



# Edge Future Learning: Lessons Learned

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# 1 Executive summary

The Edge Foundation has a history of supporting schools and colleges to broaden and transform education, making it relevant to the twenty-first century. The team spent several years visiting and working with some of the most effective schools, colleges and models around the world. Although they may use different language, Edge found the similarities between all these highly effective approaches to be striking. At the time Edge distilled these into three key principles that sat at the heart of Edge Future Learning (EFL) – Project Based Learning (PBL), Real World Learning and Community Connected Learning. They went on to pilot these approaches with schools and colleges across the North East of England in partnership with Ford Next Generation Learning (NGL) and the North East Local Enterprise Partnership (NELEP).

EFL ran for about five years with an aim to learn lessons from that work and to share these with schools and colleges in the UK. In the first phase of EFL there was a strong focus on PBL. Learning from this phase informed the second stage of the pilot. Now in 2023, Edge is retaining a focus on these three key principles, now termed signature practices, but taking a broader approach to its work with schools and colleges through convening and supporting a wide range of different organizations – including Multi Academy Trusts, College Groups and other school networks – with an interest in their development and delivery through the Edge Deeper Learning UK network.

To inform this next phase of the work of Edge, they asked IOE, UCL's Faculty of Education and Society, to undertake an independent reflection on the second stage of the pilot to identify how different elements of their approach worked and the lessons learned so that these can be shared across schools and colleges and support them to adopt and adapt good practice. The research took place between August 2022 and August 2023.

## Methodology

The second stage of the pilot of EFL involved four institutions: two schools, one university technical college (UTC) and one further education (FE) college. For this research, Edge requested that the focus be on UTC South Durham and Sunderland College.

Contextual semi-structured interviews were undertaken with five participants from the Edge Foundation, the NELEP and Ford NGL to understand the origins, development of and implementation of their approaches to EFL, the structures and systems in place to support the initiative, the training provided and the local context. These were followed by contextual interviews with lead staff in the UTC and college to understand the approach to implementing EFL as a prelude to fieldwork visits (N=2).

During the fieldwork visits to the two institutions interviews were undertaken with staff (N=18). These explored the implementation of the project, the training received to support this, examples of activities undertaken with students, employer engagement and the benefits for young people. Students in focus groups shared their aspirations, experiences of the curricula and preparedness for employment (N=15). In addition, both institutions offered observations of PBL in action as part of this visit: five such observations took place. The observations gave insights into the dynamics of PBL and community connected learning at work.

The process of analysis of the interviews was guided by the phases of thematic analysis proposed by Braun and Clarke (2019) and had a specific focus on lessons learned. The research was undertaken within the ethical guidelines of the British Educational Research Association and approved by the IOE ethics committee. Both

participating institutions were provided with a copy of the report for review prior to this being submitted to the Edge Foundation and given the opportunity to make suggestions or request changes that they felt were necessary.

## Lessons learned

It is acknowledged that both organizations benefited from multiple opportunities provided by the Edge Foundation that would be impossible for most schools and colleges such as the visits to Nashville, the sustained coaching and support from Ford NGL and in the case of the college the funding for the Industry Alignment Support Officer. Undoubtedly, these resources were influential in both organizations, however, there were many stand out features of how this second phase of the EFL pilot was implemented in both institutions that could be translated into wider practice.

1. Central to the success of the pilot was the intentionality and vision for change to transform teaching and learning to better meet the needs of young people in both institutions. At an obvious level this required strong engagement from the Senior Leadership Team (SLT) but it was much deeper than that. It was about clear alignment between the strategic vision of each institution and how that aligned with the aspirations of EFL and Ford NGL. This was not about quick wins: it was about sustained commitment, clear messaging to all staff and a sense of buy-in at every level of the organization.
2. Although a little surprising to the Ford NGL coaches, the impact of the co-construction of the leaver profile<sup>1</sup>, beginning with a visioning day for all stakeholders – students, staff, parents and employer/business partners in the community, was immense. The leaver profile with its emphasis on the development of knowledge, skills and behaviours needed for future careers provided a consistency of approach across all departments, enabled focused conversations with employers and gave young people confidence in their industry-relevance. It was embedded in the curriculum offer and a central focus of teaching and learning.
3. Student needs were at the heart of teaching and learning with a focus on enabling all young people to flourish. This meant providing opportunities to support the interests and aspirations of all students, the foregrounding of multiple pathways post-18 whether these be into apprenticeships, further study or work and fostering an environment where learners were encouraged to reflect on their behaviours or outcomes and in the process develop criticality and confidence in becoming self-directed learners.
4. The implementation of PBL was fundamental in transforming the educational experience for students in both institutions, and the synchronicity between PBL and the leaver profiles was evident. PBL was carefully scaffolded to meet the needs and abilities of students with scaffolds being reduced over time. All projects were rooted in authentic real world problems that frequently involved employers and which became more challenging as time progressed. Time was taken to introduce parents to PBL through showcase events early in the Autumn term and through student-led conferences where students presented their work. This experiential approach to learning, rooted in the real world fostered the development of teamwork, creativity, problem-solving and communication in students in addition to supporting their decision-making for their future careers.
5. As might be anticipated from strong SLT commitment, dedicated timetable time for staff to undertake training in PBL, to visit and learn from other organizations, and to plan and discuss/develop ideas alongside industry partners had been ringfenced. Naturally teaching staff had different levels of experience with PBL and had different perspectives on PBL: this was recognized in both institutions in the importance given to staff feeling confident about PBL and committed to PBL rather than rushing ahead.

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<sup>1</sup> The leaver profile captures the students' personal, professional and technical development.

6. Of central importance to this initiative was the systematic and informed approach to employer engagement and the fostering of business partnerships. This was premised from a starting point of any relationship being mutually beneficial for both employers and the educational institution. Formally constituted employer boards, a tiered menu of what employers could offer, a responsiveness to employer requests about future workplace needs and Labour Market Information (LMI) all contributed to this and ensured that employers had an impact on classroom learning. Each institution had people with a recognized professional non-teaching role that focused on employer partnerships and the development of these: this had included the setting up of the advisory groups. While this had in effect been frontloaded to develop and engage with employers, once relationships were established teachers gradually took more responsibility since it was they who had the expertise to work with employers on the design of teaching and learning
7. Throughout staff in leadership roles, with respect to the pilot, were supported by Ford NGL coaches who rather than telling participants what to do instead used skilful questioning and prompting to encourage reflection and thinking. This was valued by all participants, as were opportunities to learn from and with other institutions.
8. Attempts to innovate are often beset with challenges: notable here was that whilst staff in both institutions sometimes spoke of things that had been challenging, such as allocating sufficient time for staff development and fostering teamwork among young people, these appeared to have been viewed as an integral part of the ongoing process of creating the best possible environment for learners, rather than as some kind of obstacle in their path.

## A final reflection

What is apparent in the successes evidenced in this report across both institutions is the intentionality of vision and design that ran through each aspect of teaching and learning to transform the educational experiences of young people.

This was evidenced in:

- the synergy of their mission with the aims of EFL and Ford NGL and a desire to transform education,
- the systematic design of internal systems and processes to support this, allied with strong SLT commitment,
- the close linkage between the leaver profiles and approaches to PBL,
- intentionality of purpose in that this was for all young people,
- intentionality in the structured and systematic approach to working with employers for mutual benefit,
- intentionality in the scaffolded approaches to supporting staff development, and
- the openness to reflection and change as seen in the conversations with the Ford NGL coaches, that was also fostered among students and staff.

Central to the success of the work undertaken by both institutions was that this holistic approach to education was rooted in community engagement from the very beginning. An essential part of this was the involvement of students, staff, employers and parents in the visioning day that set the path to the development and embedding of leaver profiles.

## 2 Introduction

### 2.1 Introduction

The Edge Foundation commissioned IOE, UCL's Faculty of Education and Society to undertake this small scale research into the second stage of the pilot of Edge Future Learning (EFL) and to reflect on lessons learned. The research was carried out between August 2022 and August 2023.

The Edge Foundation is the independent education charity dedicated to shaping the future of education and training to meet the demands of the 21st century global economy and ensure opportunity for all. Edge believes that all young people should have the opportunity to achieve their potential by making education relevant. Underpinning this is a vision of education that embraces high quality professional education and training, a broad and balanced curriculum, interactive and engaging real world learning and rich relationships between education and training, and employers

### 2.2 Edge Future Learning

The Edge Foundation has a history of supporting schools and colleges to broaden and transform education and training, making it relevant to the twenty-first century. The team spent several years visiting and working with some of the most effective schools, colleges and models around the world from High Tech High in San Diego to the P-TECH school in Brooklyn, to Ford Next Generation Learning (NGL), South East Regional College in Northern Ireland to School 21 in London and XP School in Doncaster. Although they may use different language, Edge found the similarities between all these highly effective approaches to be striking. At the time Edge distilled these into three key principles that sat at the heart of Edge Future Learning – Project Based Learning (PBL), Real World Learning and Community Connected Learning (see Rogers and McGrath, 2021 for a review of the evidence). They went on to pilot these approaches with schools and colleges across the North East of England in partnership with Ford NGL and the North East Local Enterprise Partnership (NELEP).

EFL ran for about five years with an aim to learn lessons from that work and to share these with schools and colleges in the UK. In the first phase of EFL there was a strong focus on PBL. Learning from this phase informed the second stage of the pilot. Now in 2023, Edge is retaining a focus on these key principles, now termed signature pedagogies, but taking a broader approach to its work with schools and colleges through convening and supporting a wide range of different organizations – including Multi Academy Trusts, College Groups and other school networks – with an interest in their development and delivery through the Edge Deeper Learning UK network.

To inform this next phase of the work of Edge, they commissioned IOE, UCL's Faculty of Education and Society, to undertake an independent reflection on the second stage of the pilot to identify how different elements of their approach worked and the lessons learned so that these can be shared across schools and colleges and support them to adopt and adapt good practice.

### 2.3 Background context

For some time it has been acknowledged that the international challenges to be faced in the 21st Century require that current students in secondary education, whether in schools or colleges, will need to develop a wider range of skills and attributes than previous generations (OECD, 2018). Alongside this sits rapid developments in new technologies that will bring significant changes to the world of work.

Employers, for example, demand different skill sets from their employees (Impetus, 2014; Mann & Huddleston, 2016) with Strongin et al. (2016) emphasizing social skills, creativity and judgment, while Mourshed et al. (2014) highlighted the importance of spoken communication, teamwork and problem solving. In addition, at a curriculum level there are concerns that many young people are receiving a curriculum that is out of date (OECD, 2020).

Internationally attention has turned to reconsider approaches to education so that young people are equipped with the capabilities that enable them to thrive. Alongside this sits a growing evidence base for the power of capabilities (Schleicher, 2016; The Foundation for Young Australians, 2016). These broader learning goals, often referred to as non-cognitive skills, capabilities, competencies or 21st century skills include critical thinking, problem solving, creativity, curiosity, interpersonal and communication skills, self-regulation, grit, entrepreneurial skills, teamwork and craftsmanship.

