

Construction Technical Excellence Colleges (CTEC) Theory of Change

Introduction

This paper presents Theories of Change for each of the five CTEC objectives and for the programme overall. The purpose of the Theory of Change is to explore and map the different activities that are being undertaken as part of the programme and to identify the causal link between these activities and project outputs, outcomes and impact. In doing so it provides a framework for monitoring programme delivery and progress towards impact.

The Theories of Change were developed through interviews with the 10 CTECs and other local partners, including employers, strategic authorities. These were then tested in workshops firstly with the DfE and secondly with the network of CTECs.

Background and rationale

Construction is an important sector in England, accounting for 6.3% of the workforce (1.9 million workers)¹ and contributing over £130 billion to the England economy². The sector is diverse, containing a mix of both entry level roles (site operatives), skilled craft trade roles (such as bricklaying, carpentry) administrative and management roles (e.g. site management, project management) and professional roles (e.g. quantity surveying, architecture, civil engineering and town planning).

The construction sector commonly experiences skills shortages and gaps. This in part reflects the cyclical nature of construction – as a sector heavily reliant on public expenditure and business confidence, it is often the first sector affected by an economic downturn. Additionally, the skills needs of the sector have also changed drastically over the last five years, driven by increasing demand for clean technologies (e.g. Ground Source Heat Pumps and retrofit), technological advancements (Business Information Modelling, modern methods of construction) and changes to business regulations driven by findings from the Grenfell Enquiry. These skills shortages and gaps affect sector productivity and growth, and are exacerbated by a lack of diversity in the sector – only 11% of sector workers are women³ and 5.4%⁴ are from ethnic minority communities.

Addressing these skills shortages and gaps will provide impacts which go beyond improving the productivity and profitability of the construction sector. An effective and adaptive construction sector is also necessary to achieve the UK Government target of 1.5 million newly built homes in England this Parliament and 5 million upgraded homes over 5 years. Moreover, the construction sector also plays a key role in supporting Government's zero emissions target for 2050 by lowering the carbon footprint of buildings.

The CTEC programme was developed to tackle these skills shortages and gaps. A leading construction training college in each region was selected, to become a CTEC with the responsibility for increasing the breadth and quality of construction provision to ensure it reflects local employer and sector needs. CTECs have five objectives:

- Objective 1: Boosting construction skills provision in response to employer need
- Objective 2: Raising the quality of teaching and curricula, including CPD for staff
- Objective 3: Leveraging greater employer engagement and investment

¹ ONS (2026) [JOBS05 Workforce jobs by region and industry \(seasonally adjusted\)](#)

² ONS (2025) [Regional gross value added \(balanced\) by industry: all International Territorial Level \(ITL\) regions](#)

³ See <https://www.cic.org.uk/policy-and-public-affairs/diversity-and-inclusion>

⁴ Ibid

- Objective 4: Collaborating with other FE providers to enhance provision and quality
- Objective 5: Promoting clear pathways into employment and higher-level education

The regional CTECs were to be supported by a national CTEC.

The CTEC programme commenced in September 2025 but the first few months up to April 2026 has involved planning and co-design. The delivery of activities is due to start from April 2026.

Programme inputs

To deliver programme activities, the DfE has earmarked 100m over the course of Parliament to the programme. This comprises £80 million in capital funding (used to purchase equipment and premises) and £20 million in revenue funding to fund staffing and delivery costs. This is split across the 10 CTECs.

Another key input into the programme is the expertise of the CTECs themselves. Providers that were selected to become CTECs had to demonstrate that they already had a high volume of enrolled construction learners (they had to comprise over 5.8% of the college's total learners or have at least 525 enrolled construction learners). They were also expected to have above average achievement rates for construction learners (over 84%) and have experience in delivering high quality construction provision as a partner of a local Institute of Technology, as a World Skills Centre of Excellence, through entering construction learners on World Skills or CITB competitions or delivering local priority construction programmes. As a result, it was expected that they would have substantial expertise and sector links that they would bring to the programme.

In the workshops, it was also emphasised that CTECs should build on existing sector intelligence and knowledge of construction skills gaps. This includes the expertise of strategic authorities, local employers, professional bodies and other sector stakeholders. Additionally, they should also be aligned to support regional skills priorities as set out in Local Skills Improvement Plans (LSIPs).

Programme activities, outputs and outcomes

The programme activities, outputs and outcomes varied for each of the programme objectives. These are set out below.

