



SOLUTIONS TO THE BUILT ENVIRONMENT SKILLS CRISIS

SUMMARY REPORT
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UCEM

UNIVERSITY COLLEGE
OF ESTATE MANAGEMENT



BUILT ENVIRONMENT
SKILLS SUMMIT 2017

Background

It is becoming ever more apparent that **the current levels of training and education for all disciplines associated with the Built Environment in the United Kingdom are not adequate to meet the growing needs of industry**, either now or in the future. Supply is both insufficient and inadequate, largely due to the fragmentation which exists across the supply chain. The challenges for education providers, competing in a market where certainty, policy, regulation and funding are all subject to frequent and cyclical changes, results in decisions being taken which are not always in the best interests of enabling industry.

This needs to change.

On 16th October 2017, University College of Estate Management¹ hosted the inaugural Built Environment Skills Summit. Key stakeholders from across industry were invited to share their views and discuss the current skills challenges, as well as envisioning the right solutions – both short and long term.

The summit agenda facilitated the following key items:

- Insights
 - Higher Education skills supply and demand research
 - Four think pieces
- Workshop 1
 - How can we move forward?
- Workshop 2
 - What is stopping us?
- Workshop 3
 - Stakeholder declaration: The way forward

This report captures the salient points from the presentations and workshop discussions held at the Summit, and presents a summary of the outcomes followed by a declaration of immediate actions on behalf of the attendees which proposes an encouraging way forward.

NB: For the purposes of this document, mentions of the ‘Built Environment’ refer to the widest interpretation of design, construction, operation and management of man-made structures *and* the natural environment; and as such incorporates the real estate, property and construction industries as well as referring to the Built Environment workplace more generally.

¹ UCEM is an independent University College with over 4,000 students studying worldwide. The institution is committed to excellence in teaching and to providing strong employability outcomes for all students; its programmes enable individuals and businesses to increase professionalism and contribute to a better Built Environment. UCEM delivers undergraduate and postgraduate degrees accredited by professional industry bodies, as well as apprenticeship programmes at both level 3 (A-level equivalent) and level 6 (degree level). UCEM is the largest supplier of Higher Education programmes within the Built Environment in the United Kingdom*

* based on UCEM’s own research and using figures derived from Higher Education Statistics Agency data (2015/16)

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Foreword

Ashley Wheaton, Principal and CEO, University College of Estate Management



The Built Environment in the United Kingdom is on the verge of facing one of its greatest ever challenges – an acute and substantial shortage of the skills and competence needed to deliver at the required scale, quality levels and rate of productivity.

Influencing Factors

A number of key factors are influencing the availability of an appropriately skilled, competent and qualified workforce: the labour market in the UK for Built Environment professions is constricted post the decision to exit the European Union; there is a growing requirement for certified skills and trades in the light of the Grenfell Tower tragedy and reports such as 'Each Home Counts' (Bonfield 2016); there are substantial ongoing challenges with attracting new talent into the required professions at all levels, as well as retaining existing staff; new technologies and construction techniques will require a significant re-skilling of the existing workforce. In addition to the above challenges, the UK has set ambitious targets for infrastructure projects and residential construction growth which require a further increase in the supply of skilled labour.

In themselves, these factors would present a considerable challenge. However, the situation is further compounded by the lack of cohesion, alignment and collaboration in the skills supply chain for the Built Environment. The supply of skills operates within a purely laissez-faire economy, based upon commercial decisions within each individual supplier. This is accentuated by the array of competing funding, regulatory and policy frameworks, which do very little to formally and precisely encourage development of the required industry skills. The result is that overall supply of available and accredited

development programmes is simply insufficient to solve the problem, added to which the market is hugely disjointed with inefficiencies and competition between providers, which further diminishes the effective supply, where the whole is in fact less than the sum of its parts.

A New Approach

If the Built Environment in the UK is to rise to the challenge, and overcome the ever-mounting skills crisis, a more collaborative and comprehensive approach will be required between industry and education. University College of Estate Management was therefore delighted to host the inaugural Built Environment Skills Summit, bringing together key, influential figures from across a variety of industry and educational disciplines to discuss, debate and agree upon the issues we are facing, and begin to form a plan to put in place the right solutions.

