

Collaborative Futures: Competence, Capability and Capacity

Creating a dynamic, skilled and adaptable
built environment workforce.

October 2024



Construction
Leadership
Council

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Foreword

UCEM was delighted to welcome leaders, educators, policymakers and workforce experts from across the built environment¹ to the 'Collaborative Futures: Competence, Capability & Capacity' conference.



Everyone in the sector shares a common goal: to cultivate a more dynamic, skilled, professional, competent and adaptable workforce. None of us can do this alone. It is only through collaboration—both within our organisations and across the sector—that we can truly meet the complex challenges ahead.

UCEM is committed to playing a central role in this common effort. We are dedicated to supporting the development of professionals who are not only equipped with the necessary technical knowledge

and skills but also possess the leadership, ethical awareness, digital literacy and sustainability competencies required in today's and tomorrow's built environment. The discussions and insights shared during this conference have reinforced the need for a holistic approach to education and continuing professional development (CPD), towards a broader integrated understanding of the industry's evolving needs and a desire for 'lifelong learning'.

I extend my heartfelt thanks to all the speakers, panellists and participants who contributed to the success of this event. Your engagement and expertise will be invaluable as we continue to navigate the challenges and opportunities before us. Together, we can build a resilient and capable workforce that will not only drive our industry forward but also contribute to a safe, sustainable and prosperous future for all.

Ashley Wheaton (HonRICS)

Vice Chancellor, University College of Estate Management (UCEM)

A capable workforce is critical in meeting the many imperatives facing the sector, especially building safety in the post-Grenfell era.



Indeed, that tragedy highlighted that competence must become a routine aspect of working life, no matter the occupation, level or role - regulatory, professional, technical, onsite and off. The Grenfell Inquiry's Final Report observed that *'the construction industry as a whole needs to become technically more competent'*².

As the Construction Leadership Council found in its recent 'Roadmap of Skills for Net Zero' report³, raising competency across the entire workforce cannot just be about younger people joining the sector. 'Lifelong learning' of those already in work, or joining from other industries, will also be necessary.

To achieve this upskilling, industry, government and professional bodies must work closely with education and training providers. This is why I was pleased to see the 'Collaborative Futures' event convene these stakeholders and I welcome this report's clarion call for collaboration.

Nick Roberts

Construction Leadership Council, People and Skills Industry Sponsor

1. For this document, mentions of the 'Built Environment' refer to the widest interpretation of design, construction, operation and management of human-made structures and the natural environment. As such, the term incorporates the real estate, property and construction industries as well as referring to the Built Environment workplace more generally.

2. Grenfell Tower Inquiry: Phase 2 Report, Volume 7, Para 113.12, published 4 September 2024. Available at: https://www.grenfelltowerinquiry.org.uk/sites/default/files/CCS0923434692-004_GTI%20Phase%20%20Volume%207_BOOKMARKED.pdf [accessed 16 October 2024]

3. Construction Leadership Council, Roadmap of Skills for Net Zero: Competencies for Domestic Retrofit, published 7 May 2024. Available at: https://www.constructionleadershipcouncil.co.uk/wp-content/uploads/2024/05/CLC-Roadmap-of-Skills-for-Net-Zero-Report_07-May-2024.pdf [accessed 16 October 2024]

1 Collaborative Futures: Competence, Capability & Capacity

Partnership working is vital to ensure competence, increase capacity and enhance the capability of those working in the built environment.

This was the conclusion reached by experts who attended 'Collaborative Futures: Competence, Capability & Capacity', hosted by the University College of Estate Management (UCEM) on Wednesday 17 July 2024 in Central London. The event, which was co-hosted by the [Construction Industry Council](#), [Construction Leadership Council](#), [Technical Apprenticeship Consortium](#), [Supply Chain Sustainability School](#) and [the Edge](#), convened leaders from built environment employers, professional bodies, regulators, training providers, educational institutions and government.