Objective 1: Boosting construction skills provision in response to employer need

Activities

In the interviews with CTECs it was found that all were commencing this task by initially identifying what the construction skills needs were in their local area. This was an understandable first step in order to boost existing construction provision. This included:

- Targeted conversations with employers and strategic authorities in their local area.
- A review of the provision available across the region to identify gaps, 'cold-spots' (areas where there is a particular lack of provision) and any areas where there is an oversupply.
- Engagement with partner providers to understand their offer.

In some areas, this research included more wider engagement with Independent Training Providers (ITPs). They noted that while the availability of FE college construction provision in their local area was well-known, they had limited understanding of what private provision was available, including provision that was fully funded by employers.

After identifying needs, the next step for CTECs was to develop provision that addressed provision gaps in their local area. This included:

- Expanding existing in-college provision in their local area where there is unmet demand. Most CTECs reported that they had a lack of available space to meet learner demand. They reported that construction is a very resource and space heavy subject to deliver, and therefore they had to limit spaces which meant they had waiting lists. To address this some CTECs were planning to develop new facilities through accessing capital funding.
- Expanding apprenticeships. Apprenticeships is another area where CTECs noted high learner demand, but places were restricted due to limited apprenticeship placements being offered by employers.
- Ensuring sufficient availability of more specialist provision. Some CTECs noted that there are gaps in construction provision in some specialist areas. Examples reported in some areas were retrofit, scaffolding and plant operations. A priority was in addressing this issue. In some regions it was noted that there may not be sufficient demand for this provision to be available in all local colleges, but it was important to have one college that could offer these programmes across the region.

In most CTECs these needs were still however being identified and therefore may evolve in future.

Outputs and outcomes

The key **outputs** that result from the activities delivered under Objective 1 includes changes to how the local skills system operates to address skills needs. This includes:

- Employers and providers have shared understanding of local priorities for construction.
- Stronger and sustained relationships between employers and providers lead to more coherent planning and long-term joint working.
- Employers and providers adopt more collaborative approaches to addressing sector skills needs.
- Local skills priorities are articulated in clear strategic plans that are used to guide local and regional construction provision CTECs and partners.

This in turn would be expected to lead to:

- Local construction training provision covers a broader range of courses, qualification levels and subject specialisms.
- More training is available at higher levels across the local area.
- More learners successfully complete suitable construction programmes that align with their career aspirations, including both new entrants and the existing workforce.

In terms of **short-term outcomes**, it was an expectation that the achievement of the above outcomes would reduce skills gaps and shortages in the sector, while also increasing participation in construction training. For providers, it would increase their capacity to respond to emerging skills needs, and for construction learners it would ensure they acquire skills which better meet industry needs.

In the **medium-term, the outcomes** the programme was expected to achieve include improved productivity (caused by a better skilled workforce), higher regional employment as more people enter the sector, and higher sector pay and progression through improved access to industry relevant upskilling opportunities.

The inputs, activities, outputs, outcomes and impacts for Objective 1 are presented in the Theory of Change below.

Figure 1.1 Theory of Change for Objective 1: Boosting construction skills provision in response to employer need

