

# OUTSTANDING TEACHING, LEARNING AND ASSESSMENT TECHNICAL SKILLS NATIONAL PROGRAMME

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# Foreword from Education and Training Foundation

The Education and Training Foundation (ETF) is the governmentbacked, sector-owned national professional development body for the further education (FE) and training sector. Our role is to support the continuing transformation of our technical and vocational education system by ensuring the sector has world-class leaders, teachers and trainers. It is the expectation that this leads to ever-improving learner outcomes, a more highly skilled workforce for employers, and a stronger economy, country and society. We do this by improving, driving and championing the quality of leadership, teaching and training.

Alongside Leadership and Governance and the Maths and English Pipeline, Outstanding Teaching, Learning and Assessment (OTLA) is one of our flagship programmes, and includes training courses, collaborative projects and our regional Professional Exchanges. Our collaborative projects aim to improve teaching, learning and assessment by giving practitioners the time and space to explore solutions to the challenges they face. There is a strong emphasis on collaboration, both within an organisation but also externally with other providers and employers. The key principles of all of our collaborative project activity are:

- Enhancing teaching, learning and assessment towards outstanding.
- Implementing and promoting the use of the Professional Standards.
- Offering peer-led, collaborative development of teaching for leaders and practitioners.
- Creating sector-led solutions to sector defined problems.

· Evidence-based, research informed.

It is our belief that allowing practitioners to engage in action research or joint practice development<sup>1</sup> activity supports a greater likelihood of longer-term change in practice. As solutions and strategies are tested, trialled and evaluated, practice becomes more embedded and honed. This programme is our first to focus on technical teaching, learning and assessment to enable students to be better equipped for the world of work, having been in receipt of high quality and up-to-date technical teaching or training. The programme has been developed in response to the Report of the Independent Panel on Technical Education (the Sainsbury Review) and the accompanying Post-16 Skills <u>Plan</u>. From forming partnerships with employers to developing communities of practice, the programme has offered organisations and practitioners the opportunity to not just develop their own skills and knowledge, but also to share effective practice with others in the sector.

Continuing with the theme of sharing and collaboration, we are excited and pleased to be able to share the learning from all of these projects with the sector.

**Gary Phillips**Director – Professional Development,
Education and Training Foundation

<sup>&</sup>lt;sup>1</sup> Fielding M et al, 'Factors Influencing the Transfer of Good Practice', University of Sussex, 2005 available here: <a href="http://webarchive.nationalarchives.gov.uk/20130401151715/https://www.education.gov.uk/publications/eOrderingDownload/RR615.pdf.pdf">https://www.education.gov.uk/publications/eOrderingDownload/RR615.pdf.pdf</a>

# Foreword from Association of Colleges

The Association of Colleges (AoC) represents colleges in England incorporated under the Further and Higher Education Act 1992. General, sixth form and specialist further education colleges are drivers of social mobility, productivity, economic growth and community development.

Colleges provide high quality technical and professional education, particularly at advanced level, covering a broad range of disciplines, from science, engineering and IT, to construction, hospitality and the creative arts.

As we head towards the Skills Plan era, initiatives such as the Outstanding Teaching, Learning and Assessment (OTLA) programme are as pivotal as they are well timed. This is because the Post-16 Skills Plan is the most important reform for a generation. Much like we have seen in high performing Nordic countries, this is a reform at system level rather than a review of qualifications.

The Skills Plan reform is different because it is not trying to chase parity of esteem by merging with or mimicking academic provision. Like the academic pathway, technical education is being redefined as prestigious and high quality in its own right.

'Prestige' and 'high quality' are of course deeply subjective terms, as is 'outstanding'. It is therefore fantastic to see providers of all type define what outstanding means for them as providers, leaders and practitioners. I believe that, when colleges and other training providers

do this, it can have a significant impact on both accountability measures and inspection outcomes. Most importantly, it can also have a profound impact on learners in terms of experience and outcomes.

It is abundantly clear that, in every project found in this report, collaboration is key. It is through both local and national communities sharing good practice that excellence is accelerated. Only through working evermore closely with both employers and education partners will we be able to deliver on the Skills Plan. It therefore goes without saying that we are delighted to have collaborated with the Education and Training Foundation, providers and many other sector bodies and stakeholders to deliver this successful programme.



**David Corke**Director of Education and Skills Policy,
Association of Colleges

### **Programme**

### **overview**

The Association of Colleges (AoC), in partnership with the Skills and Education Group (formally emfec), was awarded the contract for the Education and Training Foundation's (ETF) Outstanding Teaching, Learning and Assessment (OTLA) Technical Skills National Programme in February 2017.

A total of £1.4 million was made available by ETF for the programme, which post-16 providers were able to bid for. After a fair and transparent invitation to tender and selection process, the funding was awarded to 32 projects across the country. The programme's goal is to enhance the quality of teaching and learning assessment in post-16 education and training.

The aim of the national OTLA programme is to support practitioners to work with employers, as well as each other, to improve and develop the teaching of vocational and technical skills across technical routes. The Report of the Independent Panel on Technical Education (known as the Sainsbury Review) and the Post-16 Skills Plan emphasised the need for a technical teaching workforce that is highly skilled and has a strong understanding of both their technical skillset and teaching techniques. The programme was designed to prepare practitioners and providers for the implementation of the Review and to develop technical skills teaching across the country.

Development projects and wider programme activity supported:

· the improvement of teaching,

- learning and assessment towards consistently outstanding
- the improvement of teaching through collaborative research and development projects, similar in approach to previous OTLA work
- enhanced technical knowledge supported in part through new continuous professional development (CPD) and engagement opportunities developed with employers in relevant technical fields
- deeper and more meaningful employer engagement/partnership in subjects that fall within the new routes in the Sainsbury Review
- linking practitioners and delivery from across the sector to promote professionalism and pedagogic expertise.

#### **Steering Group**

The project Steering Group was an essential part of the programme and comprised representatives from:

- AoC
- Association of Employment and Learning Providers (AELP)
- FTF
- HOLEX
- Land Based Colleges Aspiring to Excellence (Landex)
- Natspec
- Semta
- UCL Institute of Education (IoE).

The Steering Group helped shape and oversee the management of the programme, ensuring fair due process and full sector representation. The Steering Group had the important role of selecting the projects from the applications.

#### Peer Advisors and Excellence Advisors

Each development project was supported by a Peer Advisor who acted as a critical friend to the project, providing guidance, support, and stretch and challenge. There were 11 Peer Advisors across the 32 projects. All Peer Advisors had technical or vocational expertise and experience within one of the 15 routes in the Post-16 Skills Plan. Two Excellence Advisors supported Peer Advisors to ensure consistency and to draw together good practice and emerging themes.

The Peer Advisors were supported by two Excellence Advisors with experience of similar roles on previous AoC led OTLA projects. The Excellence Advisors oversaw the Peer Advisors, which provided consistency and helped draw best practice together across the development projects.

These layers of support gave the development projects challenge and supported the quality assurance of the programme.

#### **Technical routes covered**

Of the 15 technical routes, 11 were covered through the 21 development projects:

- Agriculture, Environmental and Animal Care.
- Business and Administrative.
- · Catering and Hospitality.
- Construction.
- Creative and Design.

- · Digital.
- Engineering and Manufacturing.
- Hair and Beauty.
- Health and Science.
- Social Care.
- Transport and Logistics.

#### **Timeframes**

The programme began in February 2017 and all activity was completed in March 2019. A total of 32 projects were funded across three phases. Phase 1 projects ran from March to November 2017 led by the following providers:

- · City College Plymouth.
- College of Haringey, Enfield and North East London (CONEL).
- · Derby College.
- · Harlow College.
- · John Ruskin College.
- · Lakes College.
- · Lincoln College.
- · Liverpool Adult Learning Service.
- London College of Apprenticeship Training.
- Rathbone Training.
- Reaseheath College.
- Solihull College and University Centre.
- · South Devon College.
- South West Association of Training Providers.
- Weston College.

Funding for Phase 1 projects ranged between £34,000 and £77,000.

Phase 2 projects ran from August 2017 to February 2018, led by the following providers:

- · Abingdon and Witney College.
- · Blackburn College.
- Grimsby Institute Group.
- · London South East Colleges.
- Nelson and Colne College.
- West Thames College.

Funding for Phase 2 projects ranged between £26,600 and £36,600. Phase 3 projects ran from March 2018 to March 2019, led by the following

#### providers:

- Activate Learning
- City College Plymouth
- College of Haringey, Enfield and North East London
- · Derby College
- · Gateshead College
- · Harlow College
- Lakes College
- · London South East Colleges
- Myerscough College
- Reaseheath College
- South Devon College

Funding for Phase 3 projects ranged between £20,000 to £30,000.

#### **Professional Standards**

The development and promotion of professionalism was integral to the programme. The <u>ETF Professional</u> Standards for Teachers and Trainers provide clear expectations of effective practice and a national reference point for organisations to use to support the development of their staff.

The programme enabled practitioners to reflect on ways to deepen their knowledge and understanding, particularly in relation to their technical expertise and professional skills. Practitioners were also encouraged to reinforce the values that underpin both their practice and the overall programme, such as the promotion of social and cultural diversity, inclusion and equality of opportunity. Some development projects decided to focus specifically on certain Standards.

The Professional Standards were used to reinforce outstanding equality and diverse characteristics.

# Phase 3 projects ran from March 2018 to March 2019, led by the following providers:

- Activate Learning
- · City College Plymouth
- College of Haringey, Enfield and North East London
- · Derby College
- Gateshead College
- Harlow College
- · Lakes College
- London South East Colleges
- Myerscough College
- Reaseheath College
- South Devon College

Funding for Phase 3 projects ranged between £20,000 to £30,000.

### Other programme activity and resources

The aim of the programme was to share key outcomes and resources with the sector. This was achieved through:

- Breakout sessions at AoC Annual Conference 2017 and 2018 to showcase projects and the overall themes and aims of the programme.
- CPD sessions led by the development projects on specific topics and methods from their development projects.
- A national conference held in March 2018 that shared the lessons, themes and resources from the programme.
- A variety of local events run by AoC regions, members of the Steering Group and the development projects.

The programme produced a wealth and variety of outputs and resources, including full case studies that are available to the sector both on AoC's Outstanding Teaching, Learning and Assessment project page and the ETF's Excellence Gateway.

### Phase 1 development project case studies

# City College Plymouth

#### **Project overview**

In partnership with an employer, City College Plymouth developed a blended learning model to deliver a bespoke Level 4 HNC General Engineering training programme. Combining online support, self-study and one-to-one and group classroom tutorials, this two-year programme provides a creative solution to the challenges of employer-based learning.

#### **Project aims**

- Develop a blended learning model that enables the College to respond flexibly and creatively to employer requests for workplace-based training.
- Increase understanding of blended learning and online technologies, and how they can improve the teaching, learning and assessment (TLA) of technical training.
- Use the blended learning model to deliver the new T Level qualifications and Apprenticeship Standards.
- Develop a transferable model that can be extended to other routes, such as Digital.

#### What the provider did

City College Plymouth worked with INERYS Ltd, a multi-national minerals company. A bespoke Level 4 HNC General Engineering training programme was created to meet the needs of middle management and engineering staff who were unable to attend day release training.

The 'blended' delivery style of the twoyear qualification features scheduled onsite classroom tutorials, online interactive support and self-study. This remote teaching strategy enables students to study alongside workplace learning. Students gain a broad understanding of the industry as they develop skills in maths, engineering management, science, health and safety practice, and project design.

The blended package of learning includes the use of Google Classroom, Skype, a VLE and email support in both group and one-to-one virtual tutorials. Periodic face-to-face sessions and workshops complement the approach.

#### "

When we initially started conversations regarding delivery of the HNC on our own premises, I found City College Plymouth open to the suggestion and very willing to work with us to achieve a 'winwin' situation, even if this meant significant additional workload for them.

TRACY GAY, LEARNING AND DEVELOPMENT CO-ORDINATOR AND HR ADVISOR, IMERYS LTD

#### **Project outcomes**

- The pilot group have successfully completed the expected course modules (this same group of learners had previously failed to achieve this qualification through distance learning).
- The use and understanding of blended learning within the College and partner organisations has increased significantly, with one partner changing their course provision to a blended learning approach.
- IMERYS has requested further training for another group of employees. Other local employers have also approached City College Plymouth to request similar training.
- Tutors have improved their teaching practice, which has enhanced technical TLA and the student experience.

## Moving towards outstanding teaching, learning and assessment

- The inclusion of thrice-weekly faceto-face contact sessions with the tutor ensured that any difficulties or gaps were quickly addressed, enabling the development of higher level skills.
- The blended learning model will be adopted across other areas of the Skills Plan, including: the new Apprenticeship Standards (where

blended approaches will support the '20% off the job' training); T Level qualifications (to support work experience mentoring and the delivery of some modules); and the identification of local and national skills gaps (by increasing skilled middle managers, senior technicians and engineers).

#### Tips for success

- Ensure all parties are committed to the project. Efficient communication, staff availability, and attendance at planning and review meetings are vital.
- Allocate an appropriate amount of time for project management. This will ensure KPIs are monitored, appropriate data is collected, staff can attend meetings, and the project is promoted.
- Develop solutions to overcome IT issues. The use of a dongle, for example, enabled employers to remotely connect to Google Classroom to access lessons and resources.
- Employer partnerships:
  - Establish early contact with the employer to discuss and agree the delivery model, and manage expectations.
  - Don't assume traditional planning and delivery can be easily implemented on employer premises.
  - Be flexible with the scheme of learning and take into consideration changing circumstances.
- Consider the staffing requirements of an offsite programme at the planning and timetabling stage.

#### Takeaway message

Blended models of delivery have the potential to enable employers to develop higher level technical skills within the company without affecting frontline production. As a provider in this scenario, it is important to be flexible and adaptable.

#### **TECHNICAL SKILLS ROUTE**

## **Engineering and Manufacturing**

#### **PROVIDERS**

4

#### PRACTITIONERS AND MANAGERS

13 direct

and

#### 76 indirect

**LEARNERS** 

**180** 

**EMPLOYER** 

1

#### **PARTNERS**

Achievement Training, Deep Blue Sound Training, IMERYS Ltd, Plymouth Argyle Football Club and South Devon College

# College of Haringey, Enfield and North East London

#### **Project overview**

The College of Haringey, Enfield and North East London (CONEL) is working to create an innovative, cost effective and sustainable model for integrating industry experts, referred to as Master Technicians (MTs), in classroom delivery. Through a Further Education (FE) STEM Teaching Hub, the College will support teachers and industry experts to collaborate, share knowledge, create resources and engage with industrial and pedagogic training.

#### **Project aims**

- Encourage collaboration between education providers and industry experts to develop outstanding teaching, learning and assessment on technical route training.
- Support industry experts to be more confident in classroom delivery situations.
- Deliver pedagogic training and promote joint working between academic staff and industry experts.
- Create an online FE STEM Teaching Hub centre of excellence for collaboration between industry experts and academic staff.

#### What the provider did

College staff were asked to identify possible skills gaps in the digital curriculum before contacting partner employers to nominate MTs. The College ran a pedagogic training day for the MTs, focused on the Digital technical route. Curriculum staff and MTs worked on knowledge gaps, and

MTs planned sessions and resources alongside staff, who provided feedback.

The MTs then delivered a first classroom session to students, with a teacher present.

Project partners and participants were asked to complete a Survey Monkey questionnaire before and after the session to capture feedback. College staff then conducted further semistructured audio and video interviews with teachers, students and MTs. A FE STEM Teaching Hub (Moodle/VLE) was also established. It is home to the MT training module and resources, and is a repository that facilitates collaboration and information sharing.

#### **Project outcomes**

- 87% of students said that the ongoing use of industry experts would teach them new skills; 68% said that industry experts would inspire them.
- Employer feedback on the pedagogic training day was positive, with results demonstrating a 100% increase in confidence.
- Following the MT sessions:
  - 74% of students said that they had learnt a new skill; 97% were interested in further MT sessions.
  - 89% of college staff felt that the MT inspired, motivated and raised student aspirations.
  - 100% of MTs said that they enjoyed teaching and reflected on the strengths and weaknesses of adapting their

delivery style or resources for future sessions.

## Moving towards outstanding teaching, learning and assessment

- 141 students (86.5%) said that they were more aware of current industry practices following their first MT session.
- Teachers gained knowledge and skills from the MT sessions, which has facilitated the creation of new or updated resources.
- The project has established a framework for providers who want to use MTs in the classroom. This is a sustainable way to meet the needs of employers, learners and teachers, whilst responding to the requirements of the technical pathways via the Skills Plan.
- Increased engagement between students and industry will lay the foundations for work experience placements, which are a key requirement of T Levels.

#### **Tips for success**

- The MT model has to be costneutral, and the cost of training MTs needs to be taken into account. Each MT was paid £300 to attend the pedagogic training day and thereafter £500 per day (amounts should be adjusted based on location and sector).
- The MT training module can be completed online or offline, or independently in preparation for a session(s). However, faceto-face interactive training is recommended.

#### 66

The OTLA sessions had a great impact on our provision, giving learners a valuable insight into current working practices in music production. Learners were introduced to state of the art technology and tools that were of great value to their vocational development.

#### PARTNER FEEDBACK

"

#### Takeaway message

Upskilling teachers through MT collaboration enabled learners to gain industry knowledge and skills, improved their vocational skills development, and provided opportunities to engage with employers. The relationship wasn't all one-way – transferable pedagogic support was given to the MTs so they could plan and deliver engaging sessions, and apply these skills to their professional roles.

#### **TECHNICAL SKILLS ROUTE**

#### DIGITAL

#### **PROVIDERS**

6

#### PRACTITIONERS AND MANAGERS

32 direct

#### 91 indirect

#### **LEARNERS**

342

#### **EMPLOYERS**

10

#### **PARTNERS**

British Academy of Jewellery,
Capital City College Group,
Charanga, Haringey Local
Authority, Harlow College,
Imperial College London,
Intertrain (UK) Ltd, National
College for Digital Skills (ADA),
Shadow Robot Company, Sidereal
Games, Soundskool

# Derby College

#### **Project overview**

Derby College established a problem-based learning (PBL) curriculum to support students to develop the skills required to become expert engineers. The approach evaluates current practice against the ETF's Professional Standards and, using a Joint Practice Development model, enables participants to form partnerships, undertake CPD and deliver scenarios that develop learners' skills for work.

