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National Colleges Process Evaluation

Research report

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The Institute for Employment Studies

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Glossary

NCHSR	National College for High Speed Rail
NCCI	National College Creative Industries
NCfN	National College for Nuclear
Ada	National College for Digital Skills
IoT	Institutes of Technology (IoTs) are being created as part of the government's reform programme for technical education. They will be formed through partnerships between employers and Further Education and Higher Education providers. IoTs will specialise in technical disciplines, particularly STEM (science, technology, engineering and mathematics) at levels 3, 4 and 5, but also extending to degree level and above (level 6+)
LA	Local Authority
LEP	Local Enterprise Partnerships are business led partnerships between local authorities and local private sector businesses. They help determine local economic priorities and undertaking activities to drive economic growth and job creation, improve infrastructure and raise workforce skills within a local area
ESFA	The ESFA brings together the former responsibilities of the Education Funding Agency (EFA) and Skills Funding Agency (SFA) to create a single agency accountable for funding education and skills for children, young people and adults
HEI	Higher Education Institute

Summary

In May 2016, Government funding of £80 million was awarded to establish five employer-led National Colleges in key growth sectors – Creative and Cultural (NCCI), Digital Skills (Ada), Nuclear (NCfN), High Speed Rail (NCHSR) and Oil and Gas.¹ This was alongside substantial investment from Local Authorities (LAs), Local Enterprise Partnerships (LEPs), industry bodies and businesses.

The ambition for the National Colleges, as described in the [Post-16 Skills Plan](#) (BIS and DfE, 2016), was to meet the shortfall of higher level technical skills in key growth sectors and support the delivery of critical infrastructure projects. To achieve this, they would:

- Teach students at the highest levels, using teachers with up-to-date understanding of the industry and in environments that accurately simulate the workplace; and
- Award qualifications in their specialist areas and set standards which other colleges across the country could use.

The Colleges were intended to deliver classroom-based and apprenticeship training at Levels 3-6, with learners drawn from schools, University Technical Colleges and FE colleges. The National Colleges aimed to contribute to improved parity of esteem between technical and academic education and an increase in the number of learners choosing higher technical courses.

The Colleges opened between 2016 and 2018 (Ada and NCCI in 2016, NCHSR in 2017 and NCfN in 2018). At the end-point of the initial phase of delivery, in December 2018, the Department for Education (DfE) commissioned the Institute for Employment Studies (IES) to carry out a process evaluation. Its aims were to:

- Explore the implementation and delivery of National Colleges to date from the perspectives of key stakeholders;
- Identify factors that have helped or hindered effective implementation of National College policy;
- Identify lessons learned about how delivery can be improved or refined, and more broadly, applied across DfE's programmes, particularly the Institutes of Technology.

The research was primarily qualitative in nature and took place from February-April 2019. It involved an initial scoping phase, which incorporated a review of National College

¹ The development of the National College for Onshore Oil and Gas was paused due to weak economic conditions in the sector. This College was therefore not included in the scope of this process evaluation.

policy documentation as well as the original and revised business plans of the four National Colleges that had opened at this time. This provided further detail on how the policy had been implemented by government as well as the National Colleges' delivery plans and how these had evolved over time.

This phase of research was followed by in-depth case studies of each of the four National Colleges. The case studies incorporated day visits to the different National College campuses to interview staff and conduct focus groups with learners. Telephone interviews with other stakeholders engaged in delivery were also completed, including employers, National College board members, sector/trade bodies, and representatives of LAs and LEPs that provided co-funding. The research team also attempted to engage employers who were not already involved with the National Colleges to gather their perspectives on this new provision. In all cases except the NCHSR, interviews with this group of employers did not take place because employers did not respond to the research team's approach or it was not possible to identify suitable contacts via the Colleges or sector bodies. In total, 133 individuals participated in the research across the four College case studies.

An online survey was also administered to National College learners. The National Colleges were responsible for promoting and administering the survey: a 'census' approach was used where invitation and reminder emails were sent out to all eligible learners. The survey asked learners questions about their satisfaction with different aspects of National College provision, and how far they agreed that they had achieved particular outcomes in relation to skills, knowledge and career prospects as a result of their course. In total, 126 learners completed the survey, providing an estimated response rate of between 10-12 per cent.

There are some implications to the research being largely qualitative in approach. Qualitative approaches draw out deep insights from a range of individuals, in this case National College staff's, learners', employers' and wider stakeholders' experiences of the initial phase of the Colleges' set up and operations. However, because a limited number of individuals were included in the research, responses are not representative of all types of interviewee. As a result, it is not possible to provide a quantification of the number of interviewees that hold particular views or have particular experiences.

Further, the low numbers of learners responding to the online survey means that the survey findings are indicative only and cannot be used to draw robust comparisons between learner experiences across the National Colleges.

Research findings

As noted, the process evaluation explored various facets of the National Colleges' establishment and delivery, including:

- The commissioning processing for the National Colleges;
- The Colleges' funding arrangements in relation to their operational costs;
- The funding awarded for their capital build projects and progress against these initial plans;
- The Colleges' governance structures, including views on their effectiveness and levels of employer involvement;
- How College provision has been developed, the role of employers and sector bodies in this process, and views on its effectiveness and resulting outcomes;
- The recruitment and retention of College staff;
- How learners and employers have been recruited to the Colleges;
- The progress the Colleges have made against their learner targets, and the wider challenges that have affected their ability to recruit learners/employers;
- Staff, employer and learner experiences of course delivery and teaching.

The findings that emerged in relation to each of these areas are discussed in greater detail below. This is followed by the lessons for policy makers that can be drawn from this research.

Commissioning process

In June 2014, the former Department for Business, Innovation and Skills (BIS) issued an open call for engagement in the National Colleges programme. Expressions of interest were sought from partnerships that could identify a need for a National College in their sector, industry or profession. The partnerships that successfully passed through this stage – together with partnerships in the High Speed Rail and nuclear industries, where the government had already committed to creating new National Colleges – were asked to develop more detailed business plans for the institution. These plans had to demonstrate that the College would be viable and sustainable in the long-term, evidencing demand from the sector for high-level skills provision. They had to include detailed financial projections and information about expected income streams, and proposals for the operation and governance of the College.

The partnerships that were successful in having their plans to create a new National College approved adopted several approaches to identify employer demand in the wider

sector. These included working in partnership with National Skills Academies and private consultancies to collate evidence of current and projected skills needs, seeking input from employers via industry panels and steering groups and obtaining commitments of in-kind and financial support from employers.

Commenting on this process, senior College leaders reported a lack of clarity from BIS/SFA on the evidence requirements for the business plan. This led to additional requests for information, which contributed to significant delays in the commissioning process. Stakeholders working within BIS/SFA at the time confirmed that requests for additional information were made as part of their due diligence process and to ensure that a full value for money assessment of the capital applications could be made. In addition, they commented that delays to commissioning were also caused by the spending review process which was underway within the Department during this period. This prevented BIS/SFA from making any spending commitments till its completion in autumn 2015.

As a result of these factors, following the first submission of the business plans in July 2015, across the Colleges it took between 6-18 months for plans to be agreed with BIS/SFA. In taking forward similar policy initiatives in this area in future, College senior leaders suggested that there should be a standard template that applicants can use to develop their bid. This should include explicit and detailed guidance on the evidence they need to submit and the criteria they need to achieve to be successful in their application.

Funding

Following the agreement of the National College business plans, working capital loans were made available to cover the Colleges' initial operational costs. All the Colleges accepted this loan, apart from NCfN who felt the compound interest rate was too high. For those Colleges that accepted the loan, there was a delay in receiving payments as the responsibility for the policy moved from BIS to DfE in 2016. Though the policy team involved with the programme remained the same, there was a change in the financial, legal and commercial advisors supporting the project. This caused delays in some of the Colleges delivery plans as they were unable to recruit staff to develop and design their provision.

Several of the Colleges experienced funding shortfalls during their first few years of delivery. As a result, the repayment schedule for their working capital loans has been revised and extended. NCCI also saw an increase in their working capital loan allocation to support their initial operational costs. DfE has given further financial support to both NCCI and NCHSR, providing the Colleges with standalone grants for the period 2018/19 to 2020/21. The purpose of these grants has been to further strengthen their financial

position and ensure that they can continue to cover their operational costs as they scale-up their activity.

In terms of long-term sources of funding, across all of the National Colleges, ESFA funding for apprenticeship, 16-19 and Adult Skills provision are the primary sources of revenue for these institutions. The financial make-up of each institution and their level on reliance on these separate sources of funding differs according to the exact nature of their course offer.

All ESFA funding is paid in arrears after the first two years of delivery, with few exceptions. Senior staff members commented that this presents difficulties when they are trying to recruit a core team of staff to design and deliver new courses and increase the scale of delivery, as they do not receive ESFA funding to support this activity until after learners are enrolled. This contributed towards lean staffing models and high staff workloads across most of the National Colleges.

Other strategies adopted to manage costs included having staff members perform duties outside of their initial job description, and reviewing the type of contracts and benefits (i.e. pension) they offer different staff members. All of the Colleges had attracted some investment from industry to support their delivery. In-kind investment (i.e. donations of equipment) has generally been easier to secure, while the Colleges have had mixed levels of success in attracting large cash contributions to help ease their financial position. Working capital loans were not seen to address these financial limits to growth as repayments had to be factored into the Colleges' future financial outgoings and placed limits on institutional growth.

Building facilities and obtaining equipment

Capital funding of around £80 million was made available to establish new buildings and facilities that would support the delivery of high-quality, economically-valuable learning at the National Colleges. This investment was intended to position the Colleges as world-class centres of learning, which would assist in attracting learners and employers and improve the status and profile of higher level technical education. The National College partnerships had to submit a separate application for this capital funding as part of the commissioning process. In this, the partnerships had to provide evidence of how the capital investment would support the delivery of the National College's business plan and help to deliver its intended aims and outcomes.

At the time of fieldwork, the National Colleges had made varying levels of progress in relation to their capital build projects. The NCHSR and NCfN capital build projects were delivered on time and according to the original plans. There have been significant delays to Ada's capital build timescales, caused by a number of factors related to acquiring land.

DfE made the decision to place the NCCI capital build on indefinite hold due to a lack of progress, escalating costs and a lack of clear direction for the project

The main enablers for effective delivery of capital build projects were the previous skills and experience of the leadership teams in overseeing complex capital build projects, as well as the receipt of funding from LAs and LEPs, which sometimes helped to ensure challenging timetables and increased contractor prices (due to compressed timeframes) could be met. Colleges without previous experience of capital build projects meanwhile experienced greater levels of challenge. In these cases, Colleges supplemented the senior leadership team's experience with relevant expertise from Board members.

Within the BIS/DfE policy teams there was initially relatively little experience of overseeing large capital investments and some Colleges reported they would have benefitted from greater support and guidance at the start of this process. DfE addressed this gap by appointing specialist staff with experience of capital investment to provide on-going support to the Colleges.

All National Colleges successfully secured donations of equipment from employers and other partners to support the delivery of specialist training, and generally the expectations set out in the business plans in these areas were met.

Establishing leadership and governance arrangements

In the main, the National Colleges established governance arrangements as anticipated in their original business plans and senior leaders in Colleges, Board members and DfE stakeholders considered that Boards were functioning satisfactorily. The governance structure was slightly different in each College but there was evidence of active employer leadership in all National College Boards. All Boards were also supported in their decision-making by employer advisory groups.

Over time, Colleges have refined and developed Board membership and governance structures to respond to different requirements at different stages of set-up and delivery. Interviewees considered that, at the time of fieldwork, membership tended to be well-balanced and the Boards had achieved the necessary range of financial, commercial, further and HE and key professional skills. Colleges and their Boards had identified a few gaps in skills and membership, which they were working to address.

A key lesson learnt from the development of these governance structures was the need for educational expertise in establishing employer-led institutions. All interviewees commented that the process of expanding Board membership to include educational specialists as well as industry leaders had been a critical step in establishing sound governance. Some Board members recognised that student participation in governance and improving management information were areas for development in future.

Development of provision

During their set-up phase, the National Colleges worked to develop their curriculum offer, and create new provision at Levels 3 and above that was aligned with the high-level skills sought by industry. National Colleges worked collaboratively with employers as part of this process to identify the skills and attributes they require from new entrants to the sector through roundtable events, advisory panels and board meetings. Information gathered from these events provided an outline of what the College courses needed to cover and what level.

Heads of Curriculum then used this information, together with their own research and experience of designing similar course programmes in other institutions, to develop the content of the programme, individual units and course objectives. All four Colleges partnered with Higher Education Institutions (HEIs) to support this process and ensure the newly designed programme met the necessary academic quality standards and could be formally validated by these institutions. Another check and review of the full curriculum by employers was usually undertaken before final validation.

College staff, employers and sector bodies were largely positive about the curriculum development process. Employers generally noted the flexible approach of Colleges and their willingness to respond to industry feedback. Many commented that the resulting curriculum offer was aligned to their needs and providing them with necessary skills, though some employers stated that they would like to see the Colleges broaden their curriculum offer going forward and offer a greater range of courses.

Staff recruitment and retention

In most cases (with the exception of NCCI), the initial staffing requirements set out by the Colleges in their business plans had been broadly achieved, although the development of the teaching and learning teams was an on-going process. In some of the Colleges, staff recruitment had been delayed because of insufficient finances to recruit staff and cover operational costs. This was attributed to delays in receiving working capital loans, the lower than anticipated funding for apprenticeships and low learner numbers.

Attracting candidates to their teaching faculties with a combination of relevant teaching qualifications, teaching and industry experience was a key challenge for National Colleges, as it is for the Further Education sector more widely. NCfN and Ada in particular reported that they could not meet the salary expectations of senior teaching staff who fulfilled these criteria. In some cases, when Colleges were not able to recruit staff either due to affordability or lack of suitable applicants, they used temporary contractors from industry to address immediate staffing needs. Although this approach tackled short-term staffing issues, it resulted in some concerns about quality (e.g. lack of feedback and consistency for learners).

Issues with staff retention differed between institutions. Both NCfN and NCCI had experienced higher than anticipated levels of staff turnover. In the case of NCfN, this resulted from teaching staff accepting job opportunities at industry partners, while NCCI saw wholesale turnover following a restructuring of the organisation prompted by the departure of the College's first principal. In contrast at Ada and NCHSR there had not been any significant changes in staffing structures since the start of delivery, and the rate of turnover was seen to be in line with that of any new institution.

Learner recruitment

The effectiveness of the National Colleges' marketing and outreach activities, which were undertaken to recruit learners to the College were explored. This covered direct marketing to learners in schools and colleges as well as the enrolments that were secured by encouraging employers to train their apprentices at the College.

The strong links that senior leaders and Board members have with industry have helped with promoting the National Colleges and recruiting learners but in some cases resources for marketing were perceived to be limited. Nonetheless, Colleges have held open days, attended careers fairs and undertaken school outreach to promote their courses. Colleges reported that raising awareness of a new institution and establishing trust among parents and learners in new qualifications takes time and is resource intensive. This is particularly the case where existing qualifications are well-established.

The level of employer engagement activity required to achieve good apprenticeship numbers meanwhile has varied across Colleges. Recruiting apprentices has been easier for the NCfN, for example, because the two largest employers in the sector (representing approximately two-thirds of the workforce) sit on the governing Board and have been supplying apprentices from the College's inception. Conversely, in some sectors with a high proportion of SMEs, employer engagement in apprenticeships has been more challenging.

Learners reported being attracted to the National Colleges for a range of reasons, including the progression opportunities offered in their chosen sector; the ability to gain practical, technical experience, often while working; and the availability of higher level technical courses not available in other Colleges. For employers, key reasons for engaging with the College were: a desire to improve skills development in their industry; and the availability of specialist and bespoke provision.

Progress against recruitment targets

Across all National Colleges, learner numbers are lower than initially forecast in their original business plans and the Colleges are not yet national in their scope.

Key challenges have included delays to large infrastructure projects that were intended to support the creation of new apprenticeship vacancies and lack of approval to be apprenticeship providers for non-levy paying employers, which has meant that for NCHSR and NCCI in particular, there are significant markets they intended to work with that have not been accessible (i.e. SMEs in their respective industries). Stakeholders within DfE also considered that the narrow definition of Colleges as highly specialist institutions has further impeded the achievement of their learner number targets. There were mixed views among stakeholders on the rigour of the target-setting process. Some stakeholders highlighted that there was no precedence for the steep growth trajectories that were projected in cases where entirely new institutions were being created.

Unforeseeable circumstances such as delays to capital build projects that would provide Colleges with additional capacity have also been significant factors contributing to the lower than expected learner numbers. All Colleges have structured plans to support their path towards financial sustainability and growth. These initiatives are in very early stages and the extent to which they will succeed in increasing learner numbers is unclear.

Course delivery

In terms of their on-going delivery, members of the teaching faculty generally reported positive experiences of working in the National Colleges. They felt the industry-focused curriculum was benefiting learners, and reflected the realities of the workplace. However, financial pressures and the need to keep staffing levels low have resulted in large workloads for staff, which are hard to manage and create significant pressures.

In the main, employers were satisfied with the way in which courses were delivered and their ability to influence delivery and curriculum through mechanisms such as employer advisory boards. They were positive about learners being able to acquire high-level specialist skills and there were examples of apprentices making a valued contribution to businesses. A number of employers highlighted that the creation of the National Colleges has had a positive impact on industry attitudes toward skills, training and development.

In a few cases, employers expressed concerns about the quality of provision and tutors' skills and experience, and identified challenges in maintaining day-to-day contact with Colleges, including slow responses and difficulties in making contact during holidays.

Learner experience

Through the survey and in-depth qualitative research, learner views were sought on various aspects of National College provision as well as the outcomes they perceive to have gained from their course.

In terms of how National College provision was organised, under half of survey respondents (48%) across all four institutions were satisfied with timetabling and scheduling of their courses. Learners and employers in some of the Colleges commented on multiple changes to timetables which they perceived to be due to staffing constraints. Reflecting different employer needs, Colleges were also using a range of different models of apprenticeship delivery, combining classroom-based teaching and on-the-job-training in different ways. Apprentices commented that long gaps between classroom based learning and short periods in College were challenging.

Just over three fifths of survey respondents (61%) meanwhile were satisfied with their course content and the subjects covered. Explanations as to why learners were dissatisfied with this aspect in some Colleges included: their course being more theoretical and generalist than they expected; and less frequent use of technology and equipment than anticipated. A larger share of survey respondents (70%) reported satisfaction with the quality of teaching at their College. However, some learners perceived that insufficient numbers of teaching staff had affected the quality of their learning experience and led to disorganised delivery of classes or teachers without the right skills. Where learners had participated in guest lectures, there was acknowledgement that they brought useful industry insights but in some instances learners perceived a lack of teaching experience.

With regards to the perceived quality of student services at the National Colleges, over two thirds of respondents (69%) expressed satisfaction with their College's provision of student support and wellbeing services. However, under half (42%) were satisfied with the careers advice available to them. Learners reported that they had received little 1-2-1 careers information, advice and guidance. Where industry mentors were available to learners, this was a valued source of support and information.

Just over half of respondents (54%) were satisfied with the work experience or on-the-job learning aspects of their course. Among classroom-based learners, there was mixed feedback. Some learners felt their placement was relevant and beneficial, but others recalled undertaking a narrow range of activities or had insufficient notice meaning they could not take up the initial place they were offered. Among apprentices, the quality of communication between the College and their employers, and the level of alignment between their College and workplace activities was similarly varied.

In terms of the perceived outcomes learners had gained from engaging in National College provision, the majority of respondents felt they were gaining relevant skills and knowledge, and were opening up better career trajectories in their chosen sector. For instance, around two thirds of survey respondents thought they were gaining technical skills that were: valued by employers (68%), relevant to the area they were interested in (67%), valued across sectors (66%) and relevant to the job they wanted to do (63%). A similar proportion agreed that their course would help them find a job in their sector, help

them progress to a different role or decide whether a career in this sector was right for them (68%). Around three quarters of survey respondents reported they were gaining valuable insights (76%), relevant skills (74%) and better job prospects in the sector (74%).