Inputs and activities	Outputs	Short-term Outcomes	Medium-term outcomes	Impacts
<p>Inputs</p> <p>Core funding for each CTEC</p> <p>Capacity building funding</p> <p>Existing CTEC infrastructure, expertise and networks</p> <p>Coordination and knowledge sharing support from national CTEC</p> <p>Sector and local skills intelligence maintained and shared between sector stakeholders, employer representative bodies and Strategic Authorities</p> <p>CTEC Activities</p> <p>Maintain coherent and efficient stakeholder engagement, building on their existing relationships and consultation mechanisms</p> <p>Targeted activities that bring together providers and employers to support active, collaborative working on construction provision</p> <p>Liaising with employers, sector bodies and Strategic Authorities to understand the current and future priority skills needs in construction</p> <p>Reviewing the local offer through data and provision mapping to identify gaps, ‘cold spots’ and oversupply</p> <p>Using LSIPs and other existing local strategies and skills plans to inform the development of provision</p> <p>Developing new employer- provider partnerships where necessary to support major infrastructure projects</p>	<p>Relationships across the regional employer-provider networks are stronger and sustained, supporting coherent planning and long-term joint working</p> <p>Employers and providers adopt more collaborative mindsets and behaviours, increasingly working together to shape construction provision</p> <p>Employers and providers have shared understanding of local priorities for construction</p> <p>Clear strategic plans are agreed and actively used to guide local and regional construction provision CTECs and partners have an improved understanding of the strengths and gaps in the local offer</p> <p>New training courses are developed and delivered on construction priority skills</p> <p>Local construction training provision covers a broader range of courses, qualification levels and subject specialisms</p> <p>More training is available at higher levels across the local area</p> <p>More learners successfully complete suitable construction programmes that align with their career aspirations,</p>	<p>National and regional level</p> <p>Reduced skills gaps among construction employers</p> <p>Fewer unfilled vacancies</p> <p>Higher participation in training among construction workers, including by under-represented groups</p> <p>Provider level</p> <p>Increased provider capacity to meet local needs</p> <p>Improved preparedness to anticipate and respond to emerging skills needs, through increased capacity, stronger relationships and shared intelligence</p> <p>Increased income through more learners starting and completing provision</p> <p>Individual</p> <p>Learners choose to enter the sector with appropriate preparation, after completing construction courses and gaining</p>	<p>Improved employer productivity</p> <p>Higher employment rates in the region</p> <p>Higher sector employment and pay progression</p>	<p>40,000 people to undertake construction programmes in CTECs and partner providers and acquire construction skills</p> <p>Contribution to Government hitting its target of 1.5 million newly built homes in England this Parliament and 5 million upgraded homes over 5 years</p> <p>Contribution to Government meeting its 2050 net zero target</p> <p>Increased national productivity</p> <p>More major infrastructure projects</p> <p>Increased competitiveness of the UK economy</p> <p>Increased social mobility</p> <p>Increased wealth</p>

Inputs and activities	Outputs	Short-term Outcomes	Medium-term outcomes	Impacts
<p>Developing new and accessible construction provision that respond to employer skills need as well as learner demand</p> <p>Mobilising 'spoke' local providers to develop new programmes which fill gaps in provision and reduce oversupply of particular training offers where they exist</p>	<p>including both new entrants and the existing workforce</p>	<p>required skills and knowledge for construction roles</p>		

Objective 2: Raising the quality of teaching and curricula

Activities

For this objective, most CTECs reported undertaking a structured approach which initially involved identifying regional skills and labour needs and then addressing them. As such, when interviewed, most CTECs were conducting surveys and having conversations with other local providers to understand their skills needs.

To raise the quality of teaching and curricula, CTECs stated they planned to deliver the following activities:

- Provide informal knowledge sharing through sharing resources and undertaking activities such as learning walks. This is supported by the knowledge sharing platform developed by the national CTEC.
- Delivering teacher training. Some CTECs already had plans for this. Most planned to deliver short programmes addressing specific areas of interest, including new technological advances and adaptations to curricula.
- Working with employers to identify improvements in existing programmes. Some CTECs already had in place concrete plans for doing this.
- Develop employer relationships to leverage greater employer involvement in construction provision. This could include project-based learning as well as expert talks provided by people in industry and teacher exchanges. CTECs were however in an early stage of planning how to do this.

For some CTECs, raising the quality of teaching and curricula was also reliant on capacity building funding, as they aimed to purchase new equipment that could improve the quality of their programmes, such as more modern diggers and plant equipment that better reflect those that are used by industry.

Additionally, some CTECs referenced hoping to further utilise WorldSkills UK input and resources within their plans to improve teacher CPD. Presently, WorldSkills UK are working closely with the national CTEC to finalise a CTEC WorldSkills UK offer (see Box 1). With the offer not yet formalised and confirmed, CTECs do not yet have concrete plans for incorporating WorldSkills UK into their activities, although some providers that were Centres of Excellence already had train the trainer resources they could utilise as part of this task.

Box 1: WorldSkills UK national and regional offers for CTECs (subject to change)

- National offer: Co-ordinated through Bedford College Group, this offer would involve 3 endorsed trainers per region receiving access to masterclasses throughout the year and support for local competition endorsement.
- Regional offer: Co-ordinated directly with the CTEC Hub, WorldSkills UK would provide 5 endorsed trainers (per year, who are expected to cascade the learning locally) a residential train-the-trainer programme, with access to masterclasses throughout the year. This offer is also expected to involve support for local competition endorsement, a bespoke programme of competition tours and workshop at WorldSkills UK National Finals for construction heads across the region, alongside high-performance coach available for mentoring throughout the year.