In support of enabling young people to develop 21st century skills, many jurisdictions internationally have defined broad goals of learning/frameworks to support wider learning outcomes (OECD, 2015). Among the most popular are creativity, critical thinking, problem-solving skills, communication, collaboration, digital competencies, meta-cognition, self-regulation and responsible citizenship (Dede, 2010; Voogt & Pareja Roblin, 2012). In addition, there has been an increased focus on young people's social and emotional wellbeing and on their physical and mental health (McGuinness, 2018).

What is distinctive about these approaches (see Rogers, 2022) is that each framework underpins the curriculum offer and is not viewed as a bolt-on extra. All place students at the centre of learning and are trying to break down subject barriers in favour of larger areas of knowledge that integrate 21st century skills, with an emphasis on cross-curricular and enquiry-based projects as exemplified by PBL.

Pedagogically, PBL is underpinned by three constructivist principles: learning is context-specific; students are actively involved in the learning process; and students learn through social interactions and the sharing of knowledge and understanding (Menzies et al., 2016). Common characteristics of this approach include a) a student-centred learning approach that is organized around achieving a shared goal, b) teachers focused on the role of facilitating learning, c) strong links to a real world problem, and d) engagement in higher order thinking skills such as analysis, evaluation and synthesis.

The underlying pedagogical approach to PBL requires multiple shifts in classroom practices and can be challenging for teachers (Dole et al., 2016). Reported difficulties include initiating the student inquiry process, facilitating dialogic interactions to scaffold learning, and finding the time and resources to support in-depth student investigations (Alozie et al., 2009; Hertzog, 2007). Evidence suggests that the move from a teacher-centred approach to more student-centred learning is a gradual process and one that requires support and training over an extended period (Hertzog, 2007).

It is within this context that the innovative work of EFL took place in the North East of England.



### 2.4 Aims

The overarching aim of this project was to explore lessons learned from the development and implementation of innovative pedagogic approaches to learning in two educational institutions in England. Specific attention was given to understanding what works and how, the factors that support pedagogic innovation and the factors contributing to the transferability of the approach to other schools and colleges:

- The different stages of implementing innovative pedagogic approaches,
- Factors that support innovation,
- Factors that support employer engagement and community based learning,
- The systems and support structures in place to support pedagogic innovation, and
- Where there are specific challenges in this and how these are addressed.

# 3 Methodology

## 3.1 Overview

The second stage of the pilot of EFL involved four institutions: two schools, one UTC and one FE college. For this research, Edge requested that the focus be on UTC South Durham and Sunderland College.

### *Phase one: Background and context*

Online semi-structured interviews were undertaken with key participants from the Edge Foundation, the NELEP and Ford NGL to understand the origins, development of and implementation of their approaches to PBL, real world learning and community engagement; the structures and systems in place to support the initiative, the training provided and the local context. Interviews lasted for between 40 minutes to 1 hour and were recorded on zoom.

### *Phase two: Contextual interviews prior to fieldwork visits*

Contextual online interviews were undertaken with lead staff in the UTC and college to understand the approach to PBL, real world learning, employer engagement in the delivery and design of the curriculum, the leaver profile, the role of the industry alignment managers/support officers, the strengths and challenges of their provision and how it relates to the wider geographical context in which they are set, and the current policy context. Interviews lasted for 1 hour and were recorded on zoom.

### *Phase three: Fieldwork visits*

Fieldwork visits were undertaken to the two case study institutions in England.

Staff interviews (N=18), involving teaching and support staff, focused on the implementation of the project, the training received to support this, examples of activities undertaken with students, employer engagement and the benefits for young people.

In focus groups students shared their aspirations, experiences of the curricula and preparedness for employment. Focus groups took place with students studying at Levels 2 (GCSE) and 3 (A Level/BTEC) and across different technical specialisms. In the college HND students also took part in focus groups. The focus groups were designed to take an activity-based approach drawing on the projects that students had taken part in and/or completed. Fifteen students took part in focus groups.

Both institutions offered observations of PBL in action during the visit, either as part of a taught lesson or as part of an extended project: five such observations took place with each lasting between 15 and 45 minutes and involving approximately 90 students. These observations gave insights into the dynamics of project-based/ community based learning at work. Observations were not recorded rather field notes were made.

### 3.2 Analysis

The process of analysis of the interviews was guided by the phases of thematic analysis proposed by Braun and Clarke (2019) and had a specific focus on lessons learned. This iterative process of categorisation seeks to continually refine and test the description as it unfolds. The use of codes enabled the data to be chunked into themes and sub-themes. Interview recordings were fully transcribed. While both institutions agreed to be named in this report, in identifying the quotations and illustrations, care has been taken to anonymise individuals as much as possible.

### 3.3 Ethical considerations

The research was undertaken within the ethical guidelines of the British Educational Research Association and approved by the IOE ethics committee. All participants were provided with a briefing sheet about the research and a consent form prior to agreeing to be interviewed. All participants gave permission for the interviews to be recorded and were informed of the right to withdraw. Following transcription of interviews from phases 1 and 2 the full text was offered to each interviewee for review. These participants were able to make changes to the interview transcript that they felt were necessary. Both participating institutions were provided with a copy of the report for review prior to this being submitted to the Edge Foundation and given the opportunity to make suggestions or request changes that they felt were necessary.

## 4 Findings

The findings section begins with the background to the case study institutions followed by an overview of the different elements of EFL. Thereafter the findings from the thematic analysis are presented. These lessons learned are grouped into eight main themes and associated sub-themes which are shown here in table 4.1 to act as an advance organizer for the reader.

**Table 4.1 Lessons learned: themes and sub-themes**

Main theme	Subthemes
<b>Intentionality and vision for change</b>	<ul style="list-style-type: none"> <li>● The fit between EFL and the aims of each institution</li> <li>● Serious commitment to transformation</li> </ul>
<b>The leaver profile – the glue within the system</b>	<ul style="list-style-type: none"> <li>● Origins of the leaver profile: the visioning day</li> <li>● Delivering and embedding the leaver profile</li> <li>● The impact of knowledge, skills and behaviours</li> <li>● An external perspective on the leaver profile</li> </ul>
<b>Students at the heart of learning</b>	<ul style="list-style-type: none"> <li>● Changing mindsets</li> <li>● Opportunities for all students</li> <li>● Promoting reflection and self-directed learners</li> </ul>
<b>A scaffolded approach to learning</b>	<ul style="list-style-type: none"> <li>● A planned approach to PBL: incremental and scaffolded</li> <li>● Introducing PBL to parents</li> <li>● Links to the real world</li> <li>● Embedding transversal skills</li> <li>● Synthesizing links between projects, learning and assessment</li> </ul>
<b>Space for staff development and growth</b>	
<b>Systematic approach to employer partnerships</b>	<ul style="list-style-type: none"> <li>● The importance of formally constituted employer boards and allocation of specific tasks</li> <li>● Employer engagement that reaches the classroom</li> <li>● Employer partnerships and the future workforce</li> <li>● A professional in-house role for employer engagement</li> </ul>
<b>Wider processes and systems contributing to success</b>	<ul style="list-style-type: none"> <li>● Professional support through a critical friend approach</li> </ul>

### 4.1 Background to the case study institutions

#### UTC South Durham

UTC South Durham opened in 2016 and is a STEM-focused technical college with a focus on engineering and advanced manufacturing for 14 to 19-year-olds. Students come from a wide geographical area including County Durham, North Yorkshire, Tees Valley and Tyne and Wear. The UTC is located on Aycliffe Business Park, right next to Hitachi Rail, a business area where over 10,000 people travel to work every day. The location deliberately reflects the UTC's specialism and places it next to some of the most advanced manufacturing and engineering facilities in the country, enabling students to access fantastic real world work experiences on their doorstep. The curriculum is designed to inspire and challenge all learners so they build their confidence, become responsible citizens and prepare for their future careers. Key principles behind the curriculum are that it is employer led, destination focused, provides a balance of academic, technical and workplace learning, and it promotes student wellbeing to ultimately enable students to be career and life ready. Currently there are just over 440 students in the UTC.

#### Sunderland College

Sunderland College is one of three colleges that make up Education Partnership North East (EPNE), a North East regional college group. The other colleges being Hartlepool Sixth Form College and Northumberland College. Sunderland College/ EPNE is one of the largest providers of post-16 education in the North East with approximately 10,000 students including apprentices. The College has three campuses across the City of Sunderland, offering a wide range of academic and technical provision for school leavers, apprentices and adults. The College aims to develop and positively shape lives, communities and the economy through teaching, learning and development of skills. Across EPNE sector specialisms align to the key needs of the labour market and are embedded both in their pioneering curriculum development and investment in world-class facilities that equip their students with the relevant skills for industry. Sunderland College specialises in Health and Care, Construction, the Visitor Economy, Engineering and Manufacturing and Digital.

### 4.2 Context for the second stage of the pilot of EFL

EFL was a piece of work over a five-year period that sought to identify 'effective practice where people are trying to make education much more relevant for young people, and then trying to distil down the lessons from that work and share them with schools and colleges in this country' (Edge team member). Over time, Edge conceptualised this approach as having three signature practices:

1. Project-based learning: an approach to teaching in which students work on a project over time – from a week to up to a term – that engages them in solving a real-world problem or answering a complex question. Students demonstrate their knowledge and skills by developing a public product or presentation for a real audience.
2. Real world learning: intentionally designing the curriculum so it is relevant and contextualised, making learning meaningful and inspiring. Core to real world learning is connecting subject knowledge to real world learning experiences and problem solving. Students may complete internships and work placements, while teachers and lecturers take part in an externship.
3. Community connected learning: a form of experience learning where students collaborate with external partners to address real world challenges as part of their broader education.

(Edge, 2023, Signature Practices <https://www.edge.co.uk/practice/>)

The North East pilots of EFL were a partnership between Edge, Ford NGL and the NELEP, with each partner having different responsibilities. Edge was the enabler and national co-ordinator in providing funding to the deliverers – Ford NGL and the NELEP, in addition to bringing wider networks and expertise into this initiative, supporting pilot institutions to take part in teacher externships and providing practical guidance and support on the signature practices. Edge also funded visits to the Academies of Nashville in the US and School 21 and XP in England.

The NELEP acted as the regional coordinator and employed Industry Alignment Support Officers (IASOs), helped foster and support links with industry and employers, and provided support for the IASOs who were based in the NELEP central office once per week and in schools/colleges the rest of the time. The role of the IASOs was to support schools/colleges in establishing relationships with external organizations – employers and businesses.