Lessons for future policy

A number of valuable lessons have been learned in the initial set up phase of the National Colleges which should inform similar future policy initiatives such as the Institutes of Technology:

- Establishing new educational institutions without start-up investment and grants and relying instead on working capital loans and employer investment is not standard practice within DfE and initially impeded the Colleges' ability to meet learner targets and grow. Given that start-up grants from central government were not available, more detailed consideration could have been given to other models such as evolving new institutions from existing education and training providers. Overall, the NCfN has experienced fewer challenges than the other Colleges because it was built on two strong existing colleges that have been able to provide much of the wider infrastructure required in setting up a new institution, such as business development and marketing, and covering some of the College's overhead costs. This lesson appears to have been applied to the design of the IoTs, which will be created from existing FE colleges and Higher Education Institutions.
- An inherent risk with a specialist institution is that the scope is so narrow that learner numbers will be too low to achieve a broad base and achieve financial sustainability. A narrow definition also makes other risk factors more difficult to manage and potentially leads to less resilient organisations. The NCHSR in particular appears to have been affected by its narrow conceptualisation and a wider remit from the start could have avoided some of the difficulties it has experienced in relation to delays with HS2.
- In order to successfully establish a new employer-led institution, the expertise of industry representatives needs to be combined with that of educational specialists with knowledge and experience of the FE sector and its funding systems. The National College founding employers required support to successfully navigate educational processes and systems and, while they obtained this eventually, it would have benefitted the Colleges if a requirement for FE expertise had been in the initial call for engagement.
- The success of new institutions in part relies on existing educational policies, funding streams and systems creating an enabling environment. More work could have been undertaken at the early design stage of the policy to understand adjustments required

to existing processes to accommodate the new National Colleges (i.e. the payment of ESFA funding in arrears; apprenticeship funding reform and the associated procurement of services to deliver training for non-levy paying employers). While recognising some policy shifts could not have been foreseen, if more time had been invested early on to analyse the potential impact of existing policies and to involve relevant stakeholders in findings solutions, it is likely there would have been fewer challenges.

- High-quality teaching staff with industry experience can be difficult to obtain in buoyant and/or specialist sectors of the UK economy where salary expectations are high. A consistent message from the National Colleges is that the current funding environment in the Further Education sector does not enable them to offer competitive wages. Some consideration therefore needs to be given to how IoTs can attract quality teaching staff to meet their delivery ambitions. One suggestion from the National Colleges was that employer contributions could be explicitly sought to co-fund salaries for senior teaching positions in order to bring them closer in line with the industry average.

1. Introduction

1.1. The National Colleges policy

In May 2016, Government funding of £80 million was awarded to establish five employer-led National Colleges in key growth sectors – Creative and Cultural (NCCI), Digital Skills (Ada), Nuclear (NCfN), High Speed Rail (NCHSR) and Oil and Gas.² This was alongside substantial investment from Local Authorities (LAs), Local Enterprise Partnerships (LEPs), industry bodies and businesses.

The National Colleges policy aimed to tackle challenges set out in the [UK's Industrial Strategy](#) (HM Government, 2017). These relate to low productivity compared to competitors such as France and Germany and the need for a world-class technical education system, which historically has not been valued as much as academic education.

The ambition for the National Colleges, as described in the [Post-16 Skills Plan](#) (BIS and DfE, 2016), was to meet the shortfall of higher level technical skills in key growth sectors and support the delivery of critical infrastructure projects. To achieve this, they would:

- Teach students at the highest levels, using teachers with up-to-date understanding of the industry and in environments that accurately stimulate the workplace; and
- Award qualifications in their specialist areas and set standards which other colleges across the country could use.

The Colleges were intended to deliver classroom-based and apprenticeship training at Levels 3-6, with learners drawn from schools, University Technical Colleges and FE colleges. The National Colleges aimed to contribute to improved parity of esteem between technical and academic education and an increase in the number of learners choosing higher technical courses.

The Colleges opened between 2016 and 2018 (Ada and NCCI in 2016, NCHSR in 2017 and NCfN in 2018). At the end-point of the initial phase of delivery, in December 2018, DfE commissioned the Institute for Employment Studies (IES) to carry out a process evaluation. Its aim was to provide a comprehensive and independent account of how the

² The development of the National College for Onshore Oil and Gas was paused due to weak economic conditions in the sector. This College was therefore not included as part of this process evaluation.

National Colleges had been developed and implemented so far, drawing on the perspective of key stakeholders involved in the design and delivery of the policy.

1.2. Policy context

The National Colleges policy was launched and implemented at a time of significant change in the Further Education sector, coinciding with a series of Government reforms to the technical education and skills system to increase standards and improve responsiveness to employer needs. The [national Productivity Plan](#) (HM Treasury, 2015) and Post-16 Skills Plan describes four major planks of reform:

- **Expansion of apprenticeships.** To meet the need for high numbers of new technical and professional skilled workers, the quantity of high-level apprenticeship programmes (at Levels 4-6) is being increased.
- **A new Apprenticeship Levy** on employers with a payroll of over £3 million is supporting the funding of apprenticeships, with levy contributors able to use their contributions to help fund the costs of training apprentices, and non-levy contributors able to access vouchers which mean they only have to contribute 5% of the costs of apprenticeship training.
- **The simplification and streamlining of technical qualifications.** In line with recommendations from the Sainsbury Review, there is a new framework of 15 technical routes and work-based programmes, intended to make it easier for young people and adults to understand which qualifications and programmes they should follow to target particular careers. At the start of each route is a **new T Level programme**, a classroom-based alternative to apprenticeships, which includes a structured industry placement alongside classroom-based technical education.
- **A network of Institutes of Technology (IoT).** These new institutions will be formed through partnerships between employers and Further Education and Higher Education providers. IoTs will specialise in technical disciplines, particularly STEM (science, technology, engineering and mathematics) at levels 3, 4 and 5, but also extending to degree level and above (level 6+). They will be employer-led and provide high quality progression pathways in technical education.

1.3. Research aims and method

The aims of the process evaluation were to:

- Explore the implementation and delivery of National Colleges to date from the perspectives of key stakeholders;

- Identify factors that have helped or hindered effective implementation of National College policy;
- Identify lessons learned about how delivery can be improved or refined, and more broadly, applied across DfE's programmes, particularly the IoTs.

To address these aims, IES designed a process evaluation study comprising primarily qualitative methods. The key components of the methodology are summarised below.

A review of relevant documentation

The documents reviewed included: the DfE business case for the policy; the initial call for engagement issued in June 2014; a letter sent to prospective National Colleges about how their business plans and capital proposals would be assessed; the business plan for each of the National Colleges; and the policy evaluation framework and key performance indicators, which was developed by DfE.

Telephone interviews with DfE stakeholders

Telephone interviews were conducted with 9 members of the DfE policy and programme team, including senior policy leads and account managers responsible for working with each of the colleges.

Case study research with the 4 National Colleges

Day visits to all the National Colleges were organised, and for Colleges with more than one site operating at the time of the study (i.e. NCfN and NCHSR), both sites were visited. During the course of the visits, individual and paired interviews and also group discussions were carried out with a range of staff and learners. The target was to include between 8-10 staff members per college, including senior management, human resources staff, curriculum managers, teachers and tutors, business development/employer engagement and administrative staff, and to conduct 2 focus groups with learners per college, with 7-8 participants in each. The targets for numbers of staff participating in the research were achieved. For the learners, the targets were achieved in 2 Colleges, while there was a slight shortfall in the other 2 institutions. In the case of one College (NCCI), individual telephone interviews were carried out with apprentice learners who were off-site as discussion groups were not feasible.

In addition, telephone interviews were conducted with wider stakeholders, including employers, National College board members, sector/trade bodies and LA and LEP representatives. The majority of the employers interviewed were engaged in the National Colleges' work already, either as Board members or because they had recruited apprentices, contributed funding or equipment, or supported curriculum development. The research team attempted to engage employers who were not already involved with the National Colleges to gather their perspectives on the Colleges. In all cases except the

NCHSR, interviews with this group of employers did not take place because employers did not respond to the research team's approach or it was not possible to identify suitable contacts via the Colleges or sector bodies.

In total, 133 individuals participated in the research (see Table 1.1 below).

Table 1: Achieved sample – case study research

College	Staff	Learners	Employers	Governors	Sector bodies	LA/LEP	Total
Ada	8	14	5	2		1	30
NCCI	8	7	4	2	1		22
NCfN	20	15	5	2	1		43
NCHSR	12	12	9	3	1	1	38
TOTAL	48	48	23	8	2	1	133

An online survey of learners

The research team designed a short online survey (less than 10 minutes) for learners, which was delivered using SNAP survey software. Providers were responsible for promoting and administering the survey: a 'census' approach was used where invitation and reminder emails were sent out to all eligible learners. This included current and previous learners.

In total, 126 learners completed the survey (with an additional 4 learners partially completing it). As providers administered the survey and the sample frame is not available to the research team, it is not possible to calculate an exact response rate or to assess how representative the achieved sample is of the total learner population.³ However, based on learner enrolments in the colleges in the academic year 2018/19 and assuming that all learners were invited to take part by their College, we estimate a response rate of 10-12 per cent. This is in line with response rates achieved on other similar, online learner surveys.

As most questions in the survey were not mandatory and sometimes routing was used, the number of respondents who answered each question varied. Findings are reported using 'valid' per cent.

The vast majority of survey respondents (98%) were currently attending a National College, while the remaining 2 per cent had already completed one course and were now enrolled on a further course. The majority of respondents were attending either Ada

³ In the academic year 2018/19, approximately 1,147 learners were enrolled.

or NCHSR (38% each). The number of respondents from the NCCI and the NCfN, meanwhile, were quite small (17 and 15 respondents, respectively). In the case of NCCI, this is partly explained by the smaller cohort size at the institution.

Respondents were studying a range of qualifications between Levels 2 to 6, although most respondents (67%) were studying at Levels 4 to 6. Just under a third of respondents (32%) were studying at Level 3A little under half (48%) had been attending their current course for 6 months or less.

The majority of respondents were male (73%) and just over a quarter were female (27%). Respondents were aged between 16 and 53 years, although nearly half (49%) were aged 20 or younger. The median average age was 21 years. A third of respondents identified as Black, Asian or Minority Ethnic (33%) and around two-thirds identified as white (67%).

This process evaluation is one component of a wider evaluation strategy for the National Colleges, which includes on-going data monitoring and analysis of long-term outcomes. The data monitoring and long-term outcomes strands are being developed and delivered in-house by DfE analysts.

1.4. Limitations of the research

There are some implications to the research being largely qualitative in approach. Qualitative approaches draw out deep insights from a range of individuals, in this case National College staff's, learners', employers' and wider stakeholders' experiences of the initial phase of the Colleges' set up and operations. However, because a limited number of individuals were included in the research, responses are not representative of all types of interviewee. As a result, it is not possible to provide a quantification of the number of interviewees that hold particular views or have particular experiences. However, where necessary for understanding, some indication of scale is provided, using statements such as 'some', 'many' and 'most'. Generally, though, in reporting the qualitative evaluation data, the aim is to present the range of views and experiences, and explore the factors that drive these perspectives.

More specifically, it should be noted that the composition of the learner focus groups differed between Colleges. This in turn affected the balance of evidence available on the topics presented in the learner recruitment (Chapter 8) and learner experience (Chapter 11) sections of the report. In the case of Ada and the NCfN, the discussion groups consisted of more apprentices than classroom-based learners. The discussion group at the NCCI, meanwhile, consisted entirely of classroom-based learners, while one apprentice was interviewed off-site. The discussion groups at the NCHSR were evenly split between the two.

Further, the low numbers of learners responding to the online survey means that the survey findings are indicative only and cannot be used to draw robust comparisons between learner experiences across the National Colleges. The responses from NCCI and NCfN were considered too low to provide meaningful insights into the learner experience. As a result, the individual findings for these two institutions are not presented within this report. In addition, as it is not possible to compare the characteristics of learners responding to the online survey to those of the entire National College learner population, we are unable to assess whether there is non-response bias caused by particular groups of learners being less likely to respond to the survey.

1.5. About the report

This report synthesises the evidence gathered during the process evaluation and sets out the implications for policy.

- Chapter 2 focuses on the **commissioning process** and summarises feedback from senior leaders in the National Colleges and DfE stakeholders.
- Chapter 3 considers the National Colleges' **funding**.
- Chapter 4 summarises the funding awarded for the **capital build projects** and progress against initial plans in completing the capital build projects and obtaining equipment.
- Chapter 5 highlights findings in relation to the Colleges' **governance structures**, including views on effectiveness and employer leadership.
- Chapter 6 describes **how provision has been developed**, the role of employers and sector bodies, and considers the effectiveness of the process and resulting outcomes.
- Chapter 7 considers **staff recruitment and retention**, while Chapter 8 looks at **how learners and employers have been recruited**.
- Chapter 9 looks at the **progress the Colleges have made against their learner targets**, and the wider challenges that have affected their ability to recruit learners.
- Chapter 10 describes **staff and employer experiences of course delivery and teaching** and Chapter 11 considers **learners' experiences**.
- Chapter 12 draws together findings from previous chapters to assess **whether National Colleges are on track to achieve intended benefits**, make recommendations for on-going monitoring and delivery and summarise **lessons for policy makers**.

2. Commissioning process

This chapter provides an overview of the commissioning process and summarises feedback from senior leaders in the National Colleges and DfE stakeholders on this process.

Key findings

- In developing their business plans, National Colleges used a range of approaches to assess employer demand for high-level skills. These included working in partnership with National Skills Academies and private consultancies to collate evidence of current and projected skills needs, seeking input from employers via industry panels and steering groups and obtaining commitments of in-kind and financial support from employers.
- Senior College leaders reported a lack of clarity from BIS/SFA on the minimum evidence requirements for the business plan. This led to additional requests for information, which contributed to significant delays in the commissioning process. Following the first submission of the business plans in July 2015, across the Colleges it took between 6-18 months for plans to be agreed with BIS/SFA.
- Stakeholders within BIS/SFA commented that delays to commissioning were also caused by the spending review process which was underway within the Department during this period. This prevented BIS/SFA from making any spending commitments till its completion in autumn 2015.
- In taking forward similar policy initiatives in this area in future, College senior leaders suggested that there should be a standard template that applicants can use to develop their bid. This should include explicit and detailed guidance on the evidence they need to submit and the criteria they need to achieve to be successful in their application.

2.1. Overview

Plans to create a new generation of employer-led National Colleges to address technical skills gaps in ‘strategic, high-value’ industries were first announced in 2014. Reporting on the progress of their Industrial Strategy in April, the Conservative and Liberal Democrat coalition government confirmed that they were creating a new National College to support the High-Speed Rail transport project (HM Government, 2014). As part of this report the Government also announced their intention to work with businesses to support the creation of a National College for the nuclear industry as well as other identified areas of need.

This was followed in June 2014 by an open call for engagement in the National Colleges programme issued by the former Department for Business, Innovation and Skills (BIS, 2014a). Expressions of interest were sought from partnerships that could identify a need for a National College in their sector, industry or profession and could evidence:

- A gap in the supply of skills at Level 3, 4 and 5 in this area.
- Employer leadership at a national level, with a clear strategy for employer involvement in the governance and operation of the College, and appropriate mechanisms for engagement with businesses of all sizes.
- Financial commitment from employers to developing the new college, with an expectation that at least 50% of the initial investment required to set up and establish the college comes from employers.

BIS committed to working with interested parties whose responses met these criteria to develop their proposals further and consider opportunities for government investment. The deadline for responses was September 2014. An internal assessment panel was convened to score the expressions of interest against these evidence criteria. The panel also considered whether the proposals had an ambitious long-term vision; explained why a National College would be the most appropriate intervention to address the skills needs identified; met the 13 illustrative characteristics of a National College set out in the initial call for engagement; and were deliverable.

A shortlist of responses was compiled from this exercise and given further detailed consideration. The panel had further conversations with the shortlisted partnerships from September-October 2014 to further test the supporting evidence provided and its underpinning assumptions. An external panel of experts from the education and business world was then convened to ‘sense-check’ the Department’s assessment of these bids. Following a final meeting of the internal panel in November 2014, recommendations were put forward to Ministers on which partnerships should progress to the next stage of commissioning. Ministers agreed with these recommendations and in December 2014 the creation of 5 new National Colleges was announced in the Digital; Onshore Oil and Gas; Wind Energy; Advanced Manufacturing; and Creative and Cultural industries (BIS, 2014b).⁴

For the next stage of the commissioning process, the National College partnerships were asked to develop business plans that provided:

⁴ The development of the National College for Onshore Oil and Gas was paused due to weak economic conditions in the sector. This College was therefore not as part of this process evaluation.

- A blueprint for the operation of the College, demonstrating that the College is viable and sustainable in the long-term;
- Evidence of demand from the sector for this high-level skills provision, and sustained employer commitment to the National College;
- Clear and deliverable strategic objectives and delivery outputs, and plans for delivering them;
- Detailed financial projections and information about expected income streams;
- Proposals for the governance and leadership of the college – including the partnership’s proposed timeline for incorporation.

BIS set minimum requirements for the business plans in terms of their coverage, which formed the criteria against which the Business Plans were assessed (BIS, 2015).⁵

At the same time, the National College partnerships were able to apply for capital funding to support the building of new facilities for the college. As part of their application, partners were asked to make an education, property and financial case for these new facilities. The application had to support the delivery of the National College’s business plan, and contain ‘robust evidence’ of how the capital investment would help to deliver the aims and outcomes presented in the business plan.

A workshop for the National College partnerships was held on 16th June 2015 setting out the assessment process for the business plans and capital grant applications. The partnerships had 1 month to submit both documents, with a deadline of 16th July 2015.

The assessment process for the business plans and capital applications was due to involve:

- An internal assessment of the business plans within BIS and the Skills Funding Agency (SFA) followed by an assessment of the capital applications).
- A presentation by the National College partnerships of their business plans to a BIS and SFA assessment panel.
- A finalisation of scores by the assessment panel and the communication of their decision to the Colleges.

It was originally envisaged that the assessment process would be complete within a 3-4 week period, with a final decision communicated to colleges at the end of August 2015 (BIS, 2015).

⁵ At a minimum, the business plans had to include the following sections: Vision; Strategic Aims and Objectives; Description of Service; Employer Engagement; Financial and commercial case; Funding Information (including financial forecasts); Delivery / Operating Model; Year One Activities; Quality; Governance and Management; and details of Project Plans, including risk management (BIS, 2015).

2.2. National College feedback

Senior leaders in the National Colleges were asked about their experiences and views on the commissioning process.⁶ The following sections reflect their perspective on this process, as well as supporting information obtained from the College's original business plans.

The research also sought to engage senior stakeholders who were involved in the commissioning process within BIS/SFA to provide their feedback on implementation. However, due to staff turnover/redeployment, interviewees had only been involved in discreet elements of the commissioning process. As such, it was only possible to obtain a partial insight into commissioning from these stakeholders.

Policy announcement

Commenting on the series of policy statements in 2014 that announced the creation of the separate National Colleges, interviewees across more than one institution felt that these statements had been premature and should have occurred after their business plan had been properly developed and vetted. In one case, the announcement that a National College would be created was seen primarily as a government-led not an industry-led decision. In this instance, senior leaders observed that they developed the rationale for the College post-hoc, but that the concept originated with Government ministers. The senior leaders saw the value of the initiative, however, and worked to make the development of the business plan for the College an industry-led process from this point.

Developing the business plans

Evidencing demand within the sector for high-level skills provision and demonstrating employer commitment to the proposed National College was a key component of the business planning process, and was the main aspect discussed when senior leaders fed back on these activities.

The partnerships that were successful in having their plans to create a new National College approved adopted several approaches to identify employer demand in the wider sector. Some Colleges engaged private consultancies or National Skills Academies, for instance, to help collate secondary evidence that demonstrated current and projected skills shortages, and the shortcomings of existing education and training provision in

⁶ It should be noted that due to senior staff turnover at NCCI, it was not possible to speak with anyone at the National College who had been involved in the commissioning process.

addressing these needs. The types of secondary evidence that featured in the business plans included analyses of sector skills assessments and employer surveys previously undertaken by sector skills bodies, public bodies (i.e. the former UK Commission for Employment and Skills) and awarding bodies.

A few Colleges also had private consultants or National Skills Academies undertake direct market testing to support the business case for the National College. This involved interviews and consultations with employers and existing training providers in the sector. These evidence gathering activities were more tailored and looked at demand within the sector for the broad course outline and qualifications proposed by the College, and in some cases whether the population the College is looking to attract learners from is sufficient to meet the demand for places available.

Industry panels and/or steering groups were also established by the National Colleges at the business planning stage, alongside a shadow board of governors with strong industry representation. These mechanisms were seen as key ways in which industry could input into the design, establishment and on-going delivery of the National Colleges, and was another means of evidencing employer commitment to the project.

In addition, the Colleges compiled lists of industry partners and supporters of the project detailing their actual or anticipated contribution to the College. These included details of the cash and in-kind commitments the College had already obtained from employers, or statements of intent to support the project going forward, for instance, by investing in or training apprentices with this new provider.

In the case of Ada, the founders had been actively garnering industry support for a new college offering specialist provision in the digital sector prior to the announcement of the National Colleges' policy and open call for engagement in the programme. For NCfN, the education and training providers involved in setting up this institution had strong existing links with two large employers in the sector. The senior leaders observed that due to the concentrated nature of the Nuclear energy industry, these two organisations represented roughly three-fifths of the workforce, which was sufficient to reflect significant industry commitment at this early stage. In the case of NCHSR, it was highlighted how education and employment commitments from contractors involved in the HS2 development would be secured as part of the procurement process for this infrastructure project, and that employers would be mandated to use the College to deliver on these commitments. Although this was an objective of the original business case, it ultimately transpired that legally HS2 could not mandate contractors to use the college, as this would be against competition rules.