This important document represents the agreed views of those who attended the Summit. It provides a group declaration of the apparent challenges and even more importantly a framework for the intended way forward.

I would like to express my sincerest thanks to all of those who took part, whose energy and passion further reinforce my firm belief that together, we have taken the first important step forward in creating the required scale and quality of skills supply for the UK Built Environment to succeed in the years ahead.

Insights Summary

Think Piece 1: Amanda Clack



Current Skills Shortage: Closing the Skills Gap

There are fundamental issues in this sector and cyclical construction workload is one of the things that really plays upon the whole issue around skills. When you look at the pipeline of work that's coming down effectively you've got HS2, Hinkley, Heathrow alongside ongoing Highways, Housing and Heritage projects. The context is the magnitude of workload and whether we have the skills needed to make sure we deliver on the promises that the government has made. The All Party Parliamentary Group for Excellence in the Built Environment (2017) produced a report on skills sponsored by the Construction Industry Council. Collaboration through focusing on responsive engagement and partnership between the government and the private sector is needed through keeping construction skills 'SAFE' to deliver the ambition.

Stabilisation: This is the key ask of government. Over 50% of the construction workforce in our sector are non-UK nationals. We really need to think about how we make sure that we stabilise in the short-term because the new talent pipeline coming through is going to take time to come to fruition. We must ensure the migrant workforce is able to remain within this UK sector in the short to medium term. This stabilisation is really needed and the government can help by getting key skills in construction onto its critical skills shortage list.

Attraction: If we're serious about the skills gap, we must consider how to make the sector more attractive. RICS are trying to connect with younger people; for example engaging Ali-A and Eve Bennett who are vloggers (with millions of Twitter and YouTube

followers). We need to think differently about messaging if we're going to attract people into a sector which is naturally perceived as 'pale, male and stale'? We also need to consider pathways for entry and how we actually make sure that the people we're producing have the right skills to make them employable for the future. This includes thinking about digitalisation and innovation, and really pushing these down into schools. We need to talk about the Built Environment as a whole, rather than focus on individual professions to make it relevant. We have to also realise the potential of apprenticeships through unlocking the levy and funneling that meaningfully back into our sector. Attraction is where the government and private sector handshake takes place.

Future proof and Enterprise: This is about really driving innovation and using future tools and techniques to not only make this sector more exciting but also to make changes from within. Adapting and using new technologies particularly from manufacturing is really going to drive change that we need. When you start to look at the productivity level, 25% down on productivity here in construction compared to the EU, we must do something differently to up the productivity gain that we need. We must make what we do relevant through embracing innovation and technology fully to make sure we're optimising the future for our professions.

Closing the skills gap through diversity and inclusion is important as it makes business sense to attract the top talent. It's not just gender balance but from an RICS perspective where just 13% of qualified members are female and moving onto trainees and graduates it's at 25%. If you look at the construction sector as a whole it's around 6%; so clearly we have to do more on the male to female ratio plus also across all protected characteristics if we want to tackle the war of talent. Social inclusion is an area where apprenticeships can help but more is needed here too.

We need to consider the ageing workforce and retain more experienced people. The same approach should apply to black and minority ethnic people as well as those with disabilities. There are opportunities for everyone within our sector and what we want are the best possible people to work and operate within it. It's about addressing diversity and inclusion because unless we really start to address both we're fundamentally missing out on future talent. The real call for action is this handshake coming back to the SAFE acronym between the government and private sector. We need the government's help on the stabilisation and attraction initiatives so that we as a sector can really start to invest in future-proofing and productivity.

Think Piece 2: James Wates, CBE



Collaboration in the Skills Supply Chain: Solving the Problem of Fragmentation

There are more than three million people working in the Built Environment in the UK, representing nearly a tenth of the entire workforce. Employing those three million people are more than one million businesses. To say that the Built Environment sector is fragmented is a wonderful understatement! It presents us with some significant challenges when it comes to recruiting, training, and more importantly retaining the workforce we need. While there are some great examples of collaboration, they are taking place in an environment that is culturally and structurally resistant to it. This situation has to change.