Some CTECs also reported that they wanted to take steps to boost recruitment into the sector. However, few had yet developed concrete plans for doing so.

Outputs and outcomes

As a result of the support provided to construction teachers and providers, it was expected that this would lead to **outputs** in local stakeholders having a better understanding of the needs of the construction teaching workforce and teachers having more access to CPD and opportunities to collaborate with other teachers. This in turn was expected to lead to more teachers undertaking CPD/ self-reflection and therefore developing more specialist knowledge which would feed into the design of their programmes.

The **short-term outcomes** that were expected for this objective were linked to teachers being better equipped to deliver industry-aligned curriculum content and teaching practice being more adaptive to industry needs, and effective in meeting current and emerging skills priorities. This was expected to increase teacher confidence and proficiency, which making them feel better equipped to progress in their organisation.

Supporting teacher professional development was also felt to have a substantial impact on providers, by helping them increase teacher retention, as teachers feel that they are supported and have more opportunities to progress. This in turn would enable the FE sector to have fewer long-term unfilled vacancies.

In the **medium term, the expected outcomes** would be improved pass rates and achievements of learners, improved pay and progression of teachers, and an increased proportion of construction learners entering and staying in the construction sector because they feel better prepared and more work ready.

The inputs, activities, outputs, outcomes and impacts for Objective 2 are presented in the Theory of Change below.

Figure 1.2 Theory of Change for Objective 2: Raising the quality of teaching and curricula, including CPD for staff

Inputs and activities	Outputs	Short-term outcomes	Medium-term outcomes	Impacts
<p>Inputs</p> <p>Core funding for each CTEC</p> <p>Existing CTEC infrastructure, expertise and networks</p> <p>Coordination and knowledge sharing support from national CTEC</p> <p>Sector and local skills intelligence maintained by sector stakeholders, employer representative bodies and Strategic Authorities</p> <p>Activities</p> <p>Engaging providers to understand their staff development needs</p> <p>Engage employers to provide industry placements for teachers and release staff to contribute towards the provision of construction curricula (e.g., through the Teacher Industry Exchange Programme)</p> <p>Working with spoke providers to share feedback and good practice (e.g., platforms for knowledge exchange, staff walks),</p> <p>Delivering CPD courses aligned with current and emerging curriculum priorities</p> <p>Incorporating learning from WSUK into CPD planning</p> <p>Reviewing curricula and short courses with employers to identify areas of improvement, and collaboratively develop relevant provision</p> <p>Targeted sector promotion and enhancement of induction practices to support teacher recruitment and retention</p> <p>Purchasing specialist equipment, ensuring teachers have access to the relevant tools to deliver necessary skills provision</p>	<p>Local stakeholders have improved understanding of regional skills gaps among the construction teaching workforce</p> <p>Teachers have improved access to a wider range of CPD</p> <p>Teachers have more opportunity to collaborate and work with other teachers</p> <p>More teachers have specialist knowledge to teach construction skills relevant to need</p> <p>More construction tutors complete CPD focused on technical and pedagogical skills</p> <p>Construction tutors spend more days on CPD/self-reflection</p> <p>Construction curricula and teaching better reflect industry needs</p>	<p>National and regional level</p> <p>Construction teachers are better equipped to deliver industry-aligned curriculum content</p> <p>Construction teaching practice across regions becomes more adaptive and effective, through ongoing upskilling and best practice</p> <p>Construction teachers are better supported to improve their practice</p> <p>Learners have increased access to high-quality construction provision</p> <p>Provider level</p> <p>Increased teacher retention</p> <p>Fewer long-term unfilled vacancies</p> <p>Individual level</p> <p>Increased teacher confidence, proficiency and readiness to deliver construction training effectively, including in new and emerging curriculum areas</p> <p>Teachers feel better equipped to progress in FE construction roles, supported by strengthened opportunities for professional learning and advancement</p>	<p>Improved pass rates and achievement among learners (incl. higher proportion gaining high pass/merits)</p> <p>Increased pay and employment progression among teachers</p> <p>Higher conversion of construction graduates into construction employment as learners feel better prepared for industry expectations, and are more work-ready</p> <p>Employers have a stronger local talent pipeline</p>	<p>Contribution to Government hitting its target of 1.5 million newly built homes in England this Parliament, and 5 million upgraded homes over 5 years</p> <p>Contribution to Government meeting its 2050 net zero target</p> <p>Increased national productivity</p> <p>Increased competitiveness of the UK economy</p> <p>Increased social mobility</p> <p>Increased regional and national wealth</p>

Objective 3: Leveraging greater employer engagement and investment

Activities

There was a cognisance across all CTECs that engaging employers was a core 'enabler' in being able to achieve the objectives of the CTEC programme. Most had already been establishing consultation/governance boards that brought together employers and providers. Most were able to build on some existing networks that they had maintained over many years with local employers, which they planned to expand.

