![WorldSkills UK – excellence at work logo]

Ingredients for success

What we can learn about embedding excellence in teaching, learning and assessment for young people studying technical and vocational skills at levels 3-5

About WorldSkills UK

WorldSkills UK is a four nations partnership between education, industry and UK governments. It is a world-class skills network acting as a catalyst for:

Raising standards: through international benchmarking and professional development.

Championing future skills: through analysis of rapidly changing economic demand.

Empowering young people, from all backgrounds: through competitions-based training and careers advocacy.

About Association of Colleges

Association of Colleges is the national voice for further education, sixth form, tertiary and specialist colleges in England. We are a not-for-profit membership organisation established in 1996 by colleges, for colleges. Our members make up more than 90% of the sector – educating and training two million people each year.

Contents

Figures

Foreword

I am privileged to lead an organisation dedicated to raising standards in technical and vocational education and training. It is vital that the UK has a world-class skills system so that young people of all backgrounds can succeed in their future careers and to ensure employers and investors have access to the world-class skills they need now and in the future. At WorldSkills UK we put quality at the heart of everything we do, using our knowledge of international best practice and findings from diagnostic research to shape our programmes and activities to maximise their impact.

Our award-winning Centre of Excellence programme, developed in collaboration with NCFE is one example of our unique approach to raising standards. Over the last three years our Centre of Excellence pilot scheme has disseminated innovative methods of teaching, learning and assessment nationwide, aiming to make the delivery of technical and vocational education and training in the UK among the best in the world.

> We want our programmes to be utilised as a tool for quality improvement by all providers working within the further education and skills sector

We want our programmes to be utilised as a tool for quality improvement by all providers working within the further education and skills sector. It is therefore timely, at the end of the three-year pilot period of the Centre of Excellence, to explore how different providers have implemented the programme, how successful it has been in embedding excellence within institutions and how leaders and educators have prioritised excellence within their work more widely in order to take those lessons forward into our future programmes and services.

To that end we commissioned the Association of Colleges, a valued partner representing further education, sixth form, tertiary and specialist colleges in England, to carry out research to uncover the ingredients for success needed to embed excellence across all parts of the sector. It is our ambition that excellence should be available to everyone, wherever they work or study, whatever type of institution they attend, and whatever their level of learning or ability; this research will help us to further advance this ambition.

We will use this report's recommendations to shape the next phase of the Centre of Excellence programme

I would like to thank all the educators, senior leaders and training managers who generously gave their time to participate in the research, allowing us to build an extremely rich understanding of the different roles in developing excellence within the further education and skills sector.

We recognise that the sector is facing serious challenges in the recruitment and retention of staff and the ability to invest in capital and revenue, at the same time as educating and delivering high quality outcomes for a cohort of young people who have lived through a global pandemic which has increased the demand for additional learning and pastoral support services.

Our research has found that a whole organisation approach to the development of excellence, making use of networks and partnerships, and providing the time and space for teachers to innovate and share knowledge with their peers is essential to embedding excellence. Crucially these elements properly implemented also support leaders to find solutions to the challenges facing the sector and make better use of existing resources.

We will use this report's recommendations to shape the next phase of the Centre of Excellence programme. Our aim is to extend the benefits of the programme so that more educators are able to innovate in their teaching practice and inspire their learners so that young people of all backgrounds can pursue rewarding careers through the development of in-demand technical and employability skills to internationally recognised standards of excellence.

I hope that leaders from across the sector will find these insights valuable in their planning and strategy development for their own institutions and that together we can work to embed the ingredients for success in developing excellence in technical and vocational education and training.

Ben Blackledge
CEO WorldSkills UK

Executive Summary

This report presents an exploration of excellent practice in teaching, learning and assessment (TLA) at Regulated Qualifications Framework (RQF) Levels 3-5 (Scottish Credit and Qualifications Framework – SCQF – Levels 6-8) for 16-24 year-olds in the FE and skills sector in the United Kingdom (England, Northern Ireland, Scotland and Wales).

It has been commissioned by WorldSkills UK to build an evidence base from across the sector to underpin their mission to raise standards and support educators to deliver excellence for all technical and vocational learners.

It seeks to uncover the ingredients that help institutions successfully embed excellence in teaching, learning and assessment, by exploring three areas:

1. The conditions that help embed excellence in teaching, learning and assessment for young people studying technical and vocational skills at Levels 3-5 (and the Scottish equivalents).

2. Major barriers to embedding excellence for teaching, learning and assessment in technical and vocational skills.

3. The mechanisms, other than WorldSkills UK's programmes, which are in place to embed excellence for teaching, learning and assessment in technical and vocational skills and how WorldSkills UK might incorporate these in its programmes.

The report draws from a synthesis of relevant national policies, a survey of organisational leaders and of educators within the WorldSkills UK Centre of Excellence programme and semi-structured interviews with WorldSkills UK training managers and organisational leaders. Evidence was also generated from a focus group of organisational leaders, international case studies and other examples of excellent practice in teaching, learning and assessment. The information was also used to make comparisons between practice in the four nations.

Key findings

> It was also evident that the pursuit of and achievement of excellence requires a number of actors working toward a common goal

There was a clear steer from all the research subjects that excellence within the technical and vocational sector is about more than excellence within the confines of the technical skill itself. It was also evident that the pursuit of and achievement of excellence requires a number of actors working toward a common goal, stretching much further than teacher-student interactions at classroom or workshop level.

This was demonstrated by the significant weight given to the importance of developing transferable skills as a feature of excellence. Developing motivated, independent, reflective learners with employability skills such as team working, communication and problem-solving provides the best pathway to progression into higher levels of learning or employment – the end goal of learning at Levels 3-5 (or Scottish equivalents). The provision of excellent technical and vocation education and training therefore needs to incorporate transferable skills as an integral component.

The conditions identified with broad consistency across the four nations to support the embedding of excellence, and thus the 'ingredients for success' were:

- a whole organisational approach to excellence, including a shared responsibility for embedding excellence, having clear lines of accountability and creating opportunities to share best practice and develop collaborative and partnership working

- investing in and developing staff, including the provision of opportunities to undertake high-quality, purposeful CPD and the time and space to develop innovation in teaching practice to support recruitment and retention of the staff necessary to embed excellence

- engaging employers is critical to developing a relevant curriculum, training techniques, appropriate CPD and transferable skills. Consistency in the practice of employer engagement in quality improvement could be developed even further

- recognition of the importance of transferable skills, as referred to above.

In examining the barriers to achieving excellence, we found some areas for development across the sector:

- qualifications are often still geared towards competence, or are compliance-driven, rather than pursuing excellence

- international benchmarking plays a key role in promoting excellence but the opportunities for systematic learning from international examples are not yet embedded consistently across institutions

- there is a lack of consensus around defining excellence in technical and skills education and training.

Underlying all of these factors is the importance of the role of staff in developing excellence

Underlying all of these factors is the importance of the role of staff in developing excellence. The WorldSkills UK Centre of Excellence, run in partnership with the awarding organisation NCFE, is a programme providing CPD for educators founded on the insights gained through international benchmarking and participation in international skills competitions. It links the quality and delivery of the provision of CPD for staff with raising standards within the technical and vocational sector, recognising that excellence cannot be achieved without supporting and investing in staff.

Having uncovered a number of key ingredients for successfully embedding excellence in teaching, learning and assessment, we have developed a set of recommendations for both WorldSkills UK and for skills providers across the UK.

Summary of key recommendations:

For WorldSkills UK:

- promote excellent teaching, learning and assessment more widely

- enhance the role of WorldSkills UK training managers

- review levels of provider reach, especially to independent training providers

- develop a strategy to support the development of curricula and provision appropriate to local contexts

- continue to pursue constructive dialogue with awarding organisations so they can benefit from WorldSkills UK's knowledge of world-class standards

- lead the latest research and analysis of global trends in skills development which would benefit from WorldSkills UK's unique insight.

For providers:

- develop strategic objectives based on a shared understanding of excellence within the institution

- review how space and time can be created to share and cascade knowledge and champion excellent teaching, learning and assessment

- make better use of sustainable partnership opportunities which are available, for example, by actively supporting the development of the Centre of Excellence programme.

For future initiatives and future research:

- build consensus around a shared understanding of excellence in technical education

- provide improved mechanisms for policy learning about excellent teaching, learning and assessment through a UK-wide four nations approach

- consider further research into the relationship between the FE and skills workforce, the qualifications and experience expected by employers and the impact on quality improvement, recruitment and retention.

Introduction

The scope of this report is an exploration of excellent practice in teaching, learning and assessment within the FE and skills sector in the UK, specifically: Technical and vocational skills qualifications offered at Levels 3-5 (Levels 6-8 in Scotland) to young people aged between 16 and 24 years old.

These qualifications include BTEC National Diplomas and similar Level 3 vocational qualifications, T-levels, Higher Technical Qualifications (HTQs), including Higher National Certificates (HNCs) and Higher National Diplomas (HNDs), foundation degrees and apprenticeships. The qualifications are offered by a diverse group of providers: further education colleges, independent training providers, universities and higher education institutions, schools (particularly in Scotland) and employer providers. The aim of all such qualifications is to provide a transition opportunity into either the workplace or higher education (HE), not only equipping young people with technical and vocational skills but also the wider (transferable) skills for the future.

WorldSkills UK commissioned this report to understand better how they can support a range of organisations in the skills sector to enhance their practices as the understanding of and the drive for excellent teaching, learning and assessment deepens. WorldSkills UK currently operates a Centre of Excellence programme in partnership with NCFE, an educational charity and technical and vocational awarding organisation, aimed at facilitating knowledge transfer from WorldSkills UK's international networks into UK curriculum design and development.[1]

> WorldSkills UK is keen to understand what the ingredients for successfully embedding excellence are as they move to the second phase of the Centre of Excellence programme

The programme, coming towards the end of its third pilot year, encompasses 48 organisations, including a consortium of six colleges in Northern Ireland and two independent training providers, and operates through a programme of CPD, where WorldSkills UK high performance skills coaches work with educators in the organisations, who then cascade the knowledge and expertise to other staff. At this stage, WorldSkills UK is keen to understand what the ingredients for successfully embedding excellence are as they move to the second phase of the Centre of Excellence programme.

Where possible, the term 'excellence' has been used, although as described in Finding 6, there may not be a common understanding of this term. It has been taken to signify best practice and high-quality education, and the development of excellence is considered to be in alignment with quality improvement mechanisms. Furthermore, the long-term funding, resourcing and staffing of the FE and skills sector are outside the scope of this report. The research findings and recommendations are concerned with making the best use of existing resources.

This report has been produced from a combination of surveys and interviews with key stakeholders and draws from relevant literature, including websites, academic literature, policy documents, and media reports.

National policy context

This study covers the four nations of the UK: England, Northern Ireland, Scotland and Wales. FE and skills policy varies in each nation, although there are, of course, some common themes.

Northern Ireland, Scotland and Wales have produced recent skills strategies or strategic plans: Skills for a 10x Economy,[2] Skills Development Scotland Strategic Plan,[3] and Stronger, Fairer, Greener Wales,[4] respectively. In England, the Skills for Jobs White Paper[5] sets out the government's plans to reform post-16 technical education and training and specifies WorldSkills UK's Centre of Excellence as an example of high-quality and evidence-based training and development for teaching staff. We have examined how institutions promote excellence in teaching, learning and assessment within these different contexts and what lessons can be drawn from this.

Each nation has clear strategies for encouraging excellence in teaching, learning and assessment across their qualifications, workforce development and quality improvement mechanisms. Within these frameworks there are different organisational approaches to improving the quality of technical and vocational education training. The WorldSkills UK Centre of Excellence programme is designed to bring excellence into the development of the technical and vocational curriculum at Levels 3-5 (and the Scottish equivalents) across the UK regardless of the policy environment.

Education policy is devolved to Northern Ireland, Scotland and Wales. However, in some aspects, where there are links to Treasury policies, matters are reserved to the UK Government. For example, all four nations have had to implement the apprenticeships levy, although the way it is applied differs. The government departments directly responsible for FE and skills differ across the four nations. In England, this is the Department for Education. In Northern Ireland, the six further education colleges form part of the Department for the Economy, although there is input from the Department of Education for teacher education and inspection. The Scottish Cabinet Secretary for Education and Skills is supported by a Minister for FE, HE, Youth Employment and Training and in Wales the responsibility is split between the Minister for Education and the Minister for the Economy.