Think of this from the perspective of the 700,000 16-year-olds who every year finish their GCSEs. Many do want to go into the Built Environment (not enough, but many do). Where do they go next? The world of work and apprenticeships or continue their education; sixth-form, UTC, local FE college, A-levels, BTECs or tomorrow's T-levels? Where can they currently go to get a clear and centralised picture of what curriculum paths are available? And where might those paths

lead? When you look at the skills landscape from a young person's perspective, you've got a huge number of different paths with uncertain destinations.

To really counteract fragmentation, the whole industry needs to be getting behind joint efforts. We need to avoid individual companies reinventing the wheel and designing their own school or community outreach programmes. CITB plays an incredibly important role and its direction of travel, having heard complaints of the industry loud and clear, is to be more strategic and focused on impact (particularly for the many SMEs who pay the levy). It's moving away from 'Levy in; grant out' to 'Levy in; *skills out*'.

How does the government's intervention fit into all of this? The Skills Plan shows promise that led to the Review of Industrial Training Boards. It is also leading to the creation of **T-levels**, and a more rigorous incorporation of work experience into further education. These are positive signs for simplifying and clarifying for young people how they can enter the construction industry and develop skills that are in demand. Ultimately, I hope that the changes will tackle the **esteem gap** between vocational and academic routes. The new T-level system, with clear entry and progression routes, will be phased in between 2020 and 2023. We can't wait that long!

The **Apprenticeship Levy**, coupled with changes to the whole shift from frameworks to standards, and a greater emphasis on Higher and Degree Apprenticeships, can potentially really help to address the mismatch of supply and demand of skills. In principle, **Trailblazer** standards are a great concept – allowing industry to shape the standards according to real business needs. However, there are not enough approved standards for us to spend our digital apprenticeship vouchers on (and currently only 10% of our vouchers can be passed on to the supply chain). This all adds up to a seriously distorted market which is all demand and no supply. Fixing the

apprenticeship market therefore has to be high on our list.

Other things we need to consider include how we can harness the power of the client. The government may not have gone for the idea of a client levy as suggested in Mark Farmer's report (2016), but how else can we encourage those who are paying for the buildings and projects to do their fair share in aligning contractors and their supply chain behind key objectives for skills development? In particular, how can we ensure clients exercise their power and leadership to encourage greater use of innovation, coupled with the right sort of training?

Think Piece 3: Dr Peter Bonfield, OBE



Lifelong Skills: Ensuring Competence Certification

There are concerns around quality, compliance, certification and having trusted people out there across our industry both now and into the future. BRE deploys a number of tools and standards of qualification which are used in the UK and worldwide to make buildings and the Built Environment better. Having a standard for proving a product and proving the competency of a person who manages your risk is becoming of ever-increasing importance (and is becoming a pre-requisite for business).

We set up the BRE Academy to ensure that industry people are equipped with the latest knowledge to be competent in their role. We've grown the Loss Prevention Certification Board (LPCB). A lot of BRE private sector revenue comes from certifying either people or products against a higher level of performance that is focused on protecting life, people, property and planet. A focus of BRE has been to ensure that people are competent to deliver the things they need to do in a changing world. Examples of where BRE has been engaged include:

Each Home Counts (Bonfield 2016): There's a need to create a market for renewable

technologies and energy efficiency measures. A key to that is having trusted products and a trusted workforce which means that when you choose to do something to your home or building as a business you know that what you get is what you've been promised and if you don't it will be fixed. The review states that the government should stop putting money into that sector until a quality mark is established to make sure that trusted people are ethical, properly trained, properly competent, and have all the right insurances and warranties in place.

The Property Flood Resilience Action Plan

(Bonfield 2016): Due to climate change 1 in 6 buildings in the UK now is at risk of flooding. The insurance industry has a policy of 'like for like' replacement. They vacate homes for six months as most of the building materials need replacing if they get wet which costs around £50,000. An alternative would be to use materials and products that can withstand flooding to mitigate replacement. Quality standards required for people in particular are being developed so that those measures are delivered in a way that protects the consumer. RICS has partnered with BRE and the insurance industry to launch a scheme which requires loss adjusters and surveyors to be trained to do any work around building flood resilience.