Assessment process

A consistent point of feedback from senior College leaders on the assessment process was a lack of clarity from BIS/SFA on the requirements of the business plan. Some

interviewees described submitting what they felt was quite a detailed business case in the first instance and then being repeatedly asked for additional supporting information. The example was given of evidencing industry support for the initiative. Commissioners at BIS/SFA made several requests for further information in this area but in interviewees' view did not provide a clear indication of the minimum evidence criteria they wanted the Colleges to achieve.

"Everyone just kept saying you need more industry support. No one ever just said you need 10 letters from industry supporters and a minimum of £300,000 or £500,000 of financial commitments. No one ever put a target on it, which is much easier to hit."

Senior leader

A few senior leaders remarked that this left them with the impression that the design of the policy had not been finalised and was evolving over the course of the commissioning process.

In contrast, the view presented by senior stakeholders involved in the assessment of National College business plans within BIS/SFA at the time was that the process followed was quite robust. They confirmed that requests for additional information were made as part of their due diligence process and to ensure that they could complete a full value for money assessment of the capital applications. As a result of this rigorous testing of bids, they felt that they were left with a final shortlist that had a very strong evidence base.

However, according to senior leaders at the Colleges, these requests for further information and repeated iterations of the business plan contributed towards significant delays in the commissioning process, which was not complete in the original 3-4 week timescale outlined. Following the first submission of this document in July 2015, across the Colleges it took between 6-18 months for this plan to be agreed with BIS/SFA. This left the Colleges behind schedule in terms of implementing their original delivery plans.

Stakeholders within BIS/SFA commented that delays to commissioning were also caused by the spending review process which was underway within the Department during this period. This prevented BIS/SFA from making any spending commitments until its completion in autumn 2015.

In taking forward similar policy initiatives in this area in future, the senior leaders suggested that there should be a standard template that applicants can use to develop their bid. This should include explicit and detailed guidance on the evidence they need to submit and the criteria they need to achieve to be successful in their application. The example was given of the guidance that is issued to parties interested in setting up a mainstream free school (DfE, 2019).

3. Funding

Key findings

- Following the agreement of the National College business plans, working capital loans were made available to cover the Colleges' initial operational costs. All the Colleges accepted this loan, apart from NCfN who felt the compound interest rate was too high.
- There was a delay in the Colleges receiving the working capital loans as the responsibility for the policy moved from BIS to DfE in 2016. This caused delays in some of the Colleges' delivery plans as they were unable to recruit staff to develop and design their provision.
- Several of the Colleges experienced funding shortfalls during their first few years of delivery. As a result, the repayment schedule for their working capital loans has been revised and extended. NCCI also saw an increase in their working capital loan allocation to support their initial operational costs.
- DfE has given further financial support to both NCCI and NCHSR, providing the Colleges with standalone grants for the period 2018/19 to 2020/21. The purpose of this grant was to further bolster their financial position and ensure that they can continue to cover their operational costs as they scale-up their activity.
- In terms of long-term sources of funding, ESFA funding for apprenticeship, 16-19 and Adult Skills provision are the primary sources of revenue for the National Colleges. A consistent point of feedback from the Colleges is that, as this funding is paid in arrears, the administration of these funds is not supportive of new educational institutions that are trying to establish their staffing structures.
- All of the Colleges had attracted some investment from industry to support their delivery. In-kind investment (i.e. donations of equipment) has generally been easier to secure, while the Colleges have had mixed levels of success in attracting large cash contributions to help ease their financial position.
- Staffing is the Colleges' biggest cost. These outgoings have been managed by keeping staff numbers low as they scale up delivery, having staff members perform duties outside of their initial job description, and reviewing the type of contracts and benefits (i.e. pension) they offer different staff members.

This chapter describes the funding that National Colleges have received from a range of sources, provides feedback from College staff on the available funding and their strategies for managing costs and ensuring financial health of their institutions. It focuses largely on the funding the Colleges received to cover their initial operational costs, and the public and private revenue streams the Colleges have accessed to support their on-

going delivery. The public and private investment that the Colleges received to support the design and development of new buildings and facilities is discussed in Chapter 4.

3.1. Working capital loans

Initial allocation

To support the establishment of the National Colleges and cover their initial operational costs, each of the partnerships was offered the chance to apply for a 'working capital loan' at an early stage of programme delivery before their business plans had been finalised.

Senior policy stakeholders commented that the decision to provide the National Colleges with loans as opposed to start-up grants, which do not have to be repaid, was a new approach from central government in supporting the creation of educational institutions. According to interviewees working within BIS/SFA at the time, the rationale for this decision was that the Colleges would be more financially self-sufficient than other types of educational institution as they would be able to secure a significant amount of co-investment from employers to support delivery. Further, based on their testing of the Colleges' business case, BIS/SFA were confident that the National Colleges' assessment of industry demand for their provision were accurate and their associated learner targets could be achieved. As such, there was limited risk of the Colleges experiencing financial shortfalls and the repayments on these loans not being met.

The amount of money each of the National Colleges has received to date in working capital loans as well as subsequent grant funding from DfE is provided below:

Table 2: National College start-up funding

National College	DfE Working Capital Loan	DfE Grant Funding
Ada	£420k	£0
NCCI	£1.25m	£600k
NCHSR	£8.3m	£4.55m
NCfN	£0	£0

Source: DfE 2019

*Match funding has typically come from LEPs/LAs and colleges with Employer contributions as cash, staffing or equipment.

† Capital build paused indefinitely

The NCfN chose not to apply for the working capital loan. In the view of senior staff members at the College, the compound interest rate on the loan was too high and not financially viable for the institution. They also considered that the nature of the financial offer from BIS/SFA changed over the course of the commissioning process; staff members commented that they were initially told that the money they would receive would be in the form of a start-up grant rather than a loan. This impacted on their business plan which assumed the College would be receiving a grant from central government. In response, the College partnership had to revise its business case and identify other potential sources of funding (i.e. grants from regional LEPs). These were successfully secured but the process required additional time and resources.

For those Colleges that did receive a working capital loan, the administration of these funds was delayed. According to senior policy stakeholders, the transfer of responsibility for the National Colleges programme from BIS to DfE in 2016 was the primary cause of this disruption. Though the policy team involved with the programme remained the same, there was a change in the financial, legal and commercial advisors supporting the project. Interviewees reflected that as financial processes are very different between the two Departments and this was a new policy area for some staff members within DfE, it was challenging to secure these funds within the timeline that was required by the Colleges.

The delay in receiving working capital loans caused particular difficulties for the NCHSR. The College did not receive its loan until January 2017 and was due to open in September of the same year. According to senior leaders, the College therefore had no funding in the preceding period to start recruiting staff, which would have supported its wider curriculum and business development activities. This left the College approximately 12-18 months behind schedule in terms of their delivery plans. The College was able to secure a loan from HS2 Ltd., supported by the Department for Transport (DfT), to cover some of their start-up costs before the working capital loan became available, but this placed the institution in more debt than they initially anticipated in their original business plan.

Additional loans and grants received

Following the initial set-up phase, additional loans and grants have been made available to some of the National Colleges by DfE. These funds have been administered where the National Colleges have encountered funding shortfalls during their first few years of operation. In the case of NCCI, the College had to request an additional working capital loan to support their on-going delivery. This was equal to the value of the loan they received to support their initial establishment.

For all Colleges that received working capital loans, the schedule for their repayment has been delayed. In the view of senior policy stakeholders, the original repayment schedule

could not be met given the National Colleges' early financial position, and so this was revised to provide the institutions with more time to increase the scale of delivery and their associated revenue streams. In the case of NCHSR, it was expected that the loan from HS2 Ltd. would be repaid once the College received its working capital loan from DfE. However, in practice, the College was not in a strong enough financial position to pay back this loan immediately, and so the repayment schedule for this loan was also revised.

More recently, as Table 3.2 shows, NCHSR and NCCI have received standalone grants from the Department to further bolster their financial position and ensure that they can continue to cover their operational costs as they scale-up their activity over the period 2018/19 to 2020/21.

3.2. ESFA funding

Across all of the National Colleges, ESFA funding for apprenticeship, 16-19 and Adult Skills provision are the primary sources of revenue for these institutions. The financial make-up of each institution and their level on reliance on these separate sources of funding differs, however, according to the exact nature of their course offer. In describing their experience of accessing this public funding, a consistent message from senior staff across the Colleges is that the system is not supportive of the creation of new providers in the Further Education sector. All ESFA funding is paid in arrears after the first two years of delivery, with few exceptions. Senior staff members commented that this presents difficulties when they are trying to recruit a core team of staff to design and deliver new courses and increase the scale of delivery, as they do not receive ESFA funding to support this activity till after learners are enrolled. This contributed to lean staffing models and high staff workloads across most of the National Colleges. Working capital loans were not seen to address this funding shortfall as repayments had to be factored into the Colleges' future financial outgoings and placed limits on institutional growth.

The nature of the issues encountered in relation to the separate ESFA funding streams are discussed in greater detail below.

Apprenticeship funding

In terms of the funding the Colleges receive for their apprenticeship provision, several interviewees commented that the staggered timing of payments had created difficulties for the College. Providers receive 80 per cent of the allocated public funding for training and assessing an apprentice in equal monthly payments over the duration of their course. The remaining 20 per cent is paid once the apprentice completes their end-point assessment. In the absence of a start-up grant, this limited the funds the National

Colleges had available to recruit teaching and business development staff to support the initial design and delivery of their apprenticeship programmes, and was particularly pronounced for Colleges running multi-year programmes. As one interviewee observed:

“This model works fine for an established college, but if you're a new establishment you need a certain core team in place to be able to launch the apprenticeship programme in the first place”.

Senior staff member, Ada

In a few cases, this shortfall was made up via the working capital loans. However, this money would have to be repaid at a later point in time, which had to be factored into the Colleges future financial outgoings and placed limits on long-term institutional growth.

A few of the National Colleges also encountered difficulties in accessing the level of apprenticeship funding they anticipated in their original business plans. For instance, in the case of the NCHSR, the planned cost of delivering their flagship apprenticeship programme was estimated to be at £29,000. The programme was designed to be delivered over a 3 year period and had 7 different specialist routes apprentices could take. Under the new apprenticeship funding system, which was introduced whilst the National Colleges were being established, the College requested the maximum funding band allocation from the Institute for Apprenticeships and Technical Education (IfA) to meet the planned cost of the programme. However, the funding band decision NCHSR subsequently received was several thousand pounds lower than requested, contributing to a funding shortfall for the College. Similarly, Ada pointed to a £3,000 difference in the funding the College received to deliver 2 of their apprenticeship programmes, despite both courses requiring the same level of teaching resource over a 2 year period.

In spite of these comments, senior policy stakeholders were clear that the ESFA funding available for training and assessing apprentices was not, in principle, there to cover the full costs of these activities and employers should be expected to pay any differences that occur. While information collected on employers' willingness to pay more for their apprenticeship provision was limited in this current study, the majority of employers interviewed training their apprentices with the National Colleges were paying the apprenticeship levy. Several had been encouraged to hire apprentices for the first-time due to the organisation's desire to reinvest their levy contribution in the business, with one employer describing it as being effectively cost neutral for the organisation. It was therefore unclear whether the Colleges felt it was realistic to ask their employers to pay more to fund the costs of training and assessing their apprentices, and how this would affect their on-going engagement.

The National Colleges also experienced several other issues in accessing apprenticeship funding. First, they were unsuccessful in bidding to be on the ESFA's approved list of apprenticeship providers for non-levy paying employers in 2017. This has limited the number of employers the Colleges can work with and is a further barrier to scaling up the

delivery. An additional issue for NCHSR resulted from delays in delivery caused by the late payment of their working capital loan, which meant that College was still in the process of having their new apprenticeship standard approved by the IfA when they opened their doors in September 2017. As a result, they were not able to start training apprentices and draw down funding until January 2018 when the standard received the IfA's approval.

16-19 provision

In relation to the funding that three of the National Colleges receive for the 16-19 provision they offer (i.e. Ada, NCCI and NCfN), similar issues were raised regarding the lagged nature of the funding and inconsistencies in the system that were not supportive of new institutions looking to establish economies of scale.

From their 3rd year of operation, for instance, the 16-19 ESFA funding the National Colleges receive is based on the number of students participating in the institution in the previous academic year. Interviewees again highlighted how this was not supportive of new providers looking to establish themselves in the marketplace and increase their learner numbers year on year. Some of the Colleges were able to access additional funding from the ESFA, taking account of their current delivery context although staff had to put together a business case and go through a rigorous assessment process each year to achieve these funds.

Finance staff at one institution highlighted that there were inconsistencies in this funding system between different types of education and training provider. They were aware that some 16-19 academies are exempt from the lagged student funding formula if this is agreed in advance as part of their funding agreements (ESFA, 2018, p.7). Instead, the 16-19 funding these institutions receive can be agreed in advance based on their learner projections for a given academic year. Other inconsistencies highlighted in this area included:

- The exemption of academies, schools and schools with 6th form colleges from VAT, which does not apply to Further Education providers.
- The additional allocation academies can receive as part of their start-up grant to support the costs of up to one additional member of senior management if the institution opens 90 per cent below its capacity in terms of learner numbers (DfE, 2016, p.17).

While these issues are sector wide, interviewees stressed that they have far more of an impact on new, smaller institutions, which are looking to establish themselves and do not have financial reserves.

3.3. Private investment

All of the National Colleges have secured private investment from industry to support their establishment and on-going delivery. As set-out in Chapter 4, a significant amount of this investment has come in the form of financial support for the Colleges' capital projects and in donations of equipment.

NCHSR and NCfN have secured substantial investment from their industry partners via these means, though senior leaders at both institutions commented that cash investment in the institution by employers has been more difficult to obtain. NCCI also had difficulties in attracting private investment either in cash or in-kind to the College. This was attributed to the nature of the sector, in which employers are generally smaller and have fewer resources to contribute.

In contrast, Ada were successful at attracting private donations and endowments to the sum of £384,000 in 2017/18 from industry partners as well as charitable trusts and foundations, and according to financial accounts for that year had secured an initial \$500,000 donation for the period 2018/19 (Ada, 2018). Senior staff members attributed Ada's ability to attract this level of private investment to their strong social mission and the College's targets to recruit a diverse student cohort. The College also have a dedicated member of staff overseeing this fundraising activity, which is absent in other institutions.

3.4. Strategies adopted to manage costs

Each of the National Colleges discussed strategies they had adopted to manage their costs and support the financial health of the institution. As staff salaries make up the vast majority of their operating costs, all of the National Colleges had low number of staff in relation to the size of their learner cohorts. From discussions with College staff members about their role, it was also clear that operational responsibilities were indistinct during this early phase of delivery with staff taking on multiple roles and responsibilities. This is reflective of the Colleges' attempts to make the most of their existing assets while their financial resources to support further staff recruitment are limited.

A few Colleges had considered other ways to reduce their expenditure in relation to staffing. Some institutions had sought to recruit staff on part-time or fixed term contracts where possible to provide cost savings. One institution had also looked at staff pensions and whether cheaper schemes could be offered to support staff. Typically in the FE sector support staff are enrolled in the Local Government Pension Scheme, which has an employer contribution rate of 20 per cent. The College felt unable to support this level of financial contribution given its financial position. They therefore split the institution into two legal entities: a charitable body and a Further Education College. Support staff have

been hired to work for the charitable arm, which has enabled the College to offer its own workplace pension scheme with a lower employer contribution rate for this group.

More broadly NCfN referenced how the involvement of two existing FE providers in their creation and operation had supported the institution financially during its first few years of operation. These institutions had been able to cover the National College's overheads (IT costs etc.), which senior leaders commented would have created significant financial difficulties. The colleges had also been able to support NCfN during the set-up phase by helping to cover the cost of senior staff time required to develop the curriculum offer, prior to the recruitment of learners and the receipt of ESFA funding. However, interviewees felt that this model had only been possible due to the good financial health of both institutions and might not be replicable within the wider FE sector.

4. Building facilities and obtaining equipment

This chapter sets out the ambitions for the National College capital build projects in the original DfE and college business plans and the funding allocated for these. It then goes on to assess progress against these original plans and the main enablers and barriers to delivering the capital build projects as intended. It also examines the National Colleges' experiences of obtaining specialist equipment to support the teaching of high-level technical skills.

Key findings

- The National Colleges have made varying levels of progress in relation to their capital build projects. The NCHSR and NCfN capital build projects were delivered on time and according to the original plans. There have been significant delays to Ada's capital build timescales, caused by a number of factors related to acquiring land. DfE made the decision to place the NCCI capital build on indefinite hold due to a lack of progress, escalating costs and a lack of clear direction for the project
- The main enablers for effective delivery of capital build projects were the previous skills and experience of the leadership teams in overseeing complex capital build projects, as well as the receipt of funding from LAs and LEPs, which sometimes helped to ensure challenging timetables and increased contractor prices (due to compressed timeframes) could be met. .
- Colleges without previous experience of capital build projects experienced greater levels of challenge. In these cases, Colleges supplemented the senior leadership team's experience with relevant expertise from Board members.
- Within the BIS/DfE policy teams there was initially relatively little experience of overseeing large capital investments and some Colleges reported they would have benefitted from greater support and guidance at the start of this process. DfE addressed this gap by appointing specialist staff with experience of capital investment.
- All National Colleges successfully secured equipment from employers and other partners and generally the expectations set out in the business plans for donations of equipment were met.

4.1. Funding allocated to capital build process and initial plans

The business case for the National Colleges highlighted market failures that justified Government investment in higher level technical skills. In particular, it noted issues in relation to upfront capital investments, which providers and employers are often unwilling to make because the costs are relatively high and immediate and the returns risky and longer term. In recognition of this, the policy provided capital funding of around £80 million to establish the National Colleges. This funding was intended to ensure *'fit-for-purpose infrastructure in order to support high-quality, economically-valuable learning'* (National College Business Case, DfE). It was expected that the funding would support new or refurbished facilities, which would extend the capacity of the FE system and create state of the art Colleges. This would help to position the Colleges as world-class centres of learning, to attract learners and employers and to improve the status and profile of higher level technical education.

The capital funding awarded to each National College by DfE and a summary of the ambition for the capital build, drawn from the individual college business plans and interviews with college staff, is shown in Table 4.3 below.

Table 3: Capital Funding allocation

National College	2016 DfE funding (£)	Other sources of capital funding (£)	Ambition for the capital build
Ada	£19.6m	Greater London Authority (GLA) and the London Enterprise Panel (LEP): £20.5m	Construct purpose-built premises in a key regeneration area in Tottenham, London, which would serve to meet policy and social objectives. The aim was for the new premises to be completed in September 2019.
NCCI	£5.5m requested before the capital build was put on indefinite hold.	£4.4m of external funding from partners. The intention was that this would be 'in kind'.	Extend the Backstage Centre, Creative and Cultural Skills' rehearsal and training centre, situated in Purfleet, Essex. Build a 2,903 square metre, three-storey, multi-functional space designed as a creative and professional environment replicating typical industry settings. The building would provide student support facilities and residential accommodation alongside new offices and workshops. The project would be completed in August 2017.

National College	2016 DfE funding (£)	Other sources of capital funding (£)	Ambition for the capital build
NCfN	£14.9m	South West Local Enterprise Partnership: £3m; £4.5m loan from Bridgwater and Taunton College to fund the building of student accommodation; capital investment from Nuclear Employers of approximately £450,000.	The capital investment was intended to provide state of the art technology, such as: a virtual reality centre, including virtual laboratories and a virtual engineering suite; radiation and chemistry laboratories; computer-equipped training rooms; and a flexible learning/event space. This would be built on existing campuses of two colleges, Bridgwater and Taunton and Lakes College. The project would be completed by March 2017.
NCHSR	£40m	Sheffield City Region: £6M for Doncaster campus building; Greater Birmingham and Solihull LEP: £6m for Birmingham campus building.	Build two elite institutions with specialist facilities, one in Birmingham, close to the headquarters of HS2 Ltd and the other in Doncaster. The capital build would be completed in September 2017. Both sites would include state of the art technology and modern learning facilities.

Source: National College Business Plans and interviews with key staff

It should be noted that the NCHSR Industry Advisory Board initially recommended that the capital build for the new National College should be on one site in Birmingham. Government officials in BIS, however, made the decision that the funding should support an additional site in Doncaster. Feedback from staff at the NCHSR indicates that the decision to have two sites has had a significant bearing on the costs incurred for the capital build and other aspects of establishing the College.

4.2. Progress of capital build projects

The National Colleges have made varying levels of progress in relation to their capital build projects.