Colleges in Northern Ireland and Scotland are public bodies. In Northern Ireland they are arms-length branches of the Department for the Economy[6] and in Scotland they have been public bodies since 2014.[7] By contrast, Wales has designated colleges as public service bodies (outside the public sector).[8] The Office for National Statistics

> Each nation has clear strategies for encouraging excellence in teaching, learning and assessment across their qualifications, workforce development and quality improvement mechanisms

(ONS) recently (November 2022) reviewed the status of English FE colleges.[9] The decision was that English FE colleges, including sixth form colleges, are now public bodies. Numbers of approved providers within the four nations vary. It is to be expected that there will be more providers in England, because of scale but in the other countries, there has been more active control.

In Wales, apprenticeships are offered by approved provider networks.[10] Independent training providers offer provision at Levels 3 – 5 (and the Scottish equivalents) through a public contracting process for apprenticeship start contracts in Scotland[11] compared with an application process to be a registered apprenticeship training provider in England.[12]

In Northern Ireland colleges are encouraged to work collaboratively, for example through Curriculum Hubs, the subject of a recent evaluation.[13]

In Scotland, with the move back into the public sector, the number of colleges was reduced to one per region (with three exceptions ie, Glasgow, Lanarkshire and the Highlands and Islands), aiming for a regional dimension to skills planning. Colleges agree an annual regional outcomes agreement against which their performance is monitored.[14] Schools, with colleges, provide foundation apprenticeships at Level 6 (equivalent of Level 3).

Universities are involved across the board in Levels 4 and 5 (and the Scottish equivalent) but there is more demarcation of roles between colleges and universities in Scotland and Northern Ireland and this may develop in Wales following tertiary reform. Universities are autonomous bodies in all four nations, but all receive public funding.

Universities are involved across the board in Levels 4 and 5

National curriculum developments: Skills qualifications at Levels 3 to 5 (Levels 6 to 8 in Scotland) for 16-24 year olds

Several recent curriculum developments have been briefly reviewed to explore how they have been designed to support excellence in teaching, learning and assessment.

Whilst providers in all four nations offer HNCs (Level 4, Level 7 in Scotland) and HNDs (Level 5, Level 8 in Scotland), traditionally viewed as the higher vocational qualifications, there are also alternatives, such as Foundation Degrees (Level 5 in England, Wales and Northern Ireland and Level 8 in Scotland). As HTQs are mapped in England by the Institute for Apprenticeships and Technical Education (IfATE) these have been drawn from HNCs, HNDs and foundation degrees and badged to indicate that employers have helped to develop them, promoting them as an alternative to apprenticeships and degrees.[15] However, this scheme is not yet operating in the other nations.

The process of rebadging existing qualifications to HTQs is described by IfATE as:

> "We will compare submitted qualifications against approved occupational standards, ensuring sufficient coverage and assessment of the knowledge, skills and behaviours that are needed for an occupation. We will also require robust employer engagement endorsement of submitted qualifications... IfATE is responsible for making final approval decisions."[16]

In Scotland, there is ongoing development of the HNC/D programmes, the next generation higher nationals,[17] which will incorporate the integration of teaching, learning and assessment, widely seen as best practice, a reduced assessment load for learners and teachers, the integration of digital technology, especially for assessment and the development of meta skills such as adaptation and flexibility, in line with employer requirements for future employees.[18]

A leader in the focus group noted that in Scotland this process brought in all stakeholders:

> "... big stakeholder involvement in that development process. Qualification development and content can be driven by stakeholders and has been beneficial for Modern Apprenticeships and how [we] engage with employers for competitions."

The Welsh post-16 sector is undergoing a period of change following the establishment of the Commission for Tertiary Education and Research. Prior to this there was the development of a Welsh Advanced Baccalaureate at Level 3 which includes relevant vocational qualifications, English or Welsh and maths as well as a Skills Challenge Certificate based on employability skills, which encourages learners 'to reflect on how the application of their skills may impact on individuals, employers, society and the environment'.[19] This is an explicit attempt to develop the wider skills required by employers, equipping young people to join the future workforce. More recently, Colleges Wales has piloted the internationalisation of teaching and learning within this qualification, aiming to introduce a 7-14 day exchange for learners, during which they will achieve some elements of the qualification in Spain.[20]

The IfATE in England has led curriculum reform of apprenticeships (moving from frameworks to employer-designed standards) and the development of T-levels, funded for 16-18 year-olds, at level 3 to align with the 15 technical occupational routes set out for apprenticeships and HTQs.[21] T-levels are designed to include a technical qualification, English, maths and digital skills and an extended industry placement of about 45 days,[22] assessed through a combination of exams, an employer-set project and practical tasks. They are intended to occupy a space between A levels and apprenticeships, offering a route not only to employment but also to higher education.

Local Skills Improvement Plans (LSIPs) in England set out regional and local skills requirements determined through providers engaging locally with employers and other stakeholders. It is too early in the process to know whether there will be any flexibilities developed within local curricula to respond to the differences between the national understanding of what employers need and the local or regional picture, as described for Andalusia in the Spain case study below.

In 2021, the Northern Irish Advanced Technical Awards were launched, a collaboration between the Department for the Economy and the six further education colleges, offering a vocational qualification in areas of identified skills shortage, such as information technology, with transferable skills integrated into the award.

These are Level 3 qualifications evaluated as equivalent to A-levels, including a work-based qualification, project-based learning with employers, an industrial placement of 30 days and the development of transversal skills (for example digital literacy, problem-solving, citizenship, communication, commitment and self-management).[23]

Regulation of FE and skills

There are national differences in the regulation of FE and skills, for example through inspection regimes.

In Scotland's colleges, this is now based around annual self-evaluation and professional conversations, described as 'How good is our college?',[24] leading to a developmental approach in keeping with quality improvement, promoted through Education Scotland and the Scottish Funding Council, and linked to the annual Outcome Agreements. However, following the Muir report, 'Putting Learners at the Centre',[25] the Scottish Government has decided to develop an independent inspection body, separating this from the functions of Education Scotland and working in parallel with the development of a single quality assurance and enhancement framework for tertiary education by the Scottish Funding Council.[26] [27] In the interim, the Scottish Funding Council is keen that a new quality framework:

"Strikes the appropriate balance between assuring and enhancing the quality of tertiary provision'"[28]

In England, Ofsted has a wide-reaching role, inspecting colleges, sixth form colleges, independent training providers, adult learning providers and some aspects of university provision. These inspections are grade-based and the grades may limit access to funding and

other developmental opportunities. The latest iteration of the Education Inspection Framework (EIF) makes assessments on quality of education, behaviour and attitudes, personal development and leadership and management and a summary assessment of overall effectiveness. In the outstanding grade descriptor, high participation in skills competitions is cited as an example of commitment beyond the basics for behaviours and attitudes.[29]

A recent Ofsted blog post spelt out:

> "...good teachers use their subject and industrial expertise to design programmes around ambitious, challenging content."

> "Access to high-quality training and professional development that develops teachers' subject knowledge, their teaching skills and their awareness of contemporary practice is invaluable."[30]

In higher education the Office for Students (OfS) plays a regulatory role in England, linked both to quality and standards oversight and student complaints,[31] and until March 2023, the Quality Assurance Agency (QAA) also provided assessments for the OfS as the Designated Quality Body in England although this remit has now changed to a monitoring and advisory role on standards and quality in higher education.[32] The QAA works across the four nations, undertaking slightly different roles in each nation: for example, in Scotland, it defines its work as enhancement-led,[33] whereas in Wales it is 'to support and review the management of academic standards and quality.'[34]

Although the Teaching Excellence Framework (TEF) awards are currently under review, with new ratings due for publication in September 2023, these have had an influence on the English higher education sector and so are of relevance to providers offering Level 4 and 5 programmes (HNCs, HNDs and Foundation Degrees). Providers in Scotland, Wales and Northern Ireland may participate in the TEF on a voluntary basis, but in England the OfS uses the TEF as part of its quality and standards regulation so that it is mandatory for providers with at least 500 undergraduate students on higher education courses, although other providers may also participate.[35] The ratings measure excellence in teaching, learning and student outcomes (further study or managerial and professional employment) and are based on minimum requirements for quality and standards. The measures of teaching quality are drawn from measures viewed as a proxy for teaching quality, for example, the National Student Survey.[36]

In Wales, recent changes mean that the regulatory role undertaken by the Higher Education Funding Council for Wales will now be the responsibility of the Commission for Tertiary Education and Research. Currently, Estyn undertakes inspections in colleges and in work-based learning apprenticeship providers, in a manner similar to the English Ofsted inspections although the main inspection areas: Learning, well-being and attitudes to learning, teaching and learning experiences, care, support and guidance and Leadership and management, are more focussed on teaching and learning.[37] [38] Unlike Ofsted, the inspections are ungraded.

"...good teachers use their subject and industrial expertise to design programmes around ambitious, challenging content"

The methods for inspecting colleges in Northern Ireland have recently shifted towards a base of quality improvement, in keeping with the new Skills Strategy. The scrutiny of their arrangements is conducted by the Education and Training Inspectorate (ETI), commissioned by the Department for the Economy and the Department of Education. ETI's priority for the first quarter of 2023 is for 'Quality Improvement Planning Scrutiny' and an evaluation of Level 3 provision in the colleges following the evaluation of the curriculum hubs in 2022.[39] The quality improvement planning programme reviews organisational quality improvement plans and self-evaluation reports. After scrutiny, a college may be selected for inspection if the evidence suggests that there is ineffective planning for learning and quality improvement.[40] Similar arrangements are being put in place for work-based learning.[41]

In summary, differing regulatory and performance monitoring regimes in differing parts of the FE and skills sector, which also vary for different provider types, set a context which may impact on the priorities for excellent teaching, learning and assessment set by providers.

Findings

Features of excellence

1. The importance of transferable employability skills
(in some places described as 'soft skills'), such as resilience and emotional intelligence, was highlighted in all aspects of the research conducted. Developing technical skills alone was not seen as sufficient to represent excellence in teaching and learning or assessment

Transferable employability skills (students' soft skills) were confirmed as important or very important by a majority of educators who responded to a question ranking the importance of outcomes from excellent teaching, learning and assessment. The importance of high levels of technical skills was recognised by a similar percentage. Other related factors that were ranked similarly included the use of personalised learning approaches and learners' engagement in their learning (Figure 1). Interestingly, no educator ranked high marks in examinations and assessments as a very important or important outcome. The leaders' focus group also highlighted the wrap-around support that helped to build resilience and generate good employability skills as a feature of excellence.
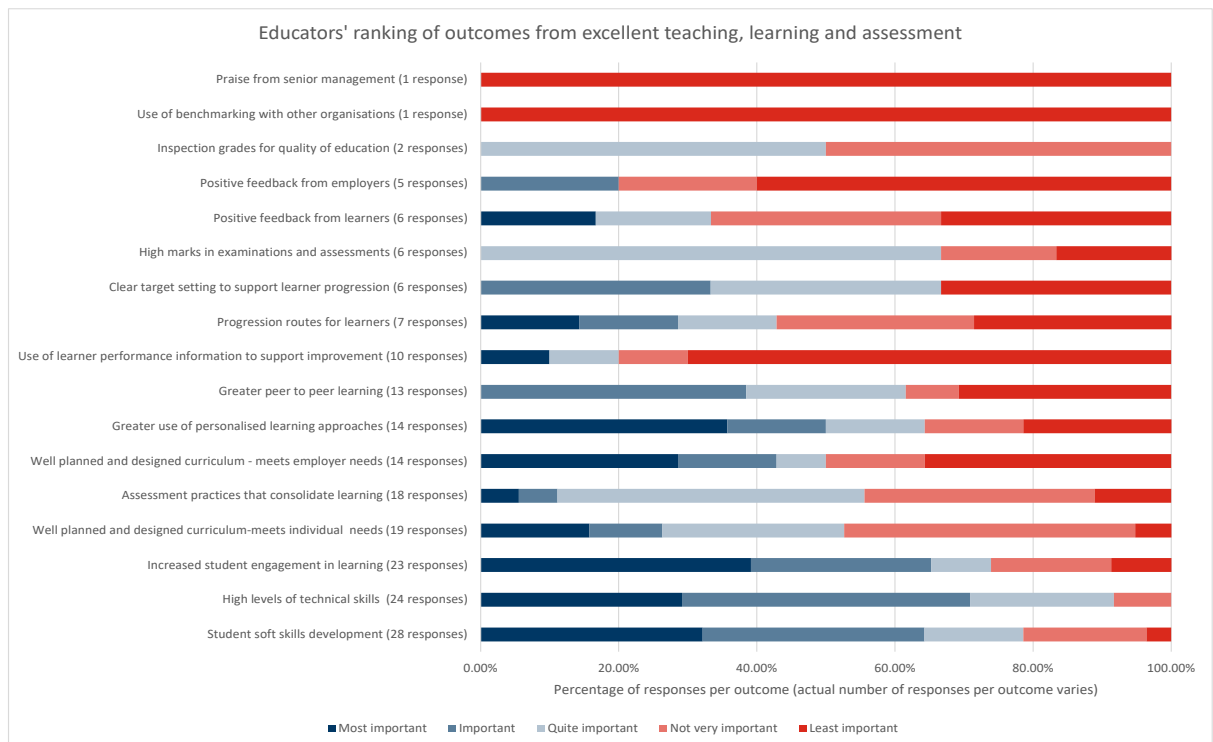
Figure 1 **Educators' ranking of outcomes from excellent teaching, learning and assessment**

Training managers observed that the student became excellent when they demonstrated skills beyond technical skills:

> "... they take ownership....being selfish when it comes to education, so that they take ownership of their own learning."