#### **Project aims**

- Use PBL to create a future workforce with high level skills and knowledge that can drive and respond to rapidly changing industry needs.
- Replace traditional assessment methods, which limit opportunities for trial, experiment and discovery.
- In partnership with employers, investigate and trial a different approach to the longitudinal development of engineers, and adapt this approach to meet T Level requirements.

#### What the provider did

The College ran a series of workshops with teaching staff, students and colleagues from other institutions to explore the features of problem-based learning, aligned with the Professional Standards. The workshops enabled teachers to develop action plans, identify ways to engage employers, and reflect on what effective facilitation of PBL looks like. The five CPD workshop days took

place between May and November 2017. The first two days focused on PBL and how the Standards could be used to develop practitioners' skills. The third workshop included speakers who have used PBL in higher education settings, and gave participants the chance to plan employer visits and gain an understanding of T Levels.

Seven PBL scenarios took place in four different colleges, supported by nine practitioners and one student facilitator, reaching over 130 students. After each scenario, learners were asked to complete a questionnaire, and focus groups were held to gather feedback.

The final two sessions reflected on student feedback, practitioners' PBL scenario, barriers faced, and tentative conclusions on how PBL could be used to improved practice.

#### **Project outcomes**

- The feedback shows that a significant majority of students enjoyed PBL and would like to do more. Comments included:
  - "I enjoyed figuring out a way to overcome the problem."
  - "During problem-based learning I have been more confident by working in a group."
- Teachers were impressed at the energy, enthusiasm and quality of results achieved once control and creative freedom was handed to the students. One teacher said:
  - "The Level 2 group exceed both our expectations of coming up with some very strong ideas

of the 'how, what, why and when' and the Level 1 students, by session two, 'took more ownership'; group work and responsibilities were much improved."

Moving towards outstanding teaching, learning and assessment

The project features a number of factors that represent outstanding teaching, learning and assessment:

- A rethinking of technical education as T Levels emerge.
- Trialling a new pedagogy, experimenting and taking risks.
- Reflecting and systematically analysing findings.
- Working collaboratively to develop professional skills.
- Contributing to the development of an evidence-based pedagogy.
- Embracing the move towards a research-informed profession.

The College has also organised CPD events with three partners to share the potential impact of a PBL, and further events, outside of engineering and construction, are planned.

#### **Tips for success**

- Ensure that problems represent real-world experiences and weave theory and practice; employers can play a significant role in this process.
- Provide dedicated training and CPD to successfully facilitate PBL.
- Students' team building, collaborative and independent

- study skills need to be developed before PBL takes place.
- Begin with one unit or part of a unit and then funnel PBL into an entire course.
- Assess process-led outcomes (such as contributions to group tasks, leadership skills and working to deadlines) as well as the 'solution'. Make sure employers are involved in assessment.
- Consider developing a programme specification for each T Level to ensure that activity focuses on behaviours, skills and knowledge for technical professionals, and goes beyond the qualification.

#### 66

This new concept will allow us to redevelop our curriculum to support the progress of our students. Having the opportunity to collaborate with various providers and employers enabled us to share ideas and work together to formulate problems for our students.

**TEACHER** 

"

#### Takeaway message

Great teaching, learning and assessment involves trust.

#### **TECHNICAL SKILLS ROUTE**

### Engineering and Manufacturing

#### **PROVIDERS**

5

#### PRACTITIONERS AND MANAGERS

31 direct

### 70 indirect

#### **LEARNERS**

144

#### **EMPLOYERS**

4

#### **PARTNERS**

Leicester College, New College Stamford, Rail Forum East Midlands, The Nottingham College, and The Uniper Training Academy

# Harlow College

#### **Project overview**

Harlow College created a CPD programme for managers – and those aspiring to manage – in the construction, engineering and manufacturing sectors. The programme develops managers' technical and theoretical skills, and challenges them to create innovative classroom practice and interactive pedagogical approaches to meet the introduction of T Levels and apprenticeship standards.

#### **Project aims**

- Deliver a bespoke training programme that provides costeffective support for practitioners.
- Deliver CPD that results in questioning, experimentation and reflection on skills, knowledge and professional practice.
- Increase the number of sector employers involved with their local college.
- Establish a working group of peers who are able to share information, ideas and practice.

#### What the provider did

Twenty-one manager practitioners from 10 partner colleges took part in the CPD programme. Participants attended an induction where they were given an overview and resources, and trained to use two digital project resources: Slack (for communication) and Padlet (to record activity).

The CPD programme consisted of five interactive workshops:

- Understanding technical and theoretical skills, with a focus on interactive pedagogical approaches.
- 2. The use of new technologies in the construction, engineering and manufacturing sectors.
- 3. Building capacity and expertise, and the innovative and continuous improvement of provider services to employers.
- 4. New approaches to curriculum design, collaboration, innovation and improvement.
- 5. Problem-based learning.

Employers and senior managers from participating colleges delivered the workshops. A final consolidation event took place following the fifth session.

The project team also provided tailored CPD to manager practitioners, who could choose to take a work shadowing placement in the summer break to develop technical expertise and teaching.

#### "

The work shadowing...process provided me with an opportunity to observe up-to-date work practices. I have reported my findings and we are looking at how the syllabus is currently being delivered to learners, so that we are able to reflect, plan and develop current working practices.

KEVIN DOO, MANAGER PRACTITIONER, COLCHESTER INSTITUTE

#### **Project outcomes**

- Manager practitioners have gained skills in subject-related technologies through work shadowing, and can now teach a broader range of practical skills.
- Practitioners have visited each other and shared specialist equipment and resources.
- Students have learnt practical skills that may not have been deliverable before because of a lack of staff knowledge. They also have access to a wider employer base and more advanced equipment.
- he project meets the aspirations of the Post-16 Skills Plan in three ways:
  - 1. It focuses on three industry sectors of key significance to the region's economy.
  - 2. It increases employer involvement in the work of college departments.
  - 3. It prepares managers and teaching staff for the introduction of T Levels by asking them to consider future changes to the curriculum.

## Moving towards outstanding teaching, learning and assessment

 Harlow College has supported transition to employment through a Level 2 work readiness programme.
 For example, students are now taught to use a runway light unit and baggage carousel in their first term so that they are ready for airport-based work experience in term two.

- Herts Regional College has created problem-based learning activities that have been adopted throughout the construction department.
- PROCAT increased its use of various technologies, such as Neopod and Kahoot, during 2017/18. Neopod, for example, enables students to access learning materials at any time of the day at the touch of a button.
- SEEVIC College has arranged conferences with a German manufacturing company (VS) to allow students to access the global engineering environment. A calendar of events, including conferences, exhibitions, and employer fairs, will broaden the experiences of engineering staff.

#### **Tips for success**

- Provide opportunities for staff to continuously upskill. Ensure that the CPD experience is enjoyable.
- Establish professional relationships between employers and teaching staff that result in real examples of employer engagement.
- Professional development is more effective when delivered via peer groups that generate enthusiasm and a sense of achievement

#### Takeaway message

Starting points for individual staff were very different, particularly the extent to which they worked with employers. However, all the participants found that, once they got employers involved and created real life projects, the students gained more enjoyment from their studies and achieved at a higher standard.

#### **TECHNICAL SKILLS ROUTES**

### Construction, and Engineering and Manufacturing

#### **PROVIDERS**

9

#### PRACTITIONERS AND MANAGERS

17 direct

#### 113 indirect

**LEARNERS** 

561

**EMPLOYERS** 

24

#### **PARTNERS**

BTL Precision, Colchester Institute, CONEL, DMG Mori, Epping Forest College, Herts Regional College, PROCAT, SEEVIC College, South Essex College and Willmott Dixon.

## John Ruskin College

#### **Project overview**

John Ruskin College collaborated with seven colleges to improve the experience of students on vocational Health and Science programmes. Each participating provider sought to develop a unique initiative that met the needs of their students, in partnership with one or more employer, taking into consideration the potential impact of T Levels on the technical education landscape.

#### **Project aims**

- Develop work placements that offer a meaningful insight into working life and facilitate the development of relevant skills and personal qualities.
- Provide comprehensive and upto-date careers education, advice and guidance to reinforce students' belief that vocational programmes provide access to a range of career opportunities.
- Plan high quality learning opportunities that combine theory and practice, classroom and workplace.

#### What the provider did

At the outset, it was agreed that each college should develop an initiative in partnership with at least one employer. A Joint Practice Development model was adopted, and each of the eight partner colleges proposed a project.

A focus was placed on developing the technical teaching skills of participants, and preparing practitioners to implement the Sainsbury review of technical education.

Partner colleges developed the following projects:

- Leyton Sixth Form College created a Care Academy to support learners from Health and Science disciplines into nursing.
- NewVIc developed a multidisciplinary initiative to identify the links between science and business via the manufacture, marketing and selling of soap.
- Havering worked with employers to offer work placements to teachers who wanted to retain a 'hands-on' understanding.
- BSix organised Careers Beyond Medicine, a careers event where employers explained a variety of science-based job roles.
- Saint Francis Xavier obtained student views on the 'ten most important features' of work placements.
- John Ruskin College devised teaching materials that considered the ethical issues frequently encountered by health professionals.
- Shooters Hill worked with Thames Tiddlers to create a workbook containing information and activities to help students evaluate performance and learning.
- Epping Forest arranged job shadowing placements that gave students the opportunity to learn from health professionals.

#### "

By the end of the project the fruits of the collaboration and dialogue were being shared by other subject teams and senior managers to a degree beyond that which could have been envisaged at the start."

#### KEVIN WATSON, PROJECT MANAGER

"

#### **Project outcomes**

- Teachers have been professionally challenged to embrace the OTLA project and practice. Several partner leads have reported interest in follow-up activity.
- Work placements are better organised, drawing on employer input and featuring detailed workbooks, and colleges are actively pursuing job shadowing opportunities.
- Staff work placements have helped teachers to re-familiarise themselves with a care-based environment.
- The project has built strong employer links and effective partnerships.

## Moving towards outstanding teaching, learning and assessment

 The views of employers were sought on the quality of materials, information given about placement students, and the skills needed by students. Employers have also been brought into colleges to give talks, to share experiences, and to assess the credibility of teaching resources. In at least two instances, constructively critical review systems have been put in place to evaluate the success of work placements.

 Examining the nature of vocational and technical education has led to improvements in teaching, learning and assessment, and how best to bring the classroom into the workplace, and the workplace into the classroom.

#### **Tips for success**

- The most successful ventures are carefully planned, ordered and prepared, and the importance of achieving the shared understanding and commitment of partners cannot be overstated.
- To maximise impact, it is crucial to secure support from senior leadership. This increases the likelihood of local developments and recommendations reaching a wider college audience.
- It is important to maintain momentum in a project that includes eight separate institutions, and which spans terms and other priorities.

#### Takeaway message

The project brought into focus far wider issues as to the nature of 'vocationalism' and 'vocational pedagogy', with particular reference to sixth form colleges and the advent of T Levels.

Depending how such issues are responded to, the project will potentially have an impact far greater than initially envisaged.

## TECHNICAL SKILLS ROUTES Health and Science

#### **PROVIDERS**

10

#### PRACTITIONERS AND MANAGERS

51 direct

#### 66 indirect

**LEARNERS** 

**275** 

**EMPLOYERS** 

36

#### **PARTNERS**

Albany House, Avicenna, Balham **Leisure Centre, Balham Park** Surgery, BEC Family Practice, **Bed Head Football Club, Boots, BSix Sixth Form College, Chrysalis Day Nursery and Pre-**School, Clapham Leisure Centre, **Croydon University Hospital, Day Lewis Pharmacy, Emerson Court Nursing Home, Epping Forest College, Havering Sixth** Form College, Hopwa House Day **Centre, Imperial College Hospital,** J's Dance Factory, John Ruskin Sixth Form College, Let Me Play, **Leyton Sixth Form College, Little Treasures Pre-School, London Metropolitan University, Marriage** Millers, Money A&E, NewVIc **Sixth Form College, NHS Waltham** Forest. Plaistow Youth Market. **Princess Alexander Hospital,** 

Randall Close Resource Centre,
Ravensbourne School, Reckett
Beckinser, Riverhouse Medical
Practice, Shooters Hill Sixth
Form College, Springfield Leisure
Centre, St Francis Xavier Sixth
Form College, Thames Tiddlers,
Thames Water, Twin Globes Care
Home and University of East
London.

### Lakes College

#### **Project overview**

Lakes College developed a project-based approach to teaching, learning and assessment (TLA) in partnership with the recently established National College for Nuclear (NCfN). The project adopts the principle of experiential learning, which underpins all pedagogy at NCfN, enhancing the skills development of nuclear technicians by placing learning in a practical, 'hands-on' context.

#### **Project aims**

- Increase the practical elements of training and learning programmes through a project-based, problem solving approach.
- Minimise aspects of theoretical learning that may be abstract or irrelevant to practical application.
- Develop nuclear technicians' skills in STEM aspects at Levels 3, 4 and 5.
- Create a TLA model that can be transferred across different industry settings and applications.
- Give TLA a practical focus to encourage people who may be keen to retrain or transfer into nuclear from other sectors and settings.

#### What the provider did

In collaboration with Bridgwater and Taunton College, Lakes College worked with the University of Cumbria and several sector employers to create a model for developing specific technical skills for nuclear job roles.

The model is supported by examples of practical application, referred to as

'objects of learning'. The project has three interconnected strands:

- 1. Focused active research to provide an overview of current approaches to experiential learning in technical education and training.
- 2. The development of a transferable model that features a practical process for incorporating experiential learning, in order to support technical skills training, particularly in safety critical environments,
- Objects of learning based on the NCfN curriculum, which are deployed using the methodology described in strand two.

The model is designed to be universal and transferrable to technical settings other than nuclear.

#### **Project outcomes**

- The combined themes of STEM, technical skills, and practical-based approaches to learning generated interest from across the sector, which has led to the College sharing information at events, delivering CPD sessions, and taking part in wider networks.
- The pedagogy developed has been adopted by the NCfN, and will be used by NCfN providers.
- Early cohorts of NCfN students took part in project development and have directly contributed to project activities. These activities had a positive impact on students, and further longitudinal studies are planned to evaluate post-project impact.

 Employers fully engaged with project teams and contributed to the NCfN TLA model. This has added credibility to the activities, and enabled employers and supply chains to directly input into objects of learning, courses, and the 'hands-on' methodology.

## Moving towards outstanding teaching, learning and assessment

- The model enables teachers and deliverers to design aspects of learning by approaching training from a practical, problem solving perspective. This creates comprehensive learning that is relevant to real world situations, and reduces the role of discrete theory input. In turn, it provides a highly skilled workforce for employers.
- Lakes College and Bridgwater and Taunton College have recruited dedicated NCfN teaching teams in order to develop and deliver NCfN qualifications and programmes of learning.

#### **Tips for success**

- A project of this type and complexity requires a significant amount of time and capacity – potentially more than envisaged at the outset.
- Implement the project in a setting where employer engagement is already established, in this case the NCfN, as this provides extra time, capacity and resource.
- Take care in the planning phase to

- ensure that the approach used is suitable for employer engagement and reflects industry interest.
- Don't allow geography to restrict partner working. Formalising plans to communicate electronically and via online document sharing is recommended.

#### **Takeaway message**

Funding for this project has directly enabled partners to develop an interesting and valuable approach to training, which has the potential to directly raise standards of TLA. This could not have been achieved to the extent it has without funding and support.

#### **TECHNICAL SKILLS ROUTE**

### Engineering and Manufacturing

**PROVIDERS** 

11

PRACTITIONERS AND MANAGERS

42 direct

195 indirect

**LEARNERS** 

49

**EMPLOYERS** 

7

#### **PARTNERS**

Bridgwater and Taunton
College, EDF Energy, Sellafield
Ltd, University of Bristol and
University of Cumbria.

## Lincoln College

#### **Project overview**

Lincoln College worked with employers and training providers to co-create maths-focused curriculum materials for learners on four technical skills routes: Construction, Creative and Design, Engineering and Manufacturing, and Hair and Beauty. A range of course-specific resources was developed, including videos, case studies and interactive learning materials, to support Level 2 and 3 learners to develop maths skills in a practical context.

#### **Project aims**

- Create vocationally relevant materials that increase learner motivation and engagement with maths.
- Develop specific learning resources that improve practical maths skills in each of four technical routes.
- Create communities of practitioners (vocational experts, maths teachers and employers) who work collaboratively to produce meaningful and effective learning.

#### What the provider did

Providers paired up to form four sub-groups. Working with at least one employer, the groups identified mathsrelated skills gaps and solutions relevant to their technical route.

Each of the sub-groups mapped information gathered from employer consultations against the GCSE and Functional Skills specifications. Potential outputs were then identified

following further consultation with maths specialists and teachers.

Three full project meetings brought all parties together, which provided opportunities for collaboration and the sharing of ideas, findings and issues. The key focus of these meetings was the development of outstanding teaching, learning and assessment.

Students were also consulted, and were directly involved in the development of specific Hair and Beauty and Creative and Design resources. All of the resources were piloted with small groups of learners, and the feedback used to test and improve materials.

Resources were co-created across all four vocational or technical routes. In Creative and Design, for example, maths was contextualised through digital and physical toolkits for teachers. In Engineering and Manufacturing, online content, augmented reality and interactive video scenarios, were used by practitioners.

#### 66

There are so many maths elements that are common across all of the vocational routes...we needed to be more joined up.

ALISTAIR SMITH, CREATIVE AND DESIGN PARTICIPANT

"

#### "

These activities made me think about what maths skills are needed for real life work.

ENGINEERING AND MANUFACTURING LEARNER

"

#### **Project outcomes**

- Learners across all four technical routes are developing maths skills relevant to their career aspirations.
   Feedback suggests that they are enjoying this type of learning, and can see the value of engaging with maths.
- Anecdotal information from practitioners suggests that, in areas where outputs are being used, attendance and comprehension is improving.
- Practitioners report an improvement in professional values, knowledge and skills as a result of the project.
- Positive and collaborative relationships have been built with colleagues and learners.
- Appropriate and fair methods of assessment provide valuable and timely feedback that supports learners' progression and achievement.