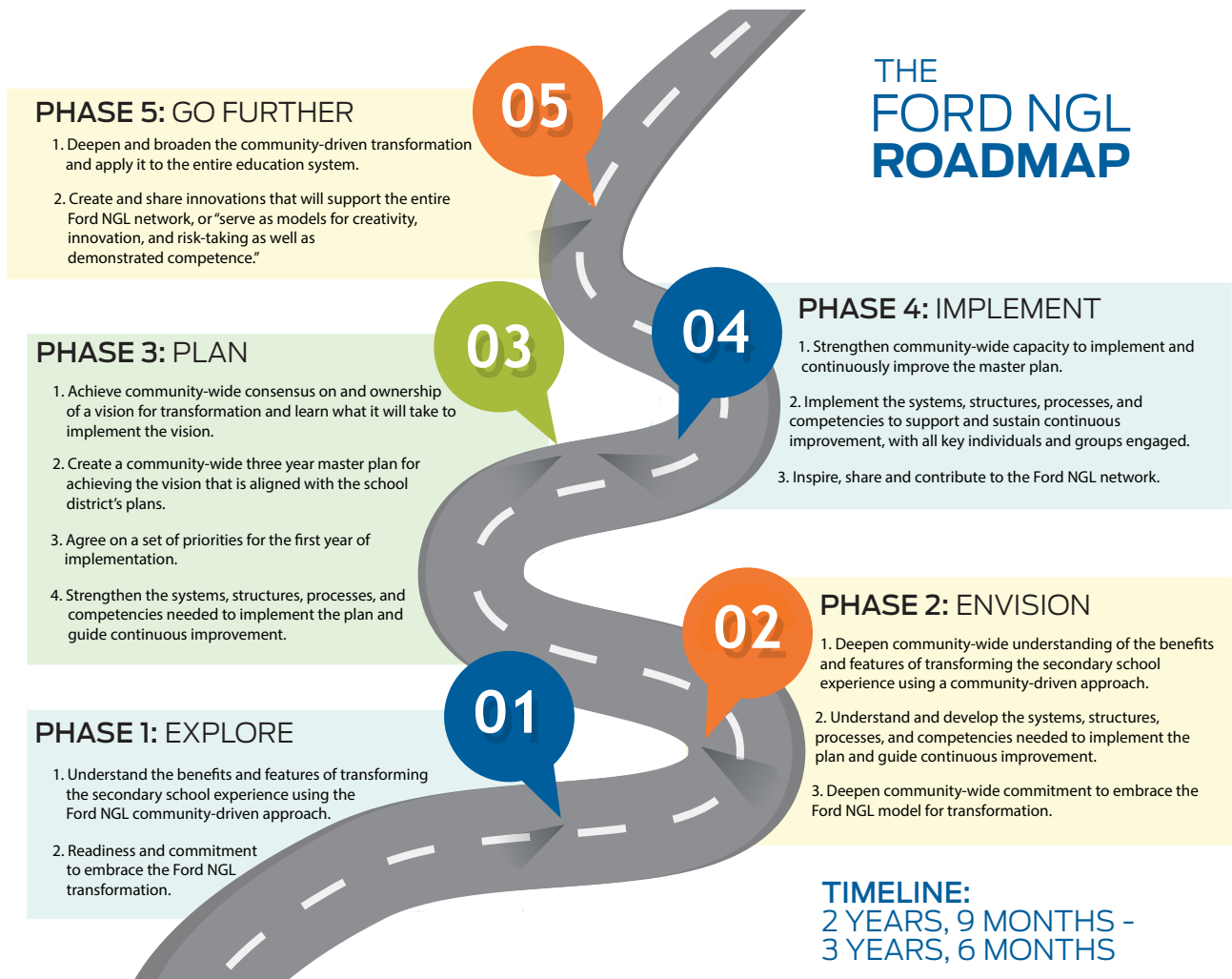
Ford NGL, the philanthropic arm of Ford Motor Company, has for many years been transforming high schools in the US founded on the Academies of Nashville model. Career academies are a model of career and technical education that blend academic rigour, instruction that is relevant to students' lives, and strong relationships between students and adults (Brand, 2009). Central to this approach is an attempt to ensure that young people are career and work ready, a curriculum that fosters career learning through real world applications, and a rich range of employer engagement including industry field trips, job shadowing and internships which help to bring the curriculum to life by emphasizing the relevance of every lesson. The Ford NGL coaches brought with them their extensive practical expertise of transformational change in the US underpinned by the Ford NGL Road Map: a five-stage implementation process (see Figure 4.1 on the next page). It is evident that this road map is not a quick fix, rather a process that may take many years. For the EFL pilot the aim was for each institution to develop their own approaches to this model based on their individual context.

Unsurprisingly all partners in the pilot shared a similar vision:

*The ultimate aim is to connect learning to relevant credible real world scenarios and challenges. (NELEP)*

*What can we do that would change how the curriculum is being delivered, how you can make it more engaging, how you can make it more authentic, more real. And basically, how can teachers change what they do in the classrooms along with partners, and not just doing it by themselves. So, it's like opening their eyes but the whole end game is how do you change student's lives, how do you change what they know about before they graduate that makes them more successful in their next step? (Ford NGL)*

Figure 4.1: The Ford NGL Roadmap



Source: <https://www.fordngl.com/products/roadmap>

## 4.3 Intentionality and a vision for change

### 4.3.1 The fit between EFL and the vision of each institution

In both institutions the underpinning rationale to be involved in this work was premised from a strong desire to benefit all students including those who may be more vulnerable or need greater support. While both institutions valued the importance of qualifications, they held a broader view of education as enabling students to develop wider skills and one that enabled students to make informed choices about their future careers.

*One of the things I took from it is that yes qualifications are really important but they are a by-product of everything else that we put in place, the various other skills we can equip them with. (College)*

*When I describe our education for visitors, it's that the purpose of education is to ensure that you are career and life ready – what else can education be trying to do? (UTC)*

In both institutions the notion of a career-focused curriculum where students benefited from rich employer engagement clearly aligned with the vision of EFL and Ford NGL. This alignment was important since it demonstrated a fit with the strategic aims of each institution so that participation in EFL wasn't viewed as a bolt on but as of real value to the institution and ultimately to students.

*It certainly wasn't done in isolation – it was never, 'Oh, we are involved in another pilot' – it was never, never ever that. It was always about complementing what our ambitions were and what we were trying to do for our students and wider stakeholders. (College)*

Apparent too, was that the vision was shared with other staff before participation in the second phase of the EFL pilot began:

*I just thought finally there is somewhere thinking more about the students as individuals who are going to go out into the world and need experiences and qualities that are going to help them navigate the world instead of just 'Yeah but they need a grade C'. (UTC)*

### 4.3.2 Serious commitment to transformation

In discussing the approach taken in Nashville, both Ford NGL coaches talked extensively about the transformation of education, the long-term commitment needed to realise this and some of the challenges that would need to be faced.

*But you have to change your structures, your systems, your processes, that's huge – it's like lifting the Titanic. (Ford NGL)*

Important within their approach was the need to be implementing while transforming and planning, and the ability to learn from experiences to inform the next stages of implementation.

*I think you just have to commit to stay with it if you're truly wanting to transform it, and you really do learn from your past, but you also showcase the things that did change and the work that did happen so that others that you're courting to do the work can see what some of those changes were. (Ford NGL)*

Evident in the UTC and college was how they had put in place clear messaging that staff would be supported throughout the process whereby it was OK to try new things (see section 4.7). This openness to sharing practice and the need for approaches to evolve over time was apparent in the work of Ford NGL in Nashville also.





*I think Ford were 15 years down the line with some of the academies we visited, and they were quite open about how they didn't see that as fully developed. It was very much building onto a model year on year. It wasn't 'this is the finished product' it was seeing the programme develop. It was really refreshing to see that senior leadership openly stood up and said 'what we're doing isn't the perfect model, we're still getting there. Whatever you see, we are still striving for better'. (NELEP)*

The passion for doing something that will be transformative, that will make a difference, played out in the strategic aims of the UTC and college, the way the institution was presented to parents, and how the students and staff described what happened in the classroom. Central to this was the strong commitment of SLT, as commented on by the NELEP:

*The other thing I think for me is the real need to engage at all levels through the education system, from the head teacher down. Where that happens, you will get more movement, because a teacher can't make a call on 'can I change how I deliver this' or 'can I have some time to...' they have to go to someone to get that authorization. Unless that authorization management line is on board, the teachers are always going to struggle to deliver things slightly differently.*

Not only was this about commitment, but also the confidence and conviction of the value of attempting transformation in the context of the English educational system and practical changes, for example, timetabling that would be needed.

*So I think partially it's that being brave and courageous in terms of our leadership and going 'actually we're going to be flexible enough to change the timetable' and a little bit of 'well we know the government want us to do this in education but we're going to do something a bit different'. (UTC)*

In the college, due to its larger size, systems and processes were required to ensure that everyone across the college knew what was happening. One member of SLT was given the role of strategic lead and this was seen

as crucial in ensuring buy-in and that the project kept on track. It also meant that the strategic lead was able to report regularly to the leadership excellence group, chaired by the CEO, which helped expand the project across other faculties and the other colleges.

### 4.4 The promise of the leaver profile

#### 4.4.1 Origins of the leaver profile: the visioning day

A key part of the Ford NGL road map (see Figure 4.1) is the creation of a leaver profile that is facilitated by the Ford NGL coaches. This begins with a visioning day when internal and external stakeholders – businesses and industry, teachers, students, parents, local community – spend a day doing workshops, where they look at and explore what skills, knowledge and attributes young people need on leaving school/college to be successful in the next stage of their education/training or employment.

In the UTC and college, employer engagement had always been central to their work, but the visioning day was the first time that they had purposively included student voice in this type of activity along with other stakeholders. This community-connected approach to developing the learner profile through consensus building had a powerful impact on both institutions.

*I think the student leaver profile wouldn't be defined in the way that it was without the Edge Foundation, the facilitation of Ford NGL and forcing us to get that community together. So, it's an articulation of what we were trying to do anyway, but it's a much, much clearer thing. (UTC)*

This was echoed in the college:

*Part of what Ford NGL do is they very much have that college leaver profile which is informed by the whole community. It's not just us saying what the students need, it's actually everyone, and the students were very much part of that – saying these are the skills we want you to give us by the time we leave – and that informed it. (College)*

The visioning day itself had a lasting impact. It was described with real enthusiasm by leaders, teachers and students. The whole approach was one of dialogue and sharing that through sustained discussion led to a consensus about what should be included in the leaver profile.

*We started by asking the students 'What skills do you think you need to help you take your next steps?'; whether that might be university or apprenticeship or employment. Then we asked the employers what skills they thought the leavers needed. And then we created the idea of the steps, what skills do we need to get where we need to be... and [the students] took the microphone and narrated to a room of employers, professionals, just why they thought those skills should be important to them as leavers. (College)*

This consensual approach was confirmed by the students: *The skills that are on our steps are the ones we chose for our department, so we know they are what the industry wants (College student).*

In a large college dealing with different sectors, it was quite natural that each department would shape their leaver profile to meet the demands of their industry, although there were similarities across these and all were underpinned by the college values: Authentic, Respectful, Innovative and Ambitious (see Figure 4.2).

