

VET pathways

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Introduction

This section provides resources for "making the case" for careers, referring to both challenges that careers services can tackle and evidence that such services work.

Research data has emerged from various sources (e.g. CEC, 2023) which have measured the growing awareness and appeal of technical and vocational pathways amongst students.. However, the research on the careers support for people throughout their apprenticeships, or beyond their apprenticeships, is less frequent. In European studies, coaching and guidance has been part of a battery of interventions used to support apprentices and drive improvements in drop out rates from education, so there are sometimes blurred boundaries between "pure" career guidance and other forms of support.

This page provides references to the landscape in which CEIAG operates, case studies of practices (including the application of theory), as well as links to research-active institutions, relevant publications, and data sources.

Headlines

The academic literature and many other publications have cited the importance of careers interventions for this age group. Amongst the common drivers are:

- Successful apprenticeships are needed to fulfil future labour market needs in the UK (e.g. [CEBR, 2013](#)) and wider afield (e.g. [McKinsey, 2021](#))
- Vocational education has been proposed as a key lever for social mobility, and means to mitigate NEET status (e.g. [Crawford-Lee and Moorwood, S. \(2019\)](#))
- Without career guidance, students from less well off backgrounds are left to rely more on ad-hoc parental referrals to secure apprenticeships ([Flohr, 2023](#))
- Apprenticeships can be heavily male skewed in certain professions and industries, but career guidance professionals can play a role in tackling barrier ([Simon, 2014](#))
- Whereas 4 in 10 parents/carers are confident of helping their children make UCAS applications, only 1 in 10 were confident with apprenticeships (though 7 in 10 would recommend one to their child) in a study in Hertfordshire. ([Amazing Apprenticeships, 2023](#))
- Across the UK, a 2023 UCAS survey found students are not receiving the information they need to make informed decisions about apprenticeship routes ([Milson, 2023](#)), echoing [Ofsted's \(2023\)](#) findings that there is a shortfall in apprentice support. Research has previously shown a frequent mismatch of apprentices' experiences with their prior expectations (e.g. [Radermacher, 2013](#))
- Once into apprenticeships, there are some gaps in support, with 68% of apprentices said that they knew how to find information about future training or qualifications and just over half (52%) were considering future training for a path other than they are on ([Institute for Apprenticeships and Technical Education, 2022](#))
- The perception is that too many students drop out of apprenticeships. Research suggests that some of these causes are related to student anxieties and career capabilities, which could be tackled earlier ([Powers and Watt, 2022](#))
- Early-leaving from apprenticeship schemes is associated with risk factors such as unemployment, poverty, health problems and social exclusion ([Cedefop, 2016](#))
- Retrospective analysis of vocational education and training in Europe from 1995 shows this to be a system in constant flux, with "small daily steps", suggesting the ongoing need to equip candidates with up to date career information. ([Cedefop, 2023](#))

- Today's apprenticeships are already an important contributor to UK society and economy. For instance, in their annual impact report for 2023, [City & Guilds](#) reported having worked with 3.5m global learners and delivering nearly £12bn to the UK economy.
- The Department for Education's 'Apprenticeship Evaluation 2021' report indicated that the trends in more apprenticeships are suggesting a move towards higher skills, thus meeting future labour market needs. ([DfE, 2022](#))
- Apprenticeships are becoming more important in international policy ([Vanderhoven, 2023](#))

Career guidance has demonstrated it can add value to support the maintenance and growth of vocational and technical education.

- In the UK, there has been strong recent growth in the uptake of apprenticeships with career advisers and teachers playing a key role in disseminating information. Despite the relative lack of confidence amongst educators discussing vocational pathways, a study in Hertfordshire found that 90% of teachers are discussing apprenticeships with students..([Amazing Apprenticeships, 2023](#))
- Over the period where more interventions were implemented in European systems to tackle early leavers (including guidance and coaching), leaving rates nearly halved from 17% in 2002 to 9.9% in 2020 ([Psifdou et al, 2022](#))

NB: Please also see Secondary Education sources for general careers support for awareness-building, including towards apprenticeship pathways.

Landscapes & contexts

Selected publications, listed below, cover literature reviews and specific studies that help to make the case for careers investment by describing the context in which it operates, and reviewing literature to show the overall impact:

There are relatively fewer studies reported into “pure” career guidance for apprentices covering a) decisions about pursuing this pathway or not, or b) during an apprenticeship programme compared to Higher Education, for instance. Also, “coaching” forms a part of interventions proposed in European studies to support students, but the content of these tends to straddle career guidance, learning and job-performance, reflecting some blurred boundaries between "pure" guidance and other forms of support. There is, however, now more research into the apprenticeship-awareness of students, parents and teachers during compulsory education. Studies below show different aspects of the career issues and choices of this group, and studies into career support.

Publications tend to provide one or more of the following types of insight for practitioners, decision-makers or policy makers, denoted in the "Purpose" column below: U = Understanding users, needs and experiences, P = Practices and their evaluation, C = Supporting or informing the investment case for careers, E = Understanding enablers of success in systems, processes and workplaces, T= Developing and criticising theories and frameworks.

NB: We have generally tried to include resources that are free to access, but have included a few important studies that require payment. These are denoted by "(Paid)" next to the URL link in the title column.

Case studies are described in the section below that particular studies where theory has been applied to the design of a service, to generate particular outcomes.