## Moving towards outstanding teaching, learning and assessment

· Direct links to the vocational

- application of these skills meets the needs of employers across all four technical routes.
- By engaging with employers, the College has generated a greater understanding of the demands of technical routes, as well as employers' perceptions of learners' maths skills. This information allowed staff to identify what is missing in each area so that outputs and resources 'bridge' any gap.

#### **Tips for success**

- It was important to identify the common mathematical themes that employers indicated were lacking in newly qualified learners. Themes identified included an ability to do mental arithmetic, calculus, and the application of hours, minutes and time.
- Communities of practice have been developed that continue to work together to share ideas and develop further materials – both in the four target routes and across the other 11 pathways. It is hoped that future projects will contextualise the development of English skills in a similar way.

#### Takeaway message

This project illustrates that the development of skills and motivation to engage in maths is significantly improved when it is explicitly linked to vocational tasks and activities. It also shows the immense value in specialist maths teachers and vocational subject teachers working together to plan learning.

#### **TECHNICAL SKILLS ROUTES**

# Construction, Creative and Design, Engineering and Manufacturing, and Hair and Beauty

#### **PROVIDERS**

5

#### PRACTITIONERS AND MANAGERS

37 direct

#### 22 indirect

#### **LEARNERS**

263

#### **EMPLOYERS**

6

#### **PARTNERS**

Bedford College, Green Vision, Monarch, NMPi, New College Nottingham and Central College Nottingham, Peterborough Regional College, RNN Group, StreamAmp, The Retreat Salon, Vision West Notts College, and &Create.

# **Liverpool Adult Learning Service**

#### **Project overview**

Liverpool Adult Learning Service (LALS) created a project to develop tutors' technical skills within the context of a changing workforce that requires digital employability skills. Through direct employer involvement, LALS and partners delivered CPD and developed resources to support the delivery of teaching, learning and assessment (TLA) that better responds to student and employer needs.

#### **Project aims**

- Support providers to meet the challenges posed by the changing nature of TLA within adult and community learning.
- Support practitioners to gain enhanced technical knowledge through the development of digital employability skills and teaching practice.
- Provide opportunities for adult learners to develop core digital skills that enhance career prospects.
- Improve TLA from good to outstanding.

#### What the provider did

LALS held discussions with a range of local partners, including Liverpool Vision (the city's economic development company), Commutual (a large housing association), Liverpool Social Care Partnership, and the Women's Organisation. These initial meetings helped identify employer need.

Through a range of research activities, five toolkits were created:

- 1. Independent learning toolkit.
- 2. Building Blocks in Social Care booklet.
- 3. Top, Middle and Bottom and Lucky Squares PowerPoint quiz.
- 4. Wellbeing toolkit.
- 5. TLA toolkit, including Edmodo, Kahoots, Quizlets and QR codes.

The toolkits use current technology to support learning around managing information, communication, transacting and problem solving. These resources were made available for use across LALS, by partner practitioners and the wider sector.

Five professional development workshops took place to further support the development of practitioners' digital skills. Planning documents were created for six subject areas, each with embedded technical skills outcomes.

Practitioners have been involved in workshops, the development and evaluation of resources, professional exchanges using Edmodo, and the completion of reflective progress logs.

A basic digital skills framework, programme of taster courses linked to technical routes, such as web design and programming, and employer, student and practitioner case studies were also made available to partners.

#### **Project outcomes**

 LALS has developed new ways of working with local employers

- in Liverpool, which ensure they are more involved in TLA. This has provided opportunities for professional discussions and collaborative work to develop resources.
- A post-digital skills survey showed a significant increase in the number of practitioners who rate their digital skills as 'good' (from 21% to 69%). The number of practitioners using digital skills in the delivery of TLA also rose (from 32% to 69%). There has been a significant increase in the use of Kahoots (35% to 76%), Quizlets (18% to 62%) and iPads/tablets (41% to 69%).
- On accredited courses in 2016/17, learners demonstrated the following outcomes:
  - 86% achieved improved English skills.
  - 82% achieved improved maths skills.
  - 85% achieved improved employability skills.

## Moving towards outstanding teaching, learning and assessment

- The project provided an opportunity to define outstanding digital and technical practice. An additional project output will be the production of a set of standards to support outstanding TLA. This will be the first task for the Practitioner Digital Champions. These standards will be shared with partners and the wider sector.
- 'Improved digital skills' are now included in a student's personal learning plan. This enables learners

to evaluate their digital skills at the start of their learning programme and set SMART targets to improve these.

#### 66

The practitioner from St Helens shared new ideas with others in his organisation and has gained confidence in his own ability to support other staff members to improve their digital skills.

#### PRACTITIONER FEEDBACK

"

#### **Tips for success**

- Provide opportunities for employer voice within TLA and programme development. This enables adult and community learning partners to work together to gain a clearer understanding of what constitutes 'outstanding' within a digital context.
- Baseline research, which clearly identified the need for support to gain enhanced digital/technical knowledge and skills, was used as supporting evidence and rationale for the project.

#### Takeaway message

The nature of the project and its content has helped to change the conversations and delivery of TLA activities, enabling us to meet a changing landscape of skills. We've witnessed an increase in staff confidence – from fear to faith – and seen a definite shift from 'technophobes' to 'technofans'!

#### **Technical skills route**

#### **Digital**

#### **PROVIDERS**

7

#### PRACTITIONERS AND MANAGERS

## 39 direct and indirect

#### **EMPLOYERS**

2

#### **PARTNERS**

Halton Adult Learning Service,
Knowsley Adult Learning Service,
Manchester Adult Education
Service, Oldham Adult Learning
Service, Sefton Adult Learning
Service, St Helens Adult Learning
Service and Wirral Lifelong
Learning.

# **London College of Apprenticeship Training**

#### **Project overview**

London College of Apprenticeship
Training (LCOAT) established a
Technical Skills Development project
to enhance technical skills teaching
and learning on Construction
and Business Administration
apprenticeships. In collaboration with
employers, LCOAT developed new
curriculum models, implemented a
system to track skill development,
and supported the flexible delivery of
English and maths functional skills.

#### **Project aims**

- Create employer influenced technical training models that deliver improved retention, satisfaction and student outcomes.
- Effectively measure learners' skill development over the course of an apprenticeship programme.
- Identify whether English and maths can be delivered, and achieve better results, through a flexible online programme that meets employer need.

#### What the provider did

The College ran focus groups with employers and partner organisations to explore potential new curriculum models, in line with the apprenticeship standards.

Two key areas were identified and formed the focus of the project:

## Effectively measure how apprentices develop new skills

A six-step process was introduced to

track students' skills development:

- Ilnduction: identify students' areas for development through a skills scan and Individual Learning Plan (ILP).
- 2. ILP goal setting: learners agree three skills they want to develop, with at least one technically linked to their apprenticeship programme.
- 3. Technical delivery sessions: learners provide feedback following each technical taught session, and indicate whether they feel they have developed new skills applicable to their job.
- 4. 4Quarterly skills appraisal: staff review learners' progress towards their apprenticeship standard/framework and associated qualifications, provide an indication of the end point assessment grading, review the three skills identified, and establish future SMART targets.
- 5. Learner and employer voice: twice-yearly consultation establishes whether the programme has developed new skills.
- 6. Exit review: feedback is gathered from learners and employers at the end of the programme to identify areas for future development.

#### Increase the flexibility of delivering English and maths skills

Employers needed a solution that allowed apprentices to study outside of normal working hours. The College created a 12-week online programme of English and/or maths across Levels 1 and 2 to enable apprentices to learn more flexibly.

Based on their diagnostic results, and through discussions with an apprentice skills coach/assessor, apprentices were able to choose which, if not all, of the 12 sessions met their needs.

The programme was piloted with 48 learners. The webinars were made available in the day, evening and at the weekend, and ran multiple times per week, providing the flexibility that employers were looking for.

English and maths specialists were employed to support the webinars, and sessions included remote tasks and group work online.

#### **Project outcomes**

- 99% of the 910 LCOAT learners who took part in the technical delivery sessions said that they had developed new skills; 96% of employers said that students' skills had improved.
- Apprentices' English and maths pass rate was 78%, which was 17% higher than 2016/17 (nearly 25% higher for maths).
- Students welcomed the flexibility of the webinars, and recommended the format as an effective way to learn.

#### 66

The webinars were fun...I felt confident before sitting my tests, and was pleased when told I had achieved my Level 2 English and maths."

TEAM LEADER APPRENTICE, LCOAT

"

## Moving towards outstanding teaching, learning and assessment

- The project improved the skills and competence of practitioners to deliver outstanding teaching, learning and assessment by creating new delivery models and focused training interventions for the apprenticeship standards.
- A methodology was established to track how apprentices develop new skills. This supported quick curriculum reviews and improvements to practitioner lesson plans.

#### **Tips for success**

- Use collected data to directly input into the curriculum, particularly where programmes are identified as not meeting project objectives.
- equired by most employers and learners, and can deliver higher retention and pass rates.
- Support apprentices through their programme, listen to their feedback, and continuously reinforce learning.

#### Takeaway message

For too many years apprenticeships have delivered qualifications and some skills. Today, that is no longer good enough. Measuring whether new skills are being developed will allow you to improve your offer and make a real impact.

#### **TECHNICAL SKILLS ROUTES**

# Business Administration, and Construction

#### **PROVIDERS**

7

#### PRACTITIONERS AND MANAGERS

75 direct

#### 11 indirect

#### **LEARNERS**

420

#### **EMPLOYERS**

13

#### **PARTNERS**

Bellway, Berkeley Group, Blu3, CNWL, Countrywide, Danny Sullivan Group, DB Cargo, Deere Training, Ensis Solutions, Erith, Geason Training, Hillingdon Council, Hull College, Morgan Sindall, Nottinghamshire Futures, Royal Borough of Greenwich, Triumph, VWNC and Yearsley Group.

# Rathbone Training

#### **Project overview**

Rathbone Training recruited two Teaching and Learning Champions (TLCs) who were tasked with developing a range of resources to support best practice in technical skills teaching, learning and assessment (TLA). Through true partnerships with employers and teaching teams, these resources were implemented across the delivery of social care apprenticeships.

#### **Project aims**

- Ensure social care apprenticeships reflect current working practice, engage learners, and meet the needs of employers and the modern workforce.
- Develop resources, in collaboration with employers, that support the development of outstanding TLA.

#### What the provider did

The TLCs formed partnerships with a range of local employers. These links supported the development of a number of resources, which included:

- An online best practice forum
  to share skills, knowledge,
  experience and materials that
  support excellence in technical
  skills delivery. The forum was
  developed using Basecamp, a
  platform that provides storage for
  resources, including documents,
  presentations, video and audio
  files. Tutors were able to 'chat'
  to participants in real time, post
  queries and upload materials.
- Employer-based CPD placements

for vocational staff, with a particular emphasis on providing access to updating at Level 5. Tutors accessed updating with Luton & Dunstable NHS Trust, United Healthcare and Feng Shui House Care Home Group.

- A monthly 'off-the-job' tutor alert, sent via email and linked to the forum, which identifies training to support apprentices, and provides tutors with links to materials and resources.
- An employer-focused safeguarding, Prevent and radicalisation conference day.

#### **Project outcomes**

#### **Providers:**

- 17% overall increase in the number of observations being graded 'good' or better; a 16% overall increase in the number of observations graded as 'outstanding' (across all partners).
- 35% overall increase in the social care retention rate across partners.
- 22% overall increase in the social care achievement rate across partners.

#### **Practitioners**:

- 83% of social care tutors have accessed the best practice forum; 81% of these have used the resources to support their apprentices.
- The forum received a 4 star rating out of 5, and the materials used were rated 4.5 out of 5.
- "I have been able to use the knowledge gained on my placement to advise Level 5 learners how to

integrate communication systems into recording systems to ensure all staff have an up-to-date knowledge on...how to deal with complaints and safeguarding issues."

#### Apprentices:

- "It has been a great experience and I have learned a lot. The way the apprenticeship is laid out is very easy to understand."
- "I have been extremely happy with my tutor, the time and effort he has put in and the way he helps me... this is much more interesting than school."

#### Employers:

- "Knowing tutors have up-to-date knowledge and skills means our apprentices get the best support and experience."
- "New learning allows staff to look at their performance and implement what they have learned to continually improve."

## Moving towards outstanding teaching, learning and assessment

- The TLCs have been an invaluable asset, providing a dedicated resource to identify, develop and implement innovative teaching, learning and assessment practice that enables outstanding technical delivery.
- Post-project, Rathbone Training has recruited a permanent TLC to continue to develop the work and champion innovation and best practice sharing.

 A partner provider is now working with an NHS Trust to deliver the new Standards in social care.

#### Tips for success

- It is essential to collaborate
  with employers, and form 'true'
  partnerships. The nature of the new
  Standards in social care mean that
  providers do not necessarily have
  the expertise to deliver everything
  a Standard contains. A partnership
  model ensures that specialisms
  can be provided and guarantees
  employer engagement and
  involvement.
- Ensure 'NVQ assessors' can move from a traditional assessor role to one of a tutor, coach and mentor, can access CPD and best practice materials, and can develop reflective practice.

#### Takeaway message

The most effective CPD is 'the doing'. Outstanding materials and resources can help to underpin the delivery of outstanding technical teaching, learning and assessment, but the best resource is tutor skills and knowledge, and that is gained by going and doing.

#### **TECHNICAL SKILLS ROUTE**

#### **Social Care**

#### **PROVIDERS**

5

#### PRACTITIONERS AND MANAGERS

67 direct

#### 123 indirect

#### **LEARNERS**

**185** 

#### **EMPLOYERS**

2

#### **PARTNERS**

Encompass Consultancy, Feng Shui Nursing Homes (Blackpool and Blackburn), Intraining Ltd, Newcastle College, Next Steps Training, United Health Ltd, West Lancashire College and Woodview Care Home (Sheffield).

# Reaseheath College

#### **Project overview**

To address a skills gap between existing teaching and learning and the requirements of the dairy industry, Reaseheath College embedded LEAN management principles throughout its curriculum content and practical experiences. Supported by an employer group, the project sought to enhance learners' skills and competencies through practical 'end goal thinking'.

#### **Project aims**

- Integrate farm and curriculum activity, and use farm performance data to inform classroom delivery.
- Embed LEAN principles throughout the curriculum, with a target of 20 hours of new bespoke delivery.
- Engage students as they move from modelled scenarios to real-life situations.
- Develop standard operating procedures for each farm process in order to deliver production efficiencies and high quality, consistent learning points.
- Create new problem-based industry projects, delivered by students on work placements, to develop and implement LEAN protocols on farms.

#### What the provider did

The College held a project launch meeting, attended by the Peer Advisor, curriculum and farm staff, and senior management. The project team reviewed amendments to the College curriculum alongside the employer group and discussed the proposed

LEAN work placement programme.

Two days of CPD were held with farm and curriculum staff to review and finalise new curriculum material and upskill staff members. A core team of five staff then completed a further five days of intensive training as part of the ILM qualification. LEAN was also embedded into the students' induction week.

An additional CPD programme was developed for the employers taking on LEAN students, in addition to an employer handbook. This programme addressed common skills gaps in the sector, including data management.

Following the implementation of the new curriculum, a best practice event was delivered to colleges that wanted to embed this approach within their organisation.

#### **Project outcomes**

- All agriculture and farm staff have been upskilled, and are involved in establishing what outstanding teaching, learning and assessment looks like.
- The enhanced practical element of the curriculum has increased engagement among students who face barriers to academic learning.
- New cross-sector employer networks have been developed, and employers are confident that a pool of highly skilled future employees is being created.
- Intensive CPD has resulted in an enthused and motivated teaching team that has adopted the principles of LEAN management and applied them to their teaching.

 Students have access to more advanced equipment and a wider employer base, and are confident that the programme is providing them with the skills required by industry.

## Moving towards outstanding teaching, learning and assessment

- Teaching and learning has been transformed as a result of a redesigned curriculum based around LEAN principles. The curriculum enables students to apply their learning, develop as independent learners, and benefit from close links with employers.
- Feedback shows that the revised curriculum has equipped learners with a strong understanding of value creation, and has placed them at the cutting edge of the sector.

#### 66

I marked one of the best stock workbooks that I have seen in the last five years. The amount of detail showed the student could relate what she had done on [the] farm and how it impacted the farm business. The quality of project work has improved considerably.

J. CLEGG, INSTRUCTOR

#### Tips for success

- Senior leadership buy-in was key to the project's success. A champion at management level gave the project a profile, and legitimised the significant time, effort and resource needed for project delivery.
- Close working relationships between farm and curriculum staff interweaved previously diametrically opposed priorities – for example, commercial operations versus educational delivery.
- The fundamental principle of LEAN management is one of continuous improvement, which requires cultural change. A LEAN team is the core around which this change can happen.
- A dedicated project management resource, over and above practitioner managers, is essential.

#### Takeaway message

The project enabled us to work with employers in a new way. It has become more of a partnership, with learners, practitioners and employers now able to really identify where and how value is added in the relationship.

#### **TECHNICAL SKILLS ROUTE**

# Agriculture, Environmental and Animal Care

**PROVIDERS** 

7

#### PRACTITIONERS AND MANAGERS

278 direct

6 indirect

**LEARNERS** 

1,612

**EMPLOYERS** 

49

#### **PARTNERS:**

Andrew Fletcher Grassland Solutions MD, Andrew Higgins, Arla, Belton Cheese, Cope Farms, Ed Dale Farmer, Grosvenor Farms Ltd, Harvey Hughes Consultants, Hill Farm, Leavesley, Muller Wisemans, Nemi Milk, Orchard Farm, Sainsbury's PLC, SAOS Ltd.

# Solihull College and University Centre

#### **Project overview**

Solihull College and University
Centre and its partners developed a
series of projects to upskill Civil and
Building Services Engineers. Working
groups, comprised of engineers from
industry with relevant specialisms and
teachers working with apprentices
from the Technician Apprenticeship
Consortium (TAC), devised dynamic
projects based on current industry
demand and practice, and focused on
increasing the number of women in
engineering.

#### **Project aims**

- To make teaching, learning and assessment in professional construction disciplines more dynamic, exciting and engaging.
- Increase the involvement of employers in programme design and delivery.
- Increase female representation in the engineering industry.