*So, while there are some core things like resilience, maths and English, critical thinking, there would also be some bespoke ones, like health and social care would have compassionate, where construction wouldn't necessarily pick that on their leaver profile. (College)*

Figure 4.2: College Leaver Profile for Health and Life Sciences



Source: Sunderland College

Whilst sector-specific profiles were needed at the college, the visioning day at the UTC produced one leaver profile that could meet the needs of all learners. And whilst the college approach had led to a visual representation in the form of steps, the UTC's profile was presented as bubbles. The aim of creating a leaver who was 'Career and Life Ready' would be achieved by a focus on three key elements: Core Skills, Academic and Technical Knowledge and Understanding, and Professional and Career Experiences (see Figure 4.3).

Figure 4.3: Career and Life Ready



Source: UTC South Durham

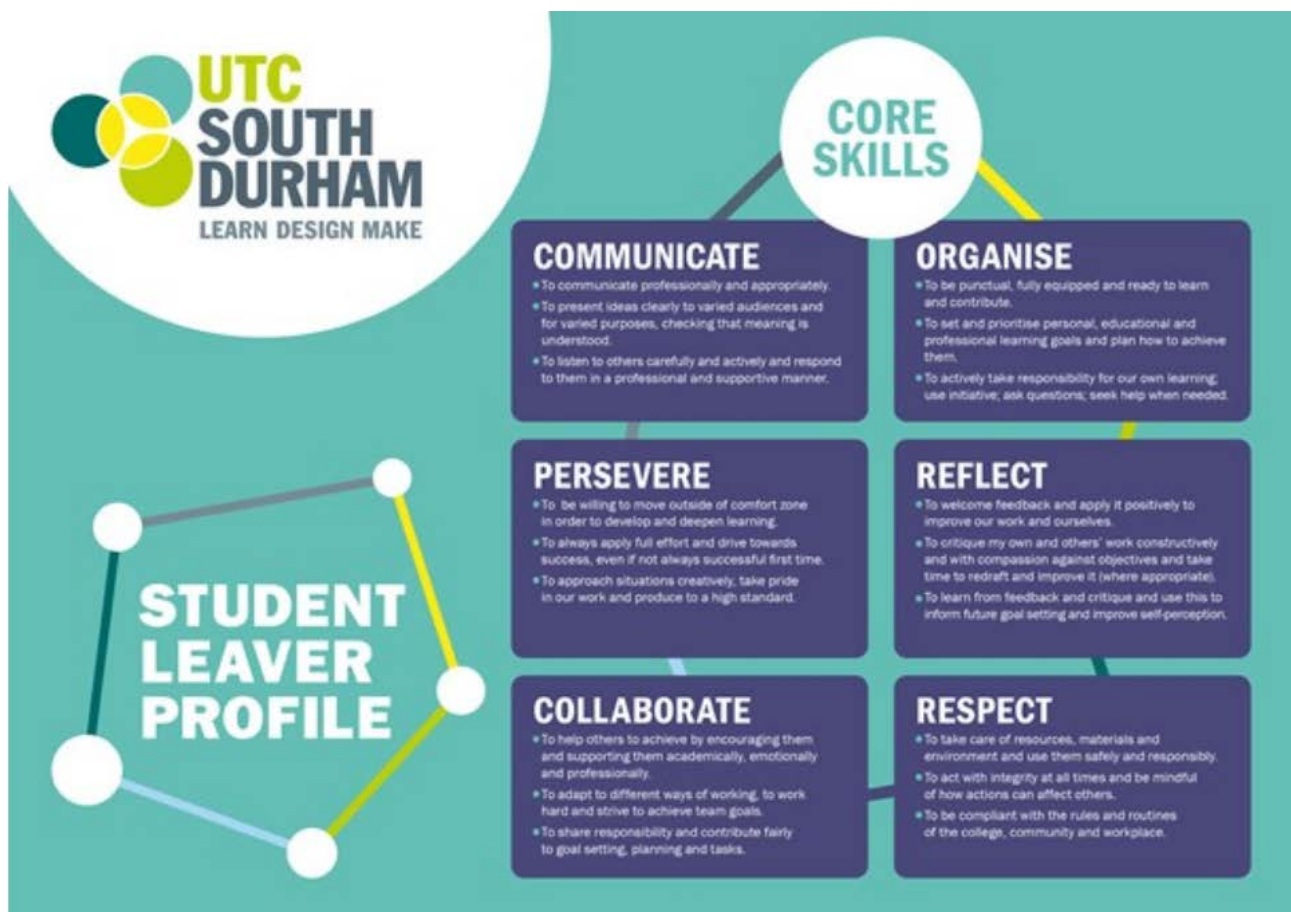
#### 4.4.2 Delivering and embedding the Leaver Profile

Both institutions reinforced the key elements of their leaver profiles with a range of posters on display throughout the buildings, including alumni success stories that demonstrated how the leaver profiles had supported progression into a chosen career. Less obvious, but crucial to success, were the underpinning strategies and tools that enabled all learners to acquire and demonstrate the elements of the profile as they progressed through their course:

*With industry, we'd really interrogate them on what skills they wanted, and watching [the learners] come up with the same things was wonderful... it was just up to us to scaffold it in a way that would map those skills so they'd developed them by the time they leave college and ready for their next step. (College)*

In the UTC, the visioning day had then led to the creation of skills definitions, a set of rubrics that expand and structure the leaver profile, and a series of protocols that can support teachers in bringing the profile into the classroom. For example, the core skills element is broken down into six key skills (see Figure 4.4), and each of these is underpinned by a set of rubrics that show four stages of achievement: Developing, Improving, Effective, Highly Effective. Students who join the UTC in Year 10 work towards achieving all six at a high level during the four years they spend at the UTC. Skills development is supported by dedicated time known as CREW in which learners work alongside a member of staff and a small group of fellow students to complete a portfolio of work that demonstrates and evidences how they have met the leaver profile.

Figure 4.4: Core skill definitions



Source: UTC South Durham

Students confirmed that the core skills are referenced across the curriculum:

*We work in collaboration – we collaborate, communicate, persevere, organise, and we are always looking at them, the core skills, and making sure we're following them. (UTC student)*

Learners also described how the Academic and Technical Knowledge and Understanding they were gaining in the classroom was consistently linked to Professional and Career Experiences:

*Each lesson, at the end there's 'with the topic we've done today you could go and do this.' It's good because you know what you might need to focus on for different careers. It's all helping us to get ready for the outside world when we grow up. (UTC student)*

In the college the sector-specific nature of the leaver profiles meant that professional behaviours and skills were developed through professional practice in the workplace or a realistic work environment in the college:

*We structure work preparation right from Level 2 with mock briefs and by the second year of Level 3 we expect them to be out on placement as brand ambassadors for themselves and us. (College)*

### 4.4.3 The impact on knowledge, skills and behaviours

All schools and colleges are constantly responsive to change in the external environment, and the shift towards demonstrating knowledge, skills and behaviours was seen as a positive move, aligned to and supportive of the change that the institutions wanted to achieve.

*It was a big moment in the college when we moved from just focusing on skills and knowledge, to knowledge, skills and behaviours... that whole step change to focus on knowledge, skills and behaviours is for our students to ultimately make them more employable, and to help them get to their chosen destination. (College)*

Evident in the construction of the leaver profiles was that both institutions had a view of education that extended beyond just gaining qualifications.

*I'm not just trying to get these students to pass the exam, what do I want these students to achieve, so what does a good mathematician look like, not what does a grade 6 look like. How do we create engineers, how do we create scientists? (UTC)*

In both institutions it was evident that whilst the leaver profiles had a clear impact as the visible 'face' of change, they were also central to the whole educational offer and approach:

*From a teaching and learning perspective our student leaver profile is our intent and implementing that so that it becomes part of everything we do... So, our head of department and faculty leads have been doing a lot of work around, if the student leaver profile is our intent and our ethos, our values and our organization, how does that link into and how does that feed into our intent for an English curriculum or our intent for a maths curriculum. (UTC)*

The impact of the leaver profile went beyond the taught curriculum, with careers staff and business managers also commenting on the importance of knowledge, skills and behaviours:

*The requirements are so important in these roles – yes, the maths and English are a big thing, but also the skills and behaviours that they need to work in those roles. (College)*

In relation to the aim of the profiles – producing leavers who were equipped to progress into a chosen career – the concept of knowledge extended beyond the course or subject. Knowing and understanding the available opportunities and the roles that they might access was crucial:

*Things like business roles in the health care sector – they don't think of that side of it. Or they want to be a paramedic but don't have the grades yet for that – so can they do first response call centre work, get a foot in the door, learn more about it, then look to progress. (College)*



#### 4.4.4 An external perspective on the leaver profile

At both institutions, staff were hugely positive about the value of the leaver profile and the impact of this. However, from the perspective of Ford NGL, there was an element of surprise in the weight placed on this:

*It's amazing how what we might call a tool has taken on a life of its own and become this thing that is probably greater than what it's intended for. Well, I agree, but I do think that it's a beacon, it is something that is out there, that is your end game. I think why it's so powerful is probably, in their context, nothing like that has ever happened, it might not have been done by schools and by business partners together. (Ford NGL)*

From the perspective of the NELEP, the leaver profile was seen as one of the key things undertaken in all institutions in both phases of the Edge pilot:

*That's been fundamental in all instances, because it's not what you necessarily end up with but it's the process by which you end up with the leaver profile. So, you have to have community engagement for that to happen, you have to have stakeholders who wouldn't normally come together in the education world in this country, or very rarely, come together with a shared vision to create and discuss something, and unpick it.*

## 4.5 Students at the heart of learning

### 4.5.1 Changing mindsets

Evidenced through the development and implementation of the leaver profile is how students in both institutions were placed at the heart of learning. Central to this was a clear commitment from staff to offer an educational experience that enabled all young people to flourish.