In the case of the NCHSR and NCfN, the capital build projects were delivered on time and according to the original plans. The NCHSR capital build projects in Doncaster and Birmingham include virtual reality training on a Eurostar power car, an augmented reality classroom, and a BIM building information modelling facility. The resulting buildings are considered by key stakeholders such as local authorities, sector bodies and board members to be high-tech state of the art facilities, which are not generally available in other FE providers. Similarly, at the southern site of the NCfN, the capital build included two buildings over two stories, including virtual reality suites, simulation control rooms, training spaces, mock reactors and a welfare and recreation space. Stakeholders praised the completed buildings. Buildings at both the NCHSR and NCfN have received architectural awards⁸ and DfE stakeholders indicated that the FE Commissioner has reported that the buildings effectively fulfil their educational functions.

There have been significant delays to Ada's capital build timescales, caused by a number of factors. Firstly, the proposed site for the new build was part of a mixed use development in Tottenham Hale but the existing freeholder was not actively marketing the lease and negotiations around a purchase have had to take place. Secondly, the existing occupiers' leases were still current and required negotiation and compensation to bring them to an end. Finally, the landowner and developer needed time to produce a revised planning proposal for the council, which included amended plans for the rest of the regeneration site in order to accommodate the College. These delays have caused increased costs. This is partly due to general inflation and increase in costs in build price in London since 2015, but also due to compensation that had to be paid to the existing occupiers to allow development and changes to building material requirements as part of new regulations. DfE and the GLA have provided additional funding to try to meet the shortfall in costs caused by these unforeseeable circumstances.

In the case of NCCI, according to DfE stakeholders, DfE made the decision to place the NCCI capital build on indefinite hold due to a lack of progress, escalating costs and a lack of clear direction for the project. Senior decision makers considered that it was better for the College to continue focussing on developing strong leadership and governance and achieving financial sustainability before embarking on a capital build project. The

⁸ NCHSR was awarded the RIBA Yorkshire Sustainability Award 2018. The NCfN was awarded the 2018 Michelmores Property of the Year Award 2018 and the 2019 Somerset BCP Building Excellence Award (Best Educational Building).

decision was also informed by the fact that the College had access to teaching and learning facilities at the existing Backstage Centre and so the capital build was not critical to delivery of the College's strategic objectives.

4.3. Enablers and barriers to completion of capital build projects

The main enablers and barriers to effective delivery of capital build projects identified through the qualitative research were:

Previous skills and experience

Feedback from senior leaders in the National Colleges and DfE staff indicated that where leadership teams have had experience of managing complex new build projects, this has supported effective delivery. For example, both the NCHSR and NCfN reported that key members of their teams had previously overseen complex, large-scale capital builds which meant they had the required skills. Consequently, they viewed the capital build as a relatively straightforward component of the college set-up phase. Conversely, Colleges without this experience have encountered greater levels of challenge. In these cases, Colleges have tried to supplement the senior leadership team's experience with relevant expertise from Board members. For example, Ada recruited a Board member that was a former principal of a large FE college who had experience of managing capital build projects and now sits on the capital build sub-committee.

The need for land acquisition

Progress was also affected by whether or not land had to be purchased or was already available. In the case of NCfN, new facilities were built on an existing campus, which meant building works could begin relatively quickly, whereas for Ada the complexity of private land transactions involving a range of stakeholders and unforeseeable circumstances has caused delays.

Funding from Local Authorities and Local Enterprise Partnerships (LEPs)

Building strong relationships with LEPs and Local Authorities has been a key enabling factor. For example, at NCHSR, Doncaster Council contributed staff time for project management of the capital build. When payment of capital funding from DfE and the LEP was delayed, the Council used its frameworks and contractors to help progress the build and to manage short-term cash flow risks of the project. Senior leaders at the NCHSR

reported that the Council's contribution was an important factor in meeting the tight timelines for opening the College. At Ada, staff commented that being able to access GLA and LEP funding has facilitated plans for the capital build. The College was successful in obtaining funding from the GLA and LEP under the Further Education Capital Fund following a competitive tendering process. This funding was made available to a number of LEPs following the Growth Deals with Government, and was a ring-fenced amount to support improvements and re-developments to the physical estates of FE institutions.

Guidance and expertise within the DfE policy team

DfE staff reported that within the BIS and DfE policy teams, there was initially relatively little experience of overseeing large capital investments, despite the emphasis in the policy of building new facilities. This gap was felt by some Colleges, who commented that they would have appreciated greater guidance and support upfront in relation to the capital build. In recognition of the need to boost skills in this area, DfE has appointed staff with greater experience of capital investment as positions have become available. Where Colleges have accessed this expertise and sought additional input, it has been a valued component of the support provided and described as '*excellent*'.

4.4. Donations of equipment and how these have been obtained

In terms of obtaining equipment, there are examples of all National Colleges successfully securing equipment from employers and other partners and, generally, expectations set out in the business plans have been met. For example, NCHSR staff estimate that around £8.5 million of equipment has been donated, including overhead lines, track, a geotechnical lab, specialist software for civil engineering and rail design, specialist augmented reality teaching and learning hardware, overhead line tensioners and lift stands. The NCfN has received nuclear panels, machinery, funds of £450,000 to buy a flow rig and equipment on loan from the University of Cumbria. Ada has generally secured cash contributions rather than in-kind donations.

The scale of donations has varied by sector and the nature of employers. For example, in the creative and cultural sector, the high number of SMEs and more limited resources mean donations were more modest and included, for example, lighting equipment.

Feedback from the Colleges suggests high levels of willingness among employers to donate equipment, partly because it is a one-off commitment. In the case of NCHSR, it was recognised that although having the equipment is beneficial and allows learners to

see real-life technology, it can be challenging to integrate use of equipment into the curriculum.

5. Establishing Leadership and Governance Arrangements

Establishing sound governance structures has been a key activity for National Colleges during the set-up phase. This chapter summarises the intended governance arrangements as described in the original College business plans and then examines the extent to which these plans were realised. It provides an overview of how governance arrangements were established, Board membership and governance structures and summarises feedback from College staff, Board members and DfE staff on the effectiveness of governance arrangements.

Key findings

- In the main, the National Colleges established governance arrangements as anticipated in their original business plans and senior leaders in Colleges, Board members and DfE stakeholders considered that Boards were functioning satisfactorily.
- The governance structure was slightly different in each College but there was evidence of active employer leadership in all National College Boards. All Boards were also supported in their decision-making by employer advisory groups.
- Over time, Colleges have refined and developed Board membership and governance structures to respond to different requirements at different stages of set-up and delivery.
- Interviewees considered that membership tended to be well-balanced and had achieved the necessary range of financial, commercial, further and HE and key professional skills. Colleges and their Boards had identified a few gaps in skills and membership, which they were working to address.
- A key lesson learnt is the need for educational expertise in establishing employer-led institutions. All interviewees commented that the process of expanding Board membership to include educational specialists as well as industry leaders had been a critical step in establishing sound governance.
- Some Board members recognised that student participation in governance and improving management information were areas for development in future.

5.1. Intended governance arrangements

The Expressions of Interest invited by the Department for Business, Innovation and Skills (BIS) required evidence of employer leadership in the governance of National Colleges.

Consequently, the business plans for each of the Colleges demonstrated a strong commitment to employer leadership of College Boards, before and after full incorporation. Across all the business plans there was an ambition for the Boards to be made up predominantly of employers, and for the Chair of the Board to be a high profile industry leader. There was also recognition in most of the business plans of the need for educational experts, staff, students, and, in one case, parents, to sit on Boards.

These employer-led Boards would be the main decision-making body, responsible for holding the senior leadership teams of Colleges to account and ensuring the integrity of College business.

In addition to decision-making bodies, the business plans also described supporting infrastructure such as advisory groups. These would steer strategy and delivery and were seen as mechanisms for greater employer influence and contribution. In particular, industry advisory boards would contribute to curriculum development to ensure the curriculum was responsive to employers' needs and adhered to industry and regulatory quality standards.

5.2. Overview of governance arrangements

Generally, the National Colleges have established governance arrangements as anticipated in their original business plans. Over time, they have refined and developed Board membership and governance structures to respond to different requirements at different stages of set-up and delivery.

How governance arrangements were established

During the period when Colleges were developing business plans and up until incorporation, they operated with Shadow Boards of Trustees/Governors in place. Shadow Boards were typically formed to represent a range of employers and to offer diversity, apart from in the case of the NCfN. In this College, a strategic decision was made to have a 'lean' governance model to ensure efficient and effective decision-making rather than a Board that represented the range of the College's stakeholders. NCCI was governed from within Creative and Cultural Skills before full incorporation.

Feedback from DfE stakeholders and College staff indicates that no major problems were experienced in establishing governance arrangements and that the transition from a Shadow Board to the full Corporation Board was also smooth. In one case, the Chair of the Board of Governors stood down unexpectedly and the Vice Chair had to take on the role for an interim period. This appears to have been handled without difficulty. A common theme among interviewees was a relatively recent transition of governing bodies as the Colleges have become more established, from 'project governance' of the

set-up of the College to a 'business-as-usual' governance model with responsibility for curriculum and operational strategy. This transition included, for example, dissolution of Project boards or sub-committees that were tasked with establishing the College or overseeing a capital build that is now complete.

Board membership

After incorporation, in some of the Colleges, membership of the Board expanded. From an initial membership comprising mainly employers there was a shift to including additional members with a wider set of skills and experience. For example, many of the Colleges recognised their Boards would benefit from increased experience of the FE sector, particularly in relation to finances and funding in FE. Others sought expertise in fundraising, regulation of qualifications, inspection or local authority representation. Chairs of the Boards appear to have proactively assessed the skills mix on their Boards, identified gaps that needed to be filled and worked to recruit suitable Board members. Their work was supported by the assessments of governance arrangements carried out by the FE Commissioner.

Some Boards are supported by a clerk. Typically, this role is responsible for: providing advice to the Board on governance, constitutional and procedural matters; providing administrative support and working with the Board to improve their effectiveness and to monitor their performance.

Governance structures

All National Colleges have an Audit Committee that reports to the Board, which is a statutory requirement. The role of the Audit Committee is to ensure the effective and efficient use of resources, safeguarding of assets and financial solvency of the College. In addition, most Colleges reported having a Board Search Committee, which is typically responsible for assessing the skills mix of the Board, ensuring there is a good balance and identifying replacement members as necessary.

Beyond this, the governance structure is slightly different in each College, with different sub-committees reporting to the Board based on need and strategic priorities. Outside of formal Board meetings, Board members work with senior leadership teams of Colleges in a number of ways. In some cases the Chair and Vice-Chairs of the Board have worked with the leadership team regularly outside of meetings, in a responsive manner as issues arise. There were also examples of annual strategy sessions involving the Board and leadership teams to discuss the College's values and mission. The ways in which Chairs of Boards work with other Board members outside of formal meetings also varies. In

some cases the Chair holds routine one to ones with members, while in others, there is limited coordination between Board members outside of meetings.

Colleges described an on-going process of defining the information to be provided to Boards to inform decision-making. Examples of the types of data provided included an update against KPIs, a risk register, a finance report including a cash flow statement and learner destination and withdrawal data.

All Boards are supported in their decision-making by employer advisory groups. In the case of NCHSR, this is an Industry Advisory Board that sits below the Corporation Board and comprises senior figures in the rail and infrastructure sector to advise and shape the College's offer to ensure it is responsive to industry needs. Similarly, NCCI has an employer steering group and Ada convenes industry round tables to canvas views and receive input from a wider range of employers. NCfN has a steering group for every course it offers, on which employers sit.

Student representation and participation in governance has been achieved either through having student Board members or having a student liaison body that reports to one of the Board sub-committees.

Over time, College governance structures have evolved and some Colleges have adjusted their governance structures to make them more effective. For example, members of the Senior Leadership Team at NCHSR indicated that they had recently moved from a model with 6 sub-committees and 5 annual Board meetings to 2 sub-committees, alongside task and finish groups focussed on particular issues requiring more detailed scrutiny and work. It was intended that this change would encourage improved engagement from the Board as a whole with quality, curriculum and finances, rather than these functions being handled primarily in sub-committees.

Feedback on effectiveness of governance arrangements

Generally, senior leaders in Colleges, Board members and DfE stakeholders considered that Boards were now established and functioning satisfactorily.

There was a view across all Colleges that constructive working relationships have been established. College staff and Board members commented on the commitment of members/Trustees and the ethos of partnership working:

"It's a group of clever people, with the right skills, who really want to be there and to make this happen and I think that's quite powerful" (Board member).

College staff reported helpful challenge and leadership from the Boards. Board members also valued the skills of senior leadership teams and commented on their responsiveness

to requests for information. There was one example of a Board proactively managing performance of a senior leader, where this was deemed to be poor.

In the main, interviewees considered that the skills and experience of Board members is relevant and high quality. There was a view that membership tends to be well-balanced and has achieved the necessary range of financial, commercial, further and HE and key professional skills. Senior leaders, Board members and DfE commented that a key lesson learnt is the need for educational expertise in establishing employer-led institutions. All interviewees commented that the process of expanding Board membership to include educational specialists as well as industry leaders was a critical step in establishing sound governance. In one case, interviewees reflected that this has resulted in a large Board that is sometime '*unwieldy*' and difficult to manage efficiently. The Chair's and College's intention in this case is to reduce the number of members by not replacing members when their term comes to an end as long as the balance of skills remains. In another College, the Chair and senior leaders viewed FE finance to be a remaining gap in Board members' expertise. The Board had actively tried to recruit someone with the necessary experience but the right candidate had not been found.

College staff and Board members reported that employers play an active role in College governance. Interviewees noted that all Chairs are experienced industry leaders and that key employers contribute to decision-making and bring valuable perspectives. Feedback from College staff also indicated that employer steering and advisory groups are working as intended. No challenges in relation to facilitating the contributions of these groups were raised by interviewees.

Attendance and participation in Board meetings and sub-committees was also considered to be good. A Chair of a Board recognised that as members tend to have full-time roles, maintaining attendance at key meetings can be a challenge for members. Nonetheless, Board members generally considered that attendance and participation were good. Where there have been issues with participation and commitment of individual Board members, Chairs and Board members reported that these had been dealt with through individual conversations.

The role of the clerk has been a success factor in the smooth operation of governance structures. The role was seen as particularly valuable by Board members and senior leaders because of the lack of FE experience among Board members initially.

Suggestions for how governance arrangements could be improved were also made by interviewees. There was recognition among some Board members that student participation in governance was not yet fully developed and that there had been an initial focus on establishing the Board and making sure it functioned effectively. Their view was that there could be a greater emphasis now on facilitating meaningful student participation in decision-making.

Interviewees reflected that ensuring there is robust and comprehensive management information in place to inform strategic decisions is a '*work in progress*'. While there was perceived to have been considerable progress in this area, senior leaders and Board members identified areas for further improvement and attention. For example, one College was assessing how attendance and punctuality data could best be monitored.

A few Board members considered that there needed to be greater clarity around the roles and responsibilities of the Board and expressed concerns that the Board was not focussed on sufficiently strategic issues:

"I think as a Board we sometimes get too involved in some of the detail rather than hovering strategically above the big issues" (Board member).

6. Development of provision

This chapter describes the process followed to establish new provision, the role employers played, and feedback from stakeholders on the effectiveness of the process and resulting outcomes.

Key findings

- National Colleges worked collaboratively with employers to identify the skills and attributes they require from new entrants to the sector through roundtable events, advisory panels and board meetings. Information gathered from these events informed the development of courses.
- Higher education institutions worked with Colleges to support course development and to provide quality assurance and formal validation.
- College staff, employers and sector bodies were largely positive about the curriculum development process. Employers generally noted the flexible approach of Colleges and their willingness to respond to industry feedback. Many commented that the resulting curriculum offer was aligned to their needs and providing them with necessary skills.
- Some employers stated that they would like to see the Colleges broaden their curriculum offer going forward.
- Mechanisms such as curriculum sub-committees or technical reference groups are generally in place for employers to review the curriculum offer to ensure it remains relevant and responsive to their needs.

6.1. Process followed

All the National Colleges followed relatively similar processes when developing their course provision, and worked closely with Higher Education Institutions (HEIs) and industry professionals throughout.

In most cases, the Colleges first worked collaboratively with industry to identify what skills and attributes they wanted from new entrants in the sector. Consultations with employers were completed via roundtable events and through formal advisory boards. This provided an outline of what College provision needed to cover and at what level. In some instances, employers used existing training standards as a starting point for this discussion and worked to make them more specialist. For instance, in the case of NCHSR, a trailblazer group of employers worked on the College's behalf to adapt the

content of an existing Level 4 rail engineering apprenticeship standard, making it relevant to the engineering requirements of high speed rail.

The next stage was more detailed, with Heads of Curriculum/Curriculum Leaders using this information, together with their own research and experience of designing similar course programmes in other institutions, to develop the content of the programme, individual units and course objectives. All four Colleges partnered with HEIs to support this process and ensure the newly designed programme met the necessary academic quality standards and could be formally validated by these institutions. Another check and review of the full curriculum by employers was usually undertaken before final validation.

As well as supporting the initial design of course provision, advisory boards and larger consultation groups composed of industry partners formed part of the on-going operation of the National Colleges, to maintain the relevance and quality of the curriculum offer. In the case of NCHSR and Ada, for instance, both have an Industry Advisory Board (IAB), a subcommittee of industry professionals who regularly meet to review College provision and advise on adjustments to the College's offer. Additionally, at NCHSR, a Technical Reference Group of HS2 representatives checks the content of new courses to ensure that they are meeting their ambitions for High Speed Rail delivery. Similarly, NCCI have a range of over 30 industry partners that support curriculum development. However, staff have expressed that these groups have not engaged in designing the course provision to the extent that the College would have liked. For NCfN, curriculum development has been largely demand-led by the College's two main industry partners as well as the Curriculum and Qualifications Advisory Group (CQAG), allowing the College to consult with nuclear employers and industry bodies on course design.

Both NCHSR and Ada also have Curriculum Advisory Boards (CABs) that operate in conjunction with the IABs. Curriculum reference panels work beneath the IABs to ensure that the curriculum aligns to future skills identified by industry partners.

6.2. Views of College staff, employers and sector bodies on the curriculum development process

The views of College staff, employers and sector bodies on the curriculum development process were largely positive across all National Colleges. Most employers that had experience of working alongside the Colleges to develop course provision had been impressed by the Colleges' flexible approach and willingness to adapt to employer needs and act upon industry feedback. Employers expressed that the process of participating in curriculum development was straightforward and consisted of open communication and regular meetings until both the College and employer were satisfied with the final outputs.

There were also examples of the Colleges responding to feedback from employers on areas for improvement. For example, a few employers that had engaged with NCHSR felt that the entry requirement for the higher level provision was too high and limited the number of learners they could send to the College. The College responded to this feedback by offering a Level 3 access to HE programme.

In another instance, teaching staff at Ada commented that a few employers had some initial reservations about the coding language they had opted to teach their learners and apprentices. The College chose JavaScript, which they found was easier for students to grasp and is one of the most commonly used coding languages. This did not meet the business needs of all the employers they work with. However, staff commented that this decision had been driven by their consideration of what is best for the student in terms of skill development and ensuring they are able to access a wide range of labour market opportunities when they finish their course, not just at their current employer.

6.3. Outcome of process and alignment with employer needs

From the perspective of employers engaged in the delivery of the National Colleges, either at Board level or through the Colleges' apprenticeship programme, the outcome of the curriculum design process was broadly positive in terms of its alignment with their needs and those of the wider sector. For instance, an employer at NCfN expressed that, on the whole, the courses offered by the College were aligned to the Nuclear Industry Council's guidelines and bridged the gap between classroom-based engineering and the real experience of working in the nuclear sector. Similarly, several apprenticeship employers at Ada, NCHSR and NCCI commented that they were attaining skills they require through the Colleges' curriculum offer.

Some employers at NCCI and NCHSR stated that they would like to see the Colleges broaden their curriculum offer going forward. For instance, a few employers at NCCI felt that the College's Level 3 and 4 classroom-based programmes in technical production were somewhat generic and wanted to see more specialist provision developed for specific backstage roles where they are currently struggling to recruit (i.e. costume design, scenic carpentry and metal work, hair and makeup). In the case of NCHSR, one employer stated that the College would have a greater impact within the rail industry were it to offer provision at Level 3 as well, which is a more natural point of entry for individuals looking to pursue a career specialism through education and (re)training.

7. Staff recruitment and retention

This chapter describes the initial staffing requirements of the National Colleges and how these have changed over time. It also details the approaches the Colleges have used to recruit staff to the organisation and the challenges they have encountered in this process.

