students on a technical qualification,

> While learners enjoyed the industry-specific elements, where they have excelled at linking theories to practice, this has not been echoed within the science elements of the technical and further science elements of their program. Due to the nature of these elements, specifically for physics, chemistry and biology it has been difficult to contextualize content. As such teachers felt that aspects of the qualification were being shoehorned into the lesson with no real meaning of purpose. (Extract from College H Case Study)

Data from the study also suggest that programmes of Apprenticeship and Technical training are not well-served by rigid programme specifications and tightly imposed end-point assessment regimes. Practitioners in the study report that students are displaying a lack of ability to connect 'theoretical' abstract learning to practical learning and assessment methods which do not/cannot accommodate context and local knowledge in the development of practical skills. Tutors in the study also report that while students can in part perform tasks, they frequently fail to connect these to explanations of why.

As Carr (1998a) and Kemmis (in Carr, 1998a) and Kemmis (2009) note, if curriculum design and development in England are to avoid the mistakes of its past, then they will have to be understood as being much more than the simple implementation of AB programme specifications. Instead, the importance of the teacher–researcher–artist in curriculum design and development needs to be recognised and accepted. In addition, a deeper understanding and a wider acceptance of the role of the teacher–researcher–artist has important implications for the organisation and micropolitics of curriculum research, design and development. As discussed above, this issue turns upon the relationship between people we have come to regard as "theorists", those we have come to regard as "practitioners", those we have come to regard as "researchers", those we have come to regard as "artists" and those we have come to regard as "curriculum designers" so that we can begin to learn how to dissolve the barriers and divisions of labour between each.

4.2. Assessment: Why Are We Assessing That Kind of Knowledge in That Way?

A finding of this study suggests that new approaches to multimodal forms of assessment will need to be developed, capable of representing a wider range of forms of knowledge, learning and achievement than at present, including practical knowledge, procedural knowledge, theoretical knowledge, problem-finding, problem-solving, critique and collaboration and cooperation, as well as developing other qualities of mind and character such as persistence, tolerance, perseverance and obervation. New approaches to multimodal assessment will also need to go beyond pen-and-paper tests to encourage the development of criticality and independence of thought, imagination, creativity and a care for, and lifelong commitment to performing a job well and for its own sake.

4.3. The Importance of Curriculum Research Design and Development Awarding Bodies

A finding of this study is that curriculum designers and teachers need to work together to set curriculum content and specifications in *broad terms*. However, as MacDonald (1991) suggests, Awarding Bodies need to leave programme specifications open to teachers to mediate and modify specifics in light of local needs and contexts, within a given degree of tolerance.

4.4. The Importance of Collaborative Curriculum Planning

As discussed above, the opening up of practical collaborative and cooperative spaces in which teachers can engage in creative curriculum has important implications for policy professionals responsible for teachers' CPD, education and curriculum leaders and those responsible for the continuous professional development of vocational teachers in vocational education and industry settings is not to be underestimated (Adelman, 1989; Banks, 2007; Harden, 2000). For example, a participant from College DE, who used their participation in the research project to pilot a collaborative curriculum planning and problem-and project-based learning college project writes,

> In this [collaborative] curriculum plan, the tutors have highlighted the various assessment activities being developed to support learning. This was then reviewed in team meetings to monitor the project. Tutors' used class notes on Teams to help students keep a project journal as well as to provide a store of information students could review before the summative assessment. To aid smooth delivery, the tutors set up a team in Microsoft Teams to provide lesson by lesson information to each other. To provide a more impartial view of the success of the project the [college's] Deputy Technical Development manager was asked to come and review progress. The project brief was provided to the students along with a student-facing delivery and assessment plan. This explained how at the end of the project the students would be assessed. . .through applying knowledge in industry-focused projects, learners were able to evidence a broad and diverse set of skills and higher order problem deconstruction and solution skills. Assessment was conducted on an ongoing basis through regular activity allowing the students to provide evidence of their practical knowledge. (Extract from College DE Case Study)

4.5. Why Are We Assessing That Kind of Knowledge in That Way?

A finding from this study draws attention to the frustrations and ironies experienced by teachers and industry-based vocational tutors of apprentices required to use paper-based examinations to measure forms of knowledge that do not lend themselves to be measured in pen-and-paper tests. This suggests that multimodal authentic ways of assessing different forms of knowledge and different ways of knowing in both vocational education and industry contexts, including problem and project-based learning and assessment activities are in urgent need of development. This has important implications for policy professionals and Awarding Bodies charged with responsibility of the content and design of specifications for vocational qualifications. The key point to note here is that it is highly unlikely that centre–periphery, overly prescriptive curriculum specifications and objectives-based models of educational change and improvement will be successful in bringing this about.