Some CTECs also reported plans for structured consultations with local employers to understand skills needs. This included roundtable discussions as well as surveys and visits. Some were complementing this with research to better understand the employer landscape, including the size of different local construction markets (civil, domestic, commercial) and areas where employers believed they had the greatest skills shortages and gaps. In all CTECs, this was building on their existing local knowledge.

Most CTECs also aimed to engage employers to deliver T Levels industry placements, apprenticeships and traineeships. They reported that shortages in employer placements were limiting their provision in this area. Some CTECs noted that this was promoting their benefits and in some cases 'demystifying' them. This could include communicating the new flexibilities that are being introduced to the End-point assessment process, which some employers reported as being a major barrier to taking on apprenticeships because they were felt to be too onerous.

Outputs and outcomes

For Objective 3, the **outputs** are for employers to have a better understanding of their local FE offer and taking increasing ownership of its development. It was expected that this in turn would result in more employers providing apprenticeships and industry placements, investing in training costs and co-designing courses. In terms of infrastructure, it is also expected that the programme would lead to standing mechanisms within each region for structured employer engagement.

The achievement of these outputs was expected to lead to **short-term outcomes** in terms of increased employer investment in, and take-up of, skills training, while also improving the quality of construction programmes by ensuring employer needs are adequately taken into account. At a provider level, it was expected that there would be an increase in income and access to greater support as a result of strengthened local employer networks. This was ultimately expected to benefit learners by enabling them to develop more industry-relevant skills and increasing access to work-based learning.

In terms of **medium-term outcomes**, it was expected that the greater involvement of employers in construction programme design and delivery would lead to higher flow of construction graduates into construction employment, alongside learners feeling better prepared for industry expectations and be more work ready. This in turn was expected to result in employers across the regions have their skills needs met more effectively and a stronger local talent pipeline, while providers have increased capacity and ability to meet employers' needs.

The inputs, activities, outputs, outcomes and impacts for Objective 3 are presented in the Theory of Change below.

Figure 1.3 Theory of Change for Objective 3: Leveraging greater employer engagement and investment

Inputs and activities	Outputs	Short-term outcomes	Medium-term outcomes	Impacts
<p>Inputs</p> <p>Core funding for each CTEC</p> <p>Existing CTEC infrastructure, expertise and networks</p> <p>Coordination and knowledge sharing support from national CTEC</p> <p>Sector and local skills intelligence maintained by sector stakeholders, employer representative bodies and Strategic Authorities</p> <p>Activities</p> <p>Developing and maintaining consultation/governance boards involving employers and providers</p> <p>Holding structured consultation and discussions with local employers to understand local skills needs</p> <p>Developing and promoting full-cost recovery provision for employers</p> <p>Developing understanding of the local employment landscape</p> <p>Engaging employers to demystify and promote apprenticeship, training and work placement opportunities</p> <p>Supporting employers, including SMEs, to reduce barriers to providing apprenticeships or work placement opportunities</p> <p>Engaging employers in curriculum design and review</p>	<p>Employers have better understanding of the local FE training offer and options for post-16 provision</p> <p>Employers increasingly take ownership and support the development of the local construction offer</p> <p>Standing mechanisms are established for structured employer engagement</p> <p>More employers are providing apprenticeships and industry placements</p> <p>More employer investment in training costs</p> <p>More co-designed courses</p>	<p>Regional level</p> <p>Increased employer investment in skills training</p> <p>More employers access training delivered by local FE providers, on a more frequent basis</p> <p>Employer needs are incorporated more effectively into the design and delivery of construction programmes</p> <p>Provider level</p> <p>Increased income through more learners starting and completing provision, supported by greater employer demand</p> <p>Providers have access to greater support as a result of strengthened local employer networks</p> <p>Individual level</p> <p>Learners develop more industry-relevant skills</p> <p>More learners have industry placement experience, improving access to apprenticeships or T Levels</p>	<p>Higher conversion of construction graduates into construction employment</p> <p>Learners feel better prepared for industry expectations and more work-ready.</p> <p>Employers across the regions have their skills needs met more effectively</p> <p>Employers have a stronger local talent pipeline</p> <p>Providers have increased capacity and ability to meet employers' needs</p>	<p>Contribution to Government hitting its target of 1.5 million newly built homes in England this Parliament, and 5 million upgraded homes over 5 years</p> <p>Contribution to Government meeting its 2050 net zero target</p> <p>Increased national productivity</p> <p>Increased competitiveness of the UK economy</p> <p>Increased social mobility</p> <p>Increased wealth and economic growth</p>