Key findings

- In most cases (with the exception of NCCI), the initial staffing requirements set out by the Colleges in their business plans had been broadly achieved, although the development of the teaching and learning teams was an on-going process.
- In some of the Colleges, staff recruitment had been delayed because of insufficient finances to recruit staff and cover operational costs. This was attributed to delays in receiving working capital loans, the lower than anticipated funding for apprenticeships and low learner numbers.
- As Colleges were operating with relatively small workforces, staff typically assumed additional roles and responsibilities.
- Attracting candidates to their teaching faculties with a combination of relevant teaching qualifications, teaching and industry experience was a key challenge for National Colleges, as it is for the Further Education sector more widely. NCfN and Ada in particular reported that they could not meet the salary expectations of senior teaching staff who had this experience.
- In some cases, when Colleges were not able to recruit staff either due to affordability or lack of suitable applicants, they used temporary contractors from industry to meet immediate staffing needs. Although this approach tackled short-term staffing issues, it resulted in some concerns about quality (e.g. lack of feedback and consistency for learners).
- Issues with staff retention differed between institutions. Both NCfN and NCCI had experienced higher than anticipated levels of staff turnover. In the case of NCfN, this resulted from teaching staff accepting job opportunities at industry partners, while NCCI saw wholesale turnover following a restructuring of the organisation prompted by the departure of the College's first principal.
- In contrast, at Ada and NCHSR there had not been any significant changes in their staffing structures since the start of delivery, and the rate of turnover was seen to be in line with that for any new institution.

7.1. Initial staffing requirements

The original National College business plans set out their anticipated staffing structures from the first year of delivery.⁹ This included details of roles within the College's senior leadership, middle management, support functions and teaching and learning teams.

For the senior leadership, the Colleges anticipated that this would include a CEO/Director role. This individual would be responsible for the overall College strategy, reporting to the board of governors, and business development with industry. In some instances, it was expected that this individual would be supported by a Head of Operations/Chief Operating Officer. Broadly, this role would oversee the support functions of the College in relation to finance, technology, managing the College premises and other administration, though the precise nature of these responsibilities differed between institutions.

Two of the Colleges also planned to hire Principals and/or Vice-Principals for the institution to oversee their educational offer, instead of subsuming these responsibilities into the CEO/Director role. In one instance, it was anticipated that the College would hire two Principals to oversee, separately, their 16-19 and Apprenticeship provision. These Principals in turn would report to a College Dean who would have overall responsibility for the educational vision and delivery at the National College. Other planned roles at the senior leadership/management level across the National Colleges included: Finance Director, Commercial Director, and HR Director.

With regards to the other staff tiers, the middle manager roles typically included Heads of Curriculum, Business Development or Apprenticeship Programme managers, Building and IT managers, for instance. There were also usually single support roles planned for the College's IT, Finance, Building/Premises management, HR, business development and general administration functions. Few details were presented in the original business plans on the composition of the teaching and learning teams, however, and how these roles would be split between the different types of provision.

⁹ In the case of NCfN, aside from senior leaders, precise job roles within the College were not made explicit in the original business plan. However, the responsibilities that would be delivered by a small number of core roles in the College were detailed. These were staff members who would work entirely or primarily on NCfN and would be employed by one or more of the organisations that made up the College partnership.

7.2. Changes in staffing structure

As part of the fieldwork completed with the National Colleges, the College's current staffing structures (as of March 2019) were reviewed and compared with their initial business plans.

In all cases with the exception of NCCI which underwent a restructuring, the initial staffing requirements set out by the Colleges in their business plans had been broadly achieved. The development of the teaching and learning teams was still an on-going process, however. The funding issues some of the Colleges experienced during their initial set-up phase together with lower than anticipated learner numbers during the first year of delivery contributed to a delay in the recruitment of teaching staff in a few instances. This was due to the limited financial resources the Colleges had available and a focus on covering their initial operational costs. In the case of NCfN, the Southern Hub continued to struggle to recruit and retain the number of teaching staff required for delivery due to high-salary expectations in the nuclear sector and lack of affordability for the institution. For these reasons, staff members at most of the National Colleges commented that they currently had lean staffing models.

In the case of NCCI, the College has seen extensive changes to its staffing structure following the departure of the first Principal. The current interim Principal created an entirely new business plan and developed a new organisation chart based on this delivery model. This new strategy was supported by a new intake of staff in July 2018, the majority of whom remain in post.

More generally, staffing structures within the Colleges still remained 'lean' as they sought to increase their revenue streams and cover their current operational costs. In practice, this meant that staff members typically assumed additional roles and responsibilities at the College, both formally as part of their job description as well as informally, to support the institution's broader operation. Examples across the Colleges included staff originally hired to an IT support role becoming actively involved in designing curriculum content and some aspects of teaching; HR Directors assuming responsibility for student recruitment and careers guidance; and lecturers assisting with the development of the College website.

7.3. Staff recruitment

The Colleges' experience of recruiting staff to the organisation was discussed with senior leaders, as well as individual staff members themselves. The focus of these discussions was centred on the recruitment of the teaching and learning teams, given the importance of these roles to the delivery of the Colleges' educational offer and their on-going development as the scale of delivery increases.

Approaches

The National Colleges adopted varying approaches to staff recruitment. Initially, across most of the institutions, prospective staff members were identified and approached directly via the partnership's own networks. In some cases there was a snowballing effect, with new recruits then disseminating information about the College and potential job opportunities through their own personal networks to support recruitment.

Some staff members who had been involved in this early recruitment activity spoke of the importance of selling the National College's mission and broader vision to prospective candidates in order to build interest in wanting to work for the institution. At this stage the College was not established and in a few cases did not even have a building or facilities they could show potential recruits. Selling the vision was therefore the main way they could generate enthusiasm and providing assurances to those who might see the process as carrying some risk.

As the Colleges have become established they have also used more formal means to recruit staff. This includes advertising job opportunities via the institution's website and job boards as well as the use of recruitment agencies.

Professional background of teaching staff

The professional backgrounds of staff working in the teaching and learning teams within the National Colleges were associated with the nature of the institution's educational offer.

For instance, as Ada and NCCI both offer classroom-based Level 3 provision, they have aimed to recruit staff with prior teaching experience at this level and in relevant subject areas to design and deliver these courses. These individuals have tended to come from mainstream educational institutions such as schools, 6th Forms and Further Education colleges. When asked about what attracted them to work at the National College, staff members cited several reasons. Some individuals commented that they liked that their subject expertise was highly valued within the College and was at the core of the educational offer, while in other mainstream educational settings it is one subject among many. Others noted that the chance to engage with industry as part of delivery (e.g. through industry projects, mentoring programmes, workplace visits) was attractive: it aided their professional development by keeping their subject knowledge up-to-date and relevant to the sector.

Staff members from teaching backgrounds who were involved in delivering the National Colleges apprenticeship provision at Levels 4 and above came from Further Education colleges and Higher Education Institutions. Some of these hires were made to support the development of the College's curriculum offer, as they had experience in designing training programmes, and the content and objectives of the units that comprised them.

This was cited as a major attracting factor for staff members involved in this activity: in terms of supporting their own professional development, they relished the chance to develop completely new educational products in a new institution where they had more autonomy and influence over aspects of their design.

For their apprenticeship provision, the National Colleges have also recruited lecturers and assessors directly from industry. A few of these individuals had experience of engaging with the education and training system having previously worked as training managers, or had relevant teaching qualifications and experience having retrained following a career in industry.

In terms of their motivations for joining the National College, several staff members recruited from industry stated that they were attracted to the opportunity to work with young people. Others cited the chance to deliver technical training in their specialist subject area, which they felt had been traditionally neglected by education provision in their sector. Some interviewees commented that they were strongly attracted to the long-term mission of the College, to address the skills needs of the sector on a national scale.

'I want to see it work. I feel as if I'm doing my national service by working here. I just want to get [the College] to a place where it's properly established, it's scalable, it's teaching thousands of people every year and it's equipping the UK economy with the skills it needs in future'.

Senior Lecturer, Ada

Staff overseeing the recruitment of the teaching faculty stated that they were ideally looking for individuals with a combination of relevant teaching qualifications, teaching experience and experience of working within industry. In practice, however, they found that the pool of applicants who had this combination of skills and experience was quite limited. As indicated above, the Colleges therefore looked to recruit a mixture of staff from either teaching or industry backgrounds to strike a balance between these skillsets in the delivery of their curriculum offer.

Challenges in recruitment and solutions

Several interviewees across the National Colleges identified challenges in recruiting teaching staff to the institution. As noted, a lack of affordability had generally hampered the expansion of these teams across the National Colleges. In response, some institutions had used temporary contractors from industry to teach at the College on a short-term basis, for instance, by delivering standalone modules. Where this solution had been tried, it had mixed levels of success. Though it had helped to address short-term resourcing issues, in some instances there had been delays in learners getting their coursework marked or the amount of feedback they received on their work had been

limited. This was due to temporary contractors moving onto other work commitments following the delivery of the module.

Another approach that was being trialled to manage staff costs was hiring teaching staff on part-time or fixed term contracts. HR managers commented that as they were attempting to move the College towards a stable financial position and manage their operational costs, they had to review staff roles and identify what positions required full-time and/or permanent contracts, and where they could offer more flexible working arrangements. While several members of staff at the National Colleges had already accepted these working arrangements, some interviewees in HR roles stated that there was not a high level of demand for part-time or fixed-term contracts among the teaching workforce, which presented an additional challenge in recruitment.

Further, for some Colleges, such as Ada and NCfN, staff commented that the salary expectations of high-quality teaching staff with industry experience were considered to be very high in both the digital and nuclear sectors. These expectations were considered to be beyond what the College could afford. Some senior members of the teaching faculty that had previously worked in industry observed that they had taken a reduction in their salary in order to work for the institution. They commented that they did not believe this approach was sustainable in the long-term in attracting and retaining experienced teaching professionals with relevant industry experience, a key criterion in the original call for engagement for the National Colleges.

In the case of NCfN, the Southern Hub had been unable to recruit the number of teaching staff they had initially planned due to this issue. On two occasions the Hub recruited and trained teaching staff who were then offered positions at one of the College's industry partners to support their internal training delivery. The salary offer for these industry posts was more than double what the College was paying its teaching staff. Senior staff members observed that without additional funding, the College would be unable to compete with the terms of pay and conditions offered by industry. A tentative solution to this issue made by one staff member was for the College to explicitly seek private investment from industry in their teaching faculty. They suggested this could take the form of industry partners sponsoring individual members of teaching staff and topping-up their salary, making it competitive with the wider sector.

Staff retention

The extent to which the National Colleges had experienced issues with staff retention differed between institutions. Both NCfN and NCCI had experienced higher than anticipated levels of staff turnover. As detailed above, in the case of NCfN, this resulted from teaching staff accepting job opportunities at industry partners, while NCCI saw wholesale turnover following a restructuring of the organisation prompted by the departure of the College's first principal.

In contrast Ada and NCHSR had not seen any significant changes in their staffing structures since the start of delivery, and the rate of turnover was viewed by HR staff to be in line with that for any new institution. Broadly, they believed they had been successful in hiring staff members who were committed to the vision of the College and to supporting the institution's establishment, which is reflected in staff feedback. To support retention going forward, both institutions emphasised the importance of good line management. They were looking to develop staff capabilities in this area in future through the provision of formal training.

In addition to this, staff at all the National Colleges had access to an emerging training and development offer, which provided bespoke training based on their individual needs. This offer was positively received across the institutions, with staff provided with access to teacher training, management and project management training, for example. However, some staff who worked remotely (apprentice assessors) wanted a more intensive induction so they could become more familiar with College staff and administrative processes before moving to working independently.

8. Learner Recruitment

This chapter summarises how learners and employers have been recruited, provides feedback from learners and employers on the recruitment, application and induction processes and assesses what has worked well and the challenges.

Key findings

- The strong links that senior leaders and Board members have with industry have helped with promoting the National Colleges and recruiting learners but in some cases resources for marketing were perceived to be limited. Nonetheless, Colleges have held open days, attended careers fairs and undertaken school outreach to promote their courses.
- The level of employer engagement activity required to achieve good apprenticeship numbers has varied across Colleges. Recruiting apprentices has been easier for the NCfN, for example, because the two largest employers in the sector (representing approximately two-thirds of the workforce) sit on the governing Board and have been supplying apprentices from the College's inception. Conversely, in sectors with a high proportion of SMEs, employer engagement in apprenticeships has been more challenging.
- Colleges reported that raising awareness of a new institution and establishing trust among parents and learners in new qualifications takes time and is resource intensive. This is particularly the case where existing qualifications are well-established.
- Learners were attracted to the National Colleges for a range of reasons, including the progression opportunities offered in their chosen sector; the ability to gain practical, technical experience, often while working; and the availability of higher level technical courses not available in other Colleges.
- For employers, key reasons for engaging with the College were: a desire to improve skills development in their industry; and the availability of specialist and bespoke provision.
- Reflecting the fact that Colleges have been in a set-up and development phase, learner induction processes have not always been detailed and consistent.

8.1. Approaches to learner recruitment

Across the Colleges, there have been diverse approaches to recruiting learners. These have included: outreach activities in local schools and colleges (such as staff attending

school careers fairs); open days for prospective students at the College (including tours of the campus and sample lessons); and direct marketing to learners via social media, websites and prospectuses.

Colleges have assigned roles and responsibilities for learner recruitment activities differently across their staff. For example, at NCfN outreach is carried out by the institution's two partner colleges. At Ada, outreach activities are delivered by a dedicated staff member who works with over 90 schools and colleges to support recruitment to the College 6th form and develop a general interest in digital careers among students. At NCCI, these activities used to be the remit of a business development manager but due to limited human resources, they are now performed by teaching and support staff. Staff members have attended careers fairs and events in local schools and hosted open days at the College. Events co-ordinators on both campuses at NCHSR promote the College by going into schools and running open days.

With regards to marketing and advertising directly to learners, NCCI hire an external marketing consultant organise internal and external recruitment events, manage the College website, create marketing materials, press releases and case studies, and to promote the College on social media.. NCfN uses the existing marketing channels of the two partner colleges, including the prospectus. At NCHSR, the focus has been on brand creation and visibility, using a range of mechanisms including local media and press.

8.2. Approaches to employer recruitment

In general employer engagement activity has been led by senior leadership teams and Board members across the National Colleges, and supported by employer engagement teams of varying sizes. The Colleges have identified employers by attending industry events where they can promote their training offer, or through personal contacts that the senior leadership team or Board members have. In two cases (NCHSR and NCCI), telesales companies have been used to generate new contacts with employers.

In many cases, after establishing initial contact, Colleges have held employer events on-site to provide the opportunity for employers to see the available facilities and learn more about the College's apprenticeship and other provision. Some Colleges reported that they generally use a staged approach to building positive relationships with employers and agreeing an apprenticeship contract. For example, they first involve employers in a more light-touch activity (such as reviewing learner work or attending an event at the College) to develop employer awareness of the College, its staff and ways of working before attempting to engage them in more intensive aspects of delivery.

While this was the general approach taken by the National Colleges, practices differed at NCfN due to the composition of the nuclear sector. The two largest employers in the sector (representing approximately two-thirds of the workforce) sit on the governing Board of the College and have been supplying apprentices from the College's inception.

In addition, some employers in the sector had long-standing relationships with NCfN's partner colleges and had been delivering apprenticeships with these providers for many years. This means that although new employers have been signed up for apprenticeship provision, overall the level of employer engagement activity required to achieve good apprenticeship numbers is less than in other Colleges.

8.3. Recruitment successes

Several factors were identified by College staff as supporting their learner and employer recruitment strategies. Across Colleges there was a view among staff that the links that College leaders and Boards had with employers have been important in helping to recruit learners. NCfN staff also viewed employers' pre-existing relationships with the local colleges in both hubs as central to their success in meeting learner number targets. The process of establishing apprenticeship provision was quick and efficient because of these links, and there was a perception of 'business as usual' among employers just under the new 'brand' of the NCfN. At Ada, staff commented that the connections the founders have with the tech industry have helped to lever a range of employer contributions, including apprentices.

As noted, the Colleges also found that inviting employers to events on-site is an effective way of promoting the available offer. This was particularly the case for those Colleges that had completed the capital build projects, where it was reported that the new, state of the art facilities could act as a key attractor for both learners and employers.

There were some sector specific factors that supported learner and employer recruitment. For instance, in the nuclear sector, there is a tradition of community engagement when a new power station is built, to raise awareness of training and employment opportunities. This meant that in the areas surrounding the NCfN there were already relatively high levels of awareness of the opportunities for careers in the nuclear sector. College staff felt that much of their PR and marketing work had already been completed for them by nuclear employers. At NCHSR, successful HS2 contractors were required to engage with the College as a condition of their contracts.

In terms of creating progression pathways into the College, where the institution delivers provision solely at Levels 4 and above, such as in the case of NCHSR, staff commented that it has been easier to establish relationships with feeder schools and colleges. As the College do not deliver Level 3 provision, they were not perceived to be in direct competition with these providers. Colleges with Level 3 provision have still been able to make links with feeder schools, but there has been more sensitivity in establishing these and the scale of networks has in some cases been smaller.

8.4. Recruitment challenges

Staff at the National Colleges also identified a number of challenges they had faced in marketing their offer to prospective learners and employers. One of the main issues identified centred on the resources required for effective marketing and promotion. College staff noted that significant resources are needed, particularly as they are new institutions that parents, learners and employers have not previously heard of. In most cases, there was a view that the available resources for marketing were limited and a larger team to focus on this and/or a national marketing campaign to promote all the National Colleges would be beneficial and support learner recruitment. Where there was existing marketing infrastructure (e.g. NCfN was able to draw on resources at its two partner colleges), this issue was less pronounced.

Staff at some of the National Colleges reported that the focus on specialist, high-level technical skills has created recruitment challenges. They noted that learners and parents have a desire to undertake qualifications with broader coverage. For example, staff at Ada reported that many parents and learners want to '*keep their options open*' and that they have worked hard to make the case for young people to specialise in computer science from the age of 16. Senior leaders at the College emphasised the importance of outreach work in schools and working with students of all ages to change mind-sets and develop interest in digital careers. As part of this effort, groups of students teach coding to local primary school students weekly.

Similarly, staff at NCHSR noted that they face a specific challenge in raising awareness among employers about the broader application to their business of the training and qualifications the College offers, even if the employer is not directly involved in the construction of high speed rail.

The Colleges also reported grappling with the challenge of trying to market new qualifications, often in a context where existing qualifications are well-established and trusted. At NCCI, there was recognition that it takes time to build awareness of new and/or more specialist qualifications. In the view of one staff member at NCCI, the level 3 and 4 qualifications they offer to learners are in a specific technical area of creative education that are less well-known to school leavers and parents and therefore may not have been considered previously. Similarly, at NCHSR staff commented that more 'established qualifications' are available to full-time learners in their local areas and it is challenging to build trust in new provision.

In terms of attracting employers to their apprenticeship training offer, a common recruitment challenge was that the Colleges could not offer a delivery model that meets the needs of all businesses. For example, one College reported that they have two apprenticeship intakes per year but some employers (particularly SMEs) would prefer a rolling intake. Similarly, Colleges reported varying preferences among employers in relation to part-time/full-time models and day or block release for apprentices to

undertake off-the-job training. At their current scales, Colleges reported that they were unable to deliver all of these options.

8.5. Learners' reasons for applying

The survey and focus group research with learners demonstrated that they found out about the Colleges in broadly similar ways. Apprentices had commonly applied for a job vacancy at the employer rather than at the College after finding out about opportunities through career fairs, their own online research as well as using the National Apprenticeship Service website. Those apprentices at the NCHSR who already worked in the industry had been enrolled on the programme by their employer or their employer had informed them about the opportunity and encouraged them to apply.

FE learners tended to learn about the opportunity through their school or college, with almost 3 in 10 respondents to the learner survey (29%) stating they had heard about the College from staff or an event at their school or college. Fourteen per cent learnt about it from using an online search engine, 12 per cent from friends or course mates and 7 per cent via social media. In the focus groups, some FE learners and apprentices knew of the Colleges because they were in their local area. Learners at NCHSR had seen the College being built and had subsequently attended an open day, while NCfN apprentices knew of the employer because of their high visibility in their local area.

In the survey, learners were also asked about their reasons for applying to the National College, and were able to provide more than one answer. Of those learners who responded to the survey, the most commonly cited reason for choosing the College was that the course would provide them with a way to progress in the sector they want to work in (51%). A similar proportion (49%) stated that they hoped their course would give them a way to enter the sector they want to work in. Other key reasons mentioned by learners in the survey included: wanting to gain practical work experience in the sector while learning (45% of respondents), and wanting to earn money while learning (38%). While almost 30 per cent of respondents had heard about the National College from staff or an event at their school or college, less than 1 in 10 respondents (8%) said they had been encouraged to apply by staff at these institutions suggesting that this was a decision that they arrived at independently.

Discussion groups with learners provided further insights into why they had chosen to study at their College. At the NCHSR, some FE learners had looked at more traditional routes or apprenticeships but they opted for the College because it offered a Level 4 qualification that was unique and not available elsewhere. At the NCfN, learners were attracted to the College because they wanted to work in the industry and because the qualifications were funded by the employer. Apprentices at Ada were attracted by a degree-level apprenticeship because they would achieve the same level of qualification as they would at university while gaining experience and working their way up within an

organisation at a young age. They also noted the opportunity to earn money and avoid student debt. Others were attracted to the particular employer they were completing their placement with and the higher rates of pay they offered apprentices.