Title	Type	Brief description	Location
Watts, A. G. (2009). The relationship of career guidance to VET. National Institute for Careers Education and Counselling. Cambridge: OECD. (Link)	P C	This report discusses the relationship between career guidance and vocational education and training. Both forms of support have aligned goals for learning, labour markets and social equity. Practices and policies are described for both career guidance prior to entering VET and during. The report provides the remit of career guidance to support those on VET pathways at suitable times.	International
Barabasch, A., & Dykeman, C. (2011). Career counselling/career and technical education:	P	The paper is based in the US setting, and explores "career counselling and career and technical education goals, early developments in the field of career	US

<p>Spectrum of interventions in the American K-16 system. In Work and education in America: The art of integration (pp. 155-174). Dordrecht: Springer Netherlands. (Link)(Paid)</p>		<p>education and career development, important legislation, present status and practices, specific K-12 practices, and future prospects and challenges. The spectrum of interventions, approaches, institutions, and assessments of current practices has a long and rich history of contributing to the economic and social well-being of society. However, career education and career and technical education cannot rest on its laurels. Major obstacles that hinder the achievement of the career interventions goals are discussed." The authors provide further references to explore career guidance in this area e.g., the various tests that have emerged in the field and their assessment.</p>	
<p>Gambin, L. et al (2012) . Review of Apprenticeships Research: A summary of research published since 2010, The National Apprenticeship Service and the Department for Business Innovation and Skills (Link)</p>	<p>U E</p>	<p>This report - completed by Warwick's Institute of Employment Research for the NAS and BIS - provides historic context by showing the state of knowledge and research over a decade ago. Perspectives of apprentices and employers are reviewed, along with coverage of policy research. At the time, participation had risen, but employers' participation had faced challenges and was low despite high awareness. The report also covers the participation by different ethnic minority groups, to be able to review subsequent trends.</p>	<p>England</p>
<p>Ryan, P. (2012). Apprenticeship: between theory and practice, school and workplace. The future of vocational education and training in a changing world, 402-432. (Link)</p>	<p>P E T</p>	<p>This chapter provides a discussion of the theory and practice of apprenticeships. Questions asked begin with "is the theory of the "apprenticeships" reflected in the practical reality?' Differences are noted from other forms of work-based learning. The split in time between workplace and classroom is discussed. The limitations are described to apprenticeships. Overall, this provides a broad discussion and</p>	<p>Europe</p>

		foundation for critical assessment, and to identify areas of possible concerns for careers.	
Sweet, R. (2012). Apprenticeship, pathways and career guidance: A cautionary tale. In The architecture of innovative apprenticeship (pp. 51-68). Dordrecht: Springer Netherlands. (Link)	C E	A history of apprenticeships schemes is compared from Germany and Switzerland compared to Nordic countries (with other comparisons also included in the text). The study highlights how policies to position and implement the schemes shape their outcomes. The paper also addresses the statistics on career guidance, and highlights “patchy” delivery (at that time). In all, the paper provides a series of system level success factors, with career guidance being integral.	Europe
Poortman, C. L., Illeris, K., & Nieuwenhuis, L. (2014). Apprenticeship: from learning theory to practice. In Contemporary Apprenticeship (pp. 11-31). Routledge. (Link)	U T	This research describes the processes and outcomes of work-based learning in a depth study into a Dutch vocational education and training programme. The study applies a cognitive, a social and an emotional dimension to consider learning processes. Qualitative case studies show that various factors in the different dimensions of learning influence the learning processes and outcomes in a diverse way. However, the authors found that the programme did not develop “flexible competences” that contribute to learning, meaning improvements were required.	Holland
Zelloth, H. (2014). Career guidance for Vocational Education and Training (VET). Journal of the National Institute for Career Education and Counselling, 33(1), 49-55. (Link)	T	The paper provides a theoretical discussion into the relationship between career guidance and vocational education and training, building on prior work by Tony Watts, A critique of both guidance (prior to a pathway) and VET (within a pathway) led to recommendations for both to work more synergistically: Career guidance needs to be “more sensitive to VET”. Meanwhile, “VET needs to consider the relevance of career guidance.”	England

<p>Kersh, N., & Juul, I. (2015). Vocational education and training as a career path for young people: making choices in England and Denmark. LLAKES Centre, Institute of Education, University College London. (Link)</p>	<p>U</p>	<p>This paper aims to contribute to a better understanding of the issues of perceptions and motivations of young people towards Vocational Education and Training (VET) in England and Denmark. It specifically focuses on factors that facilitate their either positive or negative attitudes. It discusses the "lack of parity of esteem" for these pathways compared to academic routes through higher education across Europe. The paper draws on findings from a number of other studies including the 'Experiencing Inequalities' project funded by the Economic and Social Research Council (ESRC) carried out under the auspices of the ESRC Research Centre: Learning and Life Chances in Knowledge Economies and Societies (LLAKES).</p>	<p>England Denmark</p>
<p>te Wierik, M.L., Beishuizen, J., & van Os, W. (2015). Career guidance and student success in Dutch higher vocational education. <i>Studies in Higher Education</i>, 40, 1947 - 1961. (Link)</p>	<p>C</p>	<p>This paper was written as vocational education institutions were implementing career guidance services. Normalising for other factors, students were found to achieve better academic scores after career guidance had been introduced into courses.</p>	<p>Holland</p>
<p>Cedefop (2016). Leaving education early: putting vocational education and training centre stage. Volume I: investigating causes and extent. Luxembourg: Publications Office. Cedefop research paper; No 57 (Link)</p>	<p>U E</p>	<p>Written against the backdrop of an EU 2020 target to reduce early leavers from education and training, the report investigated the causes. The research combined data analysis of several international data-sets and interviews with n=409 policy makers. The causes were found to include that the pathway had not been a first choice to start with, limiting self-perceptions, and mismatches in expectations with the reality of the training/profession. The report also discusses the influence of family background.</p>	<p>Europe</p>