Post-Grenfell: One of the first things BRE did was to see whether a combustible and flammable Aluminum Composite Material (ACM) could be on any other large tower blocks across the country. A screening programme found that in all but three cases the outer ACM around residential tower blocks that are Local Authority/Housing Association owned did not fully comply. We need trained contractors available to do the replacement work properly and professionals to undertake the inspection of these buildings – and we need it immediately. They're in the process of being trained up and certified to be able to do this work.

It is imperative that people who are being qualified across our industry are competent at what they're doing now and for the future. It

is very sobering to see how few appropriately qualified professionals we have who can deal with matters post-Grenfell. We've got to really push on quickly through a culture of collaboration and innovation. A lifelong rigour is needed which embraces research, science, innovation, data and knowledge and brings it relentlessly to those professionals who operate right across our sector.

Think Piece 4: Mark Farmer



Future Skills Requirements: Meeting the needs of Today and Tomorrow

The resourcing and size of our workforce, both now and going forward, is becoming an all-consuming industry issue. In addition, the demographics of that workforce create a real concern, which is that the resilience that we're known for in the industry is not sustainable. We're highly cyclical in terms of what we do as we shed and re-gain labour depending on economic cycles.

That resiliency is under pressure in a way that we have not seen before which is why we have a burning platform as things are now different; such that we cannot look forward based upon statistics and trends from the past. This is a new period we're entering into and the **core prognosis is declining industry resiliency**. Future skills recommendations can be condensed into the following factors which include:

1. **Integrated leadership** - the need for **clear leadership and institutional reforms** that better integrate clients, industry and government;
2. A **productivity-led** change agenda letting innovation dictate **future skills development** which clients and the supply chain can either lead on or respond to;
3. The government has to play a critical role in the **strategic initiation** of change across both of the above.

This is all about push-pull in our market; how much industry can push around different ways of doing things and be pulled in a certain direction. The government must adopt an enabling policy that supports us to do things differently. A theme within the *Farmer Review of the UK Construction Labour Model (2016)* is all about changing the way we deliver construction and changing the balance of what we do in a traditional construction environment on-site and what we do in a pre-manufactured environment. This takes construction more towards a manufacturing type sector; always mindful of the fact that we are a 'hybrid' industry as construction is always going to be site based.

The one big challenge in order to be able to deal with this is that we need 'demand-led' skills transformation and digital career families. It's not going to happen at the required scale unless the industry is asking for something different around future skills. Somehow, we have to create an end-demand which employers are responding to and through our clients commissioning work in a different way (we need that pull). We need progressive clients commissioning consultants who influence supply chain behaviour and the nature of demand that we see within the industry. This demand needs to be aggregated and scaled-up in order to be planned forward so there is a clear journey over the next five years as to how we move from traditional skills to a mix with new skills. This is not binary - it is a combination of both.

Digital, manufacturing and whole-life performance are inclusive terms which cater for all of the Built Environment industry. We must have a combined education provider strategy and co-ordinated student outreach programme which starts earlier than school-leavers or 16-18-year-olds. The combined narrative of the industry is not necessarily in the here and now, but foresight is needed in telling future talent what it will look like in the years ahead. This then creates a self-fulfilling circle around bringing that back into industry so that you start getting capacity and capability of a different profile.

Workshops Summary

Workshop 1 – How can we move forward?

This workshop focused on agreeing the required outcomes (where do we want to be) and long-term solution envisioning (how we're going to get there). Each group was asked to agree on their most important outcomes and the enablers which are needed to help meet these requirements.

These included the following outcomes:

1. Holistic Thinking

To increase visibility, we need an integrated holistic picture of the Built Environment industry. A model is required which would help draw everything together, including skills, qualifications and careers. This would help overcome a perceived lack of understanding and awareness, whilst also providing context and a unified language for how the whole system works, including: what the industry is about, how it operates, what its aims and objectives are; and a link to the accreditation, certification and recognition of skills.