What the provider did

The College hosted a launch event to share objectives, outline the benefits, and engage practitioners and engineers from industry.

Five working groups were established, each consisting of two engineers and two members of teaching staff, to develop teaching and learning projects in the following subjects:

- Building Information Modelling for Level 3 students.
- Building Information Modelling for Level 5 students.

- Building Services Engineering for Level 3 students.
- Structural Mechanics for Level 3 students.
- Sustainability for Level 3 students.

The completed projects were shared with a network of colleges and education providers at a national conference in January 2018, for use with their own apprentices.

In addition to the development of these projects, female apprentices were given the opportunity to train as Women in Science and Engineering (WISE) ambassadors. As WISE role models, participants would promote careers in STEM subjects to girls aged over 15.

WISE delivered a series of training events for female apprentices, giving them the skills and knowledge needed to lead events in schools. By July 2018, each WISE role model will have attended at least one school to promote female roles in engineering.

The themes of this project are high on our agenda so we were keen to engage with Solihull College and have found the project very useful.

BRIAN DUFFY, FACULTY DIRECTOR, LEEDS COLLEGE OF BUILDING

"

#### **Project outcomes**

- Employer and education partnerships have improved, and regional and national networks have developed, linked to TAC employers.
- The project has increased CPD opportunities in the sector, which will ensure that outstanding practice is disseminated more widely.
- Engagement with local schools has increased and, in the longerterm, it is hoped that there will be a surge in the number of women applying for apprenticeships that are relevant to TAC employers.
- Employers now have a better understanding of the role education providers play in delivering training to apprentices. They are also more confident that providers deliver the required standard of education.
- The curriculum is more relevant and exciting for apprentices and full-time students.
- Moving towards outstanding teaching, learning and assessment
- Teaching and learning is better supporting the development of industry-relevant skills. Apprentices feel that they are at the cutting edge of sector teaching, learning and assessment.
- Practitioners from other curriculum areas are looking to develop similar projects within their sectors in conjunction with employers.
- Access to predesigned, quality assured resources has enhanced practitioners' teaching and assessment.
- The colleges involved in this project

are now in a stronger position to react to the challenges associated with the development of T Levels.

#### Tips for success

- Build flexibility, in terms of time, planning and logistics, into planned employer activity.
- Make use of existing relationships rather than attempting to build new ones within the project timescales. Engaging new employers can be achieved through other, nonessential activities.
- Ensure appropriate resources are allocated to the project, and that a project manager has the time to effectively deliver stated outcomes.

#### **Takeaway message**

Greater links with influential employers who have clear skills shortages in key technical roles gives the colleges an opportunity to promote T Levels as a solution to closing the skills gap. The industry-based projects themselves enhance the training undertaken with T Levels, apprenticeships and applied general programmes. Employers value the training for their apprentices, which improves interaction with schools and the gender balance within STEM apprenticeships.

#### **TECHNICAL SKILLS ROUTE**

### Engineering and Manufacturing

#### **PROVIDERS**

4

#### **PRACTITIONERS AND MANAGERS**

25 direct

#### 71 indirect

**LEARNERS** 

350

#### **EMPLOYERS**

9

#### **PARTNERS**

ARUP, JS Wright & Co Ltd,
Leeds College of Building, Mott
Macdonald, STEM Ambassadors,
Technician Apprentice
Consortium (TAC), UTC
Aerospace systems, Women in
Science and Engineering (WISE).

# South Devon College

#### **Project overview**

South Devon College created an innovative package of lessons to develop Hair and Beauty students' skills and techniques, with a specific focus on beauty therapy, make-up, nail technology, hairdressing and barbering skills. The project aligns industry requirements with the Professional Standards through a Centre of Excellence for Professional and Technical Development.

#### **Project aims**

- Reduce skills gaps within the local hair and beauty industry by adopting innovative, hands-on teaching, learning and assessment (TLA) approaches.
- Develop the practice of teaching staff, improve their confidence, and enhance how skills are taught and assessed.
- Create industry-standard technical learning opportunities for vocational students.

#### What the provider did

The College undertook two surveys with hair and beauty staff to assess their confidence in industry-related skills and reflect on their TLA practice. An additional survey was sent to local employers to identify skills gaps in college leavers.

With the support of the City and Guilds awarding body, changes to the qualifications structure were considered. Ways in which delivery and assessment methods might enhance learner achievement were also explored.

Beauty skills gaps identified included: stage and screen make-up, cosmetic camouflage, reflexology, and laser or IPL hair removal. Hair skills gaps identified included: hair extensions, colouring techniques, Indian head massage and razor cutting. Softer skills linked to selling and promoting products and services, as well as social media skills, were also identified.

Five education partners hosted training and development days, and a total of 25 workshops were delivered. These workshops were split into two areas: learning new professional skills and enhancing TLA strategies. Seventeen employers attended the training and development days, with 14 delivering workshops to staff.

South Devon College's Teaching, Learning and Assessment Coaches (TLCs) and advanced practitioners from education partners ran a number of practical sessions to encourage teaching staff to consider innovative strategies for delivery and assessing students' skills.

These strategies were used to deliver innovative lessons. In total, 24 new lessons were created, and five employers delivered sessions directly to students.

#### **Project outcomes**

- 334 students took part in a new lesson or workshop. Feedback was positive, with 81% rating their experience as 'excellent' or 'good'.
- Students said that the new lessons helped them to develop their 'soft' skills. The top three skills were:

'motivation to succeed', 'preparing for employment' and 'self-confidence'.

- "This was a brilliant addition to our 'usual' day of learning and to witness and learn from a barber who is a prominent figure in his field."
- "I learnt the most when we were doing the hands-on part of the activity, as I felt like I was really involved."
- New TLA strategies, including creative and experimental approaches to practical skills development, the use of ICT (e.g. Kahoot, iPads, Padlet), enhanced teacher demonstrations, use of video (particularly those featuring peers), expert input from employers, group working, and blogging, were popular with students.

#### 66

Within the classroom I have been able to reflect-in-action and respond quicker to the needs of the learners. It has emphasised the importance of salon owners' input and how it can enhance the course."

#### **TEACHER FEEDBACK**

"

## Moving towards outstanding teaching, learning and assessment

 The training and development days led to increased collaboration between education and employer partners. Employers attended the TLA-focused sessions and contributed to the discussions. As a result, some have since expressed an interest in the teaching profession.

- The innovative TLA strategies included within lesson plans met areas for development highlighted by staff.
- The project provided an excellent opportunity for teaching professionals to share practice and support one another on the new technical routes.

#### **Tips for success**

- Feedback informed the training and development days as they progressed. For instance, comments from the first day suggested that staff wanted more hands-on training. This was factored into future sessions.
- It is important to factor in project outputs at an early stage to ensure that quality can be moderated and maximised.

#### Takeaway message

Employers and providers embraced the opportunity to collaborate from the outset. The five training and development days inspired all those involved, resulting in truly innovative experiences for the learners.

### TECHNICAL SKILLS ROUTE

### **Hair and Beauty**

**PROVIDERS** 

5

#### PRACTITIONERS AND MANAGERS

85 direct

159 indirect

**LEARNERS** 

334

**EMPLOYERS** 

14

#### **PARTNERS**

Carol Caine, City and Guilds
Group Business, City College
Plymouth, Cornwall College
Group, Gershwins Academy,
Helena Lyons, Kumiega Skin Care
Clinic, PETROC College, RT Hair,
Take Two, Tom Chapman and
Yeovil College.

# South West Association of Training Providers

#### **Project overview**

This project brought together training providers and employers from across the South West to develop a construction curriculum that better meets the skills needs of local employers. Through 'masterclasses' that facilitated employer and training provider collaboration, participants created job shadowing opportunities, identified effective practice, and are encouraging more young people to consider a career in construction.

#### **Project aims**

- Support tutors to understand the challenges facing employers in the construction industry.
- Create partnerships between industry employers and training providers, leading to improved and more effective outcomes for learners.
- Identify CPD opportunities that benefit staff involved in the delivery of the construction curriculum.
- Develop meaningful working relationships with local enterprise partnerships (LEPs) to support construction as a priority sector.

#### What the provider did

The Association organised eight 'masterclasses' across the South West, with each lasting between two and three hours. The sessions sparked discussion between employers and training providers, and initiated new working relationships that enabled local employers to feed into the development of a revised curriculum.

The format of the masterclasses was dependent on the local networking landscape. In some cases, sessions were added to existing construction groups; in others, they were training provider or employer-led, or involved joint working between LEPs and Employment and Skills Boards.

Employers were keen to work with training providers to develop activities that raised the profile of sector job pathways. A number of activities were proposed:

- Employers offered work experience opportunities for the first time and/ or ensured that existing placements were structured and effective.
- Careers staff, National Careers
   Service advisers and tutors had the
   opportunity to spend a half or full
   day with an employer to find out
   more about the industry.
- Tutors and teachers job shadowed at a local construction employer.
- Local courses were delivered so that employers did not have to send their apprentices out of the area to attend training.
- Employers gave careers-themed presentations to groups of students at a training provider or college.
- Providers invited employers to look around their facilities and meet with staff to find out more about what they offer and the courses available.
- Employers involved in mentoring and supporting apprentices received specialist training.

#### **Project outcomes**

- A total of 21 training providers (colleges and private providers) and 24 employers were involved in the project.
- According to the providers involved, the project will impact over 900 students.
- Feedback from training providers included:
  - "There are 400 construction students here; all will have the opportunity to benefit from this project."
  - "[The project enables] greater consideration of the variety of roles in construction trades, which allows planning for future courses in higher levels."
  - "I have a better understanding of the industry and I will be able to share [this] with students."
  - "[The project] has enabled us to review our provision to ensure it meets the needs of local employers, particularly with apprenticeships."

## Moving towards outstanding teaching, learning and assessment

- Bringing together training providers and sector employers ensured that TLA met local skills requirements and enabled learners to benefit from employer input into the curriculum, assessment and delivery.
- Tutors benefitted from exposure to the local construction landscape, giving them skills to use in the

- classroom and embed in learning plans.
- The project changed employers' perceptions of the current learning environment, providing reassurance on the quality of the curriculum, facilities and resources.

#### **Tips for success**

- Work with a wide range of stakeholders. For example, local authority economic development departments, the Federation of Small Businesses, Chambers of Commerce, Education Business Partnerships, LEPs, and local sector employer groups.
- Form links with local sector initiatives that have similar or complementary objectives.
   Employers' time is precious, and creating a new or separate project where others already exist can confuse participants and switch employers off.
- Communicate regularly with stakeholders about project progress, benefits and follow-up actions.
- Ensure all meetings have specific aims and objectives, and that everyone agrees next steps and actions.

#### Takeaway message

Although it can be difficult to set up employer-training provider relationships to support outstanding TLA, the outcomes far outweigh the hard work and perseverance.

#### **TECHNICAL SKILLS ROUTE**

#### Construction

#### **PROVIDERS**

21

#### PRACTITIONERS AND MANAGERS

42 direct

#### **LEARNERS**

920

#### **EMPLOYERS**

**24** 

#### **PARTNERS**

Devon and Cornwall Training
Provider Network, Dorset and
Somerset Training Provider
Network, Gloucestershire and
Wiltshire Training Provider
Network, and The Association of
Learning Providers for Hampshire
and the Isle of Wight.

### **Weston College**

#### **Project overview**

Weston College ran a pilot project that provided a clear vocational pathway from entry into prison through to employment on release. Focusing on the Catering technical route, the project brought together a range of organisations and employers to provide mutually beneficial education, training and employment opportunities.

#### **Project aims**

- Pilot an outstanding 'end-to-end' technical education route that provides prison-based learners with employment opportunities.
- Work with partner organisations across three project phases (induction, education and exit), putting the prisoners' needs at the heart of the journey.
- Take a proactive and creative approach that unlocks individuals' potential and transforms lives.
- Reduce re-offending rates and the impact of crime upon society.

#### What the provider did

The first step was to identify catering employers to work with ex-offenders. The College worked with these employers to design a curriculum that met their needs and that offered genuine employment opportunities to learners on their release from prison.

An initial project framework was mapped, which was then discussed with various agencies from each prison. Each of the 10 prisons involved had their own requirements, as did each of the employers.

The College's catering staff supported six employers at a CPD day, where the employers' needs and requirements were outlined. Staff were also given the opportunity to update their skills and learn new techniques.

A personal development file was created so that each learner could record their progress through the curriculum and evidence their readiness for employment. A review of the maths in catering resources was also conducted to support learners to upskill in maths.

One of the key outputs from the project was the opening of Leyhill Grounds coffee shop. This supports up to eight learners at a time, who are still prisoners, to develop their catering and 'soft' skills while serving the general public.

Other project outputs include the creation of 10 Employment Champions, who focus on employability within teaching, learning and assessment (TLA), and act as a point of contact for referrals to employers.

#### 66

I have been in prison for 16 years now, during which time I've gained a Diploma in Professional Cookery. This project has given me the opportunity to put what training I've had into practice, not only the cooking element but also the food hygiene and safety, and running a commercial kitchen. My proudest moment, however, was receiving a 5 star rating from the EHO after our inspection. I know that the experience gained from this project will put me in good stead on release."

PAUL, PRISONER

"

#### **Project outcomes**

- Staff place an emphasis on employability skills in lessons, which has led to a greater understanding of the 'soft' skills required by employers.
- Learners have a clearer pathway to employment, with milestones documented in a personal development file that is used as a record of achievement.
- There has been a significant increase in the number of employers that are willing to work with ex-offenders.
- The curriculum is designed around prison release areas and labour market information. This will see a reduction in skills gaps, unemployment and offending rates.

# Moving towards outstanding teaching, learning and assessment

- Learners now look beyond the qualification and believe that there are genuine employment opportunities when they leave prison. Over time, it is hoped that these opportunities will increase, as employer links grow in all curriculum areas. The value of vocational education courses will be enhanced as a result, with learners appreciating the importance of education in terms of securing work.
- The incentive provided by the offer of employment means that learners are far exceeding awarding body requirements. Evidence of assessment and progress is also recorded more accurately. Previously, there was no measure of the distance travelled against start points; however, this is now captured during classes to aid differentiation and evidence the learner journey.

### Tips for success

- Hit the ground running. Be in a position to start reporting on developments as soon as the bid is awarded.
- Think outside the box to resolve any issues or barriers that arise as part of the project.
- Don't underestimate the time required to deliver a meaningful project. It is important to be innovative and groundbreaking on top of your normal duties.

#### **Technical skills route**

## **Catering**

#### **Providers**

5

#### **Practitioners and managers**

# 34 direct and 37 indirect

#### Learners

36

#### **Employers**

6

#### **Partners**

Bella Italia, Café Rouge, DWP, Fat Tony's, HMP Leyhill Grounds, McDonalds, National Careers Service, Offploy, School of Food, Shaw Trust, Working Links and Yo! Sushi

## Phase 2 development project case studies

# Abingdon and Witney College

#### **Project overview**

Abingdon and Witney College worked with vocational experts to deliver outstanding teaching, learning and assessment (OTLA) in programming for robotics and automation. The project simultaneously upskilled College staff in an area of engineering critical to the future of the sector.

#### **Project aims**

- Explore the use of vocational experts and employers in classroom delivery, while also upskilling teaching staff.
- Develop learners' programming skills, an area identified by two partner employers (Active 8 Robots and JSP) as vital to the robotics industry.
- Support staff to keep their technological skills up-to-date and provide CPD relevant opportunities

   with a particular focus on programming for robotics and automation.

### What the provider did

The Microcontroller Systems for Engineers (Unit 6, BTEC Nationals in Engineering) unit was chosen for the project, as the specification lay outside the expertise of both the College's engineering and computing staff.

For the programming elements of

the unit, an electrical engineer was paired with a computing graduate from Oxford Brookes University. The engineer had no programming experience, other than using basic software, while the computing graduate had programming expertise but no knowledge of robotics engineering.

Prior to each teaching session, the staff met for a planning meeting, which typically lasted between one and two hours. The meeting identified key learning outcomes for both themselves and the students, and outlined who was responsible for each aspect of the session.

A lesson plan proforma was devised to improve planning. After each session, the pedagogical and vocational experts were asked to reflect on the lesson, and whether they had achieved their individual learning outcomes. These learning outcomes were based on the development of sufficient confidence and skills to independently deliver sessions in the future.

#### **Project outcomes**

Feedback from the electrical engineer on the co-teaching model was positive:

"It helped having an expert in the classroom to answer specific programming questions and to guide the learners. It was easier than trying to find the time to learn on my own."

The engineer suggested that this teaching model could be expanded into other areas:

"It certainly helps to observe and learn within the classroom context. It does require careful planning, time needs to be allocated, and the vocational expert/employer needs to realise that it requires far more input than just coming in to deliver a talk. I think it could be applied to other aspects of robotics."

The programmer also saw the benefits of a collaborative approach:

"Having the programming expertise is not sufficient to deliver a lesson; careful planning and collaboration are necessary to ensure that the requirements of the specification are met. This is not something I would normally consider when asked to give a talk."

Learners responded positively to codelivery:

"Initially, it was strange having two tutors, but we got used to it. It was good having Imran's engineering knowledge to put the programming in context and we certainly learned from Jared. I feel more confident about the controlled assessment now."

# Moving towards outstanding teaching, learning and assessment

The co-teaching model provided students with an outstanding learning experience. The quality lead responsible for assessing OTLA observed one of the sessions and commented that:

"The combined delivery provided an outstanding experience for the learners. Individually, delivery was good, and there was evidence of careful planning, with each tutor's input complementing the other. Student learning was observed to be excellent, and their feedback was positive."

#### Tips for success

- Allow sufficient time for planning and the sharing of knowledge between experts.
- Ensure the vocational expert understands the skills and input required to deliver a session to students.
- Provide a clear delineation of classroom management responsibilities.
- Allow time for post-lesson debriefing and self-reflection.
- Try not to be too ambitious: focusing on a single teaching model gives staff the opportunity to fully engage with and understand the aims of the project.

#### **Takeaway message**

It is very possible to upskill within a classroom setting but it does require additional planning and preparation time. However, this was less than the time required for formal CPD activity. It requires a good working relationship between the co-tutors for it to be a success.