<p>Cedefop (2016). Leaving education early: putting vocational education and training centre stage. Volume II: evaluating policy impact. Luxembourg: Publications Office. Cedefop research paper; No 58. (Link)</p>	<p>P C E</p>	<p>This is the second volume of a report on early leavers from education and training in Europe, and the potential to use VET to tackle it: This volume describes VET-related measures and evaluation to support them. Three sorts of measures - Preventative, Intervention, and Compensatory - were described along with success factors. Coaching and Guidance Centres played roles in the battery of interventions. However, the evidence to support using interventions, while existing for some, was patchy overall. Six profiles of early leaver were considered, for whom the range of interventions could be tailored, rather than pursuing a one-fits-all approach..</p>	<p>Europe</p>
<p>Simon, L., & Clarke, K. (2016). Apprenticeships should work for women too!. Education and Training, 58(6), 578-596. (Link)</p>	<p>U</p>	<p>The paper reports survey and interview results from a project to understand the barriers to women in male dominated industries and professions. The findings propose responsibilities for career guidance practitioners in being part of addressing them.</p>	<p>Australia</p>
<p>Arshad, M., Tahir, A., Khan, M.M., & Basit, A. (2018). Impact of Career Counseling & Vocational Guidance on Employment in TVET Sector. International Journal of Human Resource Studies, 8, 274-289. (Link)</p>	<p>C</p>	<p>This study focused on the graduates of technical and vocational education and training programmes in Pakistan by collecting data from principals, employed TVET graduates and their respective employers. The findings show that career counselling was important.</p>	<p>Pakistan</p>
<p>Ryan, L., & Lőrinc, M. (2018). Perceptions, prejudices and possibilities: young people narrating apprenticeship experiences. British Journal of Sociology of Education, 39(6), 762-777. (Link)</p>	<p>U C</p>	<p>Drawing on longitudinal qualitative research with young people on apprenticeship schemes in London, the authors use narrative analysis to explore how young people narrate and navigate the tensions between apprenticeships as opportunities to 'learn while they earn' and university degrees as the prevailing 'gold standard' While</p>	<p>UK</p>

		young people were aware of challenges with apprenticeships, they nonetheless rationalised them to be 'sensible' and 'mature' choices. The paper contains insight for career practitioners to find language and perspective to discuss apprenticeship schemes.	
Hubble, S. and Bolton, P. (2019), The Post-18 Education Review (the Augar Review) recommendations. Brief Paper Number 8577, 30 May 2019. House of Commons Library (Link)	E	In February 2018, the Prime Minister announced a wide-ranging Review of Post-18 Education and Funding led by Philip Augar. The publication provides context for HE career services. The <u>Independent panel report to the Review of Post-18 Education and Funding</u> was published on 30 May 2019. Several accompanying documents were published alongside the report. Headlines from the report included a) the need to bolster FE, b) reduction in debt levels are needed for disadvantaged students, c) there will be a "crackdown" on low value HE, d) the recommendation for a lifelong learning loan.	UK
Circelli, M. and Stanwick, J. (2020), Initial and continuing VET in Australia: clarifying definitions and applications. NCVET (Link)	T E	The paper explored the differentiation and continuum of initial vs continuous vocational education and training definitions (aka IVET and CVET). While grounded in discussions about the Australian context, the report nonetheless highlights the relationships between the two and (complex) implications for policy development.	Australia
Kirchknopf, S. (2020). Career adaptability and vocational identity of commercial apprentices in the German dual system. <i>Vocations and Learning</i> , 13(3), 503-526. (Link)	U T	The researchers describe that career adaptability and career identity are important capabilities in career development, but have been neglected in vocational and technical pathways. This study of n=400 German apprentices uses a measurement instrument called the Career Adapt-Abilities Scale (CAAS) to understand more about the characteristics of apprentices and demonstrated the importance	Germany

		of career adaptability in these pathways.	
Powers, T. E., & Watt, H. M. (2021). Understanding why apprentices consider dropping out: longitudinal prediction of apprentices' workplace interest and anxiety. Empirical Research in Vocational Education and Training, 13(1), 9. (Link)	U	Few studies have examined the reasons that people drop out of apprenticeship schemes. This study used a repeat survey of n=2387 apprentices, surveyed in six month intervals, to examine the progression of their their workplace interest, anxiety, job-related resources (role model, timing of choice, employer teaching, expertise, job security, and training wages) and demands (lack of information, career indecision, and excessive work). Students who dropped out could be predicted by initial interest levels and anxiety levels which in turn depended on resources.	Australia
Smith, S., Caddell, M., Taylor-Smith, E., Smith, C., & Varey, A. (2021). Degree apprenticeships-a win-win model? A comparison of policy aims with the expectations and experiences of apprentices. Journal of Vocational Education & Training, 73(4), 505-525. (Link)	U E	This article compares policy aims with experiences following the introduction of a new model for STEM apprenticeships in the UK. Specifically, this study explores an implementation in Scotland, where computing degrees are designed and delivered through partnerships between employers, universities, and Skills Development Scotland. Policy documents were reviewed and apprentice needs elicited via primary research. The paper discussed success factors for the scheme to be a long term and sustainable success, notably overcoming an issue of finding sufficient opportunity to implement learning as course topics become more specific as the course evolves.	Scotland
Institute for Apprenticeships and Technical Education (2022), 2022 Apprenticeship panel survey. (Link)	C E	The survey of n=2,016 apprentices gave a good overall positive picture of the experiences of apprentices. However, there were a few potential gaps: For instance, about half of apprentices (52%) had considered future training or qualifications towards a different career path than the one they were	UK

		currently on. And, only 53% agreed that their employer and training provider worked effectively together. Implications for CEIAG are the critical uncertainties and decision-points that the data suggest exist.	
Cedefop (2022), Case study England. The future of vocational education and training in Europe volume 2. Delivering IVET: institutional diversification and/or expansion. Thessaloniki: Cedefop (Link)	C E	This report provides historical context to the English system, describes the qualification regime, discusses the relationship between vocational and general education, between centralisation and decentralisation of courses, and standards, as well as a series of trends over time relating to uptake of different routes. In discussion, the report asks whether the situation in 2022 is much different from 1995. Comparison are made with other European nations.	England
James Relly, S., & Laczik, A. (2022). Apprenticeship, employer engagement and vocational formation: a process of collaboration. Journal of education and work, 35(1), 1-15. (Link)	P C E	In light of changing policies, this study uses interviews with five businesses and other stakeholders to show the successful ingredients for employer engagement in apprenticeship and vocational formation. The findings suggest that success factors lie in seeing a close collaboration between the college, employer and the young person, generating mutual trust and ensuring quality, support, and safeguarding.	England
Magee, M., Kuijpers, M., & Runhaar, P. (2022). How vocational education teachers and managers make sense of career guidance. British Journal of Guidance & Counselling, 50(2), 273-289. (Link)	U E	The authors review the attitudes and beliefs expressed by education managers and teachers towards career guidance in the Netherlands. The results showed “varying views of career guidance, which may be contributing to the stagnation.” Consequently, “a collective sense-making of career guidance may be an area that needs to be examined for new possibilities of transforming behaviours relevant to providing career guidance to students.”	Holland
Psifidou, I., Mouratoglou, N.,	P E	The present paper examines how national policies and practices of	Europe