Objective 4: Collaborating with other FE providers to enhance provision and quality

Activities

Engaging other regional providers was also understood to be an essential requirement in order to achieve CTEC programme objectives. Most CTECs had already put in place approaches to develop regular 'lines of communication' with other regional providers (e.g., through monthly/termly meetings) to plan local construction provision.

Building relationships with other providers was seen as a key activity to develop a coordinated regional construction offer. Some CTECs noted that this would be challenging, as ultimately providers were in competition with each other for learners. However, some areas already had examples of provider networks where construction leads met regular to discuss sector priorities, showing that this approach could be effective. Additionally, they felt that the provision of CPD provision and resources could help build this relationship, as it means regional partners feel they 'get something back' from CTECs.

Outputs and outcomes

The **outputs** associated with Objective 4 are for regular meetings to be held with other providers, providers signing up to support the priorities their regional CTECs, and a mapping of regional construction programmes. This is expected to lead to new construction programmes being developed by FE providers regionally that are aligned to CTEC priorities.

In terms of **short-term outcomes**, it was expected that effective collaboration with other FE providers would lead to greater alignment between provision and national, local and regional priorities (as set out in Skills Strategy, LSIPs, SA employment strategies) and greater trust and coordination between construction providers. This in turn was expected to lead to a more responsive and accessible local construction offer, improved application of best practice, more complementary and less duplication in regional provision, and greater specialist provision that learners can be signposted to.

In the **medium term, outcomes** were expected to include more efficient use of public post-16 education funding, with a wider range of construction programmes available across different regions. As a result, it is also anticipated that employers will have a stronger talent pipeline, in turn resulting in their skills needs being met more effectively.

The inputs, activities, outputs, outcomes and impacts for Objective 4 are presented in the Theory of Change below.

Figure 1.4 Theory of Change for Objective 4: Collaborating with other FE providers to enhance provision and quality

Inputs and activities	Outputs	Short-term outcomes	Medium-term outcomes	Impacts
<p>Inputs</p> <p>Core funding for each CTEC</p> <p>Existing CTEC infrastructure, expertise and networks</p> <p>Coordination and knowledge sharing support from national CTEC</p> <p>Sector and local skills intelligence maintained by sector stakeholders, employer representative bodies and Strategic Authorities</p> <p>Activities</p> <p>Establishing regular 'lines of communication' with other regional providers (e.g., through monthly/termly meetings) to plan local construction provision</p> <p>Building relationships with unengaged providers operating in the area, including ITPs, to include their capabilities in local planning</p> <p>Mapping existing provision, expertise and specialisms across the regional provider, identifying gaps, 'cold spots' and oversupply</p> <p>Sharing intelligence on FE workforce skills/recruitment needs and employer needs</p> <p>Sharing CPD resources with providers regionally</p> <p>Developing a shared understanding of regional construction skills needs and priorities across providers</p> <p>Mobilising providers to meet regional skills needs</p> <p>Providers sharing best practice on effective approaches ('what works')</p>	<p>Regular meetings held with other providers</p> <p>Providers sign up to support the priorities of regional CTECs</p> <p>Regional construction offers and specialisms are mapped and gaps identified</p> <p>New programmes are developed by FE providers regionally that are aligned to CTEC priorities</p>	<p>National level</p> <p>Greater alignment between provision and national, local and regional priorities (as set out in Skills Strategy, LSIPs, SA employment strategies)</p> <p>Greater trust and coordination between construction providers</p> <p>Regional level</p> <p>More responsive local offer that can respond to new and emerging skills needs</p> <p>Improved application of best practice, as a result of stronger knowledge exchange between local providers</p> <p>A more complementary local provision offer, with reduced duplication, increased specialisation, generating efficiencies for providers</p> <p>More involvement of ITPs to support the regional skills agenda</p> <p>Increased signposting and brokerage of learners between providers</p> <p>Learners in FE 'cold spots' (e.g., rural areas) have better access to high-quality construction skills provision</p>	<p>More efficient use of public post-16 education funding to support construction provision</p> <p>A wider range of construction programmes available in regions</p> <p>Employers have a stronger local talent pipeline</p> <p>Employers across regions have their skills needs met more effectively</p>	<p>Contribution to Government hitting its target of 1.5 million newly built homes in England this Parliament, and 5 million upgraded homes over 5 years</p> <p>Contribution to Government meeting its 2050 net zero target</p> <p>Increased national productivity</p> <p>Increased competitiveness of the UK economy</p> <p>Increased social mobility</p> <p>Increased wealth</p>