#### **TECHNICAL SKILLS ROUTE**

# **Engineering and Manufacturing**

#### **PROVIDERS**

1

#### PRACTITIONERS AND MANAGERS

18 direct

10 indirect

**LEARNERS** 

190

**EMPLOYERS** 

2

#### **PARTNERS**

Active Robots, Basingstoke College of Technology and JSP Ltd.

# Blackburn College

#### **Project overview**

Blackburn College, Bolton College and Nelson and Colne College worked in partnership to trial an employer engagement model that supports digital teaching practitioners to bring real world learning into the classroom, deliver an employer-led curriculum, and improve the quality of teaching, learning and assessment (TLA).

#### **Project aims**

- Provide inspiring, employer-led masterclasses that bring the digital industry to life and give learners an insight into the world of employment.
- Organise relevant and useful industry placements for staff that enable them to enhance their technical knowledge and skills.
- Collaborate with employers to develop a new curriculum that reflects current industry practices and addresses local skills gaps.

## What the provider did

Seven digital ambassadors were recruited from industry, after being approached by Blackburn College's Industry Links Manager for STEM. Each ambassador was then paired with a teaching practitioner from each college, in order to support their skills development.

Practitioners were given time away from the classroom to develop a partnership with their ambassador, and to create content and resources for a series of digital masterclasses. The ambassadors and practitioners

jointly delivered masterclasses to learners on a range of courses. This included students on Level 2 in ICT, Software Development, and HND in Computing Systems with Gaming routes.

The masterclasses were embedded into timetabled sessions, either as part of a subject theory or tutorial session. A total of 13 sessions were delivered to 278 learners.

Data was collected to capture the impact of each masterclass on practitioners' teaching practice and learners' skill development and career aspirations.

Practitioners evaluated their skills at the end of the programme to assess learning gains and identify the impact on their TLA.

#### 66

The project has enthused teaching staff to link with industry and opened their eyes to the different career pathways available for learners.

DAVINA POLDING, EXCELLENCE AND INNOVATION MANAGER, BOLTON COLLEGE

"

#### **Project outcomes**

#### **Practitioners**

 Practitioners' technical skills have improved, and they now have a greater understanding of careers available within the sector.

- With the support of the ambassadors, practitioners have been inspired to change the curriculum and embed new technology into their teaching.
- More frequent discussions with employers have encouraged practitioners to ensure teaching reflects current industry practices.

#### **Employers**

- Employers now play more of a role in curriculum development, and communication pathways have developed between employers and students.
- Increased engagement has led to employers feeling more valued and confident in the curriculum offered.
- An increased focused on the sector and potential career pathways is helping to address recruitment shortages.

#### Learners

- Learners' communication skills have developed, and they have more belief in their ability. This has resulted in improved confidence when dealing with employers.
- Industry experts provide students with high quality and impartial careers advice, enabling them to make informed career choices.
- Learners are making better choices about their social media presence and how they present themselves.

# Moving towards outstanding teaching, learning and assessment

- Employer engagement has enabled practitioners to increase the quality of their teaching, its relevancy to the world of work, and learners' employability skills.
- The project is linked to the Professional Standards, which makes it easier for practitioners to self-reflect, assess and understand how the work supports teaching practice and CPD.
- Improved digital knowledge and skills has enhanced TLA across different subject areas. For example, a Blackburn College practitioner is working with their ambassador to create a project brief for Business and IT Career Academy learners.

#### Tips for success

- Provide all project stakeholders with a comprehensive briefing, clear role descriptions and boundaries.
- Ensure the right people are involved in project delivery. The digital ambassadors knew the industry, could present well, and had the skills to engage learners.
- Ensure senior and curriculum management buy-in. Allow time for planning and management to ensure it is prioritised.
- Link the project to the Quality Improvement Plan. This will encourage senior management involvement and enable practitioners to see how activity links to wider college outcomes.

#### Takeaway message

Establishing partnerships between employers, practitioners and providers takes time, commitment and communication. The benefits outweigh the challenges if both are engaged and enthusiastic, and it can make a considerable difference to teaching practice — and keep providers one step ahead in the preparation for T Levels.

#### **TECHNICAL SKILLS ROUTE**

## **Digital**

#### **PROVIDERS**

4

#### PRACTITIONERS AND MANAGERS

12 direct

## 3 indirect

#### **LEARNERS**

**278** 

#### **EMPLOYERS**

7

#### **PARTNERS**

Bolton College, CONEL, Digital Lancashire, JP74, Magma Digital, Modern English, Nelson and Colne College, ROQ, The White Room and VR Safety.

# **Grimsby Institute Group**

#### **Project overview**

The Grimsby Institute for Further and Higher Education, East Riding College and Rotherham College established a Skills Exchange Network for Teachers (SENT) partnership, arranging industry work placements for teaching staff from a variety of technical routes. Staff shared their experiences with colleagues, applied their learning to teaching delivery, and supported the creation of a best practice toolkit to encourage employers to host 'back to the floor' placements.

#### **Project aims**

- Encourage teaching staff to update their skills and improve their practice in order to positively change the culture and quality of technical teaching, learning and student experience.
- Improve employer relationships, enabling learners to make more informed career choices through a destination-focused curriculum and style of delivery.
- Support learners to progress and achieve, and improve the quality of and access to impartial information, advice and guidance.

## What the partnership did

Partners were encouraged to identify new and existing employer contacts, taking advantage of local knowledge and leveraging their specific skills. This resulted in a wide range of placements, both in terms of technical route and duration. Placement staff were given a pre-placement planner in order to capture specific goals, which included improving TLA, forging industry links, ensuring teaching is in line with current practice, and engaging employers around T Level qualifications.

- Catering and Hospitality: The placements provided teaching staff with up-to-date industry knowledge in different settings, from Michelin starred restaurants to college catering.
- Digital: The placement was planned with the introduction of T Levels in mind, as well as a need to develop a wide range of digital skills across sectors.
- Construction and Engineering: The placement sought to upskill staff in the latest practical techniques. One tutor's goal was to encourage more women into the sector.
- Hair and Beauty: The aim was to attract more male students into a growth area, and broaden opportunities for all learners.

Fourteen placements took place between October 2017 and January 2018. Staff shared information with colleagues and brought their experiences back into the classroom, with the aim of making their teaching, learning and assessment outstanding.

The partnership developed a supporting toolkit, 'A Guide for Employers to Host Teacher Placements', which included a menu of employer activities and training models to enable employers to more confidently approach work-based learning.

#### **Project outcomes**

- All 24 staff either engaged directly with 'back to the floor' activity or were updated by those who did, and supported their students to progress during observed lessons.
- 96% of students surveyed reported that their learning experience had improved due to the provision of work-related information, with 51% saying it made a 'big difference'.
- 91% of students knew more about progression routes and employment opportunities.
- 87% of employers surveyed regarded vocational education as important to their company.
- 75% of employers said they were now more likely to engage with education providers in the future.

#### "

I am able to improve our local curriculum by addressing the needs of local employers, thus improving progression and the enrichment of the learners through outstanding TLA methods.

DIGITAL TEACHER

"

# Moving towards outstanding teaching, learning and assessment

 Positive links have been identified between workplace CPD for staff and the learner experience, which can be modelled and replicated across technical routes.

- Staff 'back to the floor' activities were planned in a deliberate manner, with specific aims around TLA, employer relationships and capacity building.
- A collaborative partnership model has been tested, and results and feedback shared. This supports the sharing of good practice, and leverages cross-partner employer relationships that can support further staff training.

#### **Tips for success**

- Placements need to be planned at the earliest possible opportunity, as providers and employers work to different calendars and priorities throughout the year.
- Individual teaching staff prepare for placements in different ways. Although the pre-placement planning paperwork standardised expectations, a short training session for those going on placements is recommended.
- As the Professional Standards become embedded, they can play a greater role in the development of a project. This will create a clear structure for reflection, professional development and impact assessment.

## Takeaway message

Staff CPD in the workplace can create important relationships with employers, keeping them 'warm' for further collaboration and helping them adjust to changes in vocational education. For educators, this will be a key plank in the successful implementation of the Post-16 Skills Plan.

#### **TECHNICAL SKILLS ROUTES**

Catering and
Hospitality,
Construction,
Creative and Design,
Digital, Engineering
and Hair and Beauty

#### **PROVIDERS**

4

#### **PRACTITIONERS AND MANAGERS**

19 direct

### 35 indirect

**LEARNERS** 

350

#### **EMPLOYERS**

9

#### **PARTNERS**

East Riding College and Rotherham College

# London South East Colleges

#### **Project overview**

Working with employer partners, London South East Colleges created an innovative 360-degree learning model focused on the development of technical and employability skills for the hospitality industry. This collaborative approach included teacher and employer skills training, technical masterclasses and high quality work experience placements.

#### **Project aims**

- Create a 360-degree learning model where the boundaries between vocational teaching, learning and assessment (TLA) and work experience are removed.
- Enable industry partners to take a hands-on approach to shaping and collaboratively developing technical TLA.
- Deliver an outstanding Teaching Skills Academy coaching programme to enhance the teaching and learning skills of employers and industry staff.

### What the providers did

To deliver a 360-degree learning model, the College took a number of key steps.

A Teaching Skills Academy was established to provide bespoke coaching sessions for employers on curriculum content, map work placements to qualifications, and deliver meaningful masterclasses. A teaching toolkit resource was created to embed learning.

The Academy was supported through the creation of a Career Advantage Coach role. The Coach mentored both employers and learners ahead of a work placement, and supported those students on a placement. Carefully coordinated work opportunities were matched to learners' skills, behaviours and attitudes.

All teaching staff were assigned a Teaching Skills Academy Coach who provided personalised one-to-one mentoring and support. A quality assurance programme of learning walks, work scrutiny, conversations, and developmental observations gave teachers a clear focus to develop learning, behaviour and technical skills.

Masterclasses were delivered by employer partners following intensive one-to-one coaching sessions on the fundamentals of teaching and learning in further education. The masterclasses included sessions on specialist food preparation techniques. On completion of each masterclass learners had access to further training opportunities and industry placements.

#### "

The coaching programme gave teachers the opportunity to actively reflect and identify gaps in their practice, and to adopt new strategies to improve teaching, learning and assessment towards outstanding. Teachers particularly liked the opportunity to plan, do, observe and reflect.

LOLA OLUTIMEHIN, TEACHING SKILLS ACADEMY MANAGER

77

## **Project outcomes**

- The creation of a 360-degree learning model broke down barriers between college-based and employment-based TLA.
- High quality work placements supported learners' technical skill development.
- The masterclasses increased students' engagement in the industry, which has had a positive impact on attitudes and goalsetting.
- Learners identified improvements in entrepreneurial skills, flexibility, networking and communication techniques, and technical knowledge.
- In line with the Professional Standards, the biggest improvements identified by teaching staff include: building positive and collaborative relationships; evaluating practice with others and assessing its impact on learning; and applying

appropriate and fair methods of assessment and feedback to support progression and achievement.

# Moving towards outstanding teaching, learning and assessment

- Findings from focused discussions with a diverse range of learners, teachers and employers has enabled the College to identify different perspectives of what 'outstanding' looks and feels like within Hospitality.
- Completing the Professional Standards self-assessment at the start and end of the project demonstrated the journey taken in making judgments about what does and does not work in practice. It also highlighted a developing knowledge and understanding of theory and practice, and the expertise and skills needed to ensure the best possible outcomes for learners.

### **Tips for success**

- It is essential to plan curriculum delivery in collaboration with employers to ensure that partnerships are mutually beneficial.
- Successful collaboration depends on excellent communication and the sharing of transparent roles, responsibilities and expectations.
   For example, the Christmas period is one of the busiest times of the year in the hospitality sector, so realistic expectations of partner involvement during this time were set.
- Technical qualifications should focus on the skills required by industry, and opportunities for skill development should be well planned to enhance the programme

of study. For example, reviewing different perspectives of what 'outstanding' looks and feels like highlighted an employer preference for employability over technical skills

#### **Takeaway message**

Do not underestimate the power of strong employer partnerships to shape curriculum provision in response to the demands of the industry. Employers are fundamental to enriching the learner journey, and the successful progression of learners taking their next steps into employment within the hospitality industry.

#### **TECHNICAL SKILLS ROUTE**

## Catering and Hospitality

**PROVIDERS** 

2

#### **PRACTITIONERS AND MANAGERS**

20 direct

79 indirect

**LEARNERS** 

168

**EMPLOYERS** 

3

#### **PARTNERS**

C H & Co, D & D London, Royal Lancaster London, Springboard UK and Welcome Skills.

# Nelson and Colne College

#### **Project overview**

Nelson and Colne College's Creative Futures project has a three-tiered approach that drives the development of outstanding teaching, learning and assessment (TLA) in an employer-focused Creative and Design curriculum. Featuring work shadowing, CPD and co-delivery by employer partners, the project provides a best practice TLA model ahead of the introduction of T Levels.

#### **Project aims**

- Increase employers' awareness of their role in technical education, and encourage them to input into the curriculum.
- Equip Level 3 teaching staff with up-to-date, industry-relevant technical skills, which they can pass on to learners.
- Support students to understand employment opportunities and development needs, resulting in positive destinations, sustainable employment, or further education.
- Establish a 'creative hub' for partners, students and employers.

### What the provider did

All stakeholders attended a launch event, which introduced the educational context, project objectives, intended outcomes, and the plan for a 'creative hub'.

Teaching staff completed a survey to assess their baseline skills. Both teachers and employers also completed a Professional Standards questionnaire, which resulted in an agreed upon definition of what constitutes outstanding TLA.

Using information from the surveys, teachers were matched with employers, and spent a day 'back to the floor' in a business that mirrored their own teaching specialisms and curriculum.

The day included work shadowing and discussions with employers. Employers and teachers were invited back for a progress meeting, to review activity, discuss challenges, and to input into the development of the creative hub. CPD was requested and offered to staff.

In some cases, teachers took their new skills straight back to the classroom; in others, skills will be embedded in the future. Some employers were keen to deliver to learners, and these sessions took place in the classroom and the workplace. In one instance, a teacher and employer co-delivered to learners in an art gallery.

The creative hub, accessed through the Nelson and Colne College website, facilitates the sharing of ideas and practice, and sustains relationships built through the project. It is also home to work experience opportunities, CPD resources, employer guidance, and learner portfolios.

### **Project outcomes**

 Project outcomes have been more diverse than originally envisaged.
 For example, one community arts partner has offered to deliver

- careers guidance to learners.
- 100% of education and employer partners stated that their staff benefitted from the project.
- The two-way learning process, which enabled tutors to learn from industry and industry to learn more about the teaching process, was a truly collaborative exercise.
- The project gave students the opportunity to experience live briefs and direct creative engagement.

#### 66

The experience of working with industry professionals impacts on students at all levels of my teaching, giving me an up-to-date understanding of the work that exists outside College, and the skills the students require to undertake work experience.

CERISE WARD, LECTURER, NELSON AND COLNE COLLEGE

"

# Moving towards outstanding teaching, learning and assessment

 The most significant change in teachers' self-assessment has come in their professional skills, with progress made in relation to maintaining and updating teaching expertise and vocational skills through collaboration with employers. This demonstrates measurable progress in the development of TLA, which will be built upon in preparation for T Levels.  The process of engaging employers, harnessing their expertise, and seeing the impact on learners has encouraged the College to expand its employer network and prepare partners for their role in developing the T Level curriculum.

#### Tips for success

- Collaborative teaching of skills, knowledge and behaviours can take place in a variety of ways. Ultimately, the type of delivery will be dependent on an employer's time, facilities, resources, and confidence in becoming an educator.
- Contextualising the role of employers in technical education enables them to see the bigger picture and to envision their contribution, benefits and rewards.
- Creative sector employers value new ideas and want to feel part of a community, as this fuels their work and provides access to a talented pool of learners.
- When examining staff skills gaps it is crucial to identify common areas so that CPD training can be delivered effectively to the largest number of staff.

### Takeaway message

This model facilitates effective collaboration around the curriculum, pedagogy and assessment, and meets the aspirations of the Post-16 Skills Plan. We listened to employers and learned from their expertise to develop curricula that reflect current industry skills and practice.

#### **TECHNICAL SKILLS ROUTE**

## **Creative and Design**

#### **PROVIDERS**

4

#### PRACTITIONERS AND MANAGERS

38 direct

## 5 indirect

#### **LEARNERS**

377

#### **EMPLOYERS**

10

#### **PARTNERS**

Blackburn College, Curious Minds, InSitu, Oldham College and Wakefield College.

# West Thames College

#### **Project overview**

West Thames College's Blended Logistics Learning project brought together employers and training providers from across the UK to explore blended learning as a tool to drive improvement in teaching, learning and assessment (TLA). The project sought to develop work ready learners, meet the new apprenticeship standards and improve TLA across the Logistics and Transport technical route.

#### **Project aims**

- Increase tutor practitioners' experience of delivering, supporting and assessing blended learning in different settings.
- Design blended learning materials that strengthen the work readiness of learners, including apprentices.
- Provide an up-to-date, innovative learning experience that enables students to review and reflect.
- Extend relationships with employers and education and skills providers to increase career opportunities.

### What the provider did

The College and its partners met to confirm and establish partner leads, learner groups, tutor practitioners, preferred methods of communication, protocols, timescales and external requirements.

This led to the development of a tutor practitioners' guide, which set monthly activities and targets. Progress against targets was monitored

through fortnightly review email and telephone exchanges. Feedback from tutor practitioners was captured through project meetings and vox pop activities.

West Suffolk College supported the initial development of the blended learning materials through their Skills for Success resources. These were used as a basis from which West Thames College was able to plan content, consult with partners and employers, and lead the creation of blended learning tools for partner use.

All eight tutor practitioners completed the FutureLearn Blended Learning Essentials: Getting Started course. The course explored the role of technology in enhancing vocational skills teaching and evaluating the effectiveness of blended learning approaches. Two tutor practitioners also completed the Developing Digital Skills course.

A total of 98 adult learners on Level 1 Certificate in Warehousing and Storage and Level 2 Award in Forklift Truck Operations courses participated in sessions involving the virtual learning environment (Moodle), digital cameras, Kahoot, Padlet, YouTube and Quizizz. These approaches were used to record feedback and review practice.

#### "

The materials developed will really take learners into the industry – it is important to map behaviours to skills and knowledge for an industry that thrives on customer demand.