<p>Farazouli, A., & Harrison, C. (2022). Minimising early leaving from vocational education and training in Europe Career guidance and counselling as auxiliary levers: Cedefop. (Link)</p>		<p>careers guidance across EU member states support learners at risk and early leavers from education and training. The report covers 20 interventions to tackle early leavers. The report provides detailed examination of interventions, such as discussing the value of personalised vs generic guidance for young people from lower income backgrounds. The report also cites a trend whereby the early leaving rate has steadily decreased from 17.0% in 2002, to 13.4% in 2011 and to 9.9% of young people (aged 18-24) in 2020.</p>	
<p>Amazing Apprenticeships (2023), Parents/carers survey (Link)</p>	<p>U C</p>	<p>The report provides survey results for the awareness of apprenticeships amongst parents and carers in Hertfordshire, along with other associated perceptions. The survey had n=3,225 participants from n=51 schools. 3 in 4 (75%) of respondent's children had already identified a career interest, up from 74% in 2022. 70% of this year's survey respondents would consider an apprenticeship for their child, a 6% increase since 2022. Parents were most likely to encourage their child to consider an apprenticeship in year 10 and year 12, least likely in year 13 and most unsure in years 7-8. However, just over 1 in 10 parents feel confident about the apprenticeship application process. Most see the motivation as the chance to pursue an area of interest.</p>	<p>England</p>
<p>Amazing Apprenticeships (2023), Teachers survey (Link)</p>	<p>E C</p>	<p>The report provides survey results for the awareness of apprenticeships amongst teachers in Hertfordshire, along with other associated perceptions. The survey had n=629 participants from n=53 schools. 88% have had a direct conversation with students about careers. However, there were</p>	<p>England</p>

		some gaps and areas to strengthen understanding. For instance, teachers were confident talking about apprenticeships if having previously had a non teaching job. Teacher confidence rose if the teacher knew and apprentice. 58% said that hearing from local employers would be the most useful way to gain knowledge.	
Jones, K., Christie, F., & Brophy, S. (2023). Getting in, getting on, going further: Exploring the role of employers in the degree apprentice to graduate transition. British Educational Research Journal, 49(1), 93-109. (Link)	U C E T	The paper reports experiences of a graduating cohort of 'degree apprentices' from a qualitative longitudinal research study that included semi-structured interviews with 22 degree apprenticeship graduates (44 interviews in total), The report shows the graduates progressing through three phases of "getting in", "getting on" and "going further", with implications for possible career guidance support.	England
Milson, P. (2023), Project Next Generation: Early Careers and Apprenticeships. UCAS (Link)	U E	This presentation provides an overview of statistics related to the growth of interest in apprenticeships in school to 440k in 2023, from 152k in 2021. However, it also points out that students aren't getting the information that they need. Project Next Generation aimed to understand what students are planning for their future and how they choose subjects of interest and career pathways through two a research survey of n=1,000 13-17 year olds and n=24 qualitative interviews. Recommendations from the insights included to engage with students earlier, increase knowledge to increase confidence, provide access to experiences amongst others.	UK
Welsh Government (2023), Review of the skills system in Wales: initial and continuing vocational education and training programmes.	C E	This research - commissioned by the Welsh Government and undertaken by the Learning and Work Institute - explored different visions for vocational education and training in Wales. While "many positive features" were in place in	Wales

Summary (Link) Full report (Link)		Wales, there were found to be several areas for improvement, including collaboration with employers. “There was strong evidence in the literature that dual systems (those that combine learning on- and off-the-job) are an integral part of effective VET systems but look different across the IVET-CVET divide.”	
Careers and Enterprise Company (2024), Effective approaches to careers guidance for apprentices: A guide for colleges and training providers (Link)	P E	This is a practice guide that makes the case for applying the Gatsby benchmarks - originally focussed on schools - to apprenticeship schemes. The document also contains a series of case studies showing best practices, and covers (for example) the programmes needed before an apprentice begins, meeting schedules with trainers, and the use of a number of resources to signpost and inform apprentices on their pathways.	England
Gatsby and UCAS (2024), What next? Who applies to Level 4 and Level 5 qualifications? (Link)	U	<p>“This research is the first to shine a light on the motivation and experiences of applicants to HNCs, HNDs, Foundation Degrees and more at this level through UCAS.”</p> <p>The report provides trends and profiles of those taking the Level 4 and 5 routes. Primary research explores the motivation and choices, with just under half motivated to pursue a full time job after completion (47%) while only 23% of applicants had heard of Higher Technical Qualifications.</p>	England

Case studies

Some case studies, and collections of case studies, that show outcomes from different practices are listed below. (We denote cases where the study represents the explicit application of a theory to the design or interpretation of a practice).

There are many examples of online resources which describe best practices within wider apprenticeship programmes, but relatively few case studies that demonstrate best practice in counselling or guidance for apprentices, either prior-to or during the apprenticeship.