> "... they're always showing up on time and after finishing their work quickly but to a high degree, if they are asking questions, if they learn quickly, if they work well, if they take on information."

> "...it's about that willingness to be on a journey of never-ending critique of your own performance and striving for your best personal outcome. So personal best philosophy is what runs through the striving for excellence."

> "...will listen to you, that will adapt very, very quickly and put into practice...the ones that can learn and the ones that are open..."

> "...become an independent thinker. An independent learner... motivation... To strive for more."

> "...someone who attends...prepared to work, not just when they're with the training manager, but outside of that time, and also to get in the industry experience."

> "...are they turning up early, have they done any pre-coursework... energy to learn, interest in skills...they challenge me as well...they work together as a group as well."

> "...being able to model something accurately but really quickly."

They also highlighted the benefits of competitions:

> "That competition experience makes them very, very employable. They can communicate the fact that they are specialised, they are very good at their jobs ..."

An employer provider commented:

> "We place particular importance on the interpersonal characteristics of our apprentices."

The evidence from all groups therefore places great value on the development of wider employability skills in addition to technical skills as a necessary component of excellence.

The case study from Spain illustrates this further, through a description of employability skills designed within the curriculum as well as of regional specification of the curriculum to meet local employment needs. The English National Apprenticeship Awards case study also highlights the value that employers place on wider employability skills.

The evidence from all groups therefore places great value on the development of wider employability skills in addition to technical skills as a necessary component of excellence

Case Study: Spain

Spain, (population around 47 million), has developed a focus on digital education in Technical and Vocational Education and Training (TVET), following the pandemic.[42] There is also a review of teacher competences in sustainable education within TVET. Spain established an apprenticeship levy in 2015, but this is available for the training of unemployed people as well as company workers. Formal VET is mostly state-funded, although one in four learners attends a private VET centre, which do not attract public funding[43]. Despite multi-ministry involvement (Ministry of Education and Vocational Training and the Ministry of Labour, Migrations and Social Security) there is an overarching aim of matching skills with local economy needs. Spain organises VET through sectoral structures, through which businesses and social partners (unions) plan sector training needs and propose training. The implementation of this policy is on a regional basis; regions may specify between 35 and 45% of the iVET curriculum based on their assessment of local and territorial needs. Formal qualifications are awarded by education authorities (mainly for young people) or employment authorities (often for adults). Spain also offers apprenticeships through a dual VET system, usually over three years and involving at least 33% of in-company training.[44]

A thorough analysis of best practice in VET from a careers guidance perspective was developed in Andalusia.[45]

The study found that best practice aimed:

> 'to increase students' motivation and involvement in their work, share teaching resources and connect theory with the reality of the labour market, facilitate self-learning and self-assessment of the diversity of talents, as well as the development of communicative, cooperative and creative skills'.[46]

The study also recognised the value of WorldSkills, work but commented that national policies are needed to disseminate excellence across and beyond the VET sector in order to make young people's training more visible. In addition, the authors found that excellence was more readily detectable within Higher Level Apprenticeships in Andalusia and that there was inter-sectoral variation, so that more best practice was detected in ICT and less in health, social and community service. Key factors included broadening knowledge of VET among stakeholders, involving companies at all levels, integration of international experience (for example Erasmus +) and education centred on students and their experience.[47]

Findings of note from Spain include:

- the importance of employability skills that are transferable and student motivation

- regional specification of part of the curriculum to meet local needs

- the need for greater publicity and awareness raising for VET

- linkages between good teaching and the labour market

- the importance of regional and national policies to support excellence in VET.

Case Study: English National Apprenticeship Awards

In England, these well-respected awards have operated for 19 years. The award citations often indicate what employers perceive as excellent skills. Many of these extend to employability skills that are derived from values and behaviours held by the apprentice, in other words, skills beyond technical and vocational skills.

For example:

"...learns invaluable life and business skills from industry experts who share her values and expectations ... built communication skills and confidence."[48]

"...believe the apprentice programme delivers a more rounded employee who is a role model for the service's values and behaviours."[49]

The awards also demonstrate the value placed on inclusion:

"...the opportunity to offer young people opportunities they would not usually have..."[50]

In Wales, the apprenticeship awards also value innovative approaches from both employers and apprentices:

"Creating its own internal trainers to develop the next generation of employees...this new work-based training approach ... has already benefited from a 15% reduction in staff turnover..."[51]

"To understand her learners/ journey, she completed the apprenticeships herself and delivers them bilingually..."[52]

These citations demonstrate how employers value transferable skills beyond those measured by a qualification, as well as inclusion and innovation.

Conditions to generate excellence

## 2. Purposeful CPD is an essential component in developing excellence

In England, the professional standards for FE lecturers in England are set through the Education and Training Foundation (ETF),[53] in Scotland by the General Teaching Council for Scotland (GTCS), which also operates for schools,[54] and in Wales by the Education Workforce Council (which also sets standards for work-based learning (WBL) practitioners and schools).[55] The General Teaching Council for Northern Ireland has been stood down although interim duties are continued by the Department of Education.[56] The QAA continues to advise across the UK on working with WBL providers.[57] Advance HE has responsibility for the UK professional standards framework for teaching in HE.[58]

Although different bodies are responsible for the professional standards, the aims and values behind them are similar, in that they require teachers to update their subject and teaching knowledge and reflect on effective practice. In seeking to share best practice through CPD, WorldSkills UK may be assured that, across the four nations, teachers are committed to undertaking CPD and, in practice, educators felt CPD was a key factor in the development and delivery of excellence in teaching, learning and assessment, together with the sharing of good practice with colleagues (Figure 2).
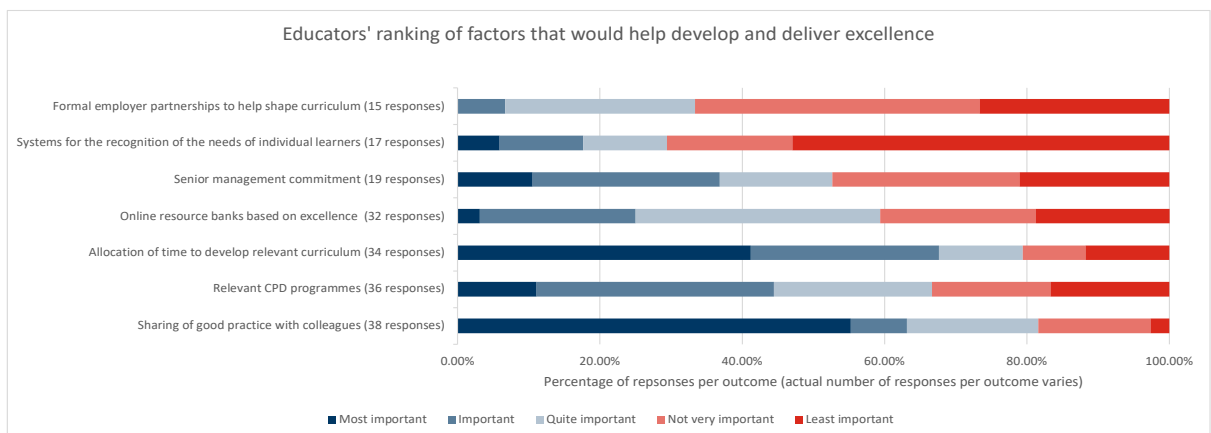
Figure 2 Educators' ranking of factors that would help develop and deliver excellence

In the leaders' survey, having well-trained staff was the third highest-ranked factor for delivering excellence, when numbers of responses were taken into account (Figure 3).
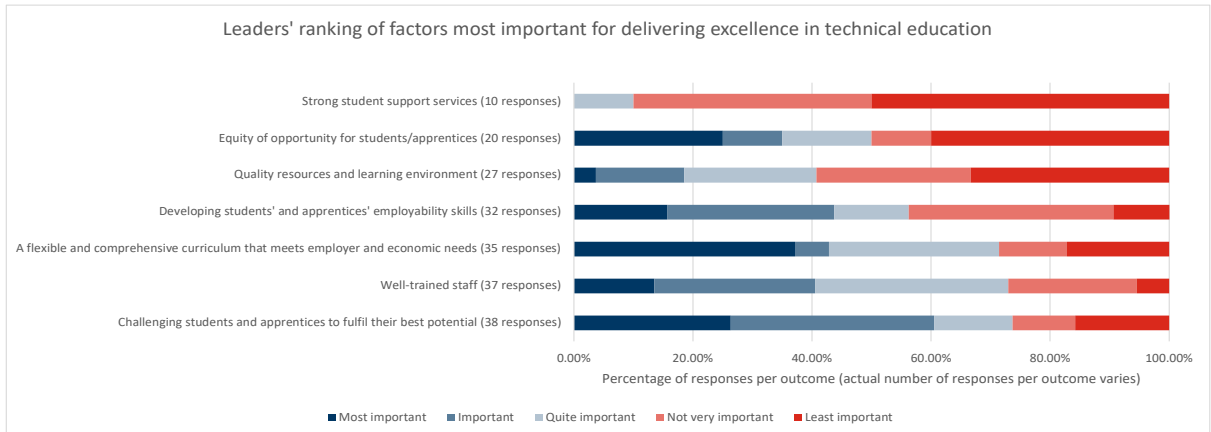
Figure 3 Leaders' ranking of factors most important for delivering excellence in technical education

Of those leaders who felt that there had been improvement in the quality of technical education in their organisations in the last five years, the majority of them attributed this to staff recruitment and CPD (Figure 4).
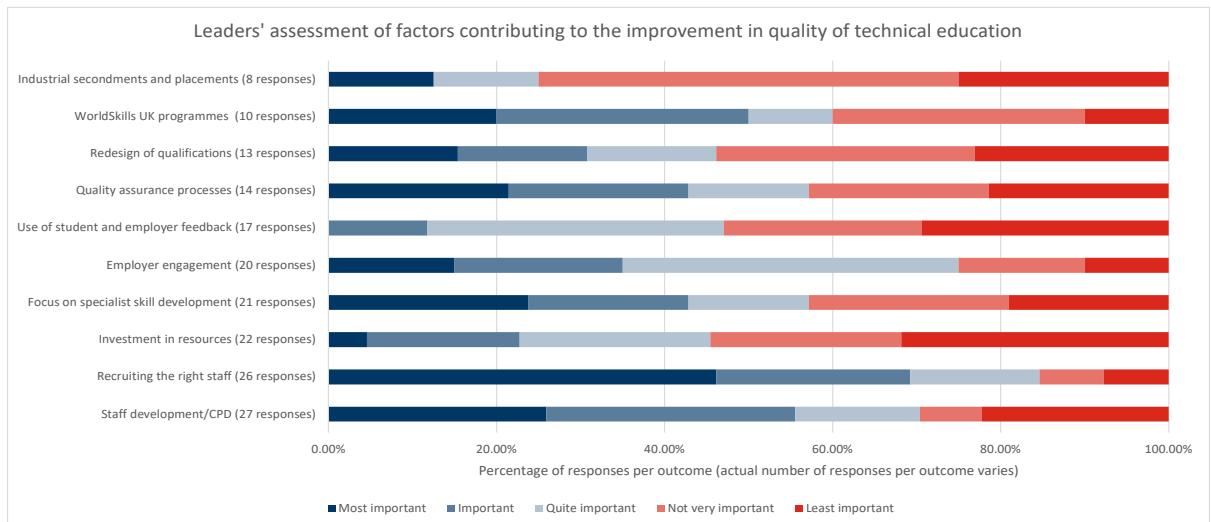
Figure 4 Leaders' assessment of factors contributing to the improvement in quality of technical education

Once recruited, purposeful CPD was seen as central to TLA excellence by leaders and educators (85%). Some examples of such CPD were cited:

> "Used Taking Teaching Further, which has helped with currency."