The event, the latest in UCEM's [INSPIRE series](#), aimed to share innovative strategies and best practice to help shape a more dynamic, skilled and adaptable construction and built environment workforce.



COMPETENCE

Validating and Certifying Quality

CAPABILITY

Defining and Developing Skills

CAPACITY

Attracting and Retaining Talent



Speakers: key factors in developing an adaptable workforce

The value of training your workforce holistically was the focus of the opening presentation by **Tony Ellender, Professional Development Manager for Balfour Beatty UK**, who described how the firm integrates various competencies, from accredited technical and professional qualifications to leadership skills, in their team members. Balfour Beatty UK has introduced initiatives such as a 'Military Talent Pathway' for veterans and also provides a professional development pathway throughout the business, to facilitate the recruitment, retention and ongoing development of talent. Tony concluded by noting that collaboration, both internal and external, is crucial in helping Balfour Beatty UK address skills gaps and enabling career transitions across their business.



Tony Ellender, Professional Development Manager for Balfour Beatty UK

Jon Vanstone, Chair of the Building Safety Regulator's Industry Competence Committee (ICC), which sits within the Health & Safety Executive, emphasised the importance of elevating competence in construction and the built environment. Highlighting the tragic consequences of inadequate safety standards, he stressed the need for a culture of excellence, "not just meeting minimum standards". The ICC aims to bridge industry and regulatory gaps, promoting continuous improvement

and accountability. Through initiatives such as specialist working groups and stringent competence requirements, the ICC supports the industry in ensuring safe, resilient buildings built with integrity.



Jon Vanstone, Chair of the Building Safety Regulator's Industry Competence Committee (ICC)

Dale Sinclair, Chair of the Construction Industry Council's Digital Forum, discussed the impending paradigm shift in the construction and built environment sector, driven by AI, modern methods of construction and the need to achieve net zero. He emphasised the importance of data integration and the human-AI interface which could help construction, building operation and decommissioning become part of a circular economy.



Dale Sinclair, Chair of the Construction Industry Council's Digital Forum

Panel discussion: how can we transform skills within the sector?

The three speakers' comments supported a panel discussion, chaired by Ashley Wheaton, UCEM Vice Chancellor, around the event's key themes of 'competency', 'capability' and 'capacity'.

Ruth Devine MBE - employer Chair of The Electrotechnical Skills Partnership, who received her MBE for services to further education and apprenticeships, advocated for relevant and robust training aligned with occupational standards, advising awarding bodies, government agencies and educational institutions to *"let employers lead. It can be difficult to attract SMEs, but there are ways of making engagement agile and easy"*.

Jon Vanstone, who was returning after his speaking slot, concurred, arguing the key to meeting the sector's skills challenges was partnership, observing that too often the content of training and education is developed in isolation from those, such as employers and contractors, who have the practical experience of construction, design and installation. He called for transparent communication, collaboration and a commitment to upholding the highest standards in every project.

Tony Ellender, who had covered similar topics when speaking earlier in the day, acknowledged Ruth and Jon's points, observing that, *"The best way to make employees leave is to not train them. But there's only one thing worse than training someone and they*

leave - not training them and they stay." Tony also suggested that employers need to think beyond even their staff, but also about the competence of those in their supply chain if they are to deliver truly safe and sustainable buildings.

Holly Hansen-Maughan, Sector Manager for Retrofit & Future Workforce at Supply Chain Sustainability School, an expert in sustainability and green skills, picked up on Tony's thoughts and called for commonality within the industry to clearly articulate and address future skills. She described the role of the Supply Chain Sustainability School in upskilling the workforce, underlining the importance of collective decision-making and the integration of education partners to align training to meet skills and workforce needs.

Mina Hasman, Chair of the Construction Industry Council's Climate Change Committee, talked about the importance of education as the foundation for building skills and awareness across the industry. She argued the need for collaboration across the value chain and consistent learning to influence actions, saying *"Education is crucial for building base-level knowledge and influencing behaviours across the industry. Collaboration is a must for us to accelerate the pace and scale of change needed for climate resilience"*.