Title	Themes	Brief description	Location
Amazing Apprenticeships, (n.d.) Case studies (Link)	Apprentices	Amazing Apprentices provide a range of resources for potential apprentices, schools and employers. Amongst these, they offer apprenticeship case studies, providing insight into the decision making processes, challenges and experiences of apprentices.	England
UNEVOC (n.d.)	Capacity building	UNEVOC are a network of UN national players operating in the VET space with a collective interest in strengthening systems. UNEVOC's website reports on global initiatives to build capacity and effectiveness, as well as the power of networking and collaboration.	Global
Filliettaz, L. (2014). Collective guidance at work: A resource for apprentices?. In Contemporary Apprenticeship (pp. 250-269). Routledge. (Link)(Paid)	Apprentices Workplaces	This case study examined the support given by apprentices in the first year of their schemes within a Swiss organisation. The research includes ethnographic and discursive methodologies to obtain a deep understanding of the experiences of apprentices, as they find different sorts of support from various sources in their work environment.	Switzerland
CIPD (2018), Apprenticeship programmes: Case studies with top tips (Link)	Apprentices	These three case studies take the employer's perspective and describe the design of projects, initiatives and programmes to support positive apprenticeship experiences.	England

<p>Venkatraman, S., de Souza-Daw, T., & Kaspi, S. (2018). Improving employment outcomes of career and technical education students. Higher Education, Skills and Work-Based Learning, 8(4), 469-483. (Link)</p>	<p>Transition programme</p>	<p>This Australian paper describes the design of a career and technical education programme for students grounded mainly in studies of the UK apprenticeship system, but also recognising other international cases in the wider Work Based Learning arena. The authors construct an outline framework to support transitions of students undergoing this type of career pathway. The paper describes, in general terms, the rationale for selecting different aspects of a vocational and education programme.</p>	<p>Australia</p>
<p>Cedefop (2019). What is the VET toolkit for tackling early leaving? (Link)</p>	<p>NEET / early leavers Toolkit</p>	<p>To tackle early leavers, Cedefop developed a toolkit that promotes transitions into vocation and educational pathways. In 2022, they reported a strong growth in the use of the tools.</p>	<p>Europe</p>
<p>Stalder, B. E. & Nägele, C. (Eds.) (2019). Trends in vocational education and training research, Vol. II. Proceedings of the European Conference on Educational Research (ECER), Vocational Education and Training Network (VETNET). (Link)</p>	<p>Apprentices Policy Transitions Digital Learning communities</p>	<p>This series of conference papers describe various projects and initiatives aimed at supporting those on VET pathways. The examples invariably involve different combinations of VET and careers related support. Case studies describe, for instance, national policy, learning communities, teacher training, apprentice experiences, inclusion, business models and collaborations between training and establishments and employers. The source provides a good segway into the diverse topics of VET and career support needs. (Volume III of this series is referenced below)</p>	<p>International</p>
<p>Brockmann, M., & Laurie, I. (2020). On-the-job training in apprenticeship in</p>	<p>Apprentices</p>	<p>This small-scale research project was based on interviews with two employers in each of the five sectors (one</p>	<p>England</p>

<p>England. University of Southampton report for Gatsby (Link)</p>		<p>large employer, one SME), as well as with representatives of national stakeholders and sector-level bodies, to understand apprenticeship practices. Apprenticeship schemes were found of different levels of expansiveness. In organisations taking a more expansive approach, mentoring and shadowing were crucial parts of the programme. In the more restrictive approach, focus was on in-house training. The research highlighted the different experiences apprentices might receive, with implications for their career development.</p>	
<p>Burke, S. (2020). An exploration into the career decision making experiences of adults in apprenticeships. Published thesis (Masters), University of Limerick, (Link)</p>	<p>Career counselling</p>	<p>The study was based on interviews with male and female electrical apprentices and explored their decision making processes before and during their apprenticeships. The role of career counselling was explored as part of decision making. The research identified the inconsistent nature of information provision, and provided practical insights for future candidates.</p>	<p>Ireland</p>
<p>Katz, B., & Elliott, D. (2020). CareerWise: Case study of a youth apprenticeship intermediary. Washington, DC: Urban Institute. (Link)</p>	<p>Apprentices</p>	<p>This is a US-based case study that provides a detailed example of how an apprentice is supported through their programme, and talks about the different critical moments that an apprentice might need support..</p>	<p>US</p>
<p>Nägele, C., Stalder, B. E., & Kersh, N. (Eds.) (2020). Trends in vocational education and training research, Vol. III. Proceedings of the European</p>	<p>Apprentices Policy Transitions Digital</p>	<p>This series of conference papers describe various projects and initiatives aimed at supporting those on VET pathways. The examples invariably involve different combinations of VET and careers related support. Case</p>	<p>Europe</p>

<p>Conference on Educational Research (ECER), Vocational Education and Training Network (VETNET). (Link)</p>	<p>Learning communities</p>	<p>studies describe, for instance, projects to reduce drop out in Italy, the value of professional learning communities, applications of digital technology, pathways to reach apprenticeships, culture, and reflections by stakeholders on their respective systems. The source provides a good segway into the diverse topics of VET and career support needs. A specific case study is provided amongst these on the role of career guidance in Spain (p248) (Link)</p>	
<p>Cedefop (2022), The Future of work is learning (Link)</p>	<p>VET pathways IVET and CVET</p>	<p>The report discusses the trends and challenges in Europe, with a strong emphasis on lifelong learning and vocational education. Several key trends are noted against the backdrop of a challenging economic scenario. Cedefop reported a strong uplift in the interest and popularity of their online resources directed towards vocational education and training from younger people. The report also discusses the closer synergies between initial and continuous vocational education and training (i.e. IVET and CVET)</p>	<p>Europe</p>
<p>Keller, A., & Barabasch, A. (2022). Coaching to support apprentice's ability to manage their own (further) competence development: results of a case study and their implications. Journal of Education and Work, 35(8), 858-870. (Link) (Paid)</p>	<p>Coaching</p>	<p>Career <i>coaching</i> is an approach that has been considered to have differences with career <i>guidance</i> or career <i>counselling</i> (e.g. Van Esbroeck and Augustijnen, 2015), In this case study example, interviews are carried out with staff and apprentices to review practices of apprenticeship coaching at a Swiss IT organisation, which are particularly used to support</p>	<p>Switzerland</p>