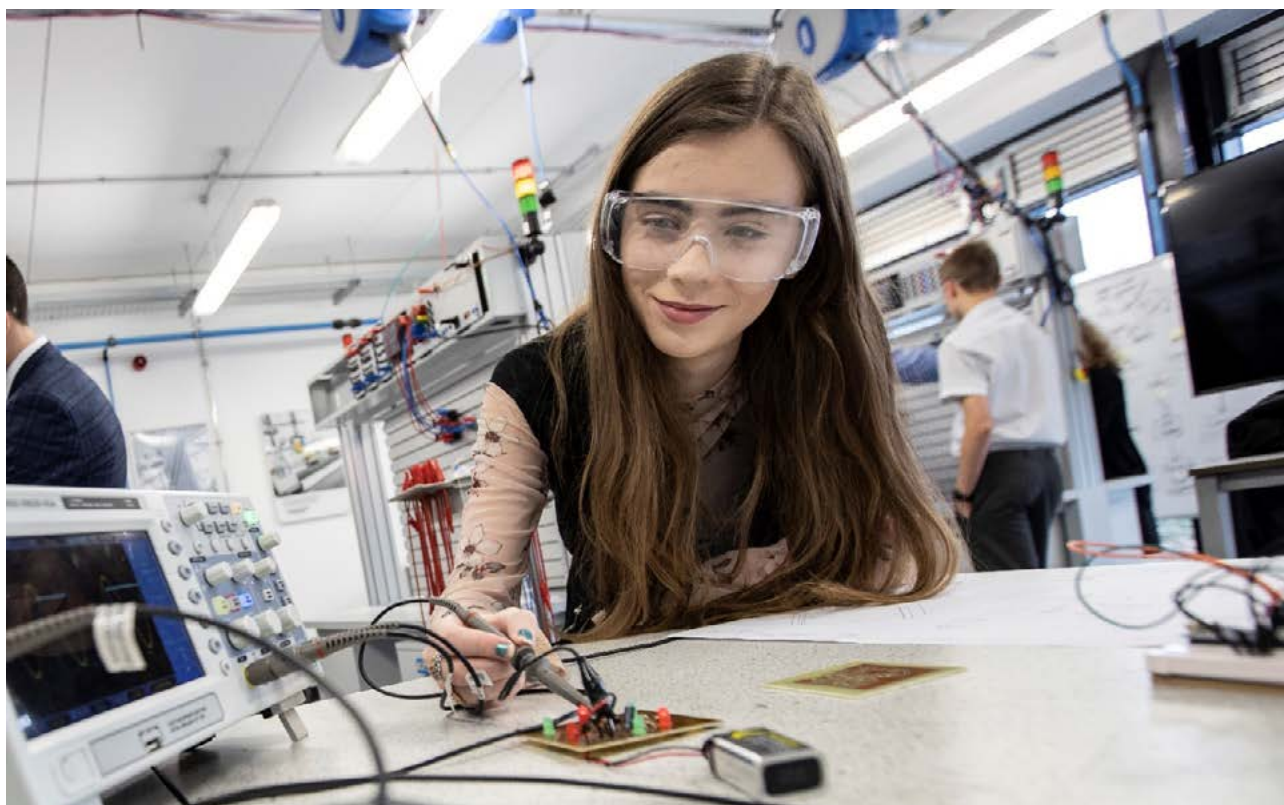
*We've got a diverse range of students, so we need a range of opportunities. It's about having an arsenal of skills and looking for the right niche for the individual. (College)*

FE colleges by their very nature often have students who have been less successful in secondary schools and hence offer a second chance (Anderson & Peart, 2016). It is perhaps not surprising that young people frequently arrive in FE lacking confidence in their abilities as learners. There was a recognition from SLT in the college that *something hasn't worked for some students pre-16 so we need to do something different*. As another member of staff continued, it's about working out why that might be and then developing that.

Similarly, the UTC attracted students from diverse backgrounds some of whom had not been happy with their previous situation:

*We attract students who are really excited about technology and that's the thing that they wanted to do for ages... And we attract students for whom schools hasn't worked, whose attendance is poor, who feel like they're being bullied and who have got all sorts of behaviour problems. (UTC)*

In both institutions there was an understanding that some students might have joined as an *opportunity to reinvent themselves* (UTC).



Central to enabling these young people to succeed was the quality of relationships between staff and students, staff valuing students as individuals and the fresh approach to teaching and learning through PBL and engagement with employers.

For some students this had brought about a change of mindset:

*When I first started on Level 1, I will admit I was a bit difficult. I hadn't liked school so didn't always behave well and I brought that here, but any of my teachers will tell you that I've really changed. The way we work here, doing the projects and being treated like a grown up, made me see the value. (College student)*

*Small things like we call teachers by their first name, things like that, it's a more one on one experience. Most colleges aren't like that but having that integrated from Year 10 onwards completely helped my mindset. I was failing everything at my old school, was always miserable, but the second I came here I was getting 8s and 7s in all my subjects – it was great. (UTC student)*

### 4.5.2 Opportunities for all students

In valuing each individual student, both institutions did their best to ensure that opportunities were available and tailored to all students. The college, for example, had decided to start their approach to PBL with the Level 1 students because it was felt that they would benefit the most from this, in terms of developing soft skills and getting them ready for their next steps. In taking this approach, SLT were mindful that this decision could have been viewed as counterintuitive. *Normally, for a pilot you would pick a Level 3 group but we picked Level 1s because we knew the impact that it would have.*

In a different example a performing arts student in college had an Education and Health Care Plan. The student was involved in the opening performance of the Rugby League World Cup – this was very successful and as a group they were asked to go on tour. Through the support of the college and fellow students, the student, who had never been away from home before travelled with the group. As his teacher said *His Mum is so proud – the student has made significant improvements here with us.*

In the UTC the observation of two English classes captured how different approaches to scaffolding PBL could be better tailored to the learning needs of students. Both classes were studying Macbeth and had slightly different driving questions and tasks (see Box 4.1).

Ensuring that opportunities were available for all students extended beyond the 'taught' curriculum to include a conscious attempt to broaden the range of employers to fit with students' aspirations.

*We're catering for all sorts of young people with all sorts of differing needs and so when we look at the employers we work with, we're quite often going out and finding architects, software development companies, interesting science-based places, marketing companies, all sorts of different things because our students are interested in those things. (UTC)*

In both institutions there was a clear recognition that leavers need to have a genuine choice of university or a work-based route to a career. At the UTC the apprenticeship route had proved so popular that *we had a year when only two of our students went to university and the rest all went to jobs and apprenticeships - but the following year 40% of our students went to university and importance was placed on each student making a good sensible next step for themselves.*



### Box 4.1

#### 'Is this working for everybody?' – differentiation in the PBL classroom

In the first lesson the students were working in small groups on a series of tasks that required discussion, debate and verbal reports to the class. Issues being raised included: misogyny, gaslighting, toxic masculinity and issues of mental health. All of these were supported by close reference to the text, which students knew sufficiently well to offer examples. The lesson was structured into time blocks by the teacher, and clear outlines were placed on the whiteboard for each task, but assigning roles and deciding how to complete the task was left to each group, as was the decision about who would feed back.

In the second class, each group of students had their own wall board with the driving question at the top and their work pinned below. They were asked to think about the world the Macbeths inhabited and consider whether they are now misjudged. Their task was to come up with a hypothesis that could be drawn from the play, then decide what research would be needed to test their statement. The teacher and the classroom assistant worked alongside the learners, offering appropriate support to groups or individuals where it was needed. The lesson ended with each group agreeing and recording their tasks for the next class.

Staff at the college also welcomed the growth in work-based routes to a career that resulted from increased employer engagement:

*So having all these employers give them placement opportunities they can do now, leading to job opportunities without going down a university route, is fantastic. Because that's not the right route for a lot of our students. We think of them as individuals. (College)*

Careers staff were aware of the need to have sufficient knowledge of local labour market opportunities to advise their learners on alternative pathways to a career. Midwifery, for example, is a shortage area but places on midwifery degree courses are highly competitive and in the region no apprenticeship courses were on offer.

*Maybe we can help them find some volunteering work that would link in nicely.. In this area you might get a health care assistant working on a maternity ward, or a support worker. As an example, if they don't have the grades for UCAS they could go and work as a health care assistant and then they might get an apprenticeship route through the Trust and end up being a nurse that way. (College)*

This did not preclude aspiration, but it did mean that learners knew which of their plans or hopes would require considerable effort to achieve – and possibly an element of good fortune.

#### 4.5.3 Promoting reflection and self-directed learners

Implicit in the embedding of the learner profile was an ambition that young people developed their ability to reflect on their progress. In some instances, this might mean that the young people also needed to reflect on their behaviours. As will be seen in the following section on PBL reflection was also a critical aspect of teamwork and solving problems.

A staff member from the UTC spoke about how reflection was evident in daily conversations with students and how a dialogic approach enabled students to see things from different perspectives:

*If I'm on call around the building and I happen to pick up a student who's made a wrong decision in a lesson or something, we can speak to our students without being confrontational, without having to shout or make a point... The majority of our students end up saying, 'yes, I need to go and apologise, or I need to do this or do that.'*

The student-led conferences in the UTC, where students presented their portfolio of work to their parents, provided evidence of critical reflection and a sense that students were becoming more self-directed in their learning.

*I think it's really powerful for them [the students] because they're not just, 'oh I'm on a 5 and I need to get to a 6'. A lot of the students can say 'I need to get to here but I know I'm really struggling with algebra and I've spoken to [first name] or whoever about it' and they can tell you a pathway through it. I think it's powerful for them to be talking about those kind of things all the time. And they do find reflecting difficult, but I think we are getting to a point now where a lot of them are reflective and proactive. (UTC)*

Evident was that teachers across both institutions understood the value of enabling students to reflect about their learning, and where needed, to reflect on where things had gone less well in a constructive way. As a prerequisite to this, students needed to have developed confidence in themselves as learners (see Box 4.2).

### Box 4.2

## Fostering self-directed learners

*We had been running a Level 1 programme that was much more academic and we were finding more and more that students at Level 1 were struggling with that. So I worked with Ford NGL, and other colleagues to build a much more skills based programme... There's quite a lot about learning to learn, around building confidence and learning to reflect.*

*And as an example of that, when [a teacher] came in to say they could do maths revision at the end of the Level 1 course – in a relaxed way concentrating on what they wanted to do – one of the students said 'well, what you need to do [first name of teacher] is give us a sheet with all the things we need to know for our exam on it, and we can tick off what we feel confident with and then the other ones we can work on'.*

*She asked me why I was smiling and I said because that's exactly what I would do for you as a professional – it's self-directed, identifying your needs. And this was from a student who at the start of the year was challenging and will admit that now – she was late, she was rude in class. And through the things we did, it totally changed her around, so to now have that skill to say to a professional 'this is what I'm good at, this is what I'm not good at, so can you give me some support to get better?' – that was just perfect. (College)*

## 4.6 PBL a scaffolded approach to learning

### 4.6.1 A planned approach to PBL: incremental and scaffolded

PBL was central to the work of transforming the educational experience in both institutions, and the synchronicity between PBL and the leaver profiles was evident. Both students and staff made frequent reference to PBL as the way of achieving the steps or developing the Skills.

It was recognized that a PBL approach to learning was likely to be different to the school environment that learners had come from and there was a shared understanding amongst staff that successful introduction of PBL would require planning and structure that was cross-curricular, with an awareness of what colleagues were doing and when:

*It's a carefully scaffolded approach. If we're thinking about project based work in English, we know that they're also doing industry projects in January though to Easter as a work skills thing, and those initial projects we do from September to half term or Christmas in English, this is part project based learning and part learning how to learn that way so that that becomes a way of working all the time. (UTC)*

Staff at the UTC explained that Year 10 learners will do a 'set up' term, then they do industry projects, then in the summer term they do community projects.