For example, in an extract from ABC College's Case Study, a research participant writes,

> Those of us who have worked on the technical level program have uniformly expressed a concern about the two, core paper-based examinations in particular. This assessment method which ultimately assesses recall is thought to be limiting for learners who found it difficult to express their knowledge in this way. It was

> agreed that the more holistic approach to assessment would be more appropriate for the core element of the technical qualification and would also open up opportunities for more project- based and problem-based learning activities within the curriculum. Staff and learners at ABC College have likened the core examinations to deciding the educational outcomes of technical level students in a penalty shootout. A one-off event that relies on a degree of luck and circumstance and ignores the events of the 90-min football match plus extra time that led up to the penalty shootout. Of course, in this metaphor for, the 90-minute football match in the 30-min extra time are the learner's hard work and dedication across two years of their technical studies. The ultimate aim is to explore assessment methods which would allow learners to exhibit skills and attributes that they have been unable to demonstrate authentically informal paper-based examinations. (Extract from College ABC Case study)

5. Conclusions and Recommendations

So, what is to be done? In England, we now seem to have arrived in the epicentre of the centre–periphery model of curriculum design and development. Prescriptive centrism in national approaches to curriculum development is not working. Equally, the teacher–researcher movement of the 1970s foundered in the trivialisation and technicization of practitioner-research. A hope here is that the insights offered in this article will contribute to discourses surrounding curriculum design, development, educational reform and approaches to educational improvement in England in the future in offering more creative, not yet envisaged and unexplored perspectives in the field of curriculum design and development.

In support of Baird et al. (2024) and other authors discussed in some detail above, the time may now have arrived for stakeholders in the English system of vocational education to learn the lessons of the past. In moving forward, it may be helpful to pursue the following goals:

1. Arrive at a cross-party consensus to build a coherent vocational education system that will last. This will involve significant engagement with employers through lasting and stable structures, as in the case of Germany.
2. Curriculum and qualification designers in England will need to have the support of sustainable fora for sector-specific employer engagement.
3. Curriculum and qualification designers in England need to ensure that qualifications are broadly framed, not overcrowded or overly complex, able to be adapted in context in line with agreed tolerances. They also need to be capable of accommodating the arts and humanities in ways which encourage teachers to make concepts, theories and ideas in different subjects and disciplines accessible to all learners.
4. Develop quality criteria for vocational qualifications as part of the design process.
5. Address the issue of the manageability and availability of work placements.
6. Create and develop a consultation process that ensures that expertise and experience in vocational education and assessment are harnessed.
7. Tackle the inadequacy of funding for the Further Education sector as it is sector most likely to deliver the qualifications.
8. Articulate the expectations of the qualifications in relation to different stakeholders in the system and produce a development process that has cross-party appeal with prospects of longevity.

In closing, it is worth reiterating the point made by Baird et al. (2024) that if the history of vocational qualifications in England teaches us anything, it is that another round of reforms is likely to begin shortly, bringing yet another opportunity to learn from (or to fail

to learn from) the mistakes made and important lessons to be learned in curriculum design and development in England over the past 40 years.

PROJECT INFORMATION SHEET
Study Title: Cross Curriculum Planning in Vocational and Technical Education

What is the purpose of the study?
The purpose of the study is to explore how teachers of vocational and technical education might be supported in developing more coherent and creative approaches to cross curriculum planning, problem and project based learning and multimodal assessment.

Who can take part in the study?
Any teacher of vocational and technical education working in a Further Education and Skills Context in England.

Do I have to take part?
Participation is entirely voluntary. If you change your mind about taking part in the research, **you can withdraw at any point during the research without giving a reason and without penalty**. After you have completed your participation in the study, you can also withdraw your consent for your data to be included by contacting me via email **within 2 weeks from the end of your participation** and providing me with your participant code. Your participant code will be given to you after you have consented to take part in the study. If you decide to withdraw during the study or in the subsequent 2-week period, your data will be destroyed and will not be used in the study.

What will happen to me if I take part?
You will be invited to two Cross Curriculum Planning Collaborative Research Workshops with a six-month interval between Workshop 1 and Workshop 2. This is to provide you with an opportunity to try out some of the curriculum planning ideas discussed at Workshop 1 with your colleagues in the context of your own practice. At each Workshop you will be supported by a team of University of Sunderland teacher educators with extensive experience of teaching and research in vocational education and training contexts. Each Workshop will cover a period of two consecutive days. Each Workshop will involve critical engagement with and discussion of a selection of peer-reviewed published texts selected from the field of cross curriculum design, planning and assessment. Throughout each Workshop you will be able to work collaboratively with other participants in the research and the University of Sunderland Research Project Team. At Workshop 2 you will be asked to share your experiences of trying out a selection of ideas from the field of cross curriculum planning with other participants in the research and with the research team. This will include demonstrating practical examples from your own experiences of working with your colleagues in the contexts of your practice. Data collected during and in-between Workshops will be distilled from transcripts of workshop discussions, critical incidents and case studies and analysed using systematic thematic analysis. Case studies and practical examples of your Cross Curriculum Plans from your collaborative activities with your colleagues will also be analysed and contribute to this research. From time to time, we may contact you by email to ask if we could meet so that we can check with you informally that we have interpreted your contributions to the study in a trustworthy way with fidelity, authenticity, accurately and with due care.