		self-reliance in decision making. .	
Nägele, C., Kersh, N., Stalder, B.E. (2023), Trends in Vocational Education and Training Research, Vol. VI. Proceedings of the European Conference on Educational Research (ECER), Vocational Education and Training Network (VETNET) (Link)	Apprentices Policy Transitions Digital Learning communities	This is the latest of the series of conference papers from VETNET, from their 2023 conference into vocation education and training. As with previous series (described above) this collection of papers describes case studies from international arenas that cover policy, programmes, teachers, culture, equality/inclusion, and digital technology amongst many facets. Careers considerations are within many of the examples. Specific focus for CEIAG support is particularly noted in two papers on supporting at risk students (p59, p157), LMI in careers education (p180) and the career choice process (p230).	International
Romanova, O. (2022). Embedding employability skills in vocational education and training: What works best for students' self-evaluation and aspirations?. Journal of Teaching and Learning for Graduate Employability, 13(1), 20-36. (Link)	Curriculum integration	The paper describes results from an education initiative in Russia towards teaching VET and entrepreneurial skills: "The analysis employs self-evaluations and entrepreneurial intentions of the Russian VET students collected with Monitoring of education markets and organisations in 2020 (n = 9 178). It focuses on social, self-learning and entrepreneurial skills, which are part of the VET national curriculum. The findings show that explicit embedding and integration of employability skills in the curriculum is significantly related to more positive self-evaluations of social and self-learning skills. Moreover, students, who were explicitly taught entrepreneurial skills, are more likely to plan to establish their own enterprise after graduation."	Russia

<p>Careers and Enterprise Company (2024), Effective approaches to careers guidance for apprentices:a guide for colleges and training providers. (Link)</p>	<p>Curriculum integration</p> <p>LMI</p> <p>Employability skills</p>	<p>This is a practice guide produced by the Career Enterprise company aimed at colleges and training providers. Within the guide, reference is made to several case studies, demonstrating the provision of careers support given by companies.</p>	<p>England</p>

Future research questions and gaps

The CDI discusses research questions and gaps with expert academics. Amongst the common topics that have been proposed for future research studies, to close gaps in our knowledge, include:

- Preconceptions vs realities of vocational pathways of those considering them.
- The level and nature of career guidance and support offered to apprentices.
- Innovations to increase foresight into vocational pathways for candidates.
- Inadvertent biases against VET through prior education, and mitigation steps.
- The pros and cons of introducing early reviews to offer apprentices exit paths.

Research agendas, related to the wider field of VET, have been discussed by Mulder and Roeleffs (2011) and more recently by Haviland, S., & Robbins, S. (2021). Vanderhoven (2023) also reviewed the agenda for global apprenticeships.

Comments about research gaps are also found in the body of work produced by the NFER.

Relevant institutions

To understand more about this area, it is worth reviewing the work of the following organisations who are active in commissioning or producing research.

These are organisations who regularly conduct or commission research related to career and/or CEIAG for this group.

Where content is restricted to memberships or requires payment, this is noted next to the name of the organisation in the first column.

Name	Description
Amazing Apprenticeships (Link)	An organisation that advocates for and champions apprentices, by providing resources for all stakeholders and promoting particular apprenticeships.
Apprenticeships UK (Link)	Apprenticeships UK is a government website that provides information and support for those considering technical and vocational routes and their parents and guardians. While not providing research per se, their website does contain <u>case studies</u> that offer insight
Association of Apprentices (Link)	This organisation works with other apprentice provides to optimise the experience and value of apprenticeships. “We provide the social and broader elements often missing from apprenticeship programmes, with access to advice and guidance which supports life-long career development, and a lifetime of professional networks.”
Association of Employment and Learning Providers (AELP) (Link)	The Association of Employment and Learning Providers (AELP) is a national membership body, representing organisations operating in the skills sector. AELP members deliver a range of training and vocational learning – including the majority of apprenticeships as well as Skills Bootcamps, 16-19 Study Programme, and the Adult Education Budget. The association produces policy and research papers, including impact statements for policymakers.
British Council (Link)	The British Council provide resources that recommend effective approaches to career guidance for VET students.
Careers Wales (Link)	Careers Wales is a public (government funded service) that provides careers information, advice and guidance service for Wales. Careers Wales works with the Welsh Government. Career Wales has a repository for various studies and articles.
Cedefop (Link)	Cedefop is a decentralised agency of the European Union that supports the development of European vocational education and training (VET) policies and contributes to their implementation. As such it publishes a large number of papers and reports – both pan European and into member countries – across most aspects of CEIAG, but particularly covering policy and system level issues.

City and Guilds (Link)	Now over 140 years old, the City and Guilds partner with its employer customers - in the UK and internationally - to deliver work-based learning programmes. The City & Guilds operate as a registered charity and are a Royal Chartered Institution. It operates six brands with different remits in the education/training landscape. It produces annual reports quantifying its impact. The City and Guilds publish their latest insights and reports several times a year.
Department of Education (Link)	The Department of Education, along with the Department of Work and Pensions, are the two Government areas where agendas align with Careers. The Department of Education website provides a section on “Research and Statistics”, and “Policy papers and consultations” guidance and regulation to inform on the national education landscape and challenges.
Education and Training Foundation (Link)	An organisation that supports the further education (FE) and skills workforce with training and CPD resources, to support the ends of enhancing the education of those aged 14 and above.
European Society for Vocational Designing and Career Counselling (Link)	Founded in 2011, the ESVDC aims to stimulate and promote European and international collaboration in research and development in the fields of life-designing, vocational guidance and career counselling. It runs conferences and publishes (though most content is behind paywalls).
European Training Foundation (Link)	The European Training Foundation (ETF) is an agency of the European Union (EU) helping EU nations to evolve their education and training systems in line with EU policies. The ETF also work with neighbouring countries to develop their <u>career guidance systems</u> . There is a large library of evaluation reports and resources.
Global Apprenticeship Network (Link)	GAN Global is a multi-sector alliance convening and connecting businesses, governments, and international organisations to promote work-based learning (WBL). GAN publish a series of reports on different aspects and areas of apprenticeships as well as engaging in projects.
Institute for Apprenticeships and Technical Education (IfATE) (Link)	IfATE work with employers to develop, approve, review and revise apprenticeships and technical qualifications. Their remit covers apprenticeships, T Levels, and higher technical qualifications (HTQ). The IfATE periodically conduct surveys and publish <u>reports and consultations</u> , as well as providing ongoing commentary on <u>news</u> affecting the sector.
International Association for Educational and Vocational Guidance (Link)	Having been in existence for 60 years, “The International Association for Educational and Vocational Guidance (IAEVG) provides global leadership in and advocates for guidance by promoting ethical, socially just, and best practices throughout the world so that career, educational and vocational guidance and counselling is available to all citizens from competent and qualified practitioners.”