Panelists also debated topics less often covered in discussions of skills and training, such as the need for financial literacy across the built environment workforce. Tony Ellender, talking about the construction sector in particular, observed, *"In an industry with circa 3% margins, everybody needs financial competence"*.



Insights from industry expert Mark Farmer: addressing the skills gap

Addressing the event via a [pre-recorded video](#)⁴, Mark Farmer, author of the 'Farmer Review', an influential review of the UK's construction labour model entitled '*Modernise or Die*', gave his perspectives on the topics under discussion. Mark elucidated the "skills gap", namely the mismatch between required capabilities and those possessed by the workforce, especially those already in the industry. This mismatch is particularly relevant in the context of green initiatives and regulatory reforms. He observed, "*The Building Safety Act and the need for high-performing buildings mean that people are having to learn different approaches to their job.*"

Mark concluded by emphasising the importance of a dual approach to training within the industry, combining professional training and education regimes with continuous professional development (CPD) programmes. This approach is vital in an era of rapid regulatory and technological changes. "*The need to keep that currency of your professional competence through CPD is going to become more important*" Mark asserted. He also suggested that the oversight of CPD might need to become more stringent, perhaps moving away from self-certification to a mandatory model to ensure its uptake, value and effectiveness.



4. Video interview, *Competence, Capability & Capacity - Perspectives from Mark Farmer, CEO of Cast Consultancy*, available at: <https://www.youtube.com/watch?v=GNN7j-XseNw> [accessed 16 October 2024]

2 Key Takeaways

The exchange of concepts at the event emphasised the necessity for greater collaboration in developing the sector's 'human capital', aiding and ensuring that training and education are holistic, something that is vital if the sector is to meet the wide array of challenges facing it, from digitisation to sustainability. The day's insightful presentations and dynamic panel discussion saw the following areas emerge as 'Key Takeaways' from the event, providing the beginnings of a strategic framework for fostering a resilient, skilled and adaptable workforce.

Takeaway 1: **Collaboration Over Competition**

The complex challenges faced by today's built environment sector necessitate a unified approach, where cooperation and shared goals take precedence over traditional competitive practices. A collaborative approach is essential for addressing the skills gaps and workforce shortages that currently hinder the sector. By working together, organisations can pool their resources and expertise, creating more comprehensive and effective training programmes.

Often overlooked is the importance of interdisciplinary activity. By working across traditional specialisms and welcoming expertise from fields such as environmental sustainability and information management the sector can create rounded training and education curricula, leading to a resilient workforce that can adapt to changes and drive innovation.

By fostering a culture of cooperation, sharing best practice and engaging in continuous dialogue with all stakeholders, the industry can build a more capable workforce, to deliver safety and quality across all projects. When organisations work together, they can collectively set and uphold industry standards, ensuring consistency and quality across the sector.

"It's all around collaboration and commonality, bringing people together to make collective decisions on what future skills we need"



Holly Hansen-Maughan,
Supply Chain
Sustainability School

Takeaway 2: **Beware 'Competence Inflation'**

This term refers to the problematic scenario around competence where individuals are operating beyond their skill levels due to a high demand for expertise, which exceeds the available supply. Such overpromotion can mean people inflating their capabilities and being paid more without an adequate assessment of competence or a commensurate improvement in productivity, all of which are important for industry growth.

This situation leads to a misalignment between the roles individuals hold and their actual capabilities, which can also be particularly detrimental in senior management positions, realising and cascading impacts on projects.

Creating a culture of continuous improvement within organisations is critical in mitigating the risk of competence inflation. Encouraging employees to pursue ongoing professional development and recognising their achievements fosters an environment where excellence is the norm. This could entail focusing not only on professional or technical qualifications but also on developing leadership and behavioural skills, as Tony Ellender explained Balfour Beatty UK now does.