CARL LOMAS, CHAIR, INSTITUTE OF COURIERS

#### **Project outcomes**

- Learners responded positively in terms of engagement and behaviours, for example arriving early at college and/or staying late to prepare for the next day.
- There has been an increase of 2% in terms of course completion (96% from 94%) and an increase of 5% in achievement (92% from 87%).
- Anecdotal evidence suggests an increase in learner progression into logistics and warehousing roles. Feedback from a key local employer, Kuehne and Nagel, indicates that those securing employment are well prepared for the job market.
- By the end of the project all students were using evidence gathered with a digital camera for self and/or peer assessment.

# Moving towards outstanding teaching, learning and assessment

Planning is already underway to

- strengthen digital pedagogy across the College, and the approach of the logistics team will be shared with other curriculum areas.
- It has been agreed that teams will visit each provider site and that biannual meetings – as a minimum – will be held for tutor practitioners to compare, contrast and share their use of blended learning techniques.
- The project has clear links to the Post-16 Skills Plan. These are evident through a focus on digital skills, the development of transferable workplace skills through blended learning materials that focus on behaviours, and support for adults to get a job and stay in work.

#### **Tips for success**

- Employers were more engaged in the project when they worked in groups. Their views, most readily expressed in informal sessions, were clear, helpful and made a significant contribution to the blended learning materials developed.
- The College took a broad approach to the development of blended learning and did not prescribe a specific route or focus with partners. By putting a framework for learning and enquiry in place through FutureLearn courses, all tutor practitioners had access to activities and tools to try out. This enabled tutor practitioners to experiment and develop new ideas.

### Takeaway message

Develop a project and let your tutors and practitioners run with it.

#### **TECHNICAL SKILLS ROUTE**

## Transport and Logistics

#### **PROVIDERS**

4

#### **PRACTITIONERS AND MANAGERS**

13 direct

## 20 indirect

#### **LEARNERS**

128

#### **EMPLOYERS**

5

#### **PARTNERS**

Heart of Worcestershire College, Somax (part of Weston College), South Essex College, Transervice and West Suffolk College.

# Phase 3 development project case studies

# Activate Learning

#### **Project overview**

Working in partnerships with employers, Activate Learning and partners, explored and developed methods of preparing staff and students for external assessments. Through employer led projects and staff industry immersion activity the project created opportunities for staff to update their skills and knowledge of current industry practice and improve teaching, learning and assessment standards.

#### **Project aims**

- Prepare staff for external assessment including collaboration with academic staff who have a great deal of experience in teaching for examined qualifications
- Reinvigorate the curriculum by working with employers including project-based learning which develops relevant skills in current industry practice
- Ensure staff update their industry understanding, knowledge and skills through time spent in relevant industry placements

## What the provider did

Activate Learning delivered two training days run by Btec assessment experts for staff to update their teaching learning and assessment practice to prepare students effectively for exams. A resource bank

off effective practice was created by staff across five colleges which was then turned into a guide on delivering externally assessed units.

25 staff completed industry immersion with employers such as British Airways and the Hilton Hotel Group. The experience enabled staff to gain a greater understanding of industry which allowed them to update the curriculum and their teaching, learning and assessment practice.

Employer-led projects were created and delivered which provided students with a better understanding of current industry practice.

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Working with students in our local community is really important to us. It gives access to more talent, helps us to understand our community and gives our staff some opportunities for their own development.

"

**EMPLOYER PARTNER** 

### **Project outcomes**

- Retention and attendance data collected from project partners had increased, highlighting the improved student experience.
- All partners delivered mock

- assessments providing feedback to students which enabled them to identify key areas of improvement ready for assessment series.
- Collaboration between staff across the partnership enriched staff experience and supported a sustained collaborative approach to improving teaching, learning and assessment.

# Moving towards outstanding teaching, learning and assessment

- The project partners concluded that it is becoming increasingly well-recognised that 'outstanding' TLA on vocational courses must involve current industry skills and knowledge.
- Activate Learning deliver an Attributes programme for all fulltime students which focuses on the skills required to be successful in the workplace. This can be done through employer-led projects in which the focus is on current skills requirements.
- An outstanding curriculum on an externally-assessed vocational course involves development of knowledge and skills for both internally and externally assessed units.

#### Tips for success

- Involve a wide range of staff in employer collaboration
- Staff industry immersion is a valuable method of CPD which should be available to all staff and formalised through an appraisal process
- Maintain employer engagement across a large proportion of the course, noting that externally assessed units should be delivered with a focus on exact specification requirements.
- Sharing is key; when staff complete CPD there should be clear channels for them to disseminate their findings to peers and share good practice.

#### Takeaway message

Employer engagement will be referred to as 'employer partnerships' moving forward. We will aim to form a greater link between providers and employers to benefit both over a long-term, as opposed to limited employer involvement with providers, such as a short quest speaker slot in a lesson.

#### **TECHNICAL SKILLS ROUTE**

## Business and Administrative

**Providers** 

3

**Practitioners and managers** 

35 direct

12 indirect

Learners

588

**Employers** 

9

#### **Partners**

Activate Learning, Guildford
College, South Devon College,
Siemens Healthineers – Karen
Faulkner, Oxford City Council,
3M, Hilton Hotel Group, Satellite
Catapult, Penningtons Manches,
Oxfordshire Community Voluntary
Action Group, Bayer PLC, British
Airways, Reading University.

# City College Plymouth

#### **Project overview**

City College Plymouth and partners trained employers to manage and mentor apprentices. Working with local SMEs, the project devised a model for workplace ambassadors responsible for conducting mentoring and apprenticeship training on employer premises, to become better prepared for taking on apprentices in the future through a programme of collaborative training with college assessors.

#### **Project aims**

- 1. To collaboratively develop a model to support training providers, assessor teams and employer-based mentors to enable them to fully support apprentices in the workplace.
- 2. To upskill the existing Training Provider assessor teams to better equip them for supporting their apprentices under Apprenticeship "standards".
- To upskill partner employers, including coaching and mentoring skills to better equip them to recruit, select and support apprentices.

### What the provider did

Research was conducted with all project partners to understand current levels of knowledge regarding Apprenticeship Standards and to identify the most appropriate forms of support required. Based on the findings, the team co-developed a range of resources for training providers, assessor teams and

employers. These resources were trialled within the professional services departments.

Masterclass sessions on the apprenticeship standards were facilitated as an approach to collaborate and share understanding between providers and employers to collaboratively develop skills and capability to support apprentices. This included recognition of the changing shape of the assessor's role to facilitate self-directed learning by the apprentice for on-programme learning to develop their knowledge, skills and behaviours.

The project delivered mentoring and coaching workshops for employers that could be delivered at an employer's premises. Employers were also upskilled on the recruitment, selection and apprentice induction processes.

#### 66

The project has been invaluable in increasing our understanding of apprenticeships and how they will benefit our business moving forward. With the knowledge we have gained, we will ensure that apprenticeships, at all levels, will become an integral part of our recruitment and staff development plans.

# BUSINESS MANAGER, CITIZENS ADVICE

#### **Project outcomes**

- As a result of the project, 14 new apprenticeship opportunities were created across the eight employer partners.
- The workshops and masterclasses have increased assessor understanding of how best to coach and support apprentices, including the significant role they can play in helping the apprentice prepare for and pass the Assessment Gateway and End Point Assessment.
- By working collaboratively assessors, tutors and employers have strengthened the relationship between provider assessors and the local business community.

# Moving towards outstanding teaching, learning and assessment

- Collaboration with local providers and employers allows the assessor teams to reflect on their practice and increases their understanding and awareness of the skills that will be required in the future.
- Masterclasses, workshops and training enabled assessors to gain additional knowledge and resources to initiate their own research on the apprenticeship standards that are specific to their industry sector.
- Supporting staff in the use of digital technologies and software such as Smart Assessor and the use of electronic portfolios has enabled them to support apprentices and employers to manage their own learning. They have also proven to be invaluable in aiding training

providers with the implementation of periodic reviews using a digital platform.

#### Tips for success

- It is recognised that assessors require new skills as apprenticeships move from frameworks to standards. For any training provider or employer to fully support their apprentices, support must be provided to assessors.
- Sharing of best practice: whether through awarding bodies or local networks. As apprentice standards are developed, proposed and approved for delivery it will be imperative to ensure that assessors and employers are part of the learning and best practice culture.
- Stakeholder engagement from the outset is important for project success. This will help to increase clarity, build engagement and ownership.

### Takeaway message

The move to apprenticeship standards means there is a significant requirement for the role of the current assessor to be re-evaluated to align it to the requirements of the new standards. This could potentially be towards an "Apprentice Learning Coach" model.

These reshaped positions will also require investment to upskill the workforce to ensure assessor skills compliment those required to support apprentices.

#### **Technical Skills Route**

# Business and Administrative & Legal, Finance and Accounting

#### **Providers**

3

#### **Practitioners and managers**

12 direct

## 114 indirect

Learners

132

#### **Employers**

8

#### **Partners**

Achievement Training, Focus
Training, Plymouth Community
Homes, Citizens Advice
Plymouth, Portcullis Legal,
Gill Akaster Solicitors, Talem
Recruitment Services, Synergy
Accountants, Mission Enterprise
and Employability, Plymouth
Raiders.

# College of Haringey, Enfield and North East London (CONEL)

#### **Project overview**

The College of Haringey, Enfield and North East London, led a project in the 2017-2018 Phase 2 of the programme. The 2018-2019 project aimed to (a) re-engage Master Technicians with curriculum teams to plan for the 2018/19 academic year and to (b) apply the model for collaboration to the key technical routes of Construction and Engineering, by engaging employers (Master Technicians) to deliver specialist training to teachers and learners.

#### What the provider did

Practitioners were asked what industry skills/knowledge they would like to update. Employers were approached with the topics suggested by the practitioners and Master Technicians were identified by the employers for delivering the training.

The MTs were supported with pedagogic training via face-to-face and online support. The training was designed to support session planning and delivery to learners.

Master Technicians then delivered training directly to students across the provider partnership, working with teachers and trainers to upskill them on current industry practice.

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Making progress with students and staff on the development of projects in terms of industry best practice have been rewarding. Interactive sessions with the future workforce are vital for the students and the future economy.

#### **EMPLOYER PARTICIPANT**

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#### **Project outcomes**

- Over 250 learners attended Master Technician sessions.
- Master Technicians indicated that working with students created opportunities to recruit creative designers/producers from the younger generation, to share new ideas and good practice.
- Practitioners in both digital media and construction gained new knowledge about industry practices which they will implement into classroom delivery.

# Moving towards outstanding teaching, learning and assessment

 The learners benefitted from teaching and learning that is aligned to industry needs. Out of 128 learners, 93% indicated the Master Technician sessions inspired them and 94% indicated they feel more aware about industry or job roles.

- Live industry projects should be a regular feature within further education as learners are better prepared for progression into employment or higher education. Live projects can develop sustainable industry partnerships that facilitate T Level preparation, for example, employer participants have offered interviews for industry placements.
- The practitioners involved in this project gained from the workshops and have opportunities to develop sustainable partnerships. Out of eleven practitioner participants, 64% indicated that it will be easier for them to embed industry practice, update current resources and have richer discussions with their learners.

### **Tips for success**

- Engaging employers can be difficult. The project initially used the support of a company who engage construction employers via social corporate responsibility partners. Developing a positive relationship with the Social Corporate Responsibility Manager within a large company is a valuable way of developing a sustainable provider/employer partnership that is beneficial and for all participants.
- Embedding the use of Master Technicians was easier to achieve within CONEL as opposed to managing the process with external provider partners. Curriculum managers are key to getting teachers on board. Buy-in and support from senior management is also essential.

#### **Takeaway message**

Providers need to find ways to explore and develop long-term relationships with industry partners to sustain a consistent supply of industry talent into technical education. In addition, this would also provide employers with work ready learners. Practitioners and learners have clearly gained from the Master Technician sessions. CONEL established new links with employers who were willing to provide further support and employment opportunities including industry placements and live projects.

**Technical Skills Route** 

# Construction; Digital; and Engineering and Manufacturing

**Providers** 

6

**Practitioners and managers** 

28 direct

and

23 indirect

Learners

274

**Employers** 

9

#### **Partners**

ADA National College for Digital Skills, SoundSkool, City and Islington College, West London College, Havering College, Kier, Fusion 2, M&D Building Maintenance SVS Ltd, VIP Studios/Charanga, JetMedia, qLegal, The Third Floor, FB Franklin Boateng, BBC.

# Derby College

#### **Project overview**

Derby College developed their 2017-2018 project and designed a Level 3 Construction and the Built Environment curriculum around problem-based learning and trialled it in a different technical route and to investigate whether it could be transferred to academic learning (Functional Skills Maths). The project aimed to extend the use of problembased learning as a pedagogical approach to creating a future workforce with higher-level skills, knowledge and behaviours.

#### What the provider did

The project facilitated tailored professional development workshops with teachers to explore the features of problem-based learning, the educational values underpinning the approach and the skills-set required for effective development and facilitation of problem-based learning. The workshops enabled teachers to develop induction and extended problem-based learning scenarios. Employers attended part of the workshop to assist teachers to co-construct these scenarios.

Several mini-problem-based learning (PBL) scenarios were created in maths, Business and Construction and the Built Environment, to be rolled out during induction, in order to build students' confidence, collaborative skills and problem-solving skills. The Construction and Built Environment teachers also worked with a consultant who specialises in PBL learning in higher education settings to design a curriculum plan and

assessment plan using PBL scenarios.

The PBL scenarios were delivered to students across all routes. In all trials, student feedback and practitioner reflections were collected

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In two- or three-years' time we are going to be doing this, and we've already practised. We can put this on our CVs and in our UCAS personal statements and it's only November in Year 1.

STUDENT, DERBY COLLEGE

**Project outcomes** 

 Students reported that they enjoyed the themed and industry-relevant approach and were able to connect it to "being in the workplace". Most enjoyed the freedom and trust and recognised that they had developed transferable and practical skills.

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- Construction and Built Environment teachers developed a curriculum around PBL tasks aligned with the qualification outcomes for the whole of Year 1 around a series of PBL scenarios. They themed the unit assessments around the scenarios and in doing so, reduced assessment burden by 66%.
- Employers and practitioners reported they were able to work together in a meaningful way.
   Employers were keen to offer contextualised and realistic ideas for problem-briefs. Most were

keen to host student visits; the Functional Skills Maths students were able to visit McDonalds to observe the use and importance of Maths in all business functions.

# Moving towards outstanding teaching, learning and assessment

- During the project, it became apparent that the traditional way of judging the quality of teaching, learning and assessment in observations of "lesson snapshots" and focusing on 'progress' in that lesson did not fully align with the emphasis on skills, behavioural and attitudinal development. Derby College observation team had an introductory session on PBL and have required teachers to construct lesson outcomes in terms of skills/ behaviours and how these might be evidenced in the session.
- The contribution of employers to co-writing problems and to meeting and talking to students has implicitly exposed both teachers and students to different careers and roles in the industry; it has also enabled teachers and students to connect their studies to employment and has naturally aligned college-based studies with future employment.

### **Tips for success**

 Problem-based learning scenarios need to be anchored in meaningful industry-relevant contexts, achieved through collaboration between employers and teachers.  Flexibility is key as the knowledge learned by students when they work on problems does not unfold typically or coherently and may not evidence what was initially planned when designing the problem-based learning brief.

#### **Takeaway message**

Problem-based learning requires faith and trust in students to believe that they could do the work and could learn without depending on the teacher to feed them everything. When students are trusted and given freedom, they produce work beyond the "expected progress". And the same is true for teachers.

#### **Technical Skills Route**

## Creative and Design; Engineering and Manufacturing; and Health and Science

#### **Providers**

4

#### **Practitioners and managers**

22 direct

and

## 63 indirect

Learners

293

#### **Employers**

7

#### **Partners**

Gateshead College, New College Stamford, Lakes College, Derby Museum Trust, East Midlands Airport, McDonalds, Padley Group, Groundwork Architects, Northern Music Trust, Andrew James Worldwide.

# Gateshead College

#### **Project overview**

This project aimed to look at how feasible it is to create an incubation studio as a transitional stage for students progressing from college game development and digital courses into the creative digital sector, specifically focused on the Games/ Virtual & Augmented reality industries. An incubation studio in this instance is envisaged as an intermediate platform for learners to engage in industriallyinformed high-quality education, working on live briefs in a professional environment located external to college facilities. A focus of this was to facilitate the progression of students with SEN, specifically who are on the Autistic Spectrum who often do not progress into paid employment due to a (sometimes perceived) lack of employability skills.

### What the provider did

Gateshead College and provider partners reached out to employers using their local employer networks and existing employer links to participate in the project steering group. Steering group meetings were activity-based and focused on how to establish an incubation studio.

Staff conducted research into T Levels – particularly the digital pathway. Students, employers and providers actively collaborated in the creation of the curriculum road map for HE, creating the subject specialism pathways. Employers worked with practitioners to create project briefs which were then codelivered to students. Learner voice was conducted to seek learner views and input.

All project participants recorded video reflective diaries, both as a means of evaluating current progress, but also as a legacy for the project so other practitioners could gain insight into the process.

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Together with Gateshead College we're constantly challenging students to find ways of applying emerging technologies to companies that operate outside of the creative and digital sectors. VR and AR can be used to simulate an evacuation of a fire-hit oil rig, for instance, or to detect a leaking valve in a water network. We're trying to help firms use the technology to minimize risk on projects and solve real-world challenges.

ALEX COOK - PROTO

## **Project outcomes**

- Employers felt more comfortable and better equipped to value and support their employees on the Autistic Spectrum facilitated through provider led CPD.
- Teaching staff have been developed industry relevant skills. Some staff have been offered up-skilling placements with employer partners as a result of the project.

 Students who are on the Autistic Spectrum (ASD) were able to participate in work experience and projects, giving presentations and receiving feedback from significant industry players.

#### Moving towards outstanding teaching, learning and assessment

- The project has supported the creation of an industry focused, innovative curriculum which has been designed to give learners choice in their own pathways, creating a clear progression route that supports students from Level 3 to Level 5.
- Focusing on SEN learners' needs within teaching, learning and assessment and how their personal social development can be focused on within a vocational setting. This gives students the opportunity to interact with businesses in a structured environment designed to increase their confidence and support them to a positive destination.