International Centre for Career Development and Public Policy (ICCDPP) (Link)	The Centre was established in 2004 to promote policy sharing and learning internationally through making international knowledge and expertise available to policy makers, researchers and career development professionals. The centre links to articles for new key research and policy announcements. and also provides examples of good practice.
International Centre for Career Guidance Studies (iCeGS) (Link)	iCeGS have conducted a high volume of critical national and international studies, specifically into the areas of careers: education, development, and policy etc, for both academic journals, policymaking bodies and careers service providers. Consequently, their research library contains relevant papers and reports to this area, as well as many related topics.
Learning and Work Institute (Link)	The Learning and Work Institute is an independent policy, research and development organisation who focus on lifelong learning, full employment and inclusion. They conduct evaluation research, policy and evidence studies and help implement new approaches with stakeholders.
National Careers Development Association (US) (Link)	The NCDAA is the United States membership body for careers professionals. As well as publishing periodic larger scale research, practitioners actively contribute short practice articles by way of small-scale evaluation, reflection or learnings. All career stages are covered
National Foundation for Educational Research (NFER) (Link)	The NFER have carried out a number of research projects into VET: "Our research in this area cuts across all levels of apprenticeships from intermediate to degree level and has focused on the barriers that young people may face in progressing onto these routes."
OECD - Work-based learning and apprenticeships (Link)	The OECD publish reports, articles and maintain data-sets across many aspects of education and the labour market. There is a dedicated portal for work-based learning and apprenticeships, which includes a number of thematic reports, country comparisons for vocational and education training and best practice guides.
Quality in Careers (Link)	The Quality in Careers Standard is the national quality award for careers education, information, advice and guidance (CEIAG) in secondary schools, colleges and work-based learning.
Skills Development Scotland (Link)	Skills Development Scotland (SDS) is Scotland's national skills body, supporting people in Scotland to develop skills. SDS also run the public-funded career service. The SDS website houses a publication library on a variety of themes.
Society for Education and Training (Link)	The Society for Education and Training (SET) is part of the Education and Training Foundation (ETF) and is the only professional body for teachers, trainers and leaders within the Further Education (FE) and Training sector. It has 22 members. It reports on research and contemporary issues through its Intuition publication for members.

The UK Institute for Technical Skills & Strategy (Link)	The UK Institute for Technical Skills and Strategy was established in August 2023, building on existing programmes of work to champion the roles of technicians in higher education and research. It advocates for skills and career development amongst technical staff in higher education and research.
UNEVOC (Link)	UNEVOC is UNESCO’s designated centre for technical and vocational education and training (TVET), UNESCO-UNEVOC supports Member States in their efforts to strengthen and upgrade their TVET systems. It runs innovative projects, capacity-building programmes and collaborative activities with more than 220 UNEVOC Centres around the globe.
VETNET - European Research Network for Vocational Education and Training (Link)	VETNET is a network of researchers interested in exploring societal, policy, governance, organisational, institutional and individual factors that shape and explain vocational education, learning and training across the lifespan. It is an open network, which welcomes members and contributions from all over the world. With its publications VETNET aims to foster knowledge sharing and mutual learning among researchers and between research, practice and policy.
Workskills UK (Link)	WorldSkills UK is an independent charity and a partnership between employers, education and governments. They exist to raise standards in apprenticeships and technical education so to support the young people taking these pathways.

Key publications sources

To explore this topic further, research related to this group of people is disseminated in the following publications.

Name	Description
Asia-Pacific Career Development Journal (Link)	This journal is part of the work for the Asia Pacific Career Development Association. The journal itself is an international biannual scholarly journal dedicated to all career development and intervention related topics, such as career counselling, individual and organisational career development, work and leisure, career education, career coaching, and career management.
Australian Journal of Career Development (Link)	The journal focuses on current theory, practice and policy relating to the career development and work education field. The target audience includes professionals in educational and academic settings, community and government agencies, business and industrial settings
British Journal of Guidance and Counselling (Link)	The aim of the British Journal of Guidance & Counselling is to publish work that sets trends and provokes fresh thought and innovation in the practice and understanding of counselling, psychotherapy and career guidance. The journal seeks to communicate, enrich and advance theory, research, policy and practice in these fields.
British Journal of Industrial Relations (Link)	A multidisciplinary, international journal of work, labour, and employment relations. It focuses on the institutions, policies, and practices associated with these relations and their implications for matters of economy and society.
Canadian Journal of Career Development (Link)	The journal covers career-related academic research and best practices from Canada and around the world. Studies often review relationships between individual characteristics and their outcomes, and also review or develop different counselling, guidance or coaching techniques.
Career Development International (Link)	Formerly the International Journal of Career Management, the journal covers career development topics, such as the inter-relationship between individual attributes, behaviours and outcomes. A considerable fraction of the papers covers the people within work/organisational settings.
Career Developments Magazine (NCDA) (Link)	The Career Developments magazine is a publication from the US National Careers Development Association. The articles include a strong coverage of practical interventions, with each issue usually focussing on a particular career theme. Articles are US-centric but many articles have transferable learnings.