Objective 5: Promoting clear pathways into employment and higher-level education

Activities

There was a general consensus of the need to promote clearer pathways into employment, due to the sector appearing to be off-putting to some groups of learners (e.g. women and ethnic minority learners) and a perceived lack of understanding of the diversity of roles in the sector (especially off-site roles). Moreover, most CTECs acknowledged a need to fix the 'leaky pipeline' – the concept there are a too many learners undertaking construction training that do not progress to work in the sector. However, the approaches that CTECs prioritised to address this varied.

Some CTECs were initially focusing on directly addressing the leaky pipeline. For some, it was in enhancing the delivery of provision that had a clear 'line of sight' to employment, such as bootcamp-style programmes, while also ensuring the development of work readiness skills in construction programmes. Some also stated doing this through working with jobcentres.

Some CTECs also reported undertaking activities that supported progression to higher level skills. This includes developing transitional programmes to HE in partnership with Higher Education Institutions.

A few CTECs reported aiming to boost awareness activities for younger age groups, before they made decisions on what careers they wanted to pursue. This included providing materials and awareness sessions to schools (i.e., CEIAG) alongside organisations providing careers advice (e.g., charities and jobcentres), employers and individuals, with information on different sector roles, pathways and entry routes, while also promoting training options and their associated career pathways across all levels to individuals and employers.

Outputs, outcomes and impacts

For Objective 5, the expected immediate **outputs** of the programme included better awareness and improved perceptions of the construction sector among learners and employers, including of opportunities and pathways. It was felt this would result in a more diverse student cohort across all levels of construction courses and more learners (including from under-represented groups) progressing to HE construction programmes, and then employment.

The **short-term outcomes** are expected to be an increased number and retention of entrants to the construction sector, as more learners choose to enter the sector and do so more quickly because they have a clearer understanding of sector entry routes. This in turn is anticipated to lead to a more diverse and qualified construction workforce, including more workers with higher level skills, which will reduce skills gaps in the sector

The **medium-term outcomes** of the programme are expected to include improved employer productivity, higher employment rates in the region, and a more diverse construction workforce, which reflects the communities that employers are working in. It is also expected to lead to regions having a higher qualified workforce and improved perceptions of the construction sector.

The inputs, activities, outputs, outcomes and impacts for Objective 5 are presented in the Theory of Change below.

Figure 1.5 Theory of Change for Objective 5: Promoting clear pathways into employment and higher-level education