> "T-levels: Staff are getting extra CPD, but pushback from heads of department as it takes staff out."

Training managers also described their expectations of an excellent teacher:

> "Being able to know new techniques that come in, new procedures, new tools, new equipment, new teaching techniques…Looking at the latest research… You are never the finished article as a teacher so we just try and learn everything new that comes in and try and improve."

> "…identify those lecturers that will be committed to work and put the hours into it. It's a lot of volunteering…it's our nature as lecturers to identify that wheatgerm, the spark, there. We have it like a sixth sense, some of us."

> "…the staff are motivated to see the learners succeed."

"…the staff are motivated to see the learners succeed"

Time pressures on staff were of concern in both the leaders' and educators' surveys and were also raised in the leaders' focus group. This theme was developed to explain that much CPD time was spent on the mandatory and compliance training, which, although important, did not lend itself to quality improvement.

Educators said consistently that time was the most important factor that would help them to cascade knowledge about teaching, learning and assessment more effectively:

> "…being given enough time to be able to meet and work with like-minded colleagues."

> "It would be better if we could get all staff on the educator programme together at the same time for cascading."

This relates not only to time available to undertake all the CPD deemed as necessary before being allocated CPD devoted to innovation but also the time to work with competition participants to develop their working practices. There was a recognition that this was heavily reliant on staff goodwill.

One training manager observed that a challenge for time to innovate was based around funding: unless the work proposed led to an actual qualification for which funding could be drawn down, senior managers were not keen to sanction it. Another described how they cascaded best practice into colleges:

> "…the lecturers then go away with that new information from this competition for the year and then train with that new kind of development within the industry to make their competitors better, but they also start using this within their own delivery."

Leaders raised concerns about being able to recruit the best staff, in a competitive market with skills shortages for qualified teachers (particularly in trade subjects), because staff with passion for their work were seen as very important to developing excellence.

"'When staff have currency it's very motivational for the students."

Leaders were significantly concerned that staff conditions could also be a barrier to implementing measures to embed excellence (Figure 5).
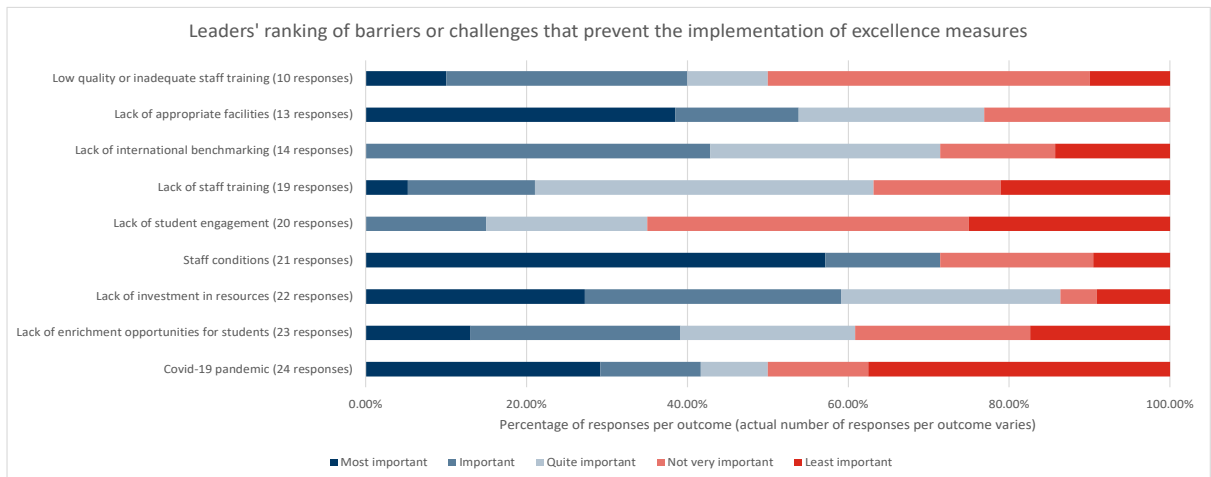
Figure 5 Leaders' ranking of barriers or challenges that prevent the implementation of excellence measures

Some leaders expressed the view that the Centre of Excellence training was very good for developing practice and spoke highly of the support received from WorldSkills UK and the opportunities it presented to them:

"Staff also want to be able to showcase what they can do."

"Best CPD, actually improves practice on the ground."

"Inspiring excellence, for staff, be inspired and learn."

The evidence points to a need to invest in and develop staff through purposeful CPD to embed excellence. The Centre of Excellence is a vehicle for purposeful CPD and is valued by leaders and staff. Creating the time and space for staff to participate in such workforce development programmes like the Centre of Excellence and allowing them to implement those practices into their teaching methods is not only essential for quality improvement, but can also contribute to positive staff recruitment and retention within institutions.

The case study of Vietnam illustrates the importance placed on staff CPD during a redesign of the country's VET policies.

Case Study: Vietnam

This case study demonstrates that staff recruitment and development are an essential part of developing excellent teaching, learning and assessment (Finding 2).

In Vietnam (population around 97 million), recent VET policy changes in 2019 have been evaluated through a joint Vietnamese/German project. These policies include changes to the regulatory framework for VET teachers, reform of VET institutions, and curriculum change which included moving from a nationally specified curriculum to an institutionally determined curriculum.[59]

Like many other nations, Vietnam operates TVET in both formal (state and private), delivered in secondary vocational schools, colleges and some universities, and informal settings. TVET is not free, although fees are capped and some subsidies are available, but institutions may charge extra for materials and private providers charge full fees. Within the formal VET system, teachers at the upper secondary or post-secondary non-tertiary levels have been required for some time to hold a Bachelor's degree and a certificate in vocational skills if they are teaching a practical subject.[60]

The UK has made a recent commitment to developing vocational training in Vietnam[61]. Needs identified include improving the capacity of teaching, promoting digital training, closer employer engagement, quality improvement and sustainable vocational education policies. This followed the Vietnamese Government's identification of the need to develop ICT skills by investing in 70 new vocational facilities and reforming both curriculum and equipment to incorporate digital education.[62]

In 2015, the British Council and the European Union (EU) supported a number of projects in Vietnam, including 'Up-skilling to UK standards in vocational teaching'. One of the key messages was the relationship between assessment, learning and teaching and the use of feedback for evaluation and planning, leading to a more learner-centred approach.[63] Other benefits included teaching portfolio development and more creative approaches to lesson planning. Exchanges for lecturers have been arranged, to support capacity building for the Association of South East Nations (ASEAN) and WorldSkills Competitions.[64] Other changes have included more staff development opportunities for teachers as well as linking employers with potential students to provide an overview of the training programmes on offer.[65] The overall outcome has been, for the colleges that participated, a fresh approach to vocational teaching and an enhanced appreciation of the need for clear relationships between business, colleges and vocational teaching standards.

In summary, assessed against the interventions that it received, what Vietnam felt it needed in terms of policy learning to improve its VET systems was:

- teacher development, from lesson planning to assessment methods

- development of relationships between employers and colleges

- quality assurance systems

- development of high-quality training materials, both for digital learning and for mobile training

- access to international best practice about teaching, learning and assessment.

3. A whole organisational approach to embedding excellence is vital

Responsibility for excellence

In the leaders' survey, leaders identified collective responsibilities for embedding excellence and accountability for excellence within their institution (Figure 6). 83% assigned responsibility to the senior leadership team, with 70% saying that it lay with curriculum and faculty managers, 68% teaching staff and 65% included the board of governors. 85% reported including a strategic objective relating to excellence within their plans and 80% reported using key performance indicators to measure excellence.

There was further support for a whole organisational approach from a Centre of Excellence manager, who had observed that behaviour and attitudes to learning (a current Ofsted grade) had noticeably improved with the introduction of a whole organisational approach to excellence, based on the work of the Centre of Excellence.

One training manager commented on the flow-on effect from the senior leadership and governance team in driving excellence within the whole institution:

> "The drive comes from all but predominantly from the leadership of the organisation, from governance through to the senior leadership team. The vision of the organisation, the mission, the values that the organisation has, is all geared towards excellence and achievement. And that feeds down to the wider team and of course, then the learners."

Educators noted the commitment to excellence at an institutional level with 93% of educators agreeing that their organisation was committed to excellence, with 50% saying that their organisation was very committed.

> "The drive comes from all but predominantly from the leadership of the organisation, from governance through to the senior leadership team"

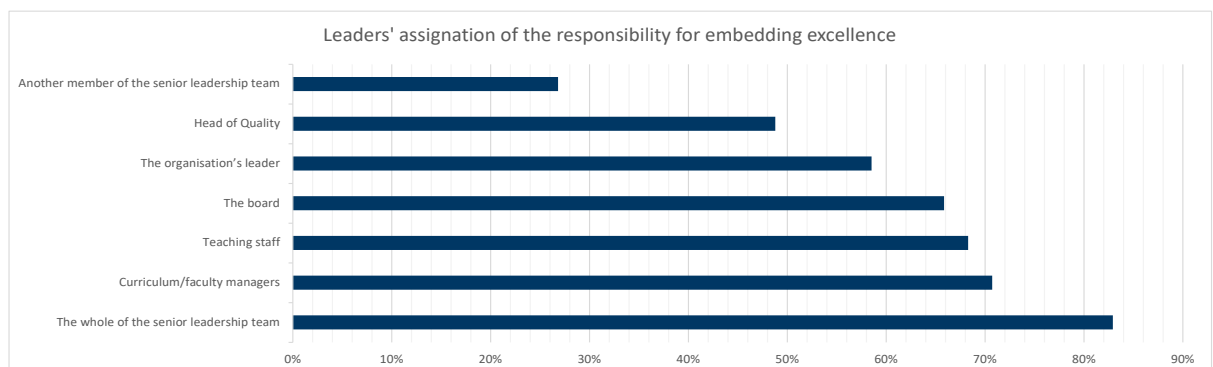Leaders' assignation of the responsibility for embedding excellence

Figure 6 **Leaders' assignation of the responsibility for embedding excellence**

Measuring and benchmarking performance

Most leaders ranked the use of internal performance frameworks as a way of holding those responsible to account most highly, followed by student performance in exams and assessments and then external performance and regulatory frameworks.

Through participation in WorldSkills UK's benchmarking activities such as the Centre of Excellence, Learning Lab, Innovation Network and skills development competitions, institutions can access national and international benchmarking opportunities. Not only do these offer an independent mechanism to benchmark institutional performance, they also provide a way for institutions to incorporate the latest industry standards into skills development. For instance, the international WorldSkills Occupational Standards are consulted on and updated with businesses biennially to remain in line with the needs of international markets and industries.[66]

Previous WorldSkills UK research found that training for competitions provides a vital 'third space'[67] for teachers and students to experiment with innovative pedagogical approaches outside formal education or employment settings.

When considering performance benchmarking, particularly by external organisations, however, leaders in the focus group felt that there needed to be:

> "...right balance between quantitative and qualitative evidence."

and noted the differences between:

> "...growth or fixed mindsets as basis for tutorials. Gets tight in education when obsessed with measurements. Difficult to measure resilience."

Those leaders working within institutions participating in the Centre of Excellence programme spoke highly of the impact on staff and learners:

> "Staff also want to be able to showcase what they can do."