The focus group students represented Years 10 to 13, and whilst the current projects they described obviously varied in complexity and technical specification, it was clear that the PBL approach was the same across all four years. Evidence that scaffolding was effective in developing new ways of learning could be seen in the speed with which it could be removed; during Year 10 it was already possible for initial scaffolding to be withdrawn:

*I find that scaffolding it in a way that you make sure you've gone over the roles that they need, giving them clarity, I think that really works. I found with last year's Year 10 cohort that I could take bits of that away as they went through the year because they were more skilled at doing it themselves. (UTC)*

The college also provided many examples of a curriculum and delivery that progressed from small tasks with clear scaffolding through to more complex projects and a gradual removal of the scaffolding as the learners built up their skills:

*At Level 1 they did a lot of smaller class-based projects with me first. Then the crisp packets project, where they made blankets for the homeless, that was a massive one. But we had constant small things in class, standing up and speaking, collecting stamps for their oracy passport, slowly building them up to the point where when I said 'this is what we're going to do' they didn't go 'agh!' and freak - they just went 'oh, OK'. (College)*

Definitions of PBL often require a link to a real world problem, and in both institutions the role of employer engagement in the curriculum ensured that learners were working on realistic tasks that prepared them for their industry. However, there were some examples that went beyond simply 'being linked', with students drawing on their knowledge engaged curriculum to tackle and resolve an actual problem presented by an employer – work of a standard that could have been done by company employees or other professionals. One such example was described by students at the UTC (see Box 4.3).

### Box 4.3

## Engineering the Solution – from classroom concept to company production

Two sixth formers explained how the product they had created for their Year 12 engineering industry project had been taken up by a local company to be manufactured and installed in their workplace.

*Last year we were given an employer brief to solve a problem with the feed on their industrial looms. What we created was a lever system – a bar that presses down onto the yarn and instead of a constant gentle feed, it jolts it and stops the yarn getting tangled.*

*The first stage was to design a possible solution in SolidWorks and present that to company representatives at the project exhibition in the engineering hall. Then we were asked to present in our board room to that company, and then again to the Board and the CEOs of all the sister companies.*

*Since then, we've been working with them to make a prototype that's currently being tested, then they give us an efficiency analysis, then implement our solution into the workplace. They've got 41 of these machines, which is good for both of us. They've got an improved system, we've got some credit to our name and experience engaging with a real life company.*

In addressing real world issues, projects could also have a community focus – as seen in the blankets for the homeless project (see box 4.4) and in how performing arts students supported a request from a local radio station (see 4.8.2). At the UTC community projects included improving the platform at a local railway station, one that involved fencing, re-wilding an industrial estate and a project for a residential home.

### 4.6.2 Introducing PBL to parents

If PBL was new to students, it was new to parents, too. Both institutions took steps to explain the importance of PBL to parents such as with their open events:

*When we do a welcome event, it won't be a 'normal' welcome with a staff presentation, it will be the students showcasing what they've done. Parents may not click that it's project based learning but they'll definitely click that it's a career-focussed curriculum that we are delivering. (College)*

Once students had started the course it was possible to explain PBL by showcasing the work their young person had already done. In the college, one faculty did this very early in the course:

*One of the things we do right at the start is to give them an induction project that might only be two to six weeks but its purpose is to slowly bring them into it from the start... and at the end of that we have a theatre full of parents, we tell them about project based learning and employer engagement, and then we let them go off and see what the young person has done in those first few weeks with us. The parents can see straight away the distance their young person has travelled just from a PBL project. (College)*

At the UTC, parental understanding of the PBL approach was also built through showcasing student work. Student Conferences, at which learners talk about their achievements, were much appreciated by parents:

*They think it's so much more valuable than the traditional parents evening and they've commented on how they feel like they've learned so much because, you know, they normally come home and you don't get much out of them about what they've done in school but now they've sat there and have really opened up in there. (UTC)*

### 4.6.3 Embedding transversal skills

#### Communication

In both institutions, the building of communication skills was seen as a crucial element of success. In the college, there was recognition that some students began their course unable to speak out in class; even giving their name could be a challenge so developing confidence, though not an easy task, was seen as crucial because *it's not a soft skill...it's a key skill, a life skill*. This could be an important role for the skills coaches in the college structure: *I was there to integrate English into PBL as that golden thread that went through everything.*



Creating 'confident communicators' was being supported at both institutions by reference to oracy programmes, though this was not a reference to generic 'off the shelf' products. The aim was always expressed in terms of professional communication required by their industry sector, and no sector was excluded from this:

*Even if it's the construction industry they need that. They won't just be laying bricks, they'll be laying bricks for a customer so they need to be able to communicate, and also the ability to be proactive. (College)*

At the college, staff spoke of a 'passport' approach to developing communication skills, in which learners would acquire 'stamps' on completion of speaking tasks that increased in difficulty. The UTC was exploring the possibility of employer engagement, again with the ultimate aim of producing young learners who are skilled in communicating with professionals:

*One of the things that we'd like to get out of that is preparing the students for professional communication... [we've] started to review with some of the business partners whether they would come in and do some communication sessions with the students as well. (UTC)*

Developing communication skills within PBL has clear benefits, one of the most obvious being that project outcomes so often require strong verbal communication skills. At the UTC, students had discovered this when their project presentation resulted in a request for them to talk about their design solution with the Board members of a local company interested in their product, *which was a completely new sort of experience than we'd had – we'd not done it to that level, we had to try and convince the company.* They acknowledged that a session with a member of staff, who had considerable industry experience, had offered an advanced level of scaffolding that helped them convince the company to build a prototype of their design:

*I don't think anyone, especially at our age, has the initiative to make those connections on their own, so that's what the school really helps with. (UTC student)*

An equally important but perhaps less obvious benefit was the role of communication skills in the teamwork that underpins a successful project. At the college, students describing their Blankets for the Homeless project spoke of the communication skills needed from the very start to promote and explain their project across the college (see Box 4.4).

### Box 4.4

## Building confidence and communication – Blankets for the Homeless project

At the college, two Level 3 students in Health and Social Care gave an enthusiastic account of the *Blankets for the Homeless project* (aka the Crisp Packet Project) they had done in their Level 1 course.

*To start, we had to collect lots of the right kind of crisp packet, so we had information and collecting boxes all over the building. And that was really good for us because every time we collected the packets, people asked us what we were doing, so it meant we had to talk to all sorts of different people, which was hard for me at first because I was really shy and quiet back then.*

*So, once you've got the packets you have to cut down one side to open them out into a rectangle then wash and dry them. Then you lay them out in rows and iron them together, until you've got a blanket-sized piece. You need to do the ironing through a wet tea towel though so it doesn't stick. And then you finish it off by ironing clear plastic over both sides to seal it, and you can write a message on it for the homeless person it is given to.*

*It was fun to do but there was a serious side to it as well because we were developing some of the skills on our steps, especially confidence and communication. I'm a different person now, even my Mum says that.*

### Teamwork

The literature on assessment by groupwork shows that even at undergraduate level, students may experience difficulties in ensuring that all members of a team contribute equally to project outcomes, seeing this as an issue that should be resolved by teaching staff rather than managed by the team (Jassawalla et al., 2008). At the college, HND students in the focus group exhibited none of the 'social loafing' described in the research literature. Staff explained that although teamwork may be new to the students at first, *we really build that up until it clicks – it's essential in our industry*. This process could begin even before a student had been accepted.

*Even when we hold auditions... we give feedback, so we might say did you notice what the staff were doing at the end? We'd be moving the chairs and tables back, so we'd tell them 'If you'd helped us with that it would have helped you, by creating a good impression, because the majority of the work in our industry lies in small companies where you have to get stuck in - it's not just performance.'* (College)

Using a PBL approach with young learners could therefore be expected to create some challenges. At the UTC, both staff and students recognized this issue and also saw the potential for learning that it offered (see Box 4.5).

#### Box 4.5

### 'It's about being brave' – stepping back and trusting the learners

Staff realise that stepping back to let students 'get on with it' will inevitably mean that some contribute more than others. Letting that happen *'goes against every instinct as a teacher, an educator'* because at the end of the project, some students have little to present. For them, the learning comes from reflecting on that, *'How did that feel? What are you going to do differently about this next time?'*

In the focus group, a Year 11 and a Year 13 student discussed how this approach had been a crucial part of their development and something they felt was very different to other schools:

*For the local community project, I was in a group with three others but I ended up doing most of the work, and they left me presenting it in front of all this group of people. But I did get awarded a Future Leader, so it was a good outcome for me.*

*Once the teachers give us a project, they leave us to it. So, if there's arguments in the group, we are expected to sort it out. And we need that independence, to develop skills and to think on our feet, you're not always going to have a teacher there for the rest of your life telling you what to do.*

#### 4.6.4 Synthesizing links between projects, learning and assessment

In both institutions the projects were about far more than outcomes, projects were there to teach a way of learning that could be applied to their education for life. To achieve this, it was essential that students understood how each project related to the knowledge and skills they had gained in their classes, particularly where this crossed curriculum boundaries. And for a learner to have a successful project outcome they needed to understand how they would be assessed.

These three factors came together clearly in the Uniformed Public Services (UPS) course, where a syllabus change had been made specifically to enable an effective PBL approach. Level 3 learners now have Year 2 of their course entirely based around projects, with clarity provided by a 'roadmap' that shows how substantial projects build one on another, including a final expedition. The units and the standards are clearly stated for each project, so the students know exactly what they are covering and what will be assessed – by teachers, by peer review, and by police review for some projects. The students have done all the right units in Year 1 to underpin the PBL approach in Year 2, and the teacher becomes a facilitator for much of the PBL.

At the college, many of the projects crossed traditional curriculum boundaries. Performing Arts students had worked with Public Services, Travel and Tourism, and Construction. Public Services students had worked with Digital and Sport. This was possible because staff had strong links with colleagues in other departments, often attributed to the systems and structures put in place to support the project.

At the UTC, two students whose product had been taken up by a local engineering company (see Box 4.3) explained that getting to this stage had required far more than mechanical skills and knowledge *I did the managing of it... a lot of my job was to incorporate health and safety stuff and the cost of it and all that.* External assessment by professionals at every stage had made it *very real, it wasn't like something that you do in a classroom.*





### 4.7 Space for staff development and growth

The research literature consistently highlights the importance of developmental time for teachers given the identified challenges with implementing PBL. Indeed in the college, an initial response from some staff was about development time:

*For us, one... challenge I suppose was that although staff could see the benefits, they were concerned about planning time, they needed time to get their head around things. (College)*

The strong commitment from all SLT in each institution had enabled timetabled space for staff to engage in continuing professional development (CPD). Within the college there was a pre-existing slot on Wednesday afternoon that became dedicated to staff training, upskilling and understanding PBL. The UTC by its nature had a huge amount of flexibility over how they organized and ran themselves, however, staff CPD time was felt to be *very precious because there's not a lot of time to go around, there are lots of competing priorities* (SLT). That said they had created a timetable that finished at 2.30pm on some days, which gave scope for staff training and development, at departmental or whole UTC level.

What was recognized in both institutions was that it was crucial that staff did not feel forced into becoming involved in the initiative and that they needed a variety of experiences to bring PBL into fruition. This included external training supported by Edge including visits to Nashville, US and XP school in Doncaster, internal-in-house training and time in their institutions to reflect and process things so that they had the tools to embrace approaches to PBL effectively.