What are the possible disadvantages and risks of taking part?
There are no foreseen disadvantages or risks to you by your participation in this study.

What are the possible benefits of taking part?
You will be able to share your experiences of taking part in the Cross Curriculum Planning Project with other Project participants and your colleagues in the context of your work.

Your contributions to the research will inform the content, design and pedagogy in the field of teaching and research in Cross Curriculum Planning and contribute to educational policy development at a national level.

What if something goes wrong?
If you change your mind about participation, please contact me by email to cancel your participation. If you feel unhappy after the study, please contact me immediately or via the Chairperson of the University of Sunderland Research Ethics Committee, whose contact details are given below.
Dr John Fulton: Chair, University of Sunderland Research Ethics Committee
john.fulton@sunderland.ac.uk

Will my taking part in this study be kept confidential?
Yes. All participant data will be made anonymous in accordance with the BERA (2024) and the UK Data Protection Act (2018).

What will happen to the results of the research study?
The results of the study will be published by the Cross Curriculum Planning Project Team at the University. Where appropriate, the results may also be presented at academic conferences and/or written up for publication in peer reviewed academic journals.

Who is organising and funding the research?
University of Sunderland and the Education and Training Foundation (ETF). Grant Number RI 17/18.5

Who has reviewed the study?
The University of Sunderland Research Ethics Committee has reviewed and approved the study. This research has been conducted in accordance with the Declaration of Helsinki and in accordance with the BERA (2024) and in line with the UK Data Protection Act (2018).

Contact for further information
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Institutional Review Board Statement: This study has been approved by the University of Sunderland Educational Research Ethics Committee.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Data generated in the research and reported in this manuscript conform to the BERA (2024) regarding protected participant anonymity, informed consent and right to withdraw in line with UK Data Protection Act (2018) data protection legislation and MDPI's policies, following the Committee on Publication Ethics (COPE) principles of publication ethics.

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References

Adelman, N. E. (1989). *The case for integrating academic and vocational education*. National Assessment of Vocational Education. US Department of Education.

Baird, J., James-Relly, S., & Gorgen, K. (2024). *The case of England; Vocational education's recognition problem*. Department of Education, University of Oxford. Available online: https://www.education.ox.ac.uk/wp-content/uploads/2024/09/Englands-vocational-assessment-recognition-problem.pdf (accessed on 13 December 2025).