> "Quality of teaching, learning and assessment is easily transferable and builds student resilience... wider aspects of being able to cope with life."

Creating opportunities to cascade and share excellence

About 65% of educators who responded to the survey had disseminated Centre of Excellence training to other staff to 11 or more of their colleagues (Figure 7), and 16% shared it beyond their institution. Related to the theme of teachers having the time to undertake purposeful CPD, around half of educators surveyed wanted more time to be made available for the cascading of Centre of Excellence resources specifically, through dedicated staff development days, or dedicated timeslots within other CPD events, for example.

"Staff also want to be able to showcase what they can do"

"Quality of teaching, learning and assessment is easily transferable and builds student resilience"
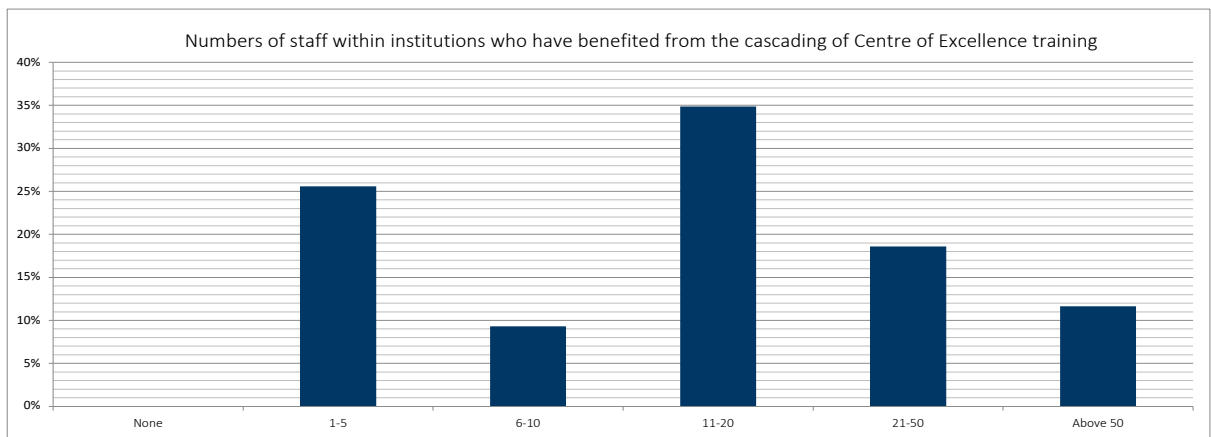
Figure 7 Numbers of staff within institutions who have benefitted from the cascading of Centre of Excellence training

Educators also identified the most important source of motivation to share the knowledge that they have gained from the Centre of Excellence programme (Figure 8). Encouragement from the Centre of Excellence Skills coach was the most significant factor.
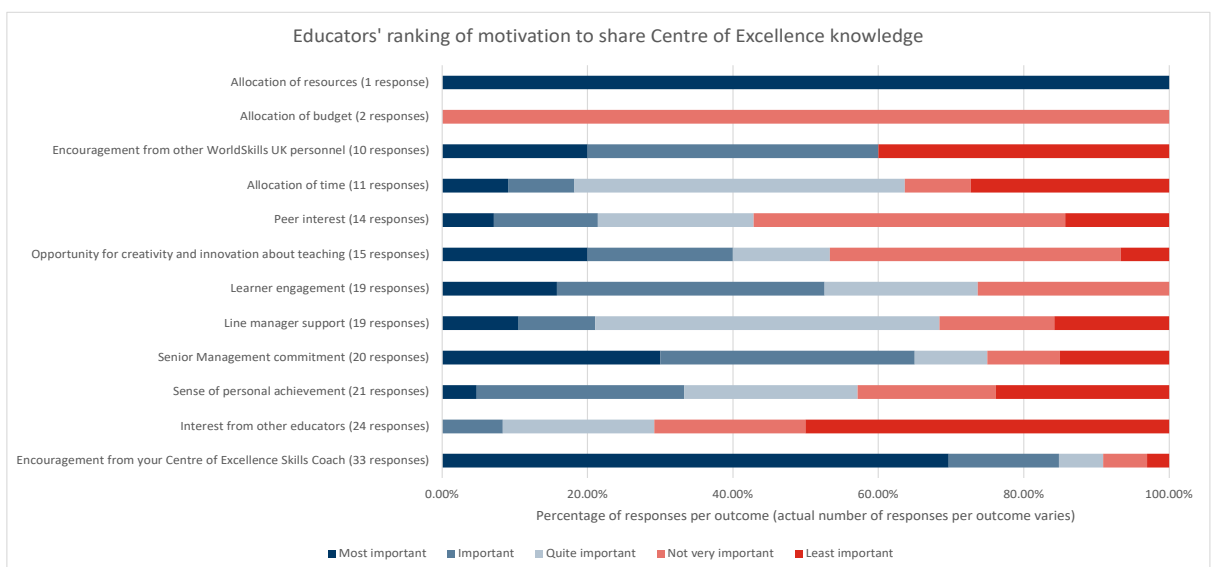
Figure 8 Educators' ranking of motivation to share Centre of Excellence knowledge

More than half of educators who responded to a question about the sources of their materials did not use sources other than the Centre of Excellence materials for information about excellence in teaching and learning. Of those who did, some drew from industry experts, or peer educators, or their own experience, or, in some cases from other organisations such as the ETF and the WorldSkills UK Development Hub.

A collaborative system-wide commitment to excellence can maximise resources and ensure continuity

Whilst reviewing the outcomes of the Centre of Excellence pilot, WorldSkills UK may wish to consider how to develop and extend the benefits of the Centres of Excellence to other providers, particularly outside the college part of the sector, in a way that encourages providers to prioritise excellence, whilst recognising the limited resources that some organisations are able to devote to it.

Given resourcing constraints identified by leaders and training managers, the possibility of a partnership approach to competitions and the Centre of Excellence (as exemplified by Northern Ireland) may be worthy of further consideration. Whilst there are regional skills competition partnerships in England, the outcomes of these are perhaps less visible to those who are not engaged. In Northern Ireland, with a single Centre of Excellence, there is the potential for a consortium approach to competition. Similarly, the engagement of more providers in Centres of Excellence through partnerships, perhaps mirroring and expanding the English Institutes of Technology, might pool scarce resources, allow greater participation and promote excellent teaching, learning and assessment more widely.

Input from training managers supported this approach and suggested that collaboration could be fostered systematically:

> "...you could get five educators from five different disciplines and they cross- pollinate ideas and think about possibilities which are outside of their usual experience ..."

> "...the WorldSkills family ... we all help each other. We've got this amazing collective common goal to just be better at everything, just improve everything."

> "...we had a few meetings this year ...with the other training managers ...I'm trying to create a ...kind of hub of training managers because there are skills we share and there are skills we have to pass on to our competitors."

The perception drawn from the training manager interviews was that their competition work frequently operated in a silo within their organisation.

> '...colleges have become more and more pressurised places, It's difficult then to take your time out of that to go and do things like WorldSkills.'

> 'They understand the benefit. I think they see me rushing around doing all this stuff. And I think there's a bit of sort of, that's for him to do...'

Other staff, they felt, were not aware of the benefits of skills competitions, nor interested in becoming aware, or had conflicting priorities:

> '...it's kind of filtered down for my curriculum area manager to disseminate, really. That's difficult for him because he has his day

"...the WorldSkills family ... we all help each other. We've got this amazing collective common goal to just be better at everything, just improve everything"

job and unless he's completely bought into the whole competition thing, it really just creates a bit of a problem for him.'

"...get them to embed CPD a bit better for skills competitions or for best practice. So linking an actual qualification to some kind of delivery would really, really help me be able to do that."

Once they left an organisation, many training managers expressed concern that involvement in skills competitions would not continue. It is of concern that the work carried out is not embedded to the degree that it is independent of a single enthusiast but is part of the quality improvement infrastructure of the organisation. There is an opportunity for WorldSkills UK to support all providers to develop a more systematic approach to this aspect of excellent teaching, learning and assessment and to encourage good practice such as sharing across teams and succession planning.

Supporting educators to deliver excellence

Educators identified five key factors to support successful delivery of the Centre of Excellence programme within their institution (Figure 9). Interestingly, these were focussed on the learners and their experiences; options such as 'effective use of the latest digital technologies' and 'staff training' were not most highly ranked.
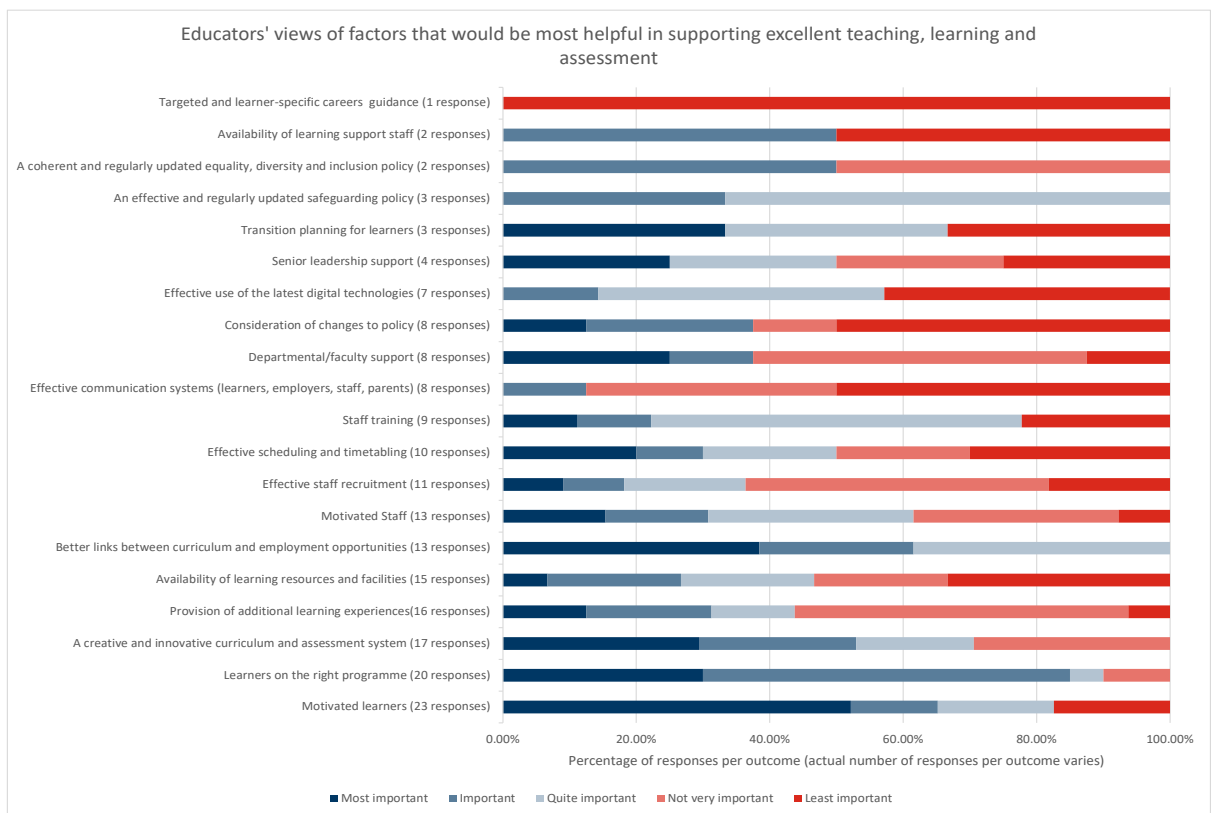
Figure 9 Educators' views of factors that would be most helpful in supporting excellent teaching, learning and assessment

Some educators commented positively about the impact of WorldSkills UK, consistent with the feedback from leaders:

> "I am now in my second year of delivering WorldSkills training to staff and my learners. Having been a FE lecturer for 29 years WorldSkills gives me a different outlook on the delivery of my practical sessions …"

> "I do enjoy being involved in cascading the learning I received from a wonderfully engaging WorldSkills UK excellence educator as I am passionate about having the opportunity to discuss best practice in terms of raising standards in our teaching and learning. I wish more time was given to making this a priority within our education institutions."