Interviewees who had benefited from the external training spoke positively about the understanding they had gained from trips to Nashville, completion of the PBL 101 course, or visits to other schools already using PBL, experiences that could turn around even someone who described themselves as an initial 'sceptic':

*Then I had two opportunities, the first was to visit XP school... and the second was for myself and a colleague to get some PBL training, we both went on a PBL 101 course... and I'd been transformed from that sceptic into someone who could see the impact these things were having and how they were working and began to feel quite passionate about it. (UTC)*

The college chose to work with one large faculty first before rolling the project out across the entire college: *we'd deliberately made the decision to work with a large faculty, a priority technical faculty, but to get it RIGHT* (SMT). As the head of the section said, *it was important that I set the scene with the team of teachers and support staff, gave them space to develop*. The approach had started with only one group of learners where a member of staff had volunteered to be involved since he thought PBL would be ideal for the Level 1 health and social care learners. From there the project rolled out to Level 2s and Level 3s with an open invitation to staff. This incremental approach worked well, starting with staff who were keen to be engaged and then gradually spreading throughout the college. Underpinning this approach was a clear intention, built on the college organizational systems, that prioritized cross-pollination of learning and understanding across the college group.

The scaffolded approach to PBL for students, seen in section 4.6.1, also applied to staff since it was recognized that staff across different subject areas and with different prior experiences were at different starting points in the facilitation of PBL.

*I think the English department take quite naturally to it because we're used to a lot of discussion and debate, it perhaps lends itself more to collaborative stuff, really digging into a topic. Engineers and scientists find it a little bit more challenging. They do think in project terms, but it's as in 'doing a project' it's not 'learning through projects'. In most people's minds, the project is the outcome at the end of it, it isn't the process by which you get to that outcome. (UTC)*

## 4 Findings

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*We were already doing lots of project work but it wasn't 'badged'.. For us it was good to see that there was a model that we were already using, and.. other people are now seeing it and how it can benefit learners. It's taken people out of their safe bubble and.. we can now do more, expand what we were doing because others are starting to run with this. (College)*

Staff new to PBL confirmed that it is a learning process:

*I know when I first tried it, I made a bit of a mistake in thinking I could just tell them to work in a group and then I looked and thought 'No I can't do that!' (UTC)*

On one occasion, where there was an influx of new staff in the UTC, this meant taking a step-back from the intended roll out to ensure that staff had time to become confident with PBL rather than rushing ahead.

*Because what's really, really important is that those building blocks are clearly established and that those teachers are skilled in things like questioning, metacognitive processes, those kinds of things that underpin PBL and so we need to make sure that we're secure on that before we continue disseminating the PBL practice. (UTC)*

The larger size of the college also meant that different faculties shared their learning across the wider college group and in so doing influenced other curriculum areas. For example, public services, who were perceived to have really championed the PBL approach, were now sharing with sport *who are also reflecting and changing their practices for the better. It's a little bit, well, more than a little bit, like a snowball effect that's gathering momentum. (College)*

Evident from the fieldwork visits was that there were many examples of changing mindsets:

*There's been a real impact on staff mindset as well. Staff who would initially say 'this won't work in my subject area' – and digital is a good example of this – now it's become the norm. Don't get me wrong, you'll have areas that are resistant to it, but mindset is definitely changing. (College)*



## 4.8 Systematic approach to employer partnerships

The success of community connected learning, PBL and the leaver profile lay in the systematic approach to employer partnerships that were mutually beneficial to the employer and the UTC/college. Four elements stood out as contributing to this: 1. formally constituted employer boards and the allocation of specific tasks to employers, 2. the active involvement of employers in the curriculum, 3. employers and the future workforce and 4. the appointment of a non-teaching member of staff to support employer engagement.

### 4.8.1 The importance of formally constituted employer boards and allocation of specific tasks

Both institutions had set up advisory employer groups that were formally constituted and had regular meetings. In the UTC the employer advisory group comprised 10 to 12 businesses from different sectors who met every six to eight weeks. This group had been heavily involved in the leaver profile. Although as a UTC with a specialist interest in engineering meant that they didn't need sector specific boards, the wide geographical area that students were drawn from meant that the employers also had a big geographical spread and a big sector spread.

In the college, due to its size and range of specialist sectors, different departments had established employer advisory groups, the first of which was the Health and Social Care Academy of Excellence since this was the faculty where the project started. It comprised key stakeholders in the care sector who were seen as driving a lot of the programme delivery which meant that the college was delivering the skills that employers needed. The group met four times in the first year and termly after that.

*The Health and Social Care Academy of Excellence has been so fundamental for shaping our curriculum plans and they are very much career focused now. Every year we share our draft curriculum plans with the excellence group and get their feedback on it, so we know, we've got peace of mind, in terms of knowing that what we're going to deliver to our students is right for the employers, what the industry needs to meet the skills gaps that we've got in the area. (College)*

The advisory groups were split off into subgroups with specific tasks.

*So whereas some employers might be wanting to cover the maths needed in their sector – so there was a group working on that – there might be others who really wanted to talk about placements, or professional development of staff – both of their staff and of our staff. Having the groups to work on these things was really important. (College)*

In the UTC, the small size of the institution, the direct relevance of the specialism for members of the employer advisory group, and the frequency of the meetings meant that its members could feel very much part of the team:

*They're not just a 'nice to have bolt-on consultative body', they're a team member and that's how I manage that group of people... in the same way as I would manage my staff here, and that works really effectively. (UTC)*

The UTC naturally had strong links with their founding partners, over time they had developed over 160 employer links. Each employer had an action plan that included different levels of specified activities they will deliver for the UTC. This could range from smaller contributions such as offering a careers talk or a mock interview, to supporting a student to write a CV, providing mentorship and involvement in an industry project. In essence the action plan was how the UTC engages with careers within in the curriculum.

Similarly to the approach taken in the UTC the college devised a series of workstreams for employers to sign up to. This could include guest speakers, talking with staff about changes in the industry, or the loan of equipment, for example. Some employers were involved in more than one.

### 4.8.2 Employer partners contributing to the curriculum

One known challenge with PBL learning and employer engagement centres on how learning is brought into the classroom in a meaningful way as opposed to having employer projects that are bolted onto the curriculum. Evident in both institutions was that projects had been co-constructed between employers and teachers and were integrated into the delivery of teaching and learning.

In the college Public Services students take part in a series of extended projects with the local police force – a popular career choice for these students. These mimic real-life scenarios with students filling all the roles that might be covered by the police on the day, in preparation and after the event. The event is observed and monitored by police officers who then provide student feedback. Box 4.6 provides an example of such a project which was observed during the fieldwork visit.

#### Box 4.6

### Bringing the real world into the college – FIFA World Cup project

On the day of the opening match of the FIFA World Cup Level 3 learners on the UPS course were running a student-led event to mark the occasion, carrying out every role as it would happen in a real-life situation. The students had booked the 'living staircase'<sup>2</sup> to show the game. They planned the entire event, including ticket 'sales', fire exit checks, operational searches of the venue, person searches on entry to the venue, behaviour control, door control, and first aid provision.

Members of the local police force were in attendance to observe and assess the event and had added to the veracity of the project by planting fake weapons on some of those attending, giving those learners in 'person search' roles realistic items to find.

The event was impressive, and verbal evaluation from the police officers at the close of the event was very positive about the PBL approach to learning, which they felt not only conveys the knowledge and skills required for the course but also develops the type of behaviours that will be required in many UPS careers.

Projects often involved interdisciplinary connections that frequently mirrored the world of work. For example in the college, IT students were not only working on projects in their class but worked with sports students to design a website on personal fitness.

*Effectively you're saying to them, this is what the work environment is like. You won't be sitting working in isolation just with people who are IT specialists, you could be working with health specialists and so on. I think that our whole career-focussed curriculum, the fact that we are talking about what do you want to do, what are your next steps, it just all happens naturally. (College)*

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<sup>2</sup> Located in the college's new immersive learning environment, the living staircase is a combination of staircase and room that offers space for collaborative activities including live screenings.

Not only was engagement of employers impacting on the curriculum it was also impacting on students:

*We've noticed that when we engage with employers with the students it enriches the students' experience so much that they raise their game. (College)*

Noteworthy was that both institutions had employers and community organizations contacting them directly about projects or opportunities for students. At the UTC, successful business engagement combined with the broader careers strategy had created a situation in which there was a sense that students might almost be saturated by offers:

*I'm constantly like here's an email, here's an experience, why don't you do it, you can apply for it because it's on offer, we've got somebody coming in, there's a visit going out, sign up to do it... it does make me wonder if sometimes the students almost become slightly complacent because that's just what we do here like 'oh, if it's not today there'll be another opportunity next week'. (UTC)*

In the college the local radio station was in touch to see if they could help a member of the public who had phoned in whose father was terminally ill and they wanted a song recorded that he used to sing when they were a baby. The music team stopped what they were doing and got behind this together with the students.

*And we suddenly had a record company come in and offer to record it, and the students got behind that 100%. It then went in the charts, so we raised money for the charity and that would have never happened without the staff and student mindset being, 'yes, we do plan for things, but sometimes they just come in'. (College)*

In both institutions the strong relationships with employers created opportunities that could not have been predicted or timetabled, and students were not fazed by this because they know it's what happens in industry.



### 4.8.3 Employer partnerships and the future workforce

Regular employer conversations drew attention to local skills shortages which influenced the curriculum on offer and from the employers' perspectives opportunities for recruitment. For example among creative industries in Sunderland, the employers drew attention to a major skills shortage that the college was not currently making students aware of or including in their teaching: the industry lacked theatre and lighting technicians and sound engineers. The member of staff continues the story:

*As a region, in order to produce our own work, we need to bring in people from outside the area. So we don't do a technical theatre course but we're now going to work with one of the local theatres to find ways that when we do our planning we can add elements of technical theatre to the study programme as a recognized number of hours to try and get them interested in technical theatre and upskill them a bit so that hopefully the region can draw on that, and we're not just relying on people from Manchester or London to do that work. We wouldn't have got that had it not been for the employer forum.*

Similarly within health and social care, employers had said how much they struggled with learning disability nursing and social care. As a result the college added a full week to their timetable dedicated to understanding adults with disabilities just to try and break down some barriers for students.

*By getting them to understand the different opportunities we've got in that sector, we can hopefully support some students into those roles that are available in the local area where employers need staff but are struggling to recruit. So, by working hand in hand with those employers we are feeding into those industries. (College)*

There were benefits for students too from the close working relationship with employers. In the UTC students and staff spoke about how students were being sought for apprenticeships, about companies that do not look anywhere else for apprentices and gave an example of a company picking out a student in Year 11 and waiting for them to complete Level 3 before offering them a degree apprenticeship. In the college there was an agreement in place with one care sector whereby all Health and Care students were guaranteed an interview with that organization. This was to help the organization meet their skill gaps and because *they've got much more confidence in those learners because they've shaped their learning* (College).

In both institutions, close working with employers was feeding into industries and their needs in the locality.