This strategic focus on comprehensive skill development is essential for sustaining long-term productivity and achieving excellence in the industry. Organisations must ensure that their training programmes encompass a broad spectrum of competencies, preparing employees for the multifaceted challenges of a changing sector as well as more senior roles.

“If people aren't competent to perform senior roles, then the impact and legacy that leaves on projects downstream can be massive”



Mark Farmer,
Cast Consultancy

Takeaway 3:

Enhance Professional & Technical Qualifications

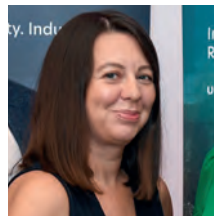
It should not be entirely incumbent on employers to develop their employees once they have joined an organisation; competencies such as project management, leadership, digital proficiency and financial awareness should begin to be engendered during initial built environment education and then certified through technical qualifications and the uptake of mandatory continuing professional development.

The event's panellists agreed that the mode of learning best suited to this task, at least for those joining the sector, was apprenticeships, a conclusion also reached at an [earlier INSPIRE event](#). They were keen to see the current levels of apprenticeship funding increased, or at least maintained, in light of the current 'Apprenticeship Levy' becoming a wider 'Growth & Skills Levy'⁵.

To make learning, whether an apprenticeship or not, as relevant as possible employers should share their expertise to align curricula with industry needs. Indeed, all those involved in built environment education, whether training providers, higher education institutions, professional bodies or government agencies should welcome the input of employers. This is mutually beneficial, both increasing the employability and longer-term productivity of those with and seeking to gain or maintain recognised industry qualifications and competencies.

This alignment helps create clear pathways of competence development, enhancing professional and technical qualifications, thus enabling employees to progress through their careers with skills that are not only current but also comprehensive and interdisciplinary.

“Awarding bodies, government agencies and educational institutions must listen to employers. Don't assume you're acting in their interest; instead, meaningfully engage and represent them”



Ruth Devine MBE,
employer Chair of
The Electrotechnical
Skills Partnership

5. As first outlined by the Labour Party in *Breaking Down the Barriers to Opportunity*, July 2023, Pg 16. Available at: <https://labour.org.uk/wp-content/uploads/2023/07/Mission-breaking-down-barriers.pdf> [accessed 16 October 2024]

Takeaway 4: **Leverage Technology for Skills**

AI and digital technology offer transformative capabilities that can streamline various aspects of the construction and built environment lifecycle, but necessitate a holistic approach to education, training and professional development to increase productivity. It is essential to ensure that organisations and the workforce are not only proficient in using these advanced tools but also understand how to integrate them effectively into their activities. This involves fostering a culture of continuous learning and development, where organisations are committed to upskilling their workforce and adapting to the evolving technological landscape.

Although headline-grabbing, the potential of AI to improve the design, construction, operation and maintenance of buildings will only be realised when the sector's workforce has understood how to collect and utilise real-time and/or 'big' data, for example via the use of 'digital twins' (virtual replicas of physical entities). Similarly, compliance with the 'golden thread' principles required under the Building Safety Act will necessitate more organisational capacity and individual competence for digital information management amongst organisations that design, construct or manage high-rise buildings⁶, possibly creating new demands for those with these abilities.

Of course, technology could have a more direct influence on construction and built environment competencies. For instance, AI-driven tools can be used for personalised training programmes, enabling employees to develop the specific skills required for their roles. The paradigm shift that could be caused by trends such as digitisation, modern methods of construction and net zero may necessitate a move away from siloed knowledge towards a more integrated understanding of various disciplines.