Educators also ranked factors that would help them develop and deliver excellence in teaching, learning and assessment (Figure 2). Sharing good practice was identified as the most important by most of the educators, with the allocation of time to develop curriculum also being a concern. This may suggest that there is more to do to encourage organisations to prioritise excellence through methods valued by educators, and again collaboration between institutions to encourage the sharing of resources could be a way to achieve this.

The case study from New Zealand illustrates a system-wide approach to connection and collaboration, in this instance through a single VET institution which works with key employer groups to meet local skills needs, resulting in a focus on better provision for learners. The case study from Scotland demonstrates the value of intra-organisational collaboration.

"I do enjoy being involved in cascading the learning I received from a wonderfully engaging WorldSkills UK excellence educator…"

Case Study: New Zealand

New Zealand, (population around five million) has long had a reputation for a scholarly approach to vocational education and training (VET), without necessarily reaching the pinnacle of success in WorldSkills Competitions.

In recent years, it has undergone significant systemic changes to its VET system (ROVE, Reform of Vocational Education and Training).[68] These have been designed to provide learners with more opportunities to move both geographically and between modes of learning, whilst defining institutional roles more clearly, to aid integration and communication between different parts of the system, which was previously identified as making an 'arbitrary distinction between on the job learning and classroom-based learning'.[69] This critique, arising from the identification of future skills shortages led to the recognition that change was needed to better support learners, employers and communities to respond to these shortages. In 2020, all public VET institutions joined to form a single VET institution, Te Pūkenga, which delivers applied vocational learning across all qualification levels.[70]

Six Workforce Development Councils and 15 Regional Skills Leadership Groups support work with employers, the former through identifying industry specific skills are included in vocational qualifications and hence in VET and the latter working locally to develop labour market reforms in response to local skills needs. Teaching excellence has become a focus of Ako Aotearoa, the National Centre for Tertiary Teaching Excellence, through greater attention on employer partnerships leading to internships and secondments for teachers.[71] There are also links into Centres of Vocational Excellence, the first two being identified in construction and the primary care sector.[72]

These reforms are designed to build flexibility for learners whilst ensuring that future skills needs are met. A recent study of New Zealand apprenticeships found that, across quite different industrial sectors, 'portals to deeper capability in the field'[73] were developed by enhancing the inclination to make use of acquired employability skills as well as accessing the employability skills themselves. The role of employers, workplace mentors and teachers was seen as vital to this.

Findings of note from this study are:

- making connections across the whole VET system

- removing barriers between distinct aspects of VET learning

- providing VET teachers with training and recent, relevant industrial experience

- developing learners' employability skills to encourage excellence.

Case Study: CDN Awards in Scotland

The College Development Network Awards in Scotland aim to recognise the talent, innovation and achievement of colleges, staff and learners.[74]

Although the theory of contextualising core skills within vocational learning is well understood, it is not always undertaken in practice. However, a lecturer within UHI Moray was commended for her approach to changing the mindset of lecturers across many departments so that they linked core skills into work-based activity for apprenticeships and Scottish Vocational Qualification (SVQ) learners on a systematic basis. This helps prepare learners for the future workforce as well as improving their understanding of core skills through practical application.

4. Employer engagement is regarded as critical to embedding excellence

Employer engagement is a priority for senior leaders in the FE and skills sector. 88% of leaders surveyed had leveraged support from employers in assisting the pursuit of excellence and 95% had incorporated learning from employer engagement into embedding excellence (Figure 10). 43% rated the curriculum meeting employer needs as most important or important in the delivery of excellence, whereas 44% identified developing students and apprentices with in-demand employability skills as most important or important (Figure 3).

Sources used by leaders to embed excellence in technical education

International partnerships
'Pressure testing' competitions
Benchmarking with other organisations
International occupational standards
WorldSkills UK Innovation Network
WorldSkills UK Centres of Excellence
Employer engagement
Visits to or engagement with other organisations

0.00% 10.00% 20.00% 30.00% 40.00% 50.00% 60.00% 70.00% 80.00% 90.00% 100.00%

Figure 10 **Sources used by leaders to embed excellence in technical education**

Of those leaders who felt that there had been improvement in the quality of technical education in their organisation in the last five years, employer engagement was ranked as the third most important factor (Figure 4), and of the factors ranked as most important for delivering excellence in technical education, delivering a flexible and comprehensive curriculum that meets employer and economic needs was second only to challenging students and apprentices to fulfil their best potential (Figure 3).

From the leaders' focus group, it was noted that in Scotland, the engagement of stakeholders in qualification development, for example Modern Apprenticeships, was viewed as positive. However, the new skills strategy released in Northern Ireland has highlighted differences between employer priorities and those of awarding organisations as to which skills are more important. In England, it was observed that, based on the pilot examples, the new accountability agreements (and indeed the Ofsted focus on local skills needs) were more aimed towards responsiveness to employer needs than excellence in teaching, learning and assessment; in other words, excellence is implicit rather than explicit.

The findings from the educators' survey show educators are more equivocal than leaders about the importance of employer engagement in delivering excellence with only 7% of respondents assessing help from formal employer partnerships in shaping the curriculum as most important or important. Instead, educators in the main selected the development of students' 'soft' skills and technical skills as most important or important outcomes.

However, the view of an employer provider who was interviewed was:

> "In our experience many education providers are able to invest in advanced equipment, however, their ability to train on this equipment often cannot be relied upon…"

whilst emphasising the importance of apprenticeships to cultivating a successful workforce development ethos:

> "…highly skilled and motivated workforce which starts with the apprenticeship."

Training managers observed it can be difficult to secure employer engagement within education and training institutions due to employers prioritising internal training and development:

> "I've tried to get employers of staff who have training roles in the big organisations to release them for let's say one day a week to go assist in a college and deliver for one day, in a month maybe. And we got one inquiry…"

> "…[the experts] are kept within the so-called academy trainings they have in the company…monopolise the training which is very, very expensive …You can't embed this into training colleges, into universities, unless you let them do the training…"

There is an opportunity to support organisations, particularly in England, to share best practice in this regard

From this, it can be concluded that the strategies for involving employers in the development of excellent teaching, learning and assessment can be developed further, as there is currently piecemeal employer engagement with this agenda. There is an opportunity to support organisations, particularly in England, to share best practice in this regard. For example, as accountability agreements and LSIPs gain traction, there is the option of ensuring that these encompass both excellence and responsiveness.

The role for WorldSkills UK's Centre of Excellence programme in developing stronger employer links between education and industry is a strength which should be encouraged further within the culture of institutions as there is a clear sense that senior leaders place a premium on good employer relationships due to the positive impact they perceive in developing excellence.

As shown in the following case study, the reforms of the FE and skills sector in Chile placed emphasis on the importance of engaging employers. The UK Beacon Award case study highlights some excellent practice in employer engagement.

Case Study: Chile

Chile (population around 19 million) was, in the past, noted for its extreme neoliberal approach to education, leading to a very segmented system of education[75] (similar to the marketisation of English FE) but the recent reforms have sought to temper this, because it was identified that VET did not flourish within this system. A combination of national research, international advice and some policy learning has led to the rethink of VET policy. For example, more recent government strategies have highlighted the need for coordinated governance of TVET institutions (there are several different forms of provider), improving the attractiveness of VET to young people and the need to ensure good quality control of VET as the strategy is implemented.[76]

Consequently, Chile has recently launched new policies for TVET and has demonstrated a particular interest in teacher training development, as well as creating new TVET centres. The strategies have been based on applying international models to the Chilean context, where VET has been under-developed in certain regions and where employer engagement has also been spasmodic. By improving employer integration, it is hoped that VET will better support the youth labour market[77] and that more workplace training will be developed. Students' aspirations were not being fulfilled through past TVET technical education routes.[78]

There is support for the professionalisation of VET teachers through a new post graduate programme for teachers in secondary TVET institutions.[79] Many teachers were part-time or hourly paid and work across several TVET institutions. This led to the development of their professional identity and an emphasis on the technical skills they could deliver, rather than the subject specific pedagogies that may be developed with formal teacher training. Additionally, there was the risk that they would return to industry, rather than remain in the VET teaching profession.[80] During the planning of this reform, an OECD study[81] identified that, as the reforms were implemented, there is a need to develop both hard and employability skills during VET. As an example, research has identified the differences between embedding digital skills in an instrumental or an empowering way.[82]

Findings of note from this study are:

- students and employers need to have clarity about routes to the labour market

- importance of VET teaching profession – initial training and continuing support.

both technical and employability skills are important to VET.

Case Study: UK Beacon Awards

The Beacon Awards, run by the Association of Colleges, promote and celebrate best practice in UK FE colleges across a range of topics such as support for students and widening participation. Some of these awards highlight excellent practice in teaching, learning and assessment in key areas for skills development.

Bradford College was a finalist for an employer engagement award in 2021/22 for its future technologies centre, in partnership with 60 employers, which facilitates the growth of technology and low carbon skills capacity and capabilities within the region. This centre links the employers with industry bodies and training providers to reskill employees and to develop the future workforce.[83]

Heart of Worcestershire College was commended for effective use of technology in 2022/23 because it offered a new blended learning programme. 'Elements', combining weekly timetabled online learning with six-week real world projects, some of which were co-created with employers. These digital tasks were aligned with the vocational and technical curriculum to develop digital literacy and transferable skills such as communications, critical skills, collaboration and creativity, to develop the learner 'as a whole person.'[84]

These examples illustrate employer engagement, innovative uses of digital technology and the benefits of partnership working in achieving greater synergy and more effective use of resources.

Areas for development

5. Qualifications are still geared towards competence not excellence

From the evidence gathered, the role of awarding bodies in quality improvement is not consistently clear. Their focus often leads to compliance-driven behaviour rather than behaviours designed to improve excellence.

Leaders in the focus group observed that the awarding bodies were:

"Not always in touch/up to date with employer needs."

The ability to be agile and responsive as an enabler to excellence has to be applicable across the system. As one leader explained, there is the importance of:

"...currency of qualification and content but also appetite for innovation in assessment and capture of student evidence."

There is emphasis on the need for a certificate or end point assessment which often does not meet the employers' needs for employability skills and therefore does not prioritise the cultivation of transferable skills so crucial to the development of excellence in teaching and learning as identified in the earlier findings:

"...increased stakeholder involvement but tensions between awarding organisation priorities and employer priorities."

A training manager said:

"...the awarding bodies find it really difficult to get those descriptors to assess that quality. Quantity is easy."

"...the assessment needs to be owned by the student, not by the lecturer..."

WorldSkills UK has access to international standards which can help the qualifications and awards sector identify ways in which they can support excellence and should look to share more of their insights with awarding bodies and institutions that set standards.

6. There is no consensus around defining excellence in technical and skills education and training.

There was no consensus within the wider FE and skills sector around the definition of excellence although key elements of excellence were identified within the research by different groups.

In the leaders' survey, views on defining excellence coalesced between the delivery of assessment outcomes and good retention and a wider perspective related to positive learner progression and employability (Figure 11).
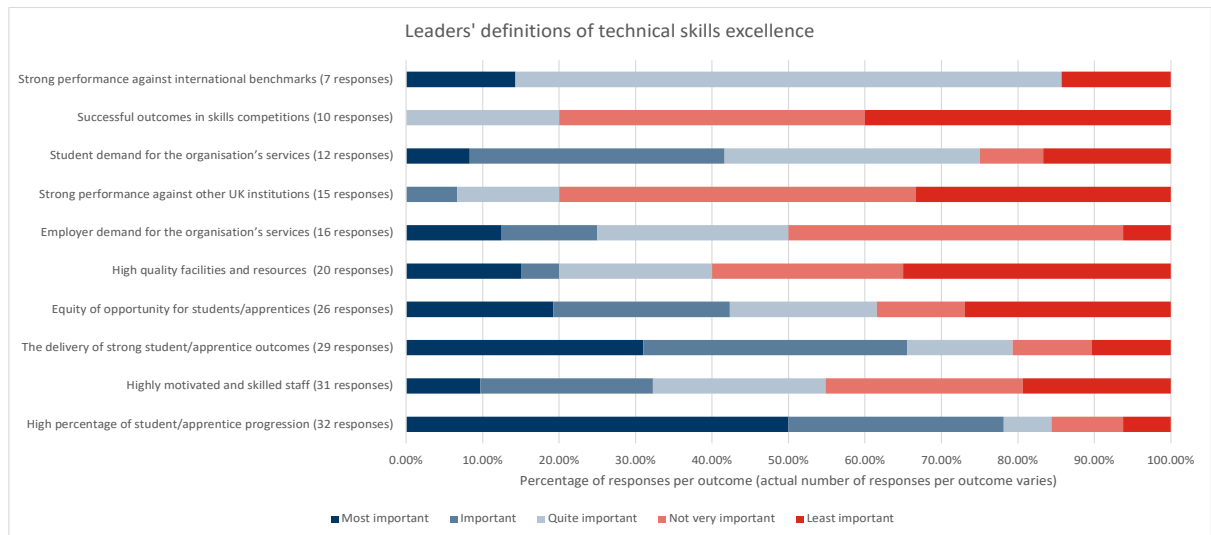
Figure 11 Leaders' definitions of technical skills excellence

In the leaders' focus group, it was observed that excellence was subjective and that there were different stakeholder perspectives on this. For example, an employer may not view the achievement of a qualification as excellence, but may be more drawn to the attitudes of the prospective employee. A learner starting in a role may not only be looking at the job they are currently doing, but the career promotion prospects.