Career Planning and Adult Development Journal (Link)	This was a US journal that appeared to stop publishing after 2018 (Confirmation of the current status is unknown). However, there is a backlog of papers to 1983, with many being international in orientation. It was an annual publication of the Career Planning and Adult Development Network.
Careerwise (Ceric) (Link)	Career Wise is a Canadian careers news website, which is a programme of Ceric, a charitable organisation that furthers career education in Canada. News and articles are centred on Canada, but frequently contain relevant topics. Articles often cover practical tips, ideas or practices.
Cedefop (Link)	Cedefop is a decentralised agency of the European Union that supports the development of European vocational education and training (VET) policies and contributes to their implementation. As such it publishes a large number of papers and reports – both pan European and into member countries – across most aspects of CEIAG, but particularly covering policy and system level issues. It has a particularly high volume of reports covering labour market needs, skills shortages and career development across the lifespan, with a number of country reports.
Empirical Research in Vocational Education and Training (Link)	The main focus of this journal is to provide a platform for original empirical investigations in the field of professional, vocational and technical education, comparing the effectiveness, efficiency and equity of different vocational education systems at the school, company and systemic level. The journal fills a gap in the existing literature focusing on empirically-oriented academic research and stimulating the interest in strengthening the vocational part of the educational system, both at the basic and higher education level.
European Journal of Training and Development (Link)	Formerly the European Journal of Industrial Training, this journal covers organisational practices to support learning, the roles of supervisors and managers, applications of technology, implications of policy and economies, and evaluations or reviews that vary in scale from national systems to individual companies.
European Journal of Vocational Training (Link)	Focuses on the recognition, validation, and certification on non-formal and informal learning, knowledge, and competences. Ceased publication from 2010 onwards.
Journal of Adult and Continuing Education (Link)	The journal covers the broad area of adult career and skill development, and related international and national issues. It is aimed at researchers, professionals and practitioners in sectors of the economy.
Journal of Career Development (Link)	The journal provides the latest in career development theory, research and practice, focusing on the impact that theory and research have on practice. Covers the application of career theories, career development,

	career and leisure, career and family, workplace issues, careers in schools, and innovative techniques.
Journal of the National Institute for Career Education and Counselling (Link)	Publishes papers from both academics and practitioners on all aspects of career development, covering career guidance, career education, theory, research, policy, practice; covers the diverse needs of different groups and adopts a multi-disciplinary perspective.
Journal of Vocational Behaviour (Link)	The Journal of Vocational Behavior publishes original empirical and theoretical articles that contribute novel insights to the fields of career choice, career development, and work adjustment across the lifespan and which are also valuable for applications in counselling and career development programs in businesses and public sector organisations.
International Journal for Educational and Vocational Guidance (Link)	Publishes articles related to work, leisure, career development, counselling, guidance, and education. Offers coverage with an international perspective, including comparative studies and multi or cross-cultural insights .
The Career Development Quarterly (Link)	The journal mainly covers “career development through the design and use of career interventions, ...Articles cover career counselling and development, work, leisure, career education, and coaching and management. The official journal of the National Career Development Association (NCDA), a division of the American Counseling Association.”
Work, Employment and Society (Link)	This is the journal of the British Sociological Association which publishes original research on the sociology of work. It covers a wide range of topics about work, employment and unemployment, and their connections with wider social processes. Many papers address different careers and career contexts, viewed through a social lens.

Data sources

Some contextual data sources are provided below. These are particularly useful for studying the prevalence of different situations, trends over time or comparing situations with different geographies or groups.

Name	Description
Careers and Enterprise Company, Student Career Readiness (Link)	The Careers and Enterprise Company carry out a large-scale annual survey that captures multiple measures of students' career readiness through secondary education. (105k surveys were collected in 2024). Scores measure student career awareness of Apprenticeship routes.
City and Guilds, Training Trends (Link)	The City and Guilds publish an annual survey of the nation's businesses to understand the trends relating to training activities, including barriers and sentiments to future intent. Metrics gathered include the prioritisation of training as a driver for business growth, anticipated changes in training expenditure and perceptions of business preparedness for economic and technological trends.
Department for Education, Apprenticeship Learners report (Link)	The DfE have produced annual learner reports for apprenticeships. This 2022 version - linked to the left - shows an expansive range of metrics covering participation and quality.
OECD Data Explorer (Link)	The OECD measure a wide range of economic and social indicators including education and employment values. Metrics on primary schools include Inclusion time in education by country and subject.
OECD - Access and participation in VET (Link)	A dataset showing international data and trends for participation rates in vocational and technical training by country.
OECD - Early leavers from education (Link)	A dataset showing international comparisons on early leavers from education- who are a cohort particularly targeted for vocational /technical pathways.
Office of National Statistics - Business Insights and Impacts on the UK Economy (Link)	The ONS produce an approximately monthly update on a large dataset that captured very many metrics about UK business activities. Different questions are asked per wave. Some relevant indicators are included that offer insight into business confidence, performance, staffing and worker shortages.
Prospects Luminate Early Career Survey (Link)	Since 2021, Prospects Luminate have run an annual survey that measures career status, engagement, plans and career-guidance engagement from secondary school to early career (aged 25).
Rate My Apprenticeship (Link)	Gathers feedbacks from apprentices and publishes the best performing top 100 organisations for their apprenticeships.

UK Government - 16-18 Destination data (Link)	The latest data in this release covers students who left 16 to 18 study in 2020/21 and follows their destinations in 2021/22. Destination measures provide information on the success of schools and colleges in helping young people continue in education, apprenticeships or employment.
UK Government, Apprenticeships (Link)	The data shows the latest number of apprenticeships that have been started and are in flight. (Data is also split out by ethnic group) and