### **Tips for success**

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- Employers can be nervous of how they should best manage and accommodate employees that may have SEN issues such as ASD, but they are genuinely enthusiastic to engage with positive means of doing so. Providers have experience to support employers support their employees.
- Establishing a separate commercial entity that is sustainable is

considerably more expensive and complicated than the project partners initially thought, especially when factoring the discounts and savings usually offered to providers through educational licences.

#### **Takeaway message**

Due to the benefits realised from this level of active employer involvement in the curriculum, Gateshead College are actively seeking funding for the establishment of an incubation studio, which may include bidding for public funded investment as they align this to the Local Enterprise Partnership and regional strategic plan. The College are also exploring the opportunity suggested by employer partners of establishing a sponsorship model to fund the studio as a commercially separate entity. This would allow them to use the studio not only as an outstanding teaching and learning facility, but also as a means of delivering substantive work placements for Level 3 learners.

#### **Technical Skills Route**

## **Digital**

#### **Providers**

4

#### **Practitioners and managers**

24 direct

and

304 indirect

#### Learners

156

#### **Employers**

6

#### **Partners**

Cumbria University, ESPA, Keighly College, Proto, Creative and Cultural Skills, SUMO Digital, Tombola Ltd, Hammerhead VR, Northumberland Water.

# Harlow College

#### **Project overview**

The Harlow College project developed experiences from their phase 1 OTLA project and focused on the industry placement requirement within the T Level programme. The project aimed to support learners to put technical skills into practice through the placement and support teaching staff to be able to assess student's skills development. Project partners worked collaboratively to share good practice, create and test new approaches and new resources.

#### What the provider did

The partners began by researching and sharing their own and each other's' practice in preparing students for work experience and recording the progress they made. These were shared across the partnership.

Partners felt that sufficient work had been done to ensure students soft skills were developed for industry placements, but they wanted to address the specific technical skills students would be expected to have acquired on their course and then apply and improve once they were on placement for between 45-60 days.

The research process was extended to incorporate student and employer views, this included collaboration with employers to explore their views on the curriculum and the 'readiness' of students for work placements. Providers also shared with employers how they develop the technical skills students need to be effective in the workplace.

Findings from the initial research enabled the team to create improved resources for staff to use with students in preparing them for their work placement. These were tested with staff and students and reviewed by employer partners.

66

As an employer we were pleased to be asked and very happy to contribute to this important project. We are committed to offering quality placements to our local young people in the anticipation that they will consider the NHS as their future career of choice.

THE PRINCESS ALEXANDRA HOSPITAL NHS TRUST.

**Project outcomes** 

- The revised student placement handbook and teaching resource were well received by teachers who thought they improved the preparation of students in the workplace. Staff who visited students on placement felt they were able to address student concerns more effectively.
- Brining employers into lessons prior to student's industry placements helped to address student concerns about employer expectations.
- Post placement research uncovered some very specific concerns which

students experienced that the project had not anticipated, for example workplace protocols and dealing with difficult situations. Students felt a frequently asked questions section accessed via their phone would be helpful.

# Moving towards outstanding teaching, learning and assessment

- The project has resulted in revised and improved activities to prepare students for industry placements, which have become embedded across the partnership. This includes: reviewing students' personal career goals; a student-led starting point self-assessment of skills levels; a 1-1 discussion about students' learning and employment background and aspirations; and the setting out a development plan so students focus on developing their skills gaps.
- As a result of the project, partners are exploring how to make the curriculum more employer-led. The project evidenced that employers delivering talks or training preplacement proved useful in preparing students.

### Tips for success

- Student preparation needs to be both sector and company specific.
   Where students had been prepared with general resources, they felt less prepared for their placement.
- Capture student feedback post placement to fully prepare the next cohort of students. Recording this centrally will develop a bank of

77

practical hints and tips.

 Employer commitments to supporting students on placements varies enormously. Be flexible and allow time for student and employer preparation.

#### Takeaway message

Every industry placement is different, and resources and approaches must be flexible enough to cope with this. Providers need to review their processes to ensure there is sufficient care taken in matching placements. Every placement needs an individual learning plan, linked to the student and the company.

#### **Technical Skills Route**

## Social Care; and Engineering and Manufacturing

**Providers** 

6

#### **Practitioners and managers**

28 direct

Learners

421

**Employers** 

6

#### **Partners**

Colchester College, Havering
College, SEEVIC, Northampton
College, Oaklands College,
Princess Alexandra Hospital,
Kids inc Nurseries, Corbets Tey
School, Maytime Montessori,
Choice Recruitment Services,
Manchester Airport Group

# Lakes College

#### **Project overview**

Lakes College led a project in the 2017-2018 phase. The Phase 3 project provided an extension of the development and application of the Experiential Learning Model (ELM) in a range of different scenarios and curriculum areas to enhance the employability skills of the learners on Level 3 – 6 programmes.

#### What the provider did

The project partners tested approaches delivered in their previous project across partner provider provision and extended the EL model into functional skills maths and degree apprenticeships.

The team planned then planned EL approaches to be embedded within Level 5 Nuclear Technician and the Level 6 Nuclear Engineer/Scientist Apprenticeship Standards and created a set of bespoke CPD packages to support EL methodology. CPD was delivered in partnership with employers to practitioners across the partnership.

66

The National College for Nuclear's Experiential Learning model is being promoted by Teacher Education as a meta-cognitive approach, which supports learners on their journey to becoming autonomous, critical practitioners through reflective practice.

DR FIONA DIXON, PGCE LECTURER, LAKES COLLEGE

"

#### **Project outcomes**

- Engineering and Maths teams across the partnership have delivered curriculum utilising the ELM and observations.
   55 observations took place with positive feedback on the implementation of the ELM approach.
- The OTLA lead from the functional Maths team stated that the model has rejuvenated the functional maths curriculum. An increase of achievement rates with functional skills Maths was recorded for those participating in the ELM approach compared to no ELM, this amounted to a 2.2% increase in achievement.
- 97% of students within the functional skills control groups described an increased interest in Mathematics for real life experience.

# Moving towards outstanding teaching, learning and assessment

- For the model to be used. as effectively as possible, practitioners are required to identify relevant and informative spotlighting ELM activities. These spotlighting activities help to explain to the students why they are learning subject specific tasks and ensure that they have an inquisitive attitude. This helps to embed sector specific behaviours into the lessons. Carrying this model forward will ensure that students are prepared for the work place environment relevant to their sector.
- The ELM approach has enabled project partners to understand how work-based Knowledge, Skills and Behaviours can be embedded within the curriculum. ELM can be used as an effective vehicle to help drive change within curriculum design. Embedding work-based skills directly into the curriculum structure, as well writing the course specification around sector specific skills can enhance the student's and the practitioner's experiences.
- Partners hope to sanction the use
   of the new lesson plan format
   across organisations to allow
   other departments to fully utilise
   ELM. Ofsted's new education
   inspection framework identifies the
   requirement for work-based skills to
   be developed within the curriculum,
   using this ELM approach college
   wide will support other curriculum
   areas to easily embed the relevant
   sector specific Skills, Knowledge

and Behaviours. The use of ELM will be embedded into departmental Quality Improvement Plans.

#### Tips for success

- Preparing students to be able to learn in a more instructed, participative approach where they discover the learning themselves, rather than passively receiving information takes time and requires a large-scale adaptation to curriculum.
- Staff must be upskilled with relevant industry knowledge to be able to develop the skills and confidence required to develop ELM approaches and spotlighting activities.

#### Takeaway message

The extension project has enabled an ELM to be a driver for positive change across the project partnership. The team believe this model should be utilised in technical education delivery as it can have a positive impact on student attainment and motivation, but it also allows the seamless incorporation of sector specific work-based Knowledge, Skills and Behaviours.

#### **Technical Skills Route**

## Construction; and Engineering and Manufacturing

#### **Providers**

5

#### **Practitioners and managers**

43 direct

and

178 indirect

Learners

282

**Employers** 

9

#### **Partners**

Derby College, Bridgewater and Taunton College, Lancaster and Morecambe College, University of Cumbria, Energus Training, Sellafield Ltd, Electricite De France, Centre for Leadership and Management, National Nuclear Laboratory, Atkins, Jacobs, Morgan Sindall, West Cumbria Works

# **London South East Colleges** (LSEC)

#### **Project overview**

LSEC led a project in the 2017-2018 phase of the programme. The Phase 3 project built on a and extended the model, creating a sustainable and innovative industry-led technical learning model. Through deep and meaningful engagement with employers, the project enhanced students' learning experience in the workplace. 'Powerful learning conversations' was a technique developed to increase student confidence and aspirations, which supports the development of selfreflection and metacognitive skills of all involved: teachers, learners and employers.

#### What the provider did

The initial project created a 360° industry-led learning model that developed a holistic approach to technical skills development across all learning environments. The 360° learning model acted as the bridge between education and employment which enabled learners to be better prepared for transitioning from education to employment. In the extended project, the model was extended into to travel & tourism and hair & beauty curriculum areas.

The project partners undertook a quality review with a subject specialist to evaluate the standard of technical skills and employability development required in each subject. Each team produced a technical skills baseline assessment tool to establish learner's knowledge at the beginning of the programme and then again at sixweek progress review intervals, which

helped to differentiate and personalise their planning of teaching strategies and devise more specific skills, knowledge and behaviour targets.

In preparation for industry placements, teachers encouraged learners to take responsibility for informing the employer about the skills they had learned so far and the areas that they wished to develop and improve on placement, utilising the skills assessment.

The required knowledge, skills and experience that learners would need to develop to secure fulfilling jobs, manage their life long careers and successfully navigate changes and challenges in their work and personal circumstance were reviewed and incorporated into the ongoing review process.

#### 66

Seeing our learners explore their potential in the workshop was an emotionally moving experience. Two of the young women, who previously had said very little, came to life. Richard engaged all the students and encouraged them to make their individual personalities more accessible within minutes of a client meeting them for the first time.

LISA STUBBS, CAMPUS DIRECTOR AND ASSISTANT PRINCIPAL, GREENWICH. LONDON SOUTH EAST COLLEGES.

#### **Project outcomes**

- The project has enhanced the involvement of employers in shaping curriculum and an industry-led learning model to meet the technical and employability skills required to work within the hospitality, travel and tourism and hair and beauty industries.
- Teachers have increased their knowledge of the high standards of employability qualities and technical skills required by the industry and this has reinvigorated teaching and learning and raised expectations.
- Powerful learning conversations have enabled teachers to identify and make decisions about changes to practice in the interest of their learners.

# Moving towards outstanding teaching, learning and assessment

- The collaborative development of employability and technical skills maps with employers enabled practitioners to identify sector specific skills and qualities required. This informed curriculum planning and teaching that moved beyond the requirements of the qualification to developing modern and wider skills that better prepare learners for the industries. This in turn raised aspirations of all involved: of teachers for their learners, of learners for themselves, and, alongside that the ability of employers to help learners reach potential.
- Through meaningful conversations

with teachers, the project continually explored the impact that teachers had on their learners and what outstanding learning looks like. The evidence captured from lesson observation, learner feedback and work raised teachers' awareness. In addition to this, coaching enabled and empowered them to identify and make decisions about changes to practice in the interest of their learners.

#### Tips for success

- Staff changes are inevitable within education and training as well as industry. It is therefore important to involve a wide range of staff from the beginning: ensuring that everyone understands the aims and progress to sustain momentum even though roles and involvement may change.
- Undertaking project work during times of rapid change and curriculum restructuring is challenging. However, it prompted the project team to maintain an acute focus on teaching and curriculum and pedagogical development including the pedagogy of industry learning and employability.

#### Takeaway message

To get the best out of someone, the teacher, employer, coach and leader must have a genuinely optimistic view about the person's unlocked potential and capability. This is transferable between teachers, learners and work place staff, and acting as a coach is a powerful learning process. Effective powerful learning conversations encourage learners and teachers to increase their metacognitive skills of reflecting, planning, being resourceful and resilient. This can lead to enhanced teaching practice and higher levels of learner attainment. both at college and in the workplace, and progression to more aspirational careers.

#### **Technical Skills Route**

# Travel and tourism; and Hair and Beauty

**Providers** 

6

**Practitioners and managers** 

36 direct and 37 indirect

Learners

96

**Employers** 

5

#### **Partners**

Havering College, People
1st, Welcomes Skills Ltd,
The Springboard Charity and
Springboard UK Ltd, Canterbury
Christchurch University, Rowhill
Grange Hotel and Utopia Spa, CH
& Co, D&D London, Daniel Galvin,
Martyn Maxey Hairdressing.

# Myerscough College

#### **Project overview**

The Myersough College led project, developed the use of sustainable Virtual Reality (VR) technology to enhance the teaching and learning applied to the development of students' practical skills. The VR packages were developed in partnership with educational and industry leaders. The project enabled increased employer engagement in the development of learning resources and enabled the project to utilise employers' insights into perceived skills gaps in the industries using VR.

#### What the provider did

Both teaching staff and employers reviewed the current provision and identified gaps in learner's practical skills. Teaching methods were also assessed to identify ares of pedagogy and andragogy that would benefit from digital learning enhancement. This led the project team to identify VR as a technological tool for developing practical skills in learners. The project focused on changing employer mindsets; moving away from using VR as a marketing tool to focus on teaching and learning, with the intention of to creating real life experiences for students, based on industry skills gaps.

Three areas were chosen for the project focus: unique events (out of the ordinary workplace situations), basic protocols and health and safety. Employers worked with teaching staff to co-design storyboards and VR teaching resources. The VR packages were created and then reviewed

by employers, tutors and learners until they were perfected according to industry and curriculum needs while keeping the salient points from employer identified skills gaps.

The VR teaching resources were then utilised in classrooms with learners across the partnership. Employers and teachers shared in the development of VR technology and contributed to the development of appropriate industry specific learning packages.

66

From observation and speaking to learners it is clear they are interested in trying new technology. The 360 model works well with both teachers and learners.

TEACHER, MYERSCOUGH COLLEGE

## **Project outcomes**

- Education partners and employers are better prepared to respond to T-levels through their experience of collaborative working. Providers have been able to work with employers to develop industry placement opportunities and learn from employers about the skills and attributes required for future employees.
- Employers, teachers and learners have developed and evaluated the use of VR in teaching and learning

- and found that it is effective for their students' engagement and deeper learning.
- Learners are well prepared for work and/or industry placements as a result of challenging learning and assessment using VR. The project has enabled them to become more familiar with industry contexts before starting a placement.

# Moving towards outstanding teaching, learning and assessment

- Through the development of bespoke learning packages, created in partnership with employers, project participants have strengthened and developed industry connections by enabling employers to feed into the curriculum to ensure it met their needs.
- The project has developed a model of pedagogy for teaching with technology. Teachers now consider how the use of the VR can positively impact on teaching, learning and assessment and not just as a technology gimmick. The project developed lesson template, which embedded clear the learning outcomes and developed VR packages to support the learning outcomes identified.

## **Tips for success**

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 Though it can be a big investment of time, this type of CPD helps develop not only teaching practice but useful resources and approaches that support deeper learning for students and make the lessons enjoyable.

 When working with partners, communication is key. Having an online group allows all partners to communicate effectively. Visits to other establishments are extremely important; as a lot can be gained by seeing actual working environments and talking to different teachers to gain an understanding of their context.

#### **Takeaway message**

As a result of the project, key industry leaders and teachers recognise the need to embed VR into further T Level route and pathway design to enhance teaching, learning and assessment. VR is an effective tool, when used correctly can unlock a learners' full potential.

#### **Technical Skills Route**

# Agriculture, Environmental and Animal Care

**Providers** 

5

#### **Practitioners and managers**

32 direct

64 indirect

Learners

202

**Employers** 

6

#### **Partners**

Plumpton College, HEROs,
Barnsley College, Ambito
Beaumont College, Institute of
Groundsmanship, Manchester
City Football Club, For Famers, G
Shepherd Animal Health, LLM –
Farm Veterinary Surgeons, Higher
Spen

# Reaseheath College

#### **Project overview**

The Phase 3 Reaseheath College led project, developed the work from the 2017-2018 Phase 1 project, which applied LEAN management to curriculum development and delivery. and demonstrated how LEAN could be applied to other technical routes. LEAN management principles were integrated into schemes of work and lesson protocols and then embedded into practical delivery to up-skill practitioners and support them in applying the principles of LEAN management to specialist curriculum areas in preparation for the introduction of T- Levels.

#### What the provider did

The project partners extended the principles of the Phase 1 project into the engineering curriculum. Working with employers, teaching staff reviewed curriculum plans and delivery to identify areas where LEAN management principles could be applied.

Training was delivered to teachers on the core principles of LEAN management before new protocols and curriculum models of delivery were developed. Specific subject areas were then selected to trial the revised curriculum model and teaching staff worked with employers to develop schemes of work and teaching resources.

Managers and employers supported teaching staff to deliver the revised curriculum, reviewing progress and seeking student and staff feedback on a continuous basis. 'LEAN Champions

were identified across the project partnership to review delivery and extend the LEAN principles into additional curriculum areas.

66

The workbooks link well to each unit and give learners the chance to develop their knowledge in the best way for them. There is differentiation and they are inclusive. They will be helpful in teaching reflective practice and in understanding how each unit synoptically links together.

# TEACHER, NELSON AND COLNE COLLEGE

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#### **Project outcomes**

- The redevelopment of a core part of the curriculum, where delivery is more in line with industry training and delivery, has been very well received by students.
- Effective mapping of work-based learning to the curriculum has led to a reduction in assignments and teaching time of staff across the project partnership.
- The project has transformed the culture of the departments involved to think about how to LEAN the teaching process. Staff now consider how and when they plan, what processes to use are now able to maximise value and eliminate waste in technical teaching.

# Moving towards outstanding teaching, learning and assessment

- Technical education teaching, learning and assessment have been transformed through a redesigned curriculum based on LEAN principles. Participants have been upskilled in identifying what outstanding teaching and learning may look like from a student perspective. This has enabled students to apply their learning and be more independent. They benefit to teachers and students have come from close links with employers through applied initiatives.
- Through using LEAN management process, all teams are now better prepared for the introduction of T Levels. Looking at a new initiative through the eyes of a LEAN practitioner will provide partners with the tools to objectively design an efficient and learner-focused curriculum. The participating teams and their respective departments now collaborate at a greater level, which is leading to quality improvements in the delivery of teaching, learning and assessment.