Training managers were clear that excellence for students was about attitudes toward their learning and development and their motivation to strive for continuous improvement and progress:

"...openness to be coached and the openness to look for the holes in the work or the areas for development."

"...able to adapt the skills, the technical skills, the knowledge. The biggest thing is the social skills."

"...the whole professionalism makes them self-dependent and have initiative, be able to go with any situation..."

"...their organisation, their planning ...that crispness, that care about the work..."

"Every student pushing themselves to where they can go and always keeping that just slightly out of reach."

Some training managers provided an overall definition of excellence from their perspective:

> "...excellence for me is when a curriculum is aligned to a real job and not just the delivery of a subject."

> "...excellence in teaching is when they [the learners] are part of knowing what the objective is and they're engaged in it from the offset."

> "...excellence is about supporting and developing that individual to be their best."

> "...when I was an apprentice myself at a provider, achievement was very much about elements to one's life. And now it's been very streamlined about achievement is about qualifications, pieces of paper. And actually, it's not all about that."

From the variety of viewpoints put forward, it became apparent that there was no national cross-sectoral understanding of excellence denoting high-quality in further education and skills teaching, learning and assessment. It may be beneficial to establish a common understanding on which to base the development of programmes and initiatives in FE and skills which seek to embed excellence so that all parties are working toward consistent and compatible goals.

Related to this, it was suggested that there was perhaps a role for WorldSkills UK in communicating the wider aspects of excellence, from a qualitative as well as a quantitative viewpoint. The leaders' focus group stressed the importance of building this understanding of the different initiatives on offer, for example by helping to celebrate the inter-organisation competitions and regional skills competitions that frequently go under the radar supporting organisations in marketing and promoting these. This suggests an opportunity for WorldSkills UK to take the lead on joining up its excellence initiatives, such as WorldSkills Competitions, the Centre of Excellence and the Innovation Network, and coordinating these across the different regional and national contexts.

"...excellence in teaching is when they [the learners] are part of knowing what the objective is and they're engaged in it from the offset"

"...excellence is about supporting and developing that individual to be their best"

The leaders noted the benefit of a joined-up approach:

> 'Innovation Network: Enabled funding and helped with staffing and taking staff members off timetable.'

Supporting findings from earlier research on the role of WorldSkills UK's training managers,[85] the value of network activities and the development of communities of practice for training managers were considered to be expansive, bringing world-class standards into everyday delivery:

> "At bootcamps and clusters, we would share best practice...You get ideas from them [other training managers] that can work not only for training, but also for just normal delivery."

> "...you start to learn what people are doing. And if they're using any best practice... how you get that subject underpinned and make [the] workshop or a classroom invigorated and apply it to practice that's in the real life where they can use it."

> "...it stretches my thinking."

Whilst excellence may well mean different things in different contexts, the ambition should be to generate a common understanding of the meaning of excellent teaching, learning and assessment between organisational leaders, teachers, learners, employers and local, regional and national policy-makers and influencers in order to bring coherence across the sector and to ensure a consistent raising of standards.

The case study from Canada describes a more coherent approach to developing excellence within tertiary education.

"At bootcamps and clusters, we would share best practice... You get ideas from them [other training managers] that can work not only for training, but also for just normal delivery"

Case Study: Canada

Canada's (population around 38 million) VET system has been described as 'skills development and adult learning' because much of it takes place after completion of high school, mainly within community colleges.[86] Although VET is delivered within an education system operated by the provinces, there is an overarching national apprenticeship system (the Red Seal system), based on new occupational standards for trades considered important to the economy.[87] The aim is to improve completion rates as well as providing greater opportunities for mobility for apprentices.[88] However, apprenticeships are mainly undertaken by adults (mid 20s upwards) and are also longer than programmes in the UK, lasting for four years on average. They are frequently delivered through block, rather than day release.[89] Apprenticeships are not available in many industrial sectors and tend to be concentrated in the manual trades sector.[90]

Canada's community colleges are noted for their tertiary education model, which has been designed to bridge the transition from education to employment but operates over a shorter cycle (usually two years) than the traditional three year degree model. These programmes are vocationally-oriented and are the principal source of workplace preparation within Canada: 26% of the population of 25-64 year-olds hold a short-cycle tertiary qualification against an OECD member average of 8%.[91] The curriculum is related to labour market demands but is also forward-looking, for example, there is already commitment to supporting skills training ahead of a net zero world. A network of 680 campuses or facilities constituting the post-secondary institutions across Canada ensures that more than 95% of the population lives within 50km of an institution.[92] It is believed that there are significantly more part-time teachers than full-time teachers in the colleges, one implication being that these are real world practitioners who are also teaching, with a positive impact on the quality of learning.[93] One study documented that instructors are expected to have considerable industrial experience before teaching VET but, after a short period of initial formal teacher training, there is little support for continuing professional learning, for example via coaching or portfolio building.[94]
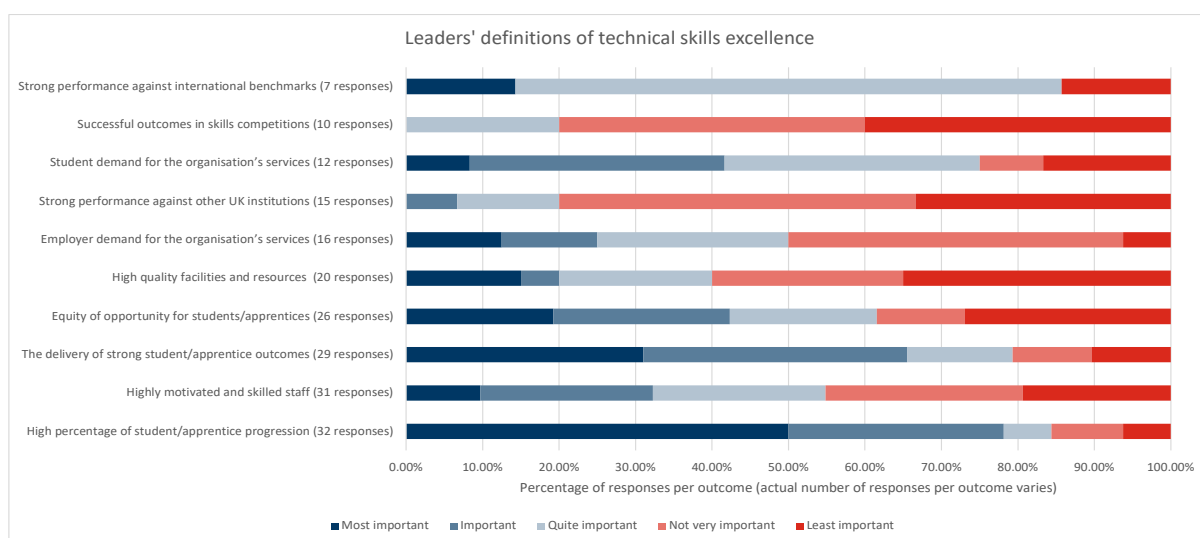
Research has also indicated that employers may hire young people on placement with them, before they have completed their qualification[95]. This reinforces the importance of good employer partnerships with educational institutions and the need to work together with learners to provide optimal education and training.

Findings of note from the Canadian examples are:

- commitment for tertiary VET (equivalent to HTQs) to a single set of institutions, with less provider fragmentation and a recognised place in system between school and workplace or university

- how good teaching might be developed

- unintended consequences of employer engagement

- VET for adults, rather than young people

- alternative apprenticeship models

- the interaction of federal and provincial VET systems.

7. International benchmarking plays a key role in promoting excellence but the opportunities for systematic learning from international examples are not yet embedded consistently across institutions

In the leaders' survey, 43% of those responding rated the lack of international benchmarking as the most important or an important challenge preventing them from implementing measures that they believed would embed excellence, 32% incorporated learning from international partnerships into their development of excellence processes and 12 % incorporated international occupational standards into their environments for excellence (Figure 10). 22% actively sought support from international networks to pursue excellence (Figure 12).

Leaders' definitions of technical skills excellence

(Bar chart showing, from top to bottom:)
- Strong performance against international benchmarks (7 responses)
- Successful outcomes in skills competitions (10 responses)
- Student demand for the organisation's services (12 responses)
- Strong performance against other UK institutions (15 responses)
- Employer demand for the organisation's services (16 responses)
- High quality facilities and resources (20 responses)
- Equity of opportunity for students/apprentices (26 responses)
- The delivery of strong student/apprentice outcomes (29 responses)
- Highly motivated and skilled staff (31 responses)
- High percentage of student/apprentice progression (32 responses)

Percentage of responses per outcome (actual number of responses per outcome varies)

Legend: ■ Most important ■ Important ■ Quite important ■ Not very important ■ Least important

Figure 12 **Leaders sought support from the following in pursuing excellence**

In the leaders' focus group, the perspective of international influences was based on the four nations cooperation (where applicable) rather than international cooperation. The four nations had previously had networks sharing best practice before the pandemic, but this work had not started again since the restrictions eased.

In the educators' survey, although sharing good practice with colleagues was the top choice (Figure 2) when identifying factors that would help them develop and deliver excellence in teaching, learning and assessment, no educators rated the sharing of their work via international networks as most important or important. There was however evidence that some training managers were making more use of international best practice within their roles through sharing their knowledge of international best practice in their day jobs so that learners and colleagues benefitted.

Six out of ten training managers interviewed identified that this was embedded to varying degrees, an improvement from earlier research which found training managers felt they were working as two separate entities, in their day jobs and for WorldSkills UK, and there was little transferability of their WorldSkills UK knowledge into their daily practice.[96]

"'I've taken a lot of information that I'm getting from the likes of Denmark and Switzerland ….their education systems are unbelievable…If I want to introduce something that's going to be industry-related but they're not currently delivering within FE in the UK, and I know that it's best practice, I'll insert it into a test project…. It's a way of me getting best practice into the colleges."

"You can research the entirety of the world now ….and you can make yourself a training plan based on what you need to develop and you know what your CPD needs are."

"…we found somebody in France … where we can actually do a lot more benchmarking. And it was useful."

"I'm always really conscious that we've got to take a foreign country approach that I don't just look at English resources, using networks like that."

"We usually have a virtual competition among the competitors around different countries, which promotes this learning from others. Obviously we are as a nation widely regarded around the world for the way you do things, so they are learning things as well."

It should also be remembered that the Centre of Excellence programme is still in a pilot phase (the final tranche of 11 organisations was onboarded in November 2022) and its reach does not yet extend across all organisations so there is room for the impact of international best practice within institutions to become more consistently embedded.

Furthermore the WorldSkills UK Innovation Network also offers international exchanges and benchmarking opportunities, extending the reach into approximately 35 additional organisations, predominantly colleges, with one university.[97] Bearing this in mind, as the next phase is planned, WorldSkills UK may wish to consider a more detailed brokerage role in developing pathways to bring international occupational standards and partnership working into the mainstream of provider work, in the interests of improving excellence.

Case Study: UK Erasmus/Turing

Aspirations for learners to gain international experience have long been a feature of the further education landscape. The Erasmus and Erasmus Plus schemes enabled learners and teachers to visit partner organisations in other parts of Europe. For many learners, this was the first time they had been away from home, developing their understanding of other cultures and ways of working, not only contributing to vocational skills but also to personal development and hence to transferable skills.