“AI will not come to fruition until we utilise real-time data from ‘digital twins’. It’s connected data that will change things in the future – we’ll need AI specialists and data scientists”



Dale Sinclair,
Construction Industry Council's
Digital Forum

6. Construction Leadership Council, *Delivering the Golden Thread: Guidance for dutyholders and accountable persons*, 27 August 2024, Pg 21. Available at: <https://www.constructionleadershipcouncil.co.uk/wp-content/uploads/2024/08/CLC-Golden-Thread-Guidance.pdf> [accessed 16 October 2024]

Takeaway 5: Inclusive Talent Pathways

As had been discussed at the previous INSPIRE event on [built environment leadership](#), the sector can help fill its skills and competency gaps by designing more inclusive talent pathways, leveraging the untapped potential of non-traditional talent pools. These include, but go beyond, protected characteristics to also include veterans, career returners or changers, refugees, the unemployed and ex-offenders, although this approach requires innovative thinking and a willingness to adapt recruitment practices and traditional training methods to suit the unique backgrounds of these individuals.

For example, in 2022/23, 16,500 people left the UK armed forces⁷, mainly people in their late twenties⁸, many having some sort of STEM-related qualification and specialism, complete with significant levels of experience, making them a natural fit for construction and built environment roles. Examples include the Balfour Beatty UK 'Military Talent Pathway' which facilitates the transition of veterans into civilian roles within the industry. This provides comprehensive support, whilst focusing teaching in areas such as finances (something to which some veterans have not generally been exposed), ensuring veterans can effectively transfer their technical skills to new contexts.

Career changers also offer a wealth of knowledge and experience which can be highly beneficial to the sector. Individuals from industries facing economic downturns, such as oil and gas, often possess transferable skills that are relevant to construction and engineering roles. Creating structured, flexible pathways for these individuals, including tailored training programmes and clear career progression routes, can help them seamlessly transition into the workforce. This not only fills critical skill gaps but also introduces fresh perspectives and innovative approaches to industry challenges.

These individuals often have relevant skills from their previous lives and can become valuable contributors to the workforce with the right mentorship and training.

The sector as a whole can help absorb a wider array of talent by enhancing its training and educational pathways, making them more flexible and 'bite-sized', qualities seen in existing schemes of training such as Skills Bootcamps or flexi-job apprenticeships. This approach also benefits those from the non-traditional groups referenced above, as it allows them to understand if a career in construction and the built environment is suitable, without committing themselves for a long period. Government could also help these groups by introducing more support for foundation-level built environment training and education.

“Accessing non-traditional talent pools means getting involved with organisations such as charities that are already plugged into these communities”



Tony Ellender,
Balfour Beatty UK

7. House of Commons Library, *UK Defence Personnel Statistics*, 13 August 2024, Pg 13. Available at: <https://researchbriefings.files.parliament.uk/documents/CBP-7930/CBP-7930.pdf#page13> [accessed 16 October 2024]

8. GOV.UK, Ministry of Defence, Statistical Release, *UK Armed Forces Annual Personnel Report*, 26 November 2013, Table 5. Available at: <https://assets.publishing.service.gov.uk/media/5a7c9821ed915d12ab4bbd43/uk-af-personnel-report-1-april-2013-revised.pdf> [accessed 16 October 2024]

3 Conclusion & Next Steps

'Collaborative Futures: Competence, Capability & Capacity' reaffirmed the critical importance of cross-sector and interdisciplinary collaboration in increasing competence, to build a more resilient, skilled and adaptable built environment workforce.



The event also considered the need not just to expand the talent pipeline, but also improve the industry's ability to absorb new talent. While many employers receive overwhelming numbers of applications for new roles, they can only appoint a fraction of appointable candidates. This challenge is compounded by the need to increase successful progression through enhanced continuation, completion and retention rates. For example, even modest improvements in apprenticeship achievement rates would lead to better outcomes for learners, employers and providers. These improvements would help ensure more individuals reach occupational competence and remain within the industry.

Amongst those contributing to and attending the event, some key 'unknowns' were identified, such as how the broadening of the 'Apprenticeship Levy' into the 'Growth & Skills Levy' would affect the sector. However, there was a clear consensus on several other themes that surround the future resilience of the built environment workforce, projected to increase to nearly 2.75 million by 2028⁹.