## Tips for success

 Senior Management buy-in has been essential to the success of the project. This created a senior project champion on executive and legitimised the significant time, effort and additional resource that went into the project delivery. It also maintained a high profile for the project to overcome any

- barriers along the way.
- The importance of having a core team upskilled in LEAN management. The LEAN Champions across the partnership played a fundamental role in underpinning LEAN management as a continuous improvement principle.

#### **Takeaway message**

LEAN projects have enthused team members across the project partnership. Staff have been motivated and speak positively about the benefits for improving the quality of teaching, learning and assessment based on LEAN processes. LEAN provides a fresh way to solve a problem, develop ideas, or streamline a business process.

#### **Technical Skills Route**

# Construction; Digital; and Engineering and Manufacturing

#### **Providers**

3

#### **Practitioners and managers**

15 direct and 11 indirect

Learners

368

#### **Employers**

11

#### **Partners**

Boston College, Nelson and Colne College, Kay Carson Streamline Management Farm, Lincolnshire Co-op Travel, Bakavoor Freshcook, United Lincolnshire Hospital NHS Trust, Compass Point, Olrids Department Store, Superflora, Infotel, South Holland District Council, Chronic Health, Salon Alchemy,

# South Devon College

#### **Project overview**

The South Devon College led project developed a curriculum designed to help to develop individual's professional behaviors, attitudes, and approaches required for competency within the accounting sector. Research with employers identified that new recruits needed to develop a range of professional skills to effectively contribute towards the culture and ethos of the sector. Responding to this, the project developed a holistic teaching, learning and assessment model that directly addresses the needs of employers.

#### What the provider did

The initial stage of the project focused on raising awareness among lecturers of the importance of embedding the professional skills identified through employer partners in the accounting sector into the curriculum. Project partners researched into current teaching, learning and assessment practice across the subject. Findings informed the development of employer led CPD sessions for staff across the participating providers. CPD sessions were focused on supporting teaching staff to identify the current culture and ethos of working in the accounting sector.

Teaching, learning and assessment resources based on teaching professional behaviours were then created in collaboration with lecturers and employers. The project partners felt it was important to create a forum where lecturers would feel confident to experiment with new approaches and to be prepared to fail, which would

enable them to ultimately learn, and improve their teaching practice.

Resources were utilised in the classroom with feedback captured from students throughout the process. A student conference was held towards the end of the project whereby students were supported to develop professional behaviours, which would support their career progression.

#### 66

It was great to see a representative of AAT making the effort to not only visit but chat to students on a personal level, offering advice and genuinely taking an interest in future accountants.

# ACCOUNTING LECTURER, SOUTH DEVON COLLEGE

#### **Project outcomes**

- Collaboration with employers from the accounting sector and lecturers across other subject areas gave accounting lecturers a greater appreciation of employability, transferable skills and behaviour inclusion in the curriculum.
- Research carried out with students before and after delivery showed a significant increase in their understanding of the employability and transferable skills identified within this project.

# Moving towards outstanding teaching, learning and assessment

- The professional skills that were identified in collaboration with employers will continue to be embedded within the schemes of learning for accounting curriculums from Levels 2 to 4 across all partners.
- The wider professional skills identified through the project will be embedded within the current 16-19 Study Programmes in preparation for T Levels and the extended industry placement.
- Lecturers involved in the delivery of this project have critically reflected on their own practice, analysing the changing environment within the accounting sector and developing their skills as practitioners to provide teaching, learning and assessment beyond the knowledge of accountancy.

### **Tips for success**

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Collaboration with employers to identify the specific employability and transferable skills required for the accounting sector has enabled project partners to create a meaningful curriculum, embedding these skills. Employer involvement is key to creating future employees who possess both the technical qualification and skills and behaviours valuable to businesses.

The use of a student conference to deliver professional skills and behaviour rather than technical knowledge provided a 'safe space' to gather feedback from students and peers in the development of outstanding teaching learning and assessment.

#### Takeaway message

The project enabled collaboration not only with employers but other training providers. Collaboration allowed participants to explore common problems and jointly identify solutions. At times, this led to the project team exploring avenues they hadn't originally considered but added value. In conclusion, the takeaway message is to explore the unexpected!

#### **Technical Skills Route**

# Legal, Finance and Accounting

**Providers** 

3

**Practitioners and managers** 

21 direct

and

98 indirect

Learners

165

**Employers** 

5

#### **Partners**

Cornwall College, Bridgwater
College, Accounting 4 Everything,
Bishop Fleming, Dartington Hall &
Trust, TekEurope, Association of
Accounting Technicians

# Key findings and lessons learnt

- Significant knowledge and skills gaps amongst teachers and employers need addressing.
- 2. Tailored CPD goes some way to filling those gaps.
- Meaningful, sustainable collaboration takes effort, time and determination.
- Joint development of curricula and authentic assessment helps to provide buy-in from partners and a shared understanding of 'outstanding'.
- Active learning approaches to TLA are the most meaningful and successful with learners, teachers and employers.
- 6. Advancing equality is challenging.
- 7. Leading complex projects requires strong project management skills.
- 8. Externally funded projects provide impetus to change but impact is not instant.
- Significant knowledge and skills gaps amongst teachers and employers need addressing.

The programme has provided valuable evidence about knowledge and skills gaps. As the individual projects progressed, the complexity of these gaps became more obvious. In most of the projects, the initial focus was on professional development for teachers, tutors and managers, on the basis that up-to-date skills are needed to inform planning and teaching, which in turn will help to address future skills shortages in the sector. This process involved identifying and addressing gaps that relate to both technical expertise and teaching skills.

The degree to which teachers have acquired more up-to-date industry specific knowledge and skills through this programme, in preparation for the introduction of T Levels, has been extensive.

Engineering, manufacturing and construction teachers across several college and employer partnerships have familiarised themselves with modern industry practice and taken this back into classrooms and workshops. Hospitality and hair and beauty teachers have worked with industry experts to hone their practical skills, while one project has enabled teachers to grapple with the rapid increase of robotics across several sectors. Teachers in a landbased partnership have acquired and applied up-to-date commercial expertise in LEAN management principles, which is transforming the college's approach to curriculum development and delivery. Tutors in an adult learning consortium have become more digitally literate and are using their newly acquired skills to support those employed in the care sector.

The projects have provided the impetus to review and update not just industry knowledge but also approaches to planning, delivering and reviewing teaching, learning and assessment (TLA). This has led to the identification of gaps for some teachers, notably in relation to technology and/or less familiar TLA approaches, such as problem-based or experiential learning. The gap for employers was particularly evident. Most acknowledged that they were unfamiliar with education jargon,

current teaching methods and planned education reforms. Some were adjusting to the new arrangements for apprenticeships and related training.

The knowledge and skills gap is most significant for students. However, a few of the projects highlight the fact that, in some circumstances, students are more advanced than their teachers, particularly in relation to digital literacy, as a consequence of part-time employment or placements, or simply because they are 'digital natives'. Hence, the notion of colearning and 'students as partners' is one of the approaches discussed below.

# 2. Tailored CPD goes some way to filling those gaps.

While face-to-face CPD events, led by those working in education, have featured strongly across all the projects, other less traditional approaches have also been trialled. Several projects have incorporated industry placements for teaching staff and many have involved employers in the design and delivery of workshops, briefings, teaching materials and assignments.

Where named individuals or groups have led on developing CPD for TLA as part of the projects, various titles have been conferred, many of which are already familiar in the sector, such as champions, advanced practitioners or coaches. For one project, 'manager practitioners' from education providers were identified and trained specifically to bridge the gap between educationalists and employers across engineering, manufacturing and construction.

The use of the term 'masterclass' has been employed in several projects as a mechanism for CPD. The masterclass concept for students is already familiar to those in the sector but, within the context of the projects. these events were most effective when they were much more than a one-off demonstration by experts, such as chefs, hair stylists or beauty therapists. In a few projects, the term masterclass was misleading. as it was used to describe standard workshops or meetings. However, in the best practice, these sessions have been carefully aligned to curriculum and student needs, planned jointly with teachers to develop their own professional expertise, and evaluated to ensure high quality learning for students. Students, too, reflect on and record their learning as and when they demonstrate new knowledge and skills.

The Professional Standards have been used effectively in most projects to identify teachers' development needs and assess impact. CPD aimed at employers has also been highly productive. For example, a hospitality partnership used a coaching model to help employers to understand student needs, particularly where they are complex, so that they are better placed to support students on work placements. Another project focused on developing a model to work with employers, whereby employees undertake a module on basic TLA principles to become 'master technicians'. The colleges now have master technicians with specific industry expertise who make a valuable contribution to the curriculum. When teachers observe these lessons, such as those on cyber security, they update their own knowledge and skills, alongside the students, as partners in learning.

CPD targeted at female apprentices who work for large, well-established employers provided one of the projects with a pool of around 60 young women ambassadors. Knowledgeable about the new T Levels and career choices, they visit schools and colleges to encourage

other females to engage in STEM, as well as advising on curriculum materials, to ensure that they are sufficiently inclusive.

# 3. Meaningful, sustainable collaboration takes effort, time and determination.

Collaboration between partner organisations was a challenge for many of the projects. Unsurprisingly, from the outset of the projects, independent training providers and FE colleges with existing, wellestablished employer links were better placed than adult learning providers and sixth form colleges.

Where these long-standing relationships between employers and educational providers already existed, the purpose of collaboration was clear, understood and refined for the projects. Even then, almost all projects had to confront problems around time and availability. Teachers and managers are extremely busy and employers rarely have time to spare, particularly when they are striving to remain profitable in an increasingly volatile economic environment.

However, the funded projects provided opportunities to identify and clearly articulate the mutual benefits of collaboration. There were no quick wins or specific models for success but, in the main, where employers were confident that their involvement would yield gains for them, particularly given concerns about skills shortages, engagement went significantly beyond the usual type of involvement with educational providers.

Across the whole programme, employers ranged from small organisations to large national companies. They engaged in a variety of activities such as hosting visits, teaching sessions, leading curriculum development groups, facilitating CPD events, identifying real-life problems for students to solve, producing live briefs and other resources, contributing to assessment, providing industry experience for teachers and placements for students, and delivering masterclasses.

# 4. Joint development of curricula and authentic assessment helps to provide buy-in from partners and a shared understanding of 'outstanding'.

The joint development of curricula by teachers, employers and, in some cases, learners, proved to be successful in maintaining buy-in and momentum. One project involving the collaboration of teachers and employers led to the development of vocationally specific materials to improve learners' maths knowledge and skills.

Working together on curriculum design and/or resources provided a more appropriate setting in which to review what 'outstanding' or excellent teaching means to employers, teachers and learners. Discussions about notions of excellence in technical education went beyond Ofsted reports and checklists in attempts to identify what constitutes outstanding practice within a given context.

In the more successful projects, a sustained effort was made to demonstrate excellence in practice, or to raise standards in areas where the need to improve had been identified through self-assessment. However, in a few projects, for varying reasons, opportunities were missed to substantially raise the bar.

In most cases, collaborative working has led to partnerships that will continue beyond the life of the project. Indeed, in several projects, working in partnership has had a significant

impact. For example, in one project, collaboration has led to a partner now working with an NHS Trust to deliver new standards in Healthcare Support Work.

With the land-based project, students are now designing and implementing a placement project, closely linked to a revised curriculum and shaped by the employer. Once the placement is completed, it is evaluated not just in terms of students' learning, but also in relation to added value for the employer.

Joint development of curricula appears to work more effectively if building on existing practice and/ or partnerships. However, new collaborative relationships were also forged through the projects and were particularly successful where those involved were confident in their own skills and ambitious in setting standards.

# 5. Active learning approaches to TLA are the most meaningful and successful with learners, teachers and employers.

The projects provided opportunities to test hypotheses, review existing approaches and evaluate them within the context of technical education. The choice of TLA approach was driven by varying factors linked to employer views, current practice and/or research.

In attempting to nudge TLA towards outstanding, all projects incorporated some kind of experiential, immersive, interactive or participatory learning. Although there is nothing new in these active learning methods, this was unfamiliar territory for many of the employers. Learning by watching, imitating, practicing and reflecting remained a feature of practical skill development in several projects. One such project focusing on hospitality

demonstrated the strength of this approach when centred on the needs of students.

In several of the projects there was a strong focus on problem-based learning (PBL), particularly when linked to the co-design of curricula, as noted above. PBL was identified as an opportunity to involve employers in formulating real scenarios, support students to solve technical problems and also participate in the assessment of suggested solutions. Tentative, early feedback suggests that this approach is popular with students and particularly successful in helping them to gain not just content knowledge. but valuable behaviours and skills, such as independent working, resilience, creative thinking and time management.

One project team focusing on the nuclear industry planned experiential learning into sections of the curriculum that previously had been delivered through traditional, didactic classroom based activities, particularly relating to science and maths, and outputs include what they now refer to as 'objects of experiential learning'. Experiential learning is often taken to mean a method of educating through first-hand experience, including the acquisition of skills, knowledge and competence outside of a traditional classroom setting. Indeed, many of the projects focused on attempting to establish seamless links between theory and practice, both at employer premises and in newly designed open spaces conducive to experiential learning, as well as on a farm or in workshops. offices, salons or kitchens.

In some settings, teachers experimented with learning alongside their students. For example, in the rapidly changing field of programming and robotics, busy teachers acknowledge that students are sometimes quicker at picking up new

applications and tools.

Radically changing an established teaching approach is not without its challenges, many of which will continue beyond the scope of this programme. Teachers need to be willing to change their practice and this often requires considerable, ongoing support. Managers can make a real difference by supporting their staff through CPD and appraisals. In addition, tensions between employers, awarding bodies and educational providers need to be resolved around timetables, deadlines, assessments and organisational cultures.

Where pedagogical approaches centre on blended learning, as they did in several of the projects, outcomes and feedback are positive. However, the challenge here is to balance the evaluation of various technologies with avoiding a temptation to simply overlay existing practice with new tools, and to ensure that any chosen approach improves the quality of teaching, learning and assessment.

# 6. Advancing equality is challenging.

While most projects met or exceeded a variety of key performance targets in relation to reach, retention of learners, attendance, or breakdown by gender or ethnicity, this does not itself advance equality. The extent to which projects were able to make a significant difference in relation to equality was variable, as would be expected, but some innovative ideas and approaches emerged.

For example, for hair and beauty practitioners, a mental health and suicide prevention lesson, targeted primarily at young men, was created, along with associated resources, by a leading professional with expertise in this area. This is helping to raise awareness amongst teachers,

employers and learners of mental health issues and how they can engage clients and alert them to relevant support services.

Several projects focused on preparation for employment for disadvantaged learners. In one, a mentor worked with employers in the hospitality sector to address learning support needs in the workplace, focusing on practical advice regarding equality of access, safety in the workplace, establishing respect, and overcoming potential barriers relating to poverty and class. In another, the acquisition of forklift truck driving skills helped unemployed adult learners find paid work.

Given the importance of English and maths in relation to employment and social mobility, it was significant that one project focused on the maths knowledge and skills required to succeed in a variety of sectors, and another aimed to support apprentices to improve their English.

Respect in the workplace was noted as critical by female apprentices, who were trained as role models, and are helping to raise awareness of T Levels as an opportunity for more young women to consider STEM related career choices.

# 7. Leading complex projects requires strong project management skills.

The projects were all complex, given the involvement of different providers and employers, tight timescales and ambitious performance targets. In addition, the projects were operating against a turbulent backdrop of area reviews and college mergers and, as a consequence, some educational partners changed several times.

It is evident that projects work particularly well where those who

lead have authority and influence within their organisations and, in addition, can demonstrate strong project management skills. This involves establishing and managing a clear project plan, shared with all partners, and delegating as and when appropriate.

Different project management models emerged. In some cases, a person was recruited specifically to manage the project. In others, responsibility fell to an already very busy middle manager or vice-principal. In a few, the principal or chief executive led.

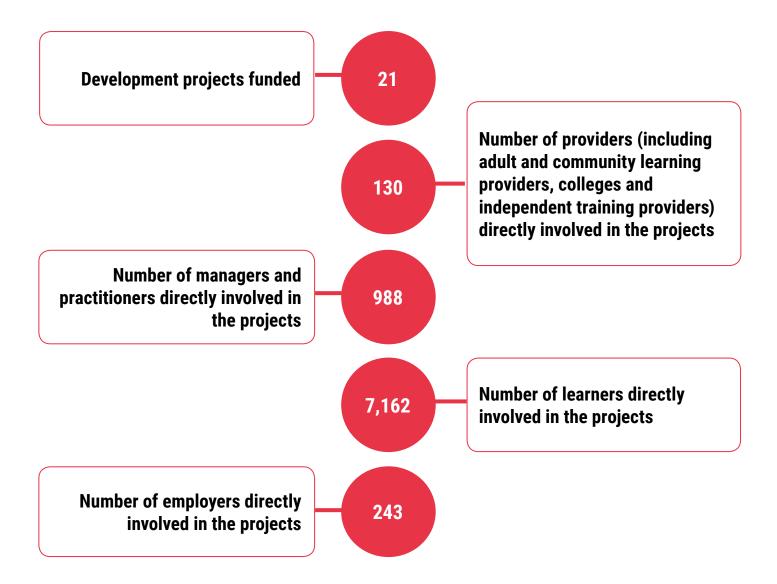
The position of project leads within the hierarchy of organisations is important. It has an impact on the extent to which they can identify and resolve issues speedily, raise the profile of the project, and influence employers, partners and governors. It also links to how effectively they can get support internally and align actions and impact to institutional self-assessment and quality improvement.

# 8. Externally funded projects provide impetus to change but impact is not instant.

The individual projects that contribute to the overall programme each reflect a wealth of rich examples of how educationalists and employers can work together to successfully improve TLA. In most cases, project leads met the requirement to ensure that their projects – or aspects of their projects - are sustainable now that funding has ended. They have identified how this activity has brought benefits to employers, teachers, managers and students, details of which are in the case studies and associated resources. This impact takes a variety of forms, be it qualitative in relation to feedback from all involved, or quantitative in the form of data on participation and student

achievement. However, the real impact will take time to filter through, and this will need to be evaluated at a later stage.

## **Programme summary in numbers**



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