The UK Government has now introduced the Turing Scheme in replacement. This is funded to support study and work placements worldwide.[98] Construction, health and digital T-level students from Bridgwater & Taunton College visited a community college in Mississippi as part of this scheme. They participated in cultural events as well as visiting local industries and attending classes at the college. This provided opportunities to understand how the industries operate in the United States as well as for personal development.[99]

> "…allowed me to grow in myself and become more independent and confident in approaching people and asking questions."[100]

> "It was interesting to me to watch them change and grow within two weeks from people that were very quiet that suddenly weren't quiet anymore and were really coming out of their shells."[101]

This scheme highlights the benefits of international mobility for enhancing excellent learning.

Conclusions

This report has drawn from a wealth of evidence to present key recommendations in support of promoting excellent teaching, learning and assessment at RQF levels 3-5 (SCQF levels 6-8) across the United Kingdom.

The conditions identified with broad consistency across the four nations to support the embedding of excellence, and thus the 'ingredients for success' were:

A whole organisational approach to excellence

There are a number of elements underpinning the whole organisation approach. Although senior leaders and governors are responsible for setting and delivering the implementation of strategic objectives, a shared responsibility for embedding excellence must be cultivated at all levels in the organisation. Supporting this, establishing a shared understanding of excellence within the institution and having clear lines of accountability for excellence are essential. Measuring performance through benchmarking activities provides an external reference point for the development of excellence, and so should be integrated into

teaching, learning and assessment holistically, rather than being seen as a separate activity or the responsibility of individuals rather than institutions. Creating opportunities to cascade and share best practice could be developed through collaboration between institutions locally or regionally to pool resources and create more opportunities for educators to access materials aimed at developing excellence.

Investing in and developing staff

From our research there is no doubt that educators in the FE and skills sector are committed to achieving the best outcomes for their students. However the competing priorities they encounter do not always make it easy for them to embed excellence. Leaders recognised the importance of well-qualified staff with currency in their subjects, but also found staff recruitment and retention challenging. Providing opportunities to undertake high-quality, purposeful CPD, such as that provided through the Centre of Excellence, networking and sharing best practice with colleagues within the institution, through local or regional partnerships, and even at national and international level, and carving out the time and space to develop innovation in teaching practice may help support leaders recruit and retain the staff necessary to support their ambitions to embed excellence in their institutions.

Employer engagement

The research found that the involvement of employers is critical to embedding excellence, through shaping curriculum development, honing training techniques and technical skills, the design and content of qualifications, developing transferable skills, and ensuring CPD for educators is relevant to their status as dual professionals. Consistency in the practice of employer engagement in quality improvement could be developed further, and new initiatives such as Local Skills Improvement Plans in England could provide a mechanism to articulate and be responsive to local employer need and shape the local curriculum.

Recognition of the importance of transferable skills

There was consensus across all research subjects about the importance of developing transferable employability skills as a feature of excellence. This speaks to the importance of the value of a broad education, with the needs of individuals, communities and employers being addressed through the provision of excellent technical and vocational education and training. Providers in the sector also hold a broader and more nuanced definition of transferable skills, following concerted attempts to engage with employers, than perhaps is recognised through formal regulatory processes.

Areas for development included developing a common understanding of excellence across the FE and skills sector, the enhancement of systematic learning from international examples of best practice

and gearing qualifications toward supporting excellence. It was also clear that opportunities for greater collaboration and the cultivation of partnerships between institutions or within local or regional areas could be developed to foster excellence.

Opportunities for the development of excellent teaching, learning and assessment for sustainable development are not yet systematically considered. There was little reference to this in any of the evidence studied. This represents a gap in the consistent design, interpretation and implementation of excellence initiatives, which should be addressed at the earliest opportunity; for example, WorldSkills UK has already cautioned that young people need to receive appropriate careers advice and guidance about green careers, if the UK is not to miss its net zero targets.[102] Whilst many parts of the FE and skills sector are no doubt part of wider sustainability and climate change initiatives, it is likely that these are moving at different paces, depending on public or private sector engagement. Cohorts of learners need to be made aware that future excellence in teaching, learning and assessment encompasses sustainability in the broadest sense so that, as the future workforce, they can carry this best practice into the workplace.

A focus on the prioritisation of educational quality improvement in the FE and skills sector, will align all parts of the sector behind key messages for learners, employers, parents and other stakeholders, namely, that technical and vocational education pathways provide high-quality routes to careers and employment, relevant to current and future labour market needs.

It is of concern that, despite the best efforts of WorldSkills UK and the project team, most responses to the surveys are still from representatives of further education colleges. This leads to the conclusion that the bulk of the evidence gathered concerns FE classroom teaching at Level 3 (Scottish Level 6) and yet there is excellent technical education at Level 3 (Scottish Level 6) being delivered in independent training providers and at Levels 4 and 5 (Scottish Levels 7 and 8) also in universities. To deliver a system that is fair for all, bringing all partners together around a common understanding of excellence in teaching, learning and assessment would seem vitally important. Otherwise, some sectors of the student population are being disadvantaged and public investment in further education and skills is not being used as equitably as it might be.

It is evident that there is excellent practice within all four nations and across the sector. Implementing the report recommendations in order to embed excellence more consistently will enable even more learners and educators in all parts of the country to benefit from the significant opportunities available through pursuing high-quality technical and apprenticeship routes.

> A focus on the prioritisation of educational quality improvement in the FE and skills sector, will align all parts of the sector behind key messages for learners, employers, parents and other stakeholders

Recommendations

From our research it is clear that excellence in technical and vocational education exists across the four nations, but the application of and access to excellence in teaching, learning and assessment is not always consistent. Therefore specific actions are needed to embed excellence for the benefit of learners, employers and educators. Considering the ingredients for success identified within the report, we have identified a number of recommendations which if implemented, will enable excellence to be embedded more consistently across the sector.

For WorldSkills UK

To continue to champion and facilitate excellence in technical and vocational education and training for all students and roll out the proven benefits of the Centre of Excellence more widely across the sector:

- promote excellent teaching, learning and assessment to education and training providers and other stakeholders through the development of a network dedicated to sharing and collaboration to develop innovation and sustainability in teaching excellence, including internationally

- enhance the role of WorldSkills UK training managers across organisations to raise standards and performance through embedding international best practice within everyday teaching and learning and empowering educators to cascade their knowledge and skills to colleagues

- review levels of provider reach, especially to independent training providers, through offering more flexibility, and developing systematic approaches to partnership or consortia engagement.

To facilitate employer engagement:

- develop a strategy to support the development of curricula and provision appropriate to local contexts, for instance through accountability agreements and LSIPs in England, through fostering regional as well as national links between employers and those organisations participating in WorldSkills UK programmes.

To support the development of excellence in assessment, qualifications and awards:

- continue to pursue constructive dialogue with awarding organisations so they can benefit from WorldSkills UK's knowledge of world-class standards.

To improve consistency in the application of international benchmarking:

- lead the latest research and analysis of global trends in skills development which would benefit from WorldSkills UK's unique insight and continue to build on the existing work of WorldSkills UK in forging international networks and partnerships

- ensure consideration of inclusive practice in development of excellence initiatives, such as the selection of learners for competitions, providing development opportunities for part-time staff who are also industry experts and the selection of staff for Centres of Excellence.

For providers

When adopting a whole organisational approach to quality improvement:

- develop strategic objectives based on a shared understanding of excellence within the institution, cultivating a collective responsibility for excellence among staff at all levels and clear lines of accountability

- make better use of benchmarking activities and the sustainable partnership opportunities that are available, for example, by actively supporting the development of the Centre of Excellence programme

- review how space and time can be created to share and cascade knowledge and champion excellent teaching, learning and assessment. To support educators with agency to develop their pedagogical practice, staff need time to participate in the purposeful CPD which the research has identified as so critical to achieving excellence

- ensure consideration of inclusive practice in development of excellence initiatives, such as the selection of learners for competitions, providing development opportunities for part-time staff who are also industry experts and the selection of staff for Centres of Excellence.

For future initiatives and future research

The research team has identified the following topics as issues worthy of further consideration in helping to embed excellence across the sector:

- it is difficult to derive a single definition of excellence from the evidence gathered. It is recommended that consensus is built around a shared understanding of excellence in technical education, in the interests of coherent policy-making and efficient use of resources as well as effective communication to the many stakeholders keen to optimise the effectiveness of further education and skills

- provide improved mechanisms for policy learning about excellent teaching, learning and assessment through consideration of both a UK-wide approach and the four nations discrete policy contexts

- consider further research into the relationship between the FE and skills workforce, the qualifications and experience expected by employers and the impact on quality improvement, recruitment and retention.

Additionally, our research found a gap in information about how excellence is achieved in Levels 4-5 provision in universities, especially in England. There is little available information about the quality of HTQ programmes offered within universities and it proved difficult to gain input from universities to this research. While some are engaged in the delivery of HTQs and some are very much engaged with skills competitions, the relative size and prominence of this type of provision within a single university may result in insufficient investment in the development of excellent teaching, learning and assessment in parallel with other parts of the sector. There was also a gap in information about excellence in independent teaching providers (ITPs) at Levels 3-5 (and the Scottish equivalents), other than via Ofsted reports in England. Further research in these areas may be of use to support all provider types in developing consistent approaches to excellent teaching, learning and assessment.

Glossary

BTEC	Business and Technology Education Council
CPD	Continuing Professional Development
EIF	Education Inspection Framework (England)
ETI	Education Training Inspectorate (Northern Ireland)
ETF	Education & Training Foundation (England)
EU	European Union
FE	Further Education
GTCS	General Teaching Council Scotland
HE	Higher Education
HNC	Higher National Certificate
HND	Higher National Diploma
HTQ	Higher Technical Qualification
IfATE	Institute for Apprenticeships and Technical Education (England)
ITP	Independent Training Provider
LSIP	Local Skills Improvement Partnership (England)
OfS	Office for Students (England)
Ofsted	Office for Standards in Education, Children's Services and Skills (England)
ONS	Office for National Statistics
QAA	Quality Assurance Agency
QR code	Quick Response code
RQF	Regulated Qualifications Framework (England, Northern Ireland and Wales)
SCQF	Scottish Credit and Qualifications Framework
STEM	Science, technology, engineering and mathematics
SVQ	Scottish Vocational Qualification
TEF	Teaching Excellence Framework
TVET	Technical and Vocational Education and Training
UK	United Kingdom
VET	Vocational Education and Training
WBL	Work-based Learning

Appendix – Methodology

This report is produced on the basis of findings from:

- an analysis of relevant national policies relating to curriculum development and regulation of FE and skills

- international comparison case studies (Spain, Chile, Vietnam, New Zealand and Canada)

- a survey of institutional leaders followed by a focus group. 41 institutional leaders responded to the questionnaire. The vast majority were from colleges and this represents about 18.5% of college leaders. Five responses came from institutions in Northern Ireland, four from Scotland, four from Wales and 32 from England. 68% of the responses came from institutions with between 251 and 1,000 employees and 70% from those with 5,001 to 20,000 learners. Just under 50% were engaged with both WorldSkills UK Competitions and the Centres of Excellence programme, whereas 20% were not involved with either. The focus group comprised seven institutional leaders from colleges across the four nations. This was supplemented by two interviews with leaders from outside the college sector

- a survey of educators within Phases 1 and 2 of the Centres of Excellence programme. This survey attracted 43 respondents, a 32% response rate. The majority of respondents (93%) were based in colleges. There was representation from Northern Ireland, Scotland and Wales among the respondents. About 67% of the respondents worked in organisations employing between 251 and 1,000 employees and about 69% of the organisations worked with between 1,001 to 10,000 learners

- interviews with WorldSkills UK training managers. Semi-structured interviews were conducted with 10 WorldSkills UK training managers. These individuals are industry experts, who may also work in a college, university or training provider and are funded to work with skills coaches and learners to develop practice during skills competitions in the UK as well as to harness global best practice in skills development for the UK

- case studies of schemes outside the Centres of Excellence, drawn from desk-based research and where possible linked to four economic priority areas: digital, green skills, STEM (science, technology, engineering and mathematics) and advanced manufacturing.

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