8.6. Learners' experiences of application and induction

Apprentices across all Colleges had in the main applied directly to the employer. For classroom-based learners applying directly to the National Colleges, different processes were in place at each institution. For example, learners at NCHSR applied through UCAS and their application was reviewed by the College as well as by Sheffield Hallam University, followed by an assessment day. Learners also had to make a separate application to Sheffield Hallam University. Learners undertaking classroom-based provision at NCCI and NCfN had to submit an application online, followed by a short interview with staff at the College. This was also the case at Ada, where the online application form also included a short problem-solving exercise.

Learners at the NCfN fed back positively on the induction process and reported that they felt prepared for their course after taking part, and that it provided learners with an opportunity to get to know their course mates. Learners at the two NCHSR campuses appeared to have different experiences of their induction. At Doncaster, learners felt that their half-day induction was insufficient and that poor communication between the College and their employer led to disorganisation. At Birmingham, learners had a longer induction lasting 2-3 days, which introduced College policies and described what the learner support team had to offer and what the course entailed. Learners at Birmingham fed back positively on their experiences and said it was useful.

At Ada, feedback from apprentices on their induction process was mixed. They were required to complete an initial 8 weeks of training at the College at the beginning of their programme. Apprentices commented that they found this process very intensive. For some, it was all new content (i.e. learning how to code) and presented quite a steep learning curve. Support from teaching staff was also limited at times as the class size was very large compared to the number of tutors available. Some recalled how in a class of 40 they had two tutors supporting their work. As the classes were mixed ability, this also created a pacing issue as the tutors were not able to progress through the content at a speed that satisfied all the apprentices.

Apprentices at Ada did recognise some of the benefits of this initial induction, however. Some commented that it provided them with a good understanding of concepts, terminology and process that are used by their employer (e.g. systems development lifecycle, understanding of the principles underpinning coding languages). Given that most of this content was new for a number of apprentices, they also recognised that some extended period of learning was necessary to bring them up to speed and ensure they could engage with the rest of the course. Finally, they noted how this extended

induction had additional social benefits as it provided them with a chance to get to know the other apprentices. Learners at the NCCI reported that they did not receive an induction, although this was scheduled to take place in for the first two weeks of their course. The induction was meant to provide foundation training to ensure all learners had the same level of technical skills but instead they had a tour of the College facilities, introductions and ice breakers. The learners felt that this had negative repercussions on their learning later on due to the gap between those with prior experience in the sector and those *“that still don't know about this basic knowledge that they should have been taught in those first few weeks”* (Learner, NCCI). There was a perception among learners that because the teaching had to cater to both groups, neither of their needs were adequately met.

8.7. Employers' reasons for engagement

A common reason reported by employers for becoming involved with the Colleges was their motivation to support skill development in their respective industries. For example, employers in the nuclear industry envisaged significant skills deficits in their industry in future and wanted to avoid this. This desire to impact the future skills of the sector was often combined with National Colleges offering more bespoke, customised provision than other educational providers. Creative employers mentioned negative previous experiences with FE colleges (where they could not get an apprenticeship that was tailored to their needs) and the opportunity to have a say was an aspect of the offer that attracted them.

Some of the employers offering apprenticeships at Ada were attracted to the College's strong focus on social diversity. In some cases this aligned to the organisation's own goals to bring in more women and people from a range of socio-economic backgrounds into the industry.

Availability of specialist provision was also attractive to employers. Employers working with the NCHSR cited the programme being specific to rail, as opposed to a general programme encompassing other forms of transport, as a reason for getting involved. Similarly, it was noted by employers involved with Ada that there were not many apprenticeship providers in the area of data analytics and software engineering. The curriculum offer was appealing because it aligned with their need for generalists who understand work across departments while also providing the specific technical skills they need, i.e. coding and database management. Employers noted that Ada's offer stood out because of its delivery model whereby the apprentices are with them full-time followed by a scheduled week at the College as opposed to a weekly release that would have disrupted their workflow and deadlines.

Becoming a levy-paying employer was also mentioned as a reason for working with National Colleges by employers. For example, many of the employers working with Ada

did not have an apprenticeship offer in place before the levy was introduced. Their business was incentivised to take on apprentices in order to make the most of this contribution, and saw this as an opportunity to tap into a new, diverse talent pool, having traditionally hired university graduates as part of their young talent programmes.

9. Progress against recruitment targets

This chapter summarises the National Colleges' progress against their learner number targets, and highlights some of the broader contextual issues that have affected the Colleges' ability to recruit learners. It then details the Colleges' plans for increasing learner numbers in future, as well as achieving any diversity targets they have.

Key findings

- Across all National Colleges, learner numbers are lower than initially forecast in their original business plans and the Colleges are not yet national in their scope.
- Key enablers to increasing learner numbers have been drawing on existing relationships with employers and the introduction of the apprenticeship levy.
- The main challenges have included delays to large infrastructure projects that were intended to support the creation of new apprenticeship vacancies and lack of approval to be apprenticeship providers for non-levy paying employers.
- This has meant that for NCHSR and NCCI in particular, there are significant markets they intended to work with that have not been accessible. Stakeholders also considered that the narrow definition of Colleges as highly specialist institutions has further impeded the achievement of their learner number targets.
- There were mixed views among stakeholders on the rigour of the target-setting process. Some stakeholders highlighted that there was no precedent for the steep growth trajectories that were projected in cases where entirely new institutions were being created.
- All Colleges have structured plans to support their path towards financial sustainability and growth. These initiatives are in very early stages and the extent to which they will succeed in increasing learner numbers is unclear.

9.1. Current learner numbers

Across all National Colleges learner numbers are lower than forecasts within the original business plans. The current learner numbers are presented in the table below.

Table 4: National College learner numbers

Learner numbers 2018/19	Apps Level 3	Apps Level 4 & Above	Non Apps 3 & Above	Others	Total
NCCI	58	0	27	0	81
Ada	0	141	130	0	271
NCHSR	30	131	41	60	262
NCfN	79	136	168	150	533

Source: Management data provided by DfE, April 2019¹⁰

Consequently, learner number targets have been revised for all Colleges. Interviews with College staff indicate that progress against the revised targets is mixed. NCfN has met its learner number targets for the 2018/19 academic year and Ada has come close, with strong growth in its apprenticeship numbers in particular (staff reported a 30 per cent increase year-on-year). Both NCCI and NCHSR have fallen short of their learner number targets, despite overall growth since their inception.

9.2. Barriers to achieving targets

The broader contextual issues, outside of the National Colleges' own recruitment activities, that have affected their ability to recruit learners and meet business plan targets are summarised below, drawing on feedback from DfE stakeholders, College staff and governors.

Lack of approval to be an apprenticeship provider for non-levy paying employers

The National Colleges were not successful in their bids to be apprenticeship providers for non-levy paying employers. NCHSR and NCCI have been particularly affected by this issue as the creative and cultural sector is composed predominantly of SMEs and there are many SMEs in the HS2 supply chain. This means that for both Colleges there are significant markets they intended to work with that have not been accessible. Feedback from DfE stakeholders indicates that while the Colleges generally met the quality criteria required by the procurement process, as new institutions it was harder for them to meet the financial criteria specified. Work to support National Colleges to be able to deliver

¹⁰ NCCI also offers and has learners enrolled on Level 2 apprenticeship programmes.

non-levy apprenticeships is on-going within DfE, with efforts to better coordinate apprenticeship and National Colleges' policy.

Delays to infrastructure projects

Some of the Colleges have been adversely affected by delays to the building of infrastructure projects. Staff at the NCHSR reported that the delays in announcing HS2 contractors and the associated slippage has meant that employers have not been able to commit to the numbers of apprentices they had originally anticipated. In addition, the negative press around HS2 is perceived to have dampened interest in the College's offer among parents and learners. As the original business plan envisaged a relatively high proportion of learners and income from HS2 apprenticeships, this is a substantial factor affecting the College's progress against targets.

Delays to and cancellation of capital build projects

At Ada, progress in scaling up learner numbers has been hampered by delay to their capital build. Efforts have been made to increase capacity and infrastructure for learners by, for example, acquiring a temporary site to support delivery of apprenticeships. However, until the new building is completed, the College is limited in the number of learners it can take on. Similarly at NCCI the cancellation of capital build plans for on-site student accommodation and additional teaching space is considered by staff to be a barrier to increasing learner numbers. The original business plan noted the importance of short-stay residential accommodation to allow training to be delivered that fits with the industry working patterns, which include late night hours.

Location

Staff at NCCI cited the College's location in Purfleet as a barrier to recruiting learners. As well as being outside of a major town or city, the College is situated some distance from a train station. The other Colleges benefit from inner city locations, good transport links and/or proximity to employers, which staff feel has been helpful.

Narrow definition of Colleges

A DfE stakeholder reflected that a key success factor for providers is scale and the fact that the Colleges have been defined as highly specialist institutions creates considerable challenges. In their view, the narrow conceptualisation of the Colleges and their limited scope in terms of subject specialisms has impeded achievement of learner number

targets and been a barrier to achieving financial health. This was also recognised by staff in some of the Colleges.

Process for establishing targets

Views among DfE staff and wider stakeholders on the process for establishing targets and conducting sensitivity analyses of these targets were mixed. One view was that the process had been robust while another was that the projected growth paths in the original business plans could have been tested more rigorously. Stakeholders with this view pointed to the fact that growth trajectories for the Colleges that were completely new institutions, and were not created through partnerships with existing educational providers, were steep and there was no precedence for similar targets having previously been achieved. They considered that experts in FE finance and learner numbers, if they had been involved in the process, would have assessed that they were unrealistic. DfE stakeholders also highlighted that more could have been done to test and understand the required balance of Level 3 learners and Level 4/5 learners for financial sustainability to inform business plan targets.

9.3. Plans for increasing learner numbers in future

The initial set-up phase of the National Colleges necessarily focussed on developing provision and achieving financial stability and, consequently, the Colleges are not yet national in their reach or scope.

College staff were asked about their plans to increase learner numbers, including how they intend to extend geographic reach. Generally, plans for establishing sites in other parts of the country and working in partnership with existing providers are limited and have not moved beyond early, initial feasibility scoping. NCHSR has plans to open small satellite sites in London and Scotland, in partnership with independent training providers. The College also has early-stage plans to set-up accommodation for their learners in Birmingham in partnership with Aston University to help improve their ability to recruit learners from other parts of the country. Ada is considering the option of setting up a site outside of London but indicated that until their capital build project is complete, estimates of growth in learner numbers in their new 3-year strategy are relatively conservative.

Senior staff at NCCI reported that they did not have plans to increase the numbers of full time FE learners at the College because they were unable to invest in learner recruitment or to build student accommodation; their focus is instead on achieving financial sustainability at the current scale before considering expansion. They noted that their apprenticeship offer is already national as they work with employers around the country.

Some Colleges are assessing the extent to which international learner recruitment is viable. Senior leaders at NCHSR indicated that they have been focussing on building strategic international partnerships, with the aim of attracting learners from other countries. Similarly, NCfN noted the potential of exporting the National College brand, although no concrete plans for this were reported.

Finally, some Colleges are considering the possibility of expanding their scope to include other sectors and sub-sectors, to help overcome the challenges of operating in a narrow field, which limits the numbers of learners they can attract. College staff and DfE stakeholders reported that a detailed options appraisal was being carried out to understand the opportunities and disadvantages of this approach. At present, none of the Colleges appeared to have fully worked up plans for using blended or distance learning to increase learner numbers and extend reach, although they recognise this is potentially an important mechanism for expansion in future..

Board members across all Colleges reported that assessing the options for expanding College provision, including reviewing the associated risks and advantages, was a priority for the next phase of College implementation.

9.4. Meeting learner diversity targets

Attracting and supporting a wide range of students from diverse backgrounds, including disadvantaged learners, is an aim of the National Colleges policy. This is intended to ensure the skills needs of sectors are met by broadening the learner base but also to provide greater opportunities to traditionally under-represented groups.

Two of the four Colleges have diversity targets that they independently set: at Ada, they have a target for 50 per cent female learners and 50 per cent of learners to be from socially disadvantaged backgrounds; at the NCHSR, they have a target for 50 per cent of learners to be female and 30 per cent to come from Black, Asian and Minority Ethnic (BAME) backgrounds. Although the other Colleges do not have explicit targets, they are still concerned with creating increased diversity among their learner populations.

In terms of NCHSR's achievement of diversity targets, the Birmingham campus at NCHSR has around 40 per cent BAME learners but the figure for Doncaster is lower, which reflects the town's demographics. The College is struggling to meet the target for 50 per cent female learners, with around 10 per cent in Birmingham and fewer in Doncaster. Staff members are aware that the College needs to tackle industry stereotypes but also recognise that this will take time. Future plans to attract more women to the sector include promoting less well known roles such as interior designers.

Ada performs well when it comes to attracting learners from disadvantaged backgrounds. Between 50 and 60 per cent of its 16-19 cohort are from socially deprived backgrounds.

The College's location in a key regeneration area of North London has supported the achievement of this objective. In the view of Ada's senior leaders, a key aspect of their success in attracting industry support is the strong social mission of the College to improve diversity within the tech industry. This allowed them to secure buy-in from employers at an early stage that they otherwise might not have had.

At the time of fieldwork, senior leaders at Ada reported that one-third of their apprentices are women, which is above the industry average but short of the 50 per cent target. In future, there is a desire to support employers to increase diversity in their apprenticeship recruitment to help move closer to the 50 per cent target. Similarly, only around 20 per cent of FE learners are women. The College reported that they are faced with the challenge of changing deep-rooted gender stereotypes. Their outreach coordinator works with all-girl schools to achieve better gender balance but from the College's perspective it is a difficult balance to support volume growth, which drives their business planning, as well as achieving a diverse intake.

In relation to the other two Colleges, senior leaders at NCfN reported that their current cohort is more diverse than is typical in the sector, particularly in terms of the proportion of women they have enrolled. Similarly, senior leaders at NCCI commented that they have a good mix of backgrounds within their current FE learner cohort, including a high proportion of learners with additional support needs across both their FE and apprenticeship intake (approximately 60 per cent of all learners). The College works with employers who have a focus on improving employment and progression opportunities for disabled people and so senior staff expect there to be an increase in disabled learners in future. They also report having higher than average LGBT representation across their FE learners and apprentice cohorts. In addition, the College has more female than male apprentices in technical subjects, against the industry trend. The ethnic mix of their apprentices is heavily weighted to White British, reflecting the composition of the sector more generally. Senior leaders within the College are hopeful that as sector-wide efforts to improve ethnic diversity in the creative and cultural sector progress, their intake of learners will also become more diverse. At this stage, there are no specific measures planned to focus on ethnic diversity.

10. Course Delivery

This chapter describes staff experiences of course delivery and teaching, employer perspectives on provision and views on outcomes achieved to date.

Key findings

- Staff generally reported positive experiences of teaching in the National Colleges. They felt the industry-focused curriculum was benefiting learners, and reflected the realities of the workplace.
- Financial pressures and the need to keep staffing levels low have resulted in large workloads for staff, which are hard to manage and create significant pressures.
- In some cases, Colleges opened before new apprenticeship standards were approved and this was perceived to have had a negative impact on learner and employer experiences.
- In the main, employers were satisfied with the way in which courses were delivered and their ability to influence delivery and curriculum through mechanisms such as employer advisory boards. They were positive about learners being able to acquire high-level specialist skills and there were examples of apprentices making a valued contribution to businesses. A number of employers highlighted that the creation of the National Colleges has had a positive impact on industry attitudes toward skills, training and development.
- In a few cases, employers expressed concerns about the quality of provision and tutors' skills and experience, and identified challenges in maintaining day-to-day contact with Colleges, including slow responses and difficulties in making contact during holidays.
- Broadly, both College staff and employers considered that good student support services were in place.

10.1. Staff experiences of delivery

Across the Colleges, staff have enjoyed the opportunity to be involved in the creation of a new industry-focused curriculum, and remain enthusiastic about the potential of the National Colleges. Generally, staff report high levels of student engagement, often more so than they have previously experienced in further/higher education institutions.

Teaching staff, many of whom have entered the Colleges directly from industry, were particularly keen to praise how these institutions reflect the realities of the industries they serve. At NCfN, both hubs operate with the health and safety standards of a nuclear

power station in order to embed 'nuclear behaviours' in learners. Similarly, at NCCI, Ada and NCHSR staff spoke of the value of having their students do 'project based' work with external clients, as they would do in industry.

There have nonetheless been challenges in delivering courses. At the NCHSR and NCCI, staff highlighted that delays in agreeing apprenticeship standards and curriculum structure were frustrating, and had had a negative impact upon their ability to deliver courses effectively. For example, at the NCHSR, staff and Board members indicated that the Institute for Apprenticeships and Technical Education (IfA) confirmed approval of a new apprenticeship standard and assessment plan around three months later than expected. This was attributed to delays in the College receiving its working capital loan, which affected the resources available, and also to delays in confirmation of the funding band by the IfA. College staff reported that opening without approval of the apprenticeship had affected learner and employer trust and satisfaction but that this had generally improved over time.

Difficulties with staff recruitment as well as retention in some instances have had a significant impact upon the workloads of teaching staff. This has been acutely felt at NCHSR and NCfN, particularly in their Southern Hub. At NCHSR teaching staff were sympathetic to the difficulties management face in sourcing staff with the degree of specialism required to deliver their curriculum, stressing that, *"it's about getting the right staff"*, rather than filling teacher roles. Similarly, at the NCfN's Southern Hub, teaching staff understood that exiting the nuclear industry for teaching typically entailed a significant reduction in pay, which makes management's task of recruitment very difficult. Nonetheless, despite understanding the difficulties, some teaching staff spoke of high levels of stress, and *"fire fighting"* against unmanageable workloads. In the case of the NCfN, there was a view that this would be addressed if vacancies were filled. At Ada, senior leaders and teaching staff noted that the limited capacity of staff was mitigated to some degree by recruiting industry partners to deliver provision until curriculum staffing roles were filled.

At Ada, staff reported that their higher level apprenticeships had attracted learners from diverse backgrounds and with a wide range of existing technical knowledge, which made teaching challenging. During the College's 8-week apprentice induction, a low staff to student ratio meant that staff had to focus on developing the knowledge of learners with little or no experience of coding and had limited time to progress those with existing skills in this area. From the perspective of staff, this issue was resolved by dividing learners into three skill-level streams, although feedback from learners suggests this issue has not been entirely resolved.

10.2. Employer feedback on provision

Most employers felt insufficiently informed to comment on the detail of course delivery but where feedback was given, it was broadly positive. For example, at the NCfN, employers recognised that there is a significant amount of '*foundational*' knowledge required to work in the nuclear industry and believed that courses were successfully equipping learners with this knowledge.

There were a few exceptions to this, where employers expressed concern about the quality of provision and repetition within the curriculum, and in one case, concerns about tutors' level of knowledge in their sector. For example, one employer felt that the College's tutors were generalists, who may not have the specialist knowledge most relevant to their sector and necessary for a higher-level technical course. Some employers also thought that the high level of staff turnover at NCfN and NCCI had led to inconsistencies and adversely affected course delivery.

Other employers were concerned that they are unable to provide work for apprentices that is directly relevant to what they have been studying in college. This was largely attributed to the unpredictability of the type of work the business will be carrying out at a given time. One large employer of apprenticeship learners at a National College highlighted that once the National College has expanded the choice of modules available to learners, it will be easier to ensure learners' workplace activities are aligned to what they study at the College.

10.3. Employer contact with Colleges

Overall, employers are satisfied with the level of contact they have with Colleges and their ability to influence delivery and curriculum.

College employer and industry advisory groups play an important role in managing employer relationships and monitoring employer satisfaction with delivery. At NCCI the employer steering group meets monthly, whilst at Ada all engaged employers are invited to a quarterly forum, alongside their more regular interactions with key contacts at the College. At the NCfN, the College's two largest contributing employers have positions on the Board and monthly meetings are arranged with other engaged employers. Similarly, the NCHSR's Industry Advisory Panel meets regularly and is a forum where employers can raise any concerns about the College's provision.

While employers are satisfied with the formal structures in place to facilitate employer leadership of provision and course delivery, there are some issues with day-to-day contact. Most Colleges have developed account management roles and functions, which are responsible for maintaining on-going relationships with employers, including periodic

reviews of apprentices' progress. However, some employers felt that the Colleges are slow to respond, particularly during school holidays and half terms. In some instances difficulties in communication were compounded by high staff turnover at the College.

10.4. Support available to learners

Across the Colleges, staff felt that the structures in place to facilitate student feedback and provide support to learners were good. At Ada and NCfN, student liaison committees have been established as a means for learners to provide feedback on course delivery and support. This information is then fed back to College management and the Board of governors.