Inputs and activities	Outputs	Short-term outcomes	Medium-term outcomes	Impacts
<p>Inputs</p> <p>Core funding for each CTEC</p> <p>Existing CTEC infrastructure, expertise and networks</p> <p>Coordination and knowledge sharing support from national CTEC</p> <p>Sector and local skills intelligence, by sector stakeholders, employer representative bodies and Strategic Authorities</p> <p>Existing collaborative networks and relationships with organisations providing and facilitating careers advice (e.g., jobcentres and local charities), and organisations supporting under-represented groups</p> <p>Activities</p> <p>Providing materials and awareness sessions to schools (i.e., CEIAG) alongside organisations providing careers advice, employers and individuals, with information on different sector roles, pathways and entry routes</p> <p>Working with jobcentres to provide training and work opportunities for those out of employment (e.g., bootcamps)</p> <p>Conducting research to understand the enablers and barriers to entering the sector faced by under-represented groups</p> <p>Working with HE providers to support accessible progression routes from regional FE programmes, including additional transition programmes to 'bridge the gap'</p> <p>Expanding provision that has a clear 'line of sight' to employment or higher-level routes (e.g., apprenticeships) and removing or modifying sector provision that does not</p> <p>Promoting training options and their associated career pathways across all levels to individuals and employers</p> <p>Promoting training supporting work readiness, including to assist with self-employment in construction</p>	<p>Better awareness and improved perceptions of the construction sector among learners and employers, including of opportunities and pathways, which enables learners to make more informed career choices.</p> <p>More diverse student cohort across all levels of construction courses</p> <p>More learners (including from under-represented groups) progressing to HE construction programmes</p> <p>Higher proportion of construction FE and HE learners (including from under-represented groups) entering employment</p>	<p>National/regional level</p> <p>Increased number of entrants into employment within the sector</p> <p>Higher retention of new entrants employed within the sector</p> <p>More diverse and qualified construction workforce, including more workers with higher level skills</p> <p>Reduced skills gaps in construction</p> <p>Individual level</p> <p>Learners transition into the sector more quickly and with less cost, facilitated by a clearer understanding of sector entry routes</p> <p>More learners choose to enter the sector after completing construction courses</p> <p>New entrants into the sector are better equipped with key skills required for construction roles</p> <p>Learners have improved access to higher paid employment opportunities</p>	<p>Improved employer productivity</p> <p>Higher employment rates in the region</p> <p>A more diverse construction workforce which reflects the communities they work in</p> <p>Regions have a higher qualified workforce</p> <p>Improved perceptions of the construction sector.</p>	<p>Contribution to Government hitting its target of 1.5 million newly built homes in England this Parliament, and 5 million upgraded homes over 5 years</p> <p>Contribution to Government meeting its 2050 net zero target</p> <p>Increased national productivity</p> <p>Increased competitiveness of the UK economy</p> <p>Increased social mobility</p> <p>Increased wealth</p>

Mechanisms

Mechanisms are the processes that need to be in place for the programme activities to lead to outputs, and for the outputs to lead to outcomes. These can be both factors within the control of CTECs, alongside external factors.

During the CTEC workshop, a wide range of mechanisms were identified that could affect the implementation of the CTEC programme. These included:

- **Timely funding and clear timelines to enable forward planning.** Most CTECs noted that programme activities, and particularly around the development of new construction programmes, require capital funding and staff time to initiate. Any delays in the funding being made available by the DfE could have consequences in delaying the development of new programmes, which in turn would delay the outputs and outcomes from being achieved.
- **Spoke colleges having the capacity and willingness to engage in CPD activities.** It was noted that while CTECs receive funding, spoke colleges do not and therefore not all will have the capacity or time to engage with CTEC activities. To address this, CTECs have to be effective in promoting the value of the programme and use, where possible, incentives to participate.
- **Employers have the capacity and willingness to participate in the design of construction provision, curricula, and work experience opportunities** (e.g., through the Teacher Industry Exchange Programme). It was noted that employers similarly have limited capacity and therefore not all will have time to participate in CTEC activities. To address this, CTECs need to promote the benefits this engagement will provide employers and also utilise existing contacts within their college and partners (e.g. strategic authorities).
- **Stable policy and funding environment.** CTECs also noted that in order to make the curricula and programme changes required, a stable environment is necessary. They noted that new priorities for the sector could divert attention and resources from CTEC initiatives, as would any funding changes which would require colleges to make cost savings.
- **Effective engagement with other partners (e.g. schools, jobcentres, HE institutions).** It was noted that partners also need to be engaged in order for the full extent of the programme benefits to be realised. HE institutions need to be supportive in ensuring that learners in FE have clear progression routes to higher learning. Jobcentres also play a role in providing accurate information on learning pathways into the construction sector and the provision available in local providers.
- **Teachers and curriculum leads have the capability, opportunity and motivation to apply what they learnt** to deliver construction provision effectively. It was noted that the provision of CPD and gathering of feedback from employers will only reap benefits if they are acted on by teachers and curriculum leads. Teachers would be expected to apply what they learnt, and this depends on whether they have the time to make changes to their lesson plans and schemes of work, the opportunity and autonomy to do so, and if they wish to make these improvements. Similarly, curriculum leads also need to be motivated and have the time to be able to make changes to their programmes.

Overall programme Theory of Change

An overall CTEC programme Theory of Change is presented below, which links together the five objective-level Theory of Changes. This diagram shows the inputs, activities, outputs, outcomes and impacts of the programme alongside the mechanisms required for the programme to achieve its objectives.

Figure 1.6 Overall CTEC programme Theory of Change