### 4.8.4 A professional in-house role for employer engagement

Both institutions offered a career-focused curriculum and had dedicated careers staff to advise students on how their learning and qualifications related to possible employment. However, as part of the pilot of EFL a new role had been created, that of IASOs, who were employed by the NELEP but funded by Edge. The IASO role involved someone in a professional role with the knowledge and expertise to make strong employer links – this person was not a teacher. In this second phase of the EFL pilot, an IASO was appointed to the college; however, the UTC already had someone in place undertaking this role so further funding was not provided.

The IASO in the college was based there for three days a week and was able to forge those relationships, and act as an interface between the community and the employers and the college. In contrast to teachers who have classroom responsibilities, the IASO had time to focus on this role. For this reason the IASO was felt to be pivotal in the support given to establishing the health and social care Academy of Excellence:

*He really helped us build up momentum – you know what it's like when you're trying to do lots of different things, the IASO was able to focus on that and support myself and the team to pull together our blueprint for these Academy of Excellences. (College)*

The IASO also brought a lot of labour market intelligence and careers information and was definitely part of the team, part of the college and engaged in regular progress meetings with curriculum leaders and employers.

*The IASO supported staff going back into industry for a couple of days and was also tasked with finding inset days for English and maths staff to go into the industry that they were teaching the students of. For example, if it was English and maths staff teaching in construction that went to a construction company. If they were linked to health, they went to a health authority or trust. That was really important for those staff to help bring relevance back into the classroom. (College)*

Like the Edge funded role, the 'IASO' in the UTC was involved in relationship building with employers, industry projects, employer visits and ran the employer advisory group. This relationship building was fundamental to understanding how the UTC and the employer might work together.

*It absolutely is about nurturing those relationships, finding out what it is that they want, what skillset do they want, how do they want to engage with our young people, what capacity they have to do that, do they want something with immediacy or are they thinking more longer term so we're going to build that relationship up gradually. (UTC)*

On appointment the UTC 'IASO' worked full time on developing and brokering relationships with employers. As relationships were established, the time dedicated to this aspect of the role reduced, although the maintenance of the relationships remained important as did the fostering of new business partners. This seemed a natural part of the process, with teachers gradually linking more strongly to established employer partners to co-create and design the curriculum and project briefs. Similarly in the college, the IASOs talked about *Our approach is we will help you to build these relationships but we will step away and you then need to manage those relationships, keep hold of them, nurture them, so you can build on them year by year.*

It appeared that while the IASO role might need to be frontloaded to develop and engage with employers, once relationships were established teachers gradually took more responsibility since it was they who had the expertise to work with employers on the design of teaching and learning: *And I think what's key to sustainability is that it doesn't become about the individual it becomes about the institution (IASO).* What had been essential about the IASO role was that they were not teachers and were not timetabled to teach: thereby giving them the flexibility to seek out employer partners and to work with them to fully understand that partnerships between the institution and employers could be of mutual benefit.

## 4.9 Wider processes and systems contributing to success

### 4.9.1 Professional support through a critical friend approach

The approach adopted by Ford NGL is premised on institutions and individuals working with trained Ford NGL coaches. It was evident that the positioning of the work of the coaches was never one of 'telling' either institution what to do, rather this was about skilful questioning and prompting to encourage reflection and thinking similar in some respects to the role of a critical friend. This approach was also in alignment with the overall aim of the pilot with each institution encouraged to develop their practice while considering their own context. This was confirmed by participants from both institutions:

*They were never here to tell us how to do it, it was always 'I wonder if?', or 'that was a really interesting reflection, what if we did, or could you have done this? How would you feel if it was that, not this?' It was never 'well, we have this road map and we're going to go from steps 1 to...' it wasn't like that. It was really very cleverly facilitated in terms of the ownership always sat with the SLT. (UTC)*

*It wasn't a case of them telling us how to do things – it was always about what would be right for your students and organization. (College)*

What was recognized by SLT in both institutions was how it was helpful to have conversations with people outside of the organization for two reasons. The first was that it brought a level of accountability, in the way that critical friends can challenge ideas:

*So I think having that level of accountability to someone external was extremely important, having someone who could be agitating our thinking was really important, and they were very much our critical friends. (UTC)*

Secondly, was that being external to the organization meant that they had a wider picture rather than being caught up in the day to day activities.

*I guess, it's just the coaching role, it's that somebody who understands us and gets us and has an insight into our world but isn't living it day to day and therefore... has that ability, as only an external person does, to challenge and question. (UTC)*

It was also evident, as seen in 4.8, that employers on advisory boards were fulfilling a supportive role.

*They're our kind of an operational arm, they're very much critical friends is how I would describe them and they co-create, and co-shape, and co-design not only the work that we do with the students but from their perspective as employers, what they would like to see. (UTC)*

### 4.9.2 Learning from others – not working alone: community connected

The visits facilitated by Edge to Nashville and the Buck Institute in the US are obviously out of the reach of most organizations, however, regional and online opportunities were of immense value and were also generating new contacts and sharing.

Seeing PBL in other organizations was useful and meant that this learning could be brought back into the institution:

*We also had staff visit XP school so they could see PBL in action, and the staff could really benefit from that because they could see everything they had learned being embedded. (College)*

It also led to training being cascaded across departments. For instance, following a visit to another FE college to see PBL in practice, one of the college music team had then *put on a CPD day with the team to share his experience, so it was layered, how this information was going down to the grass roots.*

Online opportunities were also valuable with the same FE college providing remote sessions during the Covid lockdown for the college, and the UTC having conversations with The Wood Foundation in Scotland. What was interesting was how these conversations were shared in both directions. For example, staff from the UTC delivered some online sessions to headteachers working with The Wood Foundation<sup>3</sup> on the Excelerate programme and did further follow up sessions for their staff. Staff from the UTC had also done online sessions for Ford NGL events where they shared some of the things that they had done and had also been invited to present their work in-person at a conference in Nashville.

Although in its infancy during the period of this research, there are suggestions here of an educational community coming together to share ideas to develop practice that are moving away from institutions working in isolation.

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<sup>3</sup> The Wood Foundation is similar to Edge but in Scotland. They are currently working with secondary schools in Aberdeenshire on the Excelerate programme that aims to empower young people with the knowledge, skills and experiences they require to make informed decisions about their futures. For a recent report published by the Edge Foundation see [Dabbous et al \(2023\)](#).



## 5 Lessons Learned

It is acknowledged that both organizations benefited from multiple opportunities provided by the Edge Foundation that would be impossible for most schools and colleges such as the visits to Nashville, the sustained coaching and support from Ford NGL and in the case of the college the funding for the IASO. Undoubtedly, these resources were influential in both organizations, however, there were many stand out features of how this second phase of the EFL pilot was implemented in both institutions that could be translated into wider practice.

1. Central to the success of the pilot was the intentionality and vision for change to transform teaching and learning to better meet the needs of young people in both institutions. At an obvious level this required strong engagement from SLT but it was much deeper than that. It was about clear alignment between the strategic vision of each institution and how that aligned with the aspirations of EFL and Ford NGL. This was not about quick wins: it was about sustained commitment, clear messaging to all staff and a sense of buy-in at every level of the organization.
2. Although a little surprising to the Ford NGL coaches, the impact of the co-construction of the leaver profile, beginning with a visioning day for all stakeholders - students, staff, parents and employer/business partners in the community, was immense. The leaver profile with its emphasis on the development of knowledge, skills and behaviours needed for future careers provided a consistency of approach across all departments, enabled focused conversations with employers and gave young people confidence in their industry-relevance. It was embedded in the curriculum offer and a central focus of teaching and learning.
3. Student needs were at the heart of teaching and learning with a focus on enabling all young people to flourish. This meant providing opportunities to support the interests and aspirations of all students, the foregrounding of multiple pathways post-18 whether these be into apprenticeships, further study or work and fostering an environment where learners were encouraged to reflect on their behaviours or outcomes and in the process develop criticality and confidence in becoming self-directed learners.
4. The implementation of PBL was fundamental in transforming the educational experience for students in both institutions, and the synchronicity between PBL and the leaver profiles was evident. PBL was carefully scaffolded to meet the needs and abilities of students with scaffolds being reduced over time. All projects were rooted in authentic real world problems that frequently involved employers and which became more challenging as time progressed. Time was taken to introduce parents to PBL through showcase events early in the Autumn term and through student-led conferences where students presented their work. This experiential approach to learning, rooted in the real world fostered the development of teamwork, creativity, problem-solving and communication in students in addition to supporting their decision-making for their future careers.
5. As might be anticipated from strong SLT commitment, dedicated timetable time for staff to undertake training in PBL, to visit and learn from other organizations, and to plan and discuss/develop ideas alongside industry partners had been ringfenced. Naturally teaching staff had different levels of experience with PBL and had different perspectives on PBL: this was recognized in both institutions in the importance given to staff feeling confident about PBL and committed to PBL rather than rushing ahead.

6. Of central importance to this initiative was the systematic and informed approach to employer engagement and the fostering of business partnerships. This was premised from a starting point of any relationship being mutually beneficial for both employers and the educational institution. Formally constituted employer boards, a tiered menu of what employers could offer, a responsiveness to employer requests about future workplace needs and LMI all contributed to this and ensured that employers had an impact on classroom learning. Each institution had people with a recognized professional non-teaching role that focused on employer partnerships and the development of these: this had included the setting up of the advisory groups. While this had in effect been frontloaded to develop and engage with employers, once relationships were established teachers gradually took more responsibility since it was they who had the expertise to work with employers on the design of teaching and learning.
7. Throughout staff in leadership roles, with respect to the pilot, were supported by Ford NGL coaches who rather than telling participants what to do instead used skilful questioning and prompting to encourage reflection and thinking. This was valued by all participants, as were opportunities to learn from and with other institutions.
8. Attempts to innovate are often beset with challenges: notable here was that whilst staff in both institutions sometimes spoke of things that had been challenging, such as allocating sufficient time for staff development and fostering teamwork among young people, these appeared to have been viewed as an integral part of the ongoing process of creating the best possible environment for learners, rather than as some kind of obstacle in their path.

## A final reflection

What is apparent in the successes evidenced in this report across both institutions is the intentionality of vision and design that ran through each aspect of teaching and learning to transform the educational experiences of young people.

This was evidenced in:

- the synergy of their mission with the aims of EFL and Ford NGL in a desire to transform education,
- the systematic design of internal systems and processes to support this, allied to strong SLT commitment,
- the close linkage between the leaver profiles and approaches to PBL,
- intentionality of purpose in that this was for all young people,
- intentionality in the structured and systematic approach to working with employers for mutual benefit,
- intentionality in the scaffolded approaches to supporting staff development, and
- the openness to reflection and change as seen in the conversations with the Ford NGL coaches, that was also fostered among students and staff.

Central to the success of the work undertaken by both institutions was that this holistic approach to education was rooted in community engagement from the very beginning. An essential part of this was the involvement of students, staff, employers and parents in the visioning day that set the path to the development and embedding of leaver profiles.

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