Ball, S. J. (2008). *The education debate*. The Policy Press.
Ball, S. J. (2018). The tragedy of state education in England: Reluctance, compromise and muddle—System of disarray. *Sir John Cass's Foundation Lecture: Journal of the British Academy*, *6*, 207–238. [CrossRef]
Banks, P. (2007). Planning for excellence and enjoyment. In K. Jacques, & R. Hyland (Eds.), *Professional studies primary and early years* (3rd ed., pp. 9–21). Learning Matters.
Barone, T., & Eisner, E. W. (2012). *Arts based research*. Sage.
Bewick, T. (2025). New labour and the learning age. In *Skills policy in Britain and the future of work*. Policy Press. [CrossRef]
Biesta, G. (2020). *Letting the arts teach*. ArtEZ Press.
Biesta, G. (2022). *World-centred education*. Routledge.
Biesta, G. (2024). *Teaching and teacher education on the age of evidence: The case for artistry, an interview with Gert Biesta by Philip Winter*. Educação, Sociedad Culturas. [CrossRef]
British Education Research Association (BERA). (2024). (fifth edition). Available online: https://www.bera.ac.uk/publication/ethical-guidelines-for-educational-research-fifth-edition-2024-online (accessed on 13 December 2025).
Bruner, J. (1986). *Actual mind, possible worlds*. Harvard University Press.
Carr, W. (1998a). *For education*. Open University Press.
Carr, W. (1998b). *Understanding quality in teaching*. The Falmer Press.
Clarke, V., & Braun, V. (2017). Thematic analysis. *Journal of Positive Psychology*, *12*(3), 297–298. [CrossRef]
Coffield, F. (2014). *Beyond bulimic learning: Improving teaching in further education*. Institute of Education Press.
Coffield, F. (2024). *The creative art of troublemaking in education*. Routledge.
Coffield, F. (2025a). *The creative art of troublemaking*. Routledge.
Coffield, F. (2025b, October 29). The need for a new inspection model is now imperative. *Newcastle Evening Chronicle*.
Department for Education, Department for Work and Pensions, Department for Innovation Science and Technology, UK Government. (2025). *CP142, Post 16 education and skills white paper*. ISBN 978-1-5286-5771-6. Available online: https://www.gov.uk/government/publications/post-16-education-and-skills-white-paper/post-16-education-and-skills-white-paper (accessed on 14 December 2025).
Dewey, J. (1916). *Democracy and education*. Pennsylvania State University.
Dewey, J. (1933). *How we think*. Heath.
Dewey, J. (2005). *Art as experience*. Penguin Books. (Original work published 1934).
Eisner, E. W. (2002). *The arts and the creation of mind*. Yale University Press.
Elliott, J. (1991). *Action research for educational change*. Open University Press.
Elliott, J. (1998). *The curriculum experiment: Meeting the challenge of social change*. Open University Press.
Elliott, J. (2012). *Reconstructing teacher education*. Routledge. [CrossRef]
Gregson, M. (2023). *If it was going to work it would have worked by now*. European Education Research Council Vocation and Education Training Network (VETNET). Available online: https://zenodo.org/records/7808579 (accessed on 18 October 2025).
Hamilton, D. (1998). The silence of the shadows: Educational research and the ESRC. In J. Ruddock, & D. Mcintyre (Eds.), *Challenges for educational research, new BERA dialogues*. Paul Chapman Publishing.
Harden, R. M. (2000). The integration ladder: A tool for curriculum planning and evaluation. *Medical Education*, *34*, 551–557. [CrossRef] [PubMed]
Johnston, L., & Johnston, A. (2024). Reforming vocational education in the UK: The role of vocational education. *Form for Education Studies*, *2*(3), 1488. [CrossRef]
Keep, E. (2006). State control of the English education and training system playing with the biggest train set in the world. *Journal of Vocational Education and Training*, *58*(1), 47–64. [CrossRef]
Keep, E. (2007). Both Leitch and Gordon Brown are over-optimistic about what skills and education alone can deliver. *Adults Learning*, *18*(5), 15.
Keep, E. (2015). *Governance in English VET: On the functioning of a fractured system* (Vol. 10, No. 4). Research in Comparative and International Education. SAGE Publications.
Kemmis, S. (1998). Theorizing educational practice. In W. Carr (Ed.), *For education*. Open University Press.
Kemmis, S. (2009). Action research as a practice-based practice. *Educational Action Research*, *17*(3), 463–474. [CrossRef]
Kushner, S. (2023). Hope and Ambiguity: Returning curriculum to humanism. *RELIEVE*, *29*(1), M2. [CrossRef]
MacDonald, B. (1991). Critical introduction: From innovation to reform—A framework for analysing change. In J. Ruddock (Ed.), *Innovation and change* (pp. 1–13). Open University Press.
Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet trustworthiness criteria. *International Journal of Qualitative Methods*, *6*, 1–13. [CrossRef]

Organisation for Economic Cooperation and Development (OECD). (2016). *Getting skills right*. Available online: https://oecd.org/En/publications/getting-skills-right-assessing-and-anticipating-changing-skill-needs_9789264252073–en.html (accessed on 15 December 2025).
Richmond, T. (2025). *When skills england calls will anybody answer the phone?* Higher Education Policy Institute (HEPI) Policy Note 62.
Ruddock, J. (1991). *Innovation and Change*. Open University Press.
Sarason, S. (1990). *The predictable failure of educational reform: Can we change course before it's too late*. Jossey-Bass.
Schön, D. A. (1971). *Beyond the stable state: Public and private learning in a changing society*. Penguin.
Sennett, R. (2009). *The craftsman*. Penguin.
Stenhouse, L. (1975). *An introduction to curriculum research and development*. Heinemann.
Stenhouse, L. (1981). What counts as research? *British Journal of Education Studies*, *29*(2), 103–114. [CrossRef]
Stenhouse, L. (1987). Artistry and teaching. In O. Boyd-Barrett, & P. Braham (Eds.), *Media, knowledge and power*. Routledge.
Stenhouse, L. (2012). Research as a basis for teaching. In J. Elliott, & N. Norris (Eds.), *Curriculum pedagogy and educational research* (pp. 132–136). Routledge.
UK Data Protection Act. (2018). c.12. Available online: https://legislation.gov.uk/ukpga/2018/12 (accessed on 13 December 2025).

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