Foremost amongst these was the need for a holistic approach to workforce development that integrates technical, professional and workplace competencies such as leadership, ethics, project management, financial literacy and digital proficiency.

There was also agreement, especially in light of the challenges faced – from rapid technological advancements to the urgent need for sustainability and digital competencies – that no single organisation, or even sub-sector, can address these issues alone.

“To improve and support the development of a variety of pathways to occupational competence and professionalism, we must embrace every opportunity to collaborate. Only by working together can we generate ideas, share expertise, break down barriers across the disciplines and focus on ensuring high quality education, training & professional development is available for all. Partnership is key to us advancing and providing a better built environment; one that is prepared for our future”



Dr Caroline Sudworth,
Technical Apprenticeship
Consortium

9. Construction Industry Training Board's Construction Skills Network, *Labour Market Intelligence Report: UK 2024-2028*, 15 May 2024, 'Total Employment by Occupation - United Kingdom' Table, Pg 18. Available at: https://www.citb.co.uk/media/hwofsg5j/ctb1003_csn-rep_uk-full_ow.pdf [accessed 16 October 2024]

The insights shared during the conference highlighted the value of cooperation, both within and across organisations and disciplines, to bridge the skills gap, enhance professional capability and ensure that the workforce is equipped, competent and adaptable to current and future industry demands.

The priorities identified in this document are essential for cultivating a workforce that can drive excellence across the sector. These broadly align with parts of the latest iteration of the Construction Leadership Council's (CLC) Industry Skills Plan 2021-2025¹⁰ and indeed the CLC could use its positional authority to facilitate collaboration between government, education/training providers, industry and professional bodies.

Such wide-ranging collective action is necessary to overcome the significant challenge the sector faces.

Integrating, where possible, the insights from the 'Collaborative Futures...' event with wider strategic initiatives will help guide this cooperation so that the sector can develop a future-ready workforce capable and competent in driving the construction and built environment sector forward.

Aled Williams

Construction Leadership Council, Routes into Industry Lead

Construction Industry Council, Education & Future Skills Chair



10. Construction Leadership Council, *Industry Skills Plan Update for the UK Construction Sector 2023-2024*, published 20 April 2023. Available at: <https://www.constructionleadershipcouncil.co.uk/wp-content/uploads/2023/04/CLC-Skills-Plan-2023-24-FINAL.pdf> [accessed 16 October 2024]

Acknowledgements



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The **Construction Industry Council** is the representative forum for professional bodies, research organisations and specialist business associations in the construction industry. CIC uses expertise to shape a built environment that delivers a better society and a better world bringing built environment professionals together – sharing a collective interest in enhancing the industry for a greater positive impact and contribution to society. [X @CICtweet](#)



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The **Supply Chain Sustainability School** is a virtual learning platform around sustainability, to upskill those working within, or aspiring to work within, the built environment sector. Learning covers the three core pillars of Sustainability – Environmental, Social and Economic – looking at key issues ranging from carbon management to combatting modern slavery. [X @SupplyCSSchool](#)



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The **Construction Leadership Council** works in partnership with government and organisations of all sizes across the industry to ensure the construction sector has the voice, support and resilience needed to grow, improve productivity, attract and retain talent and successfully transition to net zero. Our vision is to lead a new era of delivery in the built environment. [X @ConstructionCLC](#)



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The **Technical Apprenticeship Consortium** is a consortium of employers and key stakeholder partners committed to developing and managing high-quality technical and professional apprenticeships for the built environment. Since 2010, TAC has supported the development and management of apprenticeship standards in England and Wales which have enabled over 15,000 apprenticeship starts in the built environment sector. [X @TAC_Updates](#)



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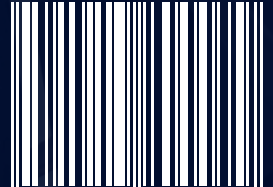


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