Mechanisms in place for learners facing difficulties with the content of their course or in managing their workloads vary by College. At the NCHSR, a learner experience team has been established to support learners with a range of issues through personal tutoring and mentorship. This in-college role is mirrored by an apprenticeship engagement officer who provides similar support for students facing difficulties on placement. At NCCI, where a high number of students are required to take Maths and English, the functional skills teacher is available to provide curriculum support to learners via 1-2-1 coaching. At Ada, all learners on an apprenticeship have access to a dedicated personal support officer who they meet every 12 weeks to discuss any issues they may be facing. Learners at the NCfN have frequent 1-2-1 meetings with tutors, though at times this has been difficult to deliver due to understaffing at the Southern hub. These learners also have access to the hub's partner colleges' support services, which are located nearby.

Broadly, employers reported few issues with ensuring apprentices had the support they required, either from the National Colleges or from their business. Some employers appeared to be more reliant on the College than others for learner support and this seemed to relate to the size of the company and the capacities of their own internal human resources (HR) function. Some learners, particularly those studying at level 5 or above who have prior experience of professional employment, reported that their employer's HR service is their natural first point of call for support ahead of services offered by their National College.

Some employers, particularly those working with Ada and NCCI, said they had been unprepared for the levels of support they would have to give to students in terms of adjusting to the workplace and work readiness. This feedback came in particular from organisations inexperienced in hosting apprentices, so may not reflect negatively upon the Colleges' preparation of learners so much as employers' readiness to host them.

10.5. Outcomes achieved to date

Perceived outcomes for learners

Across the Colleges, staff feel that learners are benefitting from the industry-focused nature of National College provision and delivery. At NCCI, teaching staff said that learners' practical experience of undertaking project-based work for real clients means they are more prepared for industry than they would typically expect from learners at this level. As well as becoming used to the ways in which the creative industry works, their placements have also exposed them to procedures common to the industry such as the use of non-disclosure agreements. Teaching staff at Ada also reported positive learner outcomes from the three industry projects learners are required to complete each year. These projects enable learners to work with the College's founding partners and have served to improve their project management and organisation skills.

At NCfN, staff members believe that the policy of operating the College within the health and safety standards of a nuclear power station means learners are uniquely prepared for the industry. Similarly, at NCHSR staff reported that the high level of learner contact with engineers who are set to work on the construction of the HS2 line has improved learners' work readiness by developing their professional communication skills. Furthermore, attending the College during its first year has provided learners with opportunities to develop their presenting skills by promoting the College through talks in local schools and participating in podcasts.

In terms of technical skills, staff acknowledged that as the Colleges are at an early stage of delivery, measurable outcomes are limited. Nonetheless, across the Colleges staff spoke of the advantages of having access to industry-donated equipment on which to train learners, and felt that the relatively high levels of student engagement had supported good skills development. Despite this generally positive outlook on learner outcomes, staff acknowledged that some of the issues in founding the Colleges, such as high staff turnover, lack of staff, and delays to receiving equipment, had likely had a negative impact on learners' engagement and their trust in the College to deliver their course effectively.

An interesting learner outcome identified by staff at the NCfN, was that their level 3 learners are more engaged and ambitious than they would typically expect at this level due to being in such close proximity to those studying at levels 4 and 5. Spending time around high-level learners was said to have "*inspired*" younger students who were impressed by the opportunities available to those studying degree level courses in the College.

Ofsted will assess Colleges' performance and the outcomes achieved and be an important indicator of whether course delivery is effective. Only one College, Ada, has so far undergone Ofsted inspection, successfully securing an overall rating of 'Good', with outstanding features. The other Colleges are due to be inspected over the coming year or two.

Employers echoed the positive outcomes for learners identified by National College staff. At NCfN, one employer felt that industry specialist courses at level 3 have given learners a chance to gain an insight into work from a younger age than previously possible. Employers engaging with the NCCI also suggested that learners were benefitting from the provision of technical skills development tailored specifically to the creative industry whilst working alongside professionals in the roles they aspire to whilst on placement.

Perceived outcomes for employers

Given that most apprentices and learners are only part way through their courses, it was generally too early to identify concrete outcomes for employers.

Nonetheless, a number of employers highlighted that the creation of the National Colleges has had a positive impact on industry attitudes toward skills, training and development. A member of a nuclear sector organisation said that employers in the nuclear industry are now more open to the benefits of investing in staff at the very beginning of their careers than they were previously. Similarly, an employer engaging with NCCI stated that being part of conversations about curriculum development in the sector had a positive impact on their commitment to investing in the skills of the creative industry's future professionals.

For one employer working with Ada, the benefit of sharing their industry knowledge with educational providers has been furthered by the knowledge learners are able to provide their existing staff. The group of apprentices the organisation is hosting have established a professional development group they call 'code club', in which staff provide guidance on professional skills and learners share the coding skills they have learnt at College with existing staff.

A number of employers also reported that apprentices were able to make valuable contributions to their work because they were able to apply industry specific skills. For example, one large employer engaging with NCHSR said that the creation of level 4 apprenticeships in their sector would likely not have occurred without the National College, and that this had already had a positive impact on the organisation in terms of meeting their higher level skills needs. An employer engaging with Ada provided similar feedback.

11. Learner experience

This chapter presents learner views on various aspects of National College provision as well as the outcomes they have gained from their course. It draws from the survey findings as well as the focus group discussions completed with learners. The survey received responses from 126 learners across the Colleges, while 48 learners participated in the focus groups. It should be noted that the composition of the focus groups differed between Colleges, which in turn affected the balance of evidence available on particular topics. In the case of Ada and the NCfN, the discussion groups consisted of more apprentices than classroom-based learners. The discussion group at the NCCI, meanwhile, consisted entirely of classroom-based learners, while one apprentice was interviewed off-site. The discussion groups at the NCHSR were evenly split between the two.

In addition, the low numbers of learners responding to the online survey means that the survey findings are indicative only and cannot be used to draw robust comparisons between learner experiences across the National Colleges. As noted, the responses from NCCI and NCfN were considered too low to provide meaningful insights into the learner experience at these institutions. The individual findings for these Colleges are therefore not presented within this chapter.

Key findings

- Under half of survey respondents (48%) across the four Colleges were satisfied with timetabling and scheduling of their courses. Learners and employers in some of the Colleges commented on multiple changes to timetables which they perceived to be due to staffing constraints.
- Around 3 in 5 survey respondents (61%) were satisfied with their course content and the subjects covered. Explanations provided as to why some learners were not satisfied included: their course being more theoretical and generalist than they expected; and less frequent use of technology and equipment than anticipated.
- Reflecting different employer needs, Colleges were using a range of apprenticeship models, combining classroom-based teaching and on-the-job-training in different ways. Apprentices commented that long gaps between classroom based learning and short periods in College were challenging.
- Over two-thirds (70%) of respondents were satisfied with the quality of teaching at their College. Some learners perceived that insufficient numbers of teaching staff had affected the quality of their learning experience and led to disorganised delivery of classes or teachers without the right skills. Where learners had participated in guest lectures, there was acknowledgement that they brought useful industry insights but in some instances learners perceived a lack of teaching experience.

- Sixty-nine per cent of survey respondents expressed satisfaction with student support and wellbeing services at their College, but under half (42%) were satisfied with the careers advice available to them. Learners reported that they had received little 1-2-1 careers information, advice and guidance. Where industry mentors were available to learners, this was a valued source of support and information.
- Fifty-four per cent of respondents were satisfied with the work experience or on-the-job learning aspects of their course. Among classroom-based learners, there was mixed feedback. Some learners felt their placement was relevant and beneficial, but others recalled undertaking a narrow range of activities or had insufficient notice meaning they could not take up the initial place they were offered. Among apprentices, the quality of communication between the College and their employers, and the level of alignment between their College and workplace activities was similarly varied.
- Overall, around two thirds of survey respondents thought they were gaining technical skills that were: valued by employers (68%), relevant to the area they were interested in (67%), valued across sectors (66%) and relevant to the job they wanted to do (63%). A similar proportion agreed that their course would help them find a job in their sector, help them progress to a different role or decide whether a career in this sector was right for them (68%).
- Around three quarters of survey respondents reported they were gaining valuable insights (76%), relevant skills (74%) and better job prospects in the sector (74%).

11.1.Learner views on course structure and content

In the survey, learners were asked to rate their satisfaction with different aspects of their course, such as the timetabling, course content and the mix of practical and theoretical elements.

Almost half (48 %) of the survey respondents said they were satisfied with timetabling and scheduling of their course but there were differences between the Colleges in how well learners rated it. For instance, 53 per cent of respondents at the NCHSR expressed satisfaction with this element, compared to 35 per cent at Ada.

Learners in the survey were also asked to rate their satisfaction with the course content and subjects covered. Overall, 61 per cent of respondents indicated satisfaction with this aspect. At the College level, the majority of respondents at both NCHSR (65%) and Ada (58%) expressed satisfaction with this element.

According to the survey, 47 per cent of respondents were 'very' or 'somewhat' satisfied with the mix of practical sessions and theory in their learning, and 15 per cent reported feeling very dissatisfied with this aspect of the course. Again, there were differences in

the responses between Colleges. More than half of the respondents at Ada (56%) reported satisfaction with this element alongside 41 per cent of those at the NCHSR.

Alongside the survey, learners were also asked about their views on course structure and content as part of the discussion groups, the details of which are reported below.

Learners views on course structure and content: classroom-based provision

Overall, classroom-based learners in the discussion did not raise issues about the structure of their course. Learners at Ada commented that they have a lot independent study time built into the course. While this was an adjustment to learners after school, they felt it had positive outcomes for their self-organisation skills.

Reflecting on the mix of theory and practical elements within the course, some learners at the NCCI felt that the project-based working did not currently offer enough opportunities to practice their skills and that the course is less practical than they had expected. Similarly, classroom-based learners at the NCfN said that instead of learning about the practical elements of the nuclear industry, they have been taught about business and design. Learners at both hubs of the NCHSR also felt that the content was focused too much on theory. This feedback may reflect unrealistic expectations among learners about the theoretical learning required for higher level technical qualifications.

Classroom-based learners interviewed at both the NCHSR and the NCCI felt that course content had been mis-represented during open days. Those at NCHSR at Doncaster said they had not so far used the software or technology that had been promoted as part of their course. Classroom-based learners at the NCCI signed up for different courses in specific technical areas of theatre and production, such as light, sound or recording. However, they found out after the course had started that they were all enrolled in a single production course.

"It's supposed to be a production and technical arts course and there is an awful lot of production and not a lot of technical."

FE learner, NCCI

These learners at the NCCI had expected to receive a specialised education in specific areas of production but did not feel they had received this. Several learners in the discussion groups reported that because they had not gained the technical skills they were hoping for as part of the course, they had taught themselves technical skills outside of lessons.

Learner views on course structure and content: apprentices

The apprentices that were interviewed are on apprenticeships that are all structured differently, reflecting the need for flexibility to meet different employers' requirements.

Apprentices in the discussion groups reflected on the impact of the course structure on their learning. Learners at the Southern Hub attend the NCfN full-time and commented that they have only limited exposure to their employer during the first year. Learners felt this structure led them to spend too little time with their employer compared to their counterparts at the Northern Hub who spend more time on placement during the initial year. Apprentices at the Birmingham Hub of the NCHSR commented positively on the rotating model of spending 6 weeks at work and 2 weeks at College because it allows them to obtain knowledge that can be applied at work and vice versa.

Apprentices at Ada, who spend 7 weeks with their employer and then attend the College for 1 week, commented that it would be better to complete larger modules in a single 2 week block. Under the current model, they cover larger modules over 2 weeks with a 7 week gap in between. Learners felt that this gap in teaching was too long and meant that they waste a lot of time refreshing their learning from 8 weeks ago when they returned to College. They suggested that it would be helpful to have mini-activities that they could complete before returning to class to support this process.

"It was very hard to get back on track. It was very hard to get back into the zone"

Apprentice, Ada

A further consequence of this course structure for apprentices at Ada is that because the assignments are given at the end of their College-based week, they do not have a chance to ask teaching staff questions until the next time they are in the College. Learners can contact tutors remotely while they are with their employer, but they have found it is not as helpful as discussing the assignment with tutors face-to-face.

Some apprentices reported that they find it challenging to fit their course work with their placement and other commitments. The apprentices at the Doncaster hub at NCHSR have found it difficult to fit their assignments around their work because they tend to have several different deadlines during the 2 week block they spend at the College. The apprentices at Ada also commented that on occasions they find it difficult to balance course work with their day-to-day job. They are not supposed to complete coursework at their employer, and have to work evenings and weekends if they are not able to finish the assignment while they are at the College. They find this quite tiring as they do not want to compromise on the quality of either. One apprentice at the NCCI similarly said that the

workload can be challenging because they are at the employer full-time, working irregular hours in a creative venue, on top of which they need to complete course work.

Timetabling issues have frustrated apprentices' learning on occasions. Learners on degree apprenticeships at the Southern Hub of NCfN commented that the structure of the course had changed multiple times since they started, which they viewed primarily as a consequence of staff changes. Similarly, apprentices at Ada commented that tutors had changed the timetable and on occasion learners had not received the new timetable or been informed of the content of teaching sessions in advance. Employers who employ apprentices from the NCCI also commented that their learners had sometimes travelled to attend training on campus only to find out that it had been cancelled last minute.

11.2.Learner views on teaching quality

In the survey, respondents were asked to rate their satisfaction with the quality of teaching at their College. A majority of survey respondents (70 %) were either 'very' or 'somewhat' satisfied with the teaching at their College. There were small differences in how learners perceived teaching quality between some of the Colleges. Three-quarters (78 %) of learners at the NCHSR reported satisfaction with this element alongside almost two-thirds of respondents (63 %) at Ada.

In the discussion groups, some learners said that an insufficient number of teaching staff had a negative impact on teaching quality. Degree apprentices at the Southern Hub of NCfN have only one tutor to teach all of their 4 modules, and they felt it was too much for a single member of teaching staff to cover. Learners at the Doncaster Hub of the NCHSR said that lack of teaching staff has led to tutors in Birmingham teaching them over Skype about topics that are complex and that in their view require someone to support them in person. Classroom-based learners at the NCCI said there is an issue with teaching both the Level 3 and 4 programmes during the 1 day per week when both cohorts' schedules overlap and they attend the College at the same time. This means that staff attention is divided and learners feel they are left with too little supervision. There was a perception that other staff try and step in but they do not have subject expertise and are therefore unable to answer learners' questions. Other learners felt that some of the teaching sessions themselves are poorly organised by teaching staff, leading to repetitive and/or irrelevant course content. Learners at the Doncaster Hub of the NCHSR said that different teachers often show them a PowerPoint presentation they have already seen without realising. At the Birmingham Hub, learners felt at the outset that their lectures were not linking to their assignments, although this has improved over time. At Ada, some apprentices felt that the teaching is inconsistent. The apprentices' priority is completing coursework and passing exams but they feel that tutors are not always focused on delivering content relevant to these aims.

Learners at the Doncaster Hub of the NCHSR discussed how lecturers often appear to have little knowledge of the curriculum. In their view, this is partly due to the high number of guest lecturers that teach them in place of more permanent teaching staff. Learners felt that guest lecturers bring variety to the course but that it has also led to instances where they have been taught by people whose backgrounds are not directly relevant the content of their course or who do not have an overview of the course. Apprentices at Ada also reported that the College employs a lot of contractors to teach discrete modules and that while these individuals know their subject area, it is clear that they have limited teaching experience. For instance, some apprentices spoke of how these temporary members of teaching staff were not always able to convey the content of the lecture in a way that learners understood by following a structured lesson plan.

"It's all well and good being a senior developer but it means nothing if you can't impart that knowledge in a way that is structured for us [the learners]"

Apprentice, Ada

Some learners discussed how their tutors do not have the right kind of industry background to teach them the course material. Classroom-based learners at the NCCI said that while their tutor has a good understanding of sound and live music, his professional background in music and teaching does not give him the required knowledge to teach them about lighting and other technically specialised areas. Level 3 apprentices at the Southern Hub of the NCfN felt that while their teachers are of good-quality, they do not all have backgrounds in nuclear engineering; some previously worked in non-nuclear roles in the defence sector.

11.3.Learner views on the quality of facilities and equipment

Survey respondents were asked about their views on the quality of facilities and equipment at their College. Overall, 68 % of learners were satisfied with the facilities and equipment at their College. A very high proportion of learners at the NCHSR (94 %) reported satisfaction with facilities and equipment, while at Ada over half of respondents (57 %) were satisfied with this element.

The quality of facilities and equipment was also discussed in the focus groups. In large parts, learners had positive feedback on this aspect of their course. Learners at the NCHSR at Birmingham expressed satisfaction with the equipment and facilities at their Hub. Similarly, the classroom-based learners at Ada were pleased with the technology they use to access course resources and complete coursework, Google Classroom. Learners said that it allows them to submit work ahead of time, which means that the teacher already knows who has completed the work. This saves teachers' time, and means the lessons can be a space for learning.

In spite of this positive feedback, several issues with the quality of facilities and equipment were discussed. For instance, as noted, classroom-based learners at the NCCI and at the Doncaster Hub of the NCHSR said they did not have the same access to equipment and facilities that had been marketed to them. At the NCCI, learners had expected to have more frequent opportunities to work with paying clients undertaking projects at the Backstage Centre (the subsidiary of the College that operates as a private entity) but in reality they have less access than they expected. Learners at the Doncaster Hub of the NCHSR also discussed how the facilities are of high-quality but they do not have access to them. When learners attended open days the equipment was showcased as though it would be used in teaching but this has not been their experience.

For the Colleges' apprenticeship provision, Level 3 apprentices at the Southern Hub of the NCfN thought that while the facilities are very good, they have not been able to use them often as the content of their course is largely theory-based during their first year. Classroom-based learners at the Doncaster Hub of the NCHSR felt that the Birmingham Hub has more specialist equipment and software and so they feel disadvantaged in comparison. Apprentices at Ada have also had trouble accessing resources. The College does not have the full version of the collaborative messaging programme they use to share module resources. As such, there are limits on the storage space available on this platform, which has led to issues such as information being erased.

11.4.Learner views on pastoral support and careers guidance

In the survey, learners were asked to rate their satisfaction with the student support and wellbeing services at their College. Overall, 69 per cent of survey respondents expressed satisfaction with this aspect of their National College experience. Between the different Colleges, a high proportion of learners at NCHSR (80 %) expressed satisfaction with student support and wellbeing services, while over half of respondents from Ada (55 %) provided this feedback.

Survey respondents were less satisfied with the careers advice that is available to them compared to pastoral support. Overall, under half (42 %) of the respondents were satisfied with careers guidance. At NCHSR, more than half of respondents (55 %) reported satisfaction with this element compared to one-third of respondents (35 %) at Ada.

In the focus groups, learners and apprentices were asked to comment on the pastoral and careers guidance services available at the National Colleges. In terms of pastoral support, learners undertaking classroom-based provision at Ada, NCfN and NCHSR were all aware that the College had pastoral and counselling services available, but none of the participants had needed to access them to-date. Views from other learners in the discussion groups are reported below.

Pastoral support

At the NCCI, all of the learners studying full-time at the College had regular personal tutorials with the pastoral care and welfare officer. There was uniform agreement among participants that the support they receive from this individual is excellent, and observed that they were very committed to the role. In these meetings, the welfare officer asks learners about their home and college life, providing them with opportunities to raise any issues they are experiencing, and assisting the learners in planning their next steps for when they leave the College.

In the case of apprentices at all the Colleges, the majority stated that they would go to their line manager at their employer in the first instance for pastoral support if they experienced any issues over the course of their programme.

Careers guidance

The level of individual, tailored careers guidance provided across the National Colleges was limited. Learners interviewed at the NCCI stated that there was no clear careers offer at the institution; while learners at NCfN and apprentices at Ada commented that they had not received any careers guidance to-date. All of these groups reflected that they would welcome the opportunity to have discussions with teaching staff about their future career options, and what their next steps should be to facilitate the achievement of these goals. Some learners felt that the focus for teaching staff was on course delivery as the institution became established and they dealt with general staff shortages.

Some learners at Ada's 6th form as well as NCHSR had industry mentors that they were assigned by the College who they could go to for careers guidance. Learners had found this form of support useful in clarifying what careers in their respective sectors are available and in supporting this decision-making.

Learner views on work placement/employer engagement

Learners were asked for their views on the experience they had of engaging with employers from industry as part of their course. In the survey, learners were asked to rate their satisfaction with the practical work experience and on-the-job learning elements of their course. Around half (54 %) of the respondents overall reported satisfaction with this element of the course. These findings differed little between the Colleges with more than half of the respondents at the NCHSR (58 %) and Ada (50 %) expressing satisfaction with the work placement and on-the-job training opportunities they received.

Learners' views on work placement and employer engagement were also asked in the discussion groups; these comments are reported below.

Employer engagement: classroom-based provision

For learners engaged in classroom-based provision at the National Colleges, those studying at NCfN and NCHSR, and Level 3 learners at NCCI had the opportunity to complete a 1-2 week work experience placement as part of their course.¹¹ At NCCI, learners enrolled on Level 4 courses could complete a 6 week work placement. Learners had mixed views on the value of this experience. Some learners at NCfN were only given a few days' notice so were unable to attend and had to have the placement rescheduled. Among those that were able to attend, they stated that they had enjoyed the experience and found it relevant to their course.

Several learners at NCCI had completed their work experience at the Backstage Centre where the College is based. Some learners had the opportunity to get involved in different aspects of the business, which they found was supportive of their development, while others were limited to one role, which they attributed to staff shortages at the Centre.

With regards to the other contact learners had with employers, learners at Ada, NCCI and NCHSR commented that industry representatives had visited the College several times to deliver careers talks. Learners spoke of how these talks had helped highlight potential career trajectories in these businesses, and provided a valuable 'day in the life' insight into particular job roles. They also had the opportunity to speak directly with employers as part of these events and ask specific questions relevant to their interests.

Learners at Ada's 6th form also noted that they received industry mentors for the duration of their course, which provided further opportunities to ask questions and clarify their career aspirations.

'Because they've worked in industry, they give you the opportunity to ask questions and work out where you want to go'

6th form learner, Ada

Employer engagement: apprentices

Apprentices undertaking their off-the-job training with the National Colleges were asked about their views on the working relationship between their employer and the College and whether their course content was applicable to the workplace. Most of the feedback on this topic came from apprentices at Ada and NCfN, given the composition of the focus groups in these settings.

¹¹ Learners at NCHSR were not due to undertake their work experience till the summer months.

Apprentices at NCfN's Southern Hub noted that they had a good level of engagement and guidance from their employer. Some apprentices found that the content of their course had been very theory-focused during their first year, however, and was not applicable to their on-the-job training at their employer. They anticipated this would change as they achieved a good grounding in the subject and could move onto the more technical aspects of their training.

At Ada, views were more mixed. A few apprentices commented that the level of communication between the College and their employer was limited. This meant that their employer was not always aware of what work they were completing at College, and the assignments they had, while College staff were not conscious of the apprentice's work commitments. As such, neither body had a full view of their apprentice's workload and could take this into consideration when deciding what work to assign them. Learners felt that this was more manageable if the content of their college-based learning matched their employer-based work, but for most apprentices in the focus groups the level of join-up was variable.

Apprentices at one of Ada's main industry partners, however, noted that they have a good support network at work. They have regular meetings with their deans to discuss their college work and how their apprenticeship is progressing. They also have individual coaches who they have regular catch-ups with. If they ever have any issues with college work, they are confident they can raise these as part of these discussions.

11.5.Overall learner experience and outcomes achieved

In the survey, learners were asked the extent to which they agree with different statements on the technical skills they are learning as part of their course. Among respondents:

- 74 per cent agreed that they are relevant to the sector;
- 68 per cent stated they are valued by employers in their sector;
- 67 per cent agreed that they are relevant to the areas they are interested in;
- 66 per cent stated that they are valued across sectors; and
- 63 per cent agreed that they are relevant to the job they want to do.

In the discussion groups, learners were asked to reflect on what outcomes they had achieved as part of their education and training at the National Colleges. The main topics discussed included skills gains and how their learning experience had influenced their future educational and/or career aspirations. The findings from these groups are reported below.

Skill gains: classroom-based provision

For learners undertaking classroom based provision, there was variation in the type and nature of the skills they felt they had gained from their course across the National Colleges. At Ada, learners attending the College 6th form felt that they were gaining valuable employability skills in the areas of time management, learning to collaborate with others, as well as independent working. They noted that these outcomes had resulted from the way their learning is structured: in lessons they tend to complete a lot of group work, and independent exercises and activities are set for learners to complete during their own study time.

As noted, in the case of NCCI, some learners undertaking the Level 3 and 4 programmes in technical production commented that they found the course to be more general and without the level of technical specialisation they had expected. As a result, learners did not feel that they were learning technical skills in particular areas of production, at least as part of the formal teaching they received. Where technical skills gains had been made, these had come via peer-learning opportunities. Some learners had industry experience and imparted their technical expertise in particular areas through group projects. While this was beneficial for those without industry experience, those with a greater level of technical competency felt they were not gaining new skills as part of the course.

With regards to the degree level provision at NCHSR, learners felt that they were gaining important skills due to the structure of their course. They had opportunities to develop their academic writing and presentation skills, as these were the main ways in which they were assessed. In terms of their knowledge gains, learners were impressed with how much they had learnt about the rail industry in such a short period. However, as noted, some learners had expected their course to have a more practical focus.

Skill gains: apprentices

Apprentices across the National Colleges were somewhat positive about the skills they felt they had gained as part of their programme of training, particularly with regard to their application in the workplace. Most of the feedback on this topic came from apprentices at Ada and NCfN, given the composition of the focus groups in these settings.

In the case of NCfN, apprentices who were further along in their course programme noted that they had attained a good mix of technical skills and theoretical knowledge as part of their course, as well as a practical understanding of safety culture in the nuclear industry, which is embedded via safety protocols that apprentices follow when attending the College. They felt that attaining this baseline of competencies provided them with a number of career opportunities in the nuclear sector. However, for apprentices in their first year, their main focus had been on developing their theoretical knowledge, and they

expected there to be a more practical focus and to gain technical skills in subsequent years.

For apprentices at Ada, one of the main technical skills gains they had made was knowledge of particular coding languages (i.e. JavaScript). While apprentices' employers did not always use these coding languages in their own software programmes, apprentices highlighted that they were they are able to take an understanding of the principles of coding languages and apply these to those that they were encountering and using in work settings. In this way, the apprentices reflected that the College had taught them to learn and develop their technical skills in the workplace. Other more generic modules taught by the College on ethics and commercial reasoning were also seen to be very useful and directly transferable to the workplace.

Some apprentices at Ada remarked that they expected to develop a more in-depth knowledge of particular subjects during their time at the College, and felt that they were currently learning more as part of the on-the-job training they were receiving. They stated that the quality of their off-the-job training had been satisfactory, however, and they had learnt the basics of what they needed to know to perform their job role.

One apprentice at NCCI commented that they had covered more content than they had expected in a relatively short period. For this individual, technical skills gains included knowledge of how to operate light and sound systems to support theatre productions, which provided them with more work opportunities in the creative sector.

11.6.Future aspirations

In the survey, learners were asked about their plans after finishing the course. Among the respondents:

- 20 per cent want to enter employment in the sector but do not have a job offer yet
- 20 per cent want to continue working with their current employer but move into a new role
- 16 per cent want to continue working with their current employer in the same role they are doing now
- 10 per cent want to go on to further work and job-related courses but do not yet have a place
- 7 per cent want to enter employment in the sector and have a job offer.

Learners were also asked how much they agreed with statements about the course's impact on their future. Among respondents to this question:

- 76 per cent agreed that it will give them valuable insights into their sector

- 74 per cent agreed that it will give them better job prospects in the sector
- 68 per cent agreed that it will help them find a job in the sector
- 68 per cent agreed that it will help them to progress to a different role in the sector
- 68 per cent agreed that it will help them decide whether a career in this sector is right for them

In the focus group research, learners were asked about the extent to which they felt their course experience had affected their future education and career aspirations, and how their education at the National College would support these future transitions. These findings are reported below.

Future aspirations: classroom-based provision

Some learners commented that their experience at the National College had helped to clarify their career aspirations. For instance, a few learners attending Ada's 6th form spoke of how they entered the College knowing that they wanted to work in the technology industry, or that they wanted a career that involved aspects of computer science and maths. For one student, their experience at the College, and specifically the completion of industry projects as part of their course, had helped clarify that they wanted to enter into a data analytics/project management type role. For another, they now knew that they wanted a job that involves coding, which they anticipate will evolve into a more specific career aspiration over time.

Other learners at the National Colleges noted no change in their aspirations. For learners at the Southern Hub of NCfN, they had enrolled on a Level 3 programme at the College knowing that they wanted to use the course as a springboard to an apprenticeship at the Hub's industry partner. The course had not helped to clarify exactly which apprenticeship programme they would like study, however.

Some learners at NCHSR were similarly unclear about the career opportunities their course would provide them with access to. A few were aware that employers who had delivered guest lectures and careers talks at the institution held a qualification from the College in high regard, and felt it would provide them with a competitive edge when applying for apprenticeships etc. but were unable to be specific about the areas of rail they wanted to specialise in. Some of the learners did note, however, that they were only part-way through their course and had not yet covered all the rail disciplines they were due to be taught.

Future aspirations: apprentices

Most of the apprentices interviewed stated that they intended to stay with the same employer after completing their programme of training. A few apprentices at NCfN were bound by their employment contract to continue to work for their employer following their apprenticeship. However, many apprentices wanted to continue in their role and were not bound by their contractual arrangements to do so. The apprenticeship programme they had joined was intended to be a recruitment pipeline for the employers concerned, so they were confident they would be offered a job opportunity at the end and some individuals had already had this confirmed.

Several apprentices were also looking to continue with optional years of their apprenticeship programme. For instance, at Ada the apprentices had the option of completing a third year at the College and achieving a BSc qualification. Their employers have requested further details of what this will involve and asked apprentices to apply internally and make a business case for completing this course. However, a few apprentices commented that details have not been forthcoming from the College about the course content, what apprentice needs to do to progress to this element and the information they need to submit themselves or via their employer as part of this application. They attributed this to the fact that the College had not yet run the third year of this programme for any of their cohorts, so it was a new process.

For apprentices on the HSR and Infrastructure Advanced Technician programme at NCHSR, the 7 different specialised routes they could take as part of the programme had widened their view about the different career paths they could follow upon completing their course.

12. Conclusions and lessons for policy

12.1. Can the National Colleges achieve their intended medium and long-term benefits?

The four National Colleges demonstrate many of the characteristics described in the initial Call for Engagement, which was issued by BIS in 2014 and set out the ambition for the institutions. For example, they have strong employer leadership: there is good involvement of employers in the governance of all Colleges and, in some cases, senior leaders bring considerable industry experience. To varying degrees, employers are supporting delivery of higher-level technical courses by employing apprentices and working with Colleges to deliver project-based work that simulates real working environments. They have also made substantial cash and in-kind contributions to support establishment of the new institutions and provide state of the art equipment. All Colleges have developed new higher-level qualifications and apprenticeship standards, with employers leading this process.

Some of the intended characteristics of National Colleges are still in the early stages of development and are not yet evident. For example, while there are mechanisms in place for the engagement of smaller businesses, most Colleges have not yet worked with these employers to the extent they would like. Colleges are also not yet national in scope and are not operating using a 'hub and spoke model'. They have necessarily started by focussing on developing new provision and recruiting learners from areas local to their main campuses. In addition, given that new apprenticeship standards have been approved only recently, these are not yet fully embedded in sectors. There is work remaining to raise awareness among employers and other providers of new apprenticeships and to establish recognised progression pathways.

All Colleges have industry steering groups, which they have worked closely with during the initial set-up phase. Employers and Colleges are positive about the contributions these groups have made to strategic leadership and curriculum design. Industry steering groups should also be able to support understanding and analysis of future skills needs. However, it is too early to assess the effectiveness of these mechanisms in identifying these needs and this will need to be tested over time. In general, Colleges do not have links to innovation centres that focus on future technologies and processes in the sector, which was part of the original policy ambition.

The ability of National Colleges to deliver intended medium-and longer-term benefits is dependent to a significant degree on having high volumes of learners. This is critical for achieving long-term financial sustainability and also delivering benefits at the intended scale. After the initial set-up phase, across all National Colleges, learner numbers are

below targets in their original business plans and the overall volume of learners is relatively low.

There are a range of reasons for this, including unforeseeable circumstances related to capital build projects (such as changes to regulations that affected costs and delivery schedules). Slippage in delivery of national infrastructure projects that has delayed demand for apprenticeships has also been a major factor. Other reasons the Colleges have made more limited progress against learner number targets than anticipated include: National Colleges not being approved as providers of apprenticeships to non-levy paying employers, difficulties in marketing the location of the College's main site (in one instance), and the lead in time it requires to build trust in new qualifications and persuade parents and learners of the benefits of taking specialist higher-level courses.

The viability of the National Colleges' original learner number targets was also called into question by stakeholders. The Colleges had predicted significant growth during the first 5 years of operations and there was no precedence for similar targets having previously been achieved in the FE sector. Given the various challenges the Colleges have encountered in increasing their learner numbers, it is not possible to assess whether these targets could have been achieved in different circumstances.

In order to deliver the intended medium and long-term benefits, the National Colleges need to expand, in terms of learner numbers and geographical reach. Senior leaders and governing bodies are focussed on this challenging task and understand the need to ensure growth maintains quality and consistency in the curriculum offer. There is also awareness that, to be successful, expansion needs to happen after National Colleges are financially and operationally stable at their current scale.

All Colleges have structured plans to support their path towards financial sustainability and growth. Strategies that some Colleges are developing to increase learner numbers include building local partnerships to help provide student accommodation, building international partnerships to try and attract employers and learners from abroad, trying to diversify their income streams (for example, running short commercial courses alongside their main offer) and minimising operational costs so that they can recruit new staff to support growth. One College is also assessing the possibility of expanding the sectors and sub-sectors it serves to help access a wider learner base. In other Colleges, there are limited plans for growth in the short-term, with the emphasis on achieving stability at the current scale. DfE continues to support Colleges' efforts and is, for example, working with Colleges to address issues around the process for becoming approved apprenticeship providers for non-levy employers. However, these initiatives are in very early stages and the extent to which they will succeed in increasing learner numbers is unclear.

There are some key risks that could affect the successful expansion of National Colleges if not carefully managed. For example, staff recruitment is a challenge for all the Colleges. In most cases Colleges have been able to recruit the core staff they had planned for in their original business plans. However, they have not had the financial resources to expand teaching, marketing and employer engagement teams to enable growth. This has had implications for learners' experience at the Colleges, with high staff workloads and limited availability occasionally having a negative impact on learner perceptions of the quality of teaching. Furthermore, staff shortages and, in some cases, turnover, had contributed to a perceived lack of organisation, clarity and consistency in course delivery for learners.

Colleges are using a range of strategies to address staffing issues, including as stated using temporary, short-term industry staff to deliver parts of courses and working with partners to help promote the College. Although these strategies have helped to alleviate effects of staffing shortages, they do not address the issue of needing more staff to promote the Colleges, recruit employers, and teach and support learners. Further, although National Colleges have all been able to recruit some staff with recent and relevant industry experience, they are affected by challenges experienced by the FE sector more widely, such as ability to match industry salaries to attract dual professionals who combine industry and teaching backgrounds and skills.

Completion of the remaining capital build projects is also a risk and without the increased space and facilities these projects would bring, the affected Colleges are likely to struggle to grow their learner intake significantly.

Beyond staffing and the capital build projects, other risks to the National Colleges delivering the intended benefits relate to the uncertainty of the wider socio-economic context, particularly in relation to the UK's exit from the European Union. The close links with employers are a strength of the institutions but they also mean the Colleges are likely to be particularly vulnerable to economic changes in the sectors they support. Any future economic recession would entail risks of reductions in employer investments, which could affect National Colleges considerably. Similarly, any significant changes to the government's energy or infrastructure strategies and investment would affect the Colleges.

Overall, after a challenging and sometimes delayed set-up phase, the National Colleges appear to be starting to provide benefits, with small-scale, emerging qualitative evidence that employers believe National Colleges are helping to fill gaps in existing provision and develop skills better suited to their needs. If learner numbers can be increased to achieve scale and long-term financial sustainability, the Colleges may be able to contribute effectively to medium and long-term ambitions such as increased parity of esteem

between technical and academic education and improved responsiveness to employers' skills needs.

12.2. Implications for on-going monitoring and delivery

The risks to increasing learner numbers will need to be managed carefully by governing bodies and senior leadership teams. The initial set-up phase appears to have been successful in establishing sound governance structures, with a breadth of expertise on Boards. Ensuring these structures remain fit for purpose and that additional expertise is brought in to respond to arising challenges will be important. This includes ensuring that all the Colleges have detailed knowledge and experience of FE finances at Board level.

Expertise from within DfE on capital investment and land acquisition has been valued by Colleges in the latter stages of the set-up phase. This needs to continue to be provided over coming months to ensure that Ada's capital project can take place as this is a key factor in the College's ability to progress and grow.

A strong Ofsted rating is likely to help Colleges to attract more learners and sell their offer. So far one College has undergone inspection, achieving a successful rating of 'Good' overall, with Outstanding features. Other Colleges must be equally successful if intended benefits of the institutions are to be delivered. College Boards appear to be well-focused on the strategic milestone of their first Ofsted inspection and maintaining this focus will be critical.

The challenges faced in relation to attracting industry professionals to FE are not unique to National Colleges. DfE should as far as possible share with Colleges learning and knowledge about effective means of overcoming these issues, for example, from the Taking Teaching Further programme.

The evidence of employer leadership in curriculum development is encouraging. As Colleges make the transition from their initial set-up phase to on-going delivery, senior leaders and Boards should monitor whether employer engagement mechanisms (such as steering groups and advisory panels) provide sufficient insights into future skills needs, as well as current needs.

Employer satisfaction with National College learners is a key measure of success and there are positive, early signs that new provision is meeting employers higher level skills needs. The existing forums and governance structures provide a means for employers to give feedback but there may be value in DfE reviewing monitoring requirements to check that this information is fed back systematically. Consideration should also be given in future, when Colleges are more established and provision has expanded, to gathering independent feedback from employers.

Learner feedback should also be regularly monitored by the National Colleges and steps taken to ensure that senior leadership and governors give attention to the quality of the learner experience as they seek to increase the scale of delivery. Learners have had mixed experiences during the Colleges early implementation, and various issues were cited in terms of how their course was resourced and organised, and how well it met their initial expectations. An enhanced learner experience will support further enrolments at the Colleges by providing evidence that can be used in the wider marketing of the College as well as increasing word of mouth referrals. The College should also ensure that their marketing provides an accurate idea of what content learners will cover and the facilities and equipment they will have access to as part of their course as well as the timings of delivery.

Similarly, as learners complete their courses, Colleges and DfE should monitor their destinations to understand whether the intended further learning, employment and progression outcomes are achieved.

12.3.Lessons for future policy

A number of valuable lessons have been learned in the initial set up phase of the National Colleges which should inform similar future policy initiatives such as the Institutes of Technology:

- Establishing new educational institutions without start-up investment and grants and relying instead on working capital loans and employer investment is not standard practice within DfE and initially impeded the Colleges' ability to meet learner targets and grow. Given that start-up grants from central government were not available, more detailed consideration could have been given to other models such as evolving new institutions from existing education and training providers. Overall, the NCfN has experienced fewer challenges than the other Colleges because it was built on two strong existing colleges that have been able to provide much of the wider infrastructure required in setting up a new institution, such as business development and marketing, and covering some of the College's overhead costs. This lesson appears to have been applied to the design of the IoTs, which will be created from existing FE colleges and Higher Education Institutions.
- An inherent risk with a specialist institution is that the scope is so narrow that learner numbers will be too low to achieve a broad base and achieve financial sustainability. A narrow definition also makes other risk factors more difficult to manage and potentially leads to less resilient organisations. The NCHSR in particular appears to have been affected by its narrow conceptualisation and a wider remit from the start could have avoided some of the difficulties it has experienced in relation to delays with HS2.

- In order to successfully establish a new employer-led institution, the expertise of industry representatives needs to be combined with that of educational specialists with knowledge and experience of the FE sector and its funding systems. The National College founding employers required support to successfully navigate educational processes and systems and, while they obtained this eventually, it would have benefitted the Colleges if a requirement for FE expertise had been in the initial call for engagement.
- The success of new institutions in part relies on existing educational policies, funding streams and systems creating an enabling environment. More work could have been undertaken at the early design stage of the policy to understand adjustments required to existing processes to accommodate the new National Colleges (i.e. the payment of ESFA funding for 16-19 and apprenticeship provision in arrears; apprenticeship funding reform and the associated procurement of services to deliver training for non-levy paying employers). While recognising some policy shifts could not have been foreseen, if more time had been invested early on to analyse the potential impact of existing policies and to involve relevant stakeholders in findings solutions, it is likely there would have been fewer challenges.
- High-quality teaching staff with industry experience can be difficult to obtain, especially in buoyant and/or specialist sectors of the UK economy where salary expectations are high. A consistent message from the National Colleges is that the current funding environment in the Further Education sector does not enable them to offer competitive wages. Some consideration therefore needs to be given to how IoTs can attract quality teaching staff to meet their delivery ambitions. One suggestion from the National Colleges was that employer contributions could be explicitly sought to co-fund salaries for senior teaching positions in order to bring them closer in line with industry averages.

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