2. Long-term Vision

A longer-term, industry-led, sustainable vision is needed to change the way that education, industry and institutions deliver certified skills and competence requirements through a planned cohesive approach. If it is simply left to market forces, then the outcome will merely perpetuate immediate and future skills shortages.

To commit to longevity, we need to smooth cyclical peaks, troughs and fluctuations in the

'left to market forces, then the outcome will merely perpetuate immediate and future skills shortages.'

educational supply chain. This could be enabled through a sustainable and integrated

industry strategy to government which stabilises demand and supply needs both now and in the future. This will act as an intelligent layer which joins together industry-led policy imperatives through a long-term vision over 5, 10 and 30 years with the aim of increasing productivity.

3. Qualifications Roadmap

A unified careers and qualifications competence model for joined-up engagement with schools and attraction into the professions needs to be created. The need to

'Built Environment career pathways to sustainably address the future talent pipeline for the industry.'

work in an integrated way could be aided through a collective joined-up careers programme which promotes a single shop window into Built Environment professions.

A clear qualifications roadmap, including progression routes and the learner journey is needed to increase understanding of Built Environment career pathways to sustainably address the future talent pipeline for the industry.

An opportunity exists through a unified set of careers resources which the industry can collectively use to promote, attract and successfully retain future talent. This needs to

also grow diversity and inclusion through considering a range of audiences from schools, non-cognates (from outside the sector), and mid-career changers to those migrating from technical levels within the sector. Allied to this, it would articulate the need for high priority skills areas, provide detail on ladders of different levels of progression, and provide pathways to continuous lifelong career options.

4. Communications

An interface group needs to build upon existing structures to represent the sector to government through a single voice. To support the sector this independent, impartial and evidence-based group needs to draw together many disconnected strands to overcome the fragmentation within the industry. This outcome will allow more

‘appropriately qualified people with relevant certified lifelong skills which will benefit the economy.’

integrated, joined-up conversation and coherent responses to government policy in a timely manner.

From a sector perspective, this interface will demonstrate the importance of the industry, facilitate more resilient workforce planning; and increase appropriately qualified people with relevant certified lifelong skills which will benefit the economy. The aim is to gain government commitment and support for the Built Environment to develop more coherent and stable skills strategies. This group would have a clear mandate and direct access to industry stakeholders, as well as relevant government departments at the appropriate senior level in order to be able to catalyse the

right change, in the right place at the right time to strengthen the Built Environment workforce.

5. Quality Mark

Lifelong learning would need to be underpinned by the development of an ongoing quality mark for certification and recognition of ongoing individual competence. Everyone who operates within it would have to abide by its defined standards in the same way as a consumer charter. This is

‘the development of an ongoing quality mark for certification and recognition of ongoing competence.’

fully aligned with existing codes of practice in keeping up-to-date but would allow verification of lifelong competence and, in effect, comprise a licence to practice which evidences the currency and relevance of skills.

6. Core Curriculum and Programme Content

A unified core curriculum across professional bodies, institutions and providers is needed to support quality and consistency. There is much duplication within and across education providers. A (new) unified curriculum would allow the more efficient sharing of learning and teaching resources to ensure that content is relevant to core, specialised and future skills areas. This would be situated in a general framework which would allow providers to draw down online relevant high quality assured content rather than spend time and resources developing this themselves. These resources would align with professional requirements and competencies/occupational standards.



Workshop 2 – What is stopping us?

This workshop focused on identifying barriers, and actions that need to be taken to remove these barriers, as well as consider solutions which could potentially ‘unlock’ blockages.

These included the following:

1. Fragmentation

There’s a lack of an overarching leadership body or initiative to lead on this agenda joining everything together and being the Built Environment interface for government. Fragmentation is occurring due to the priorities of existing bodies who have either elected and/or fee-paying membership models and there is a debate around whether this is serving the needs of the sector.

‘there is a need for a coherent leadership entity to enable the industry to speak with a single voice.’

To address this, there is a need for a coherent leadership interface to enable the industry to speak with a single voice. This should authentically represent and bring together all relevant sector stakeholders and constituencies. The right underlying support can only occur through gaining wide and strong institutional endorsement.

2. Attracting Talent

Realising the industry’s potential as a future career path is stifled as it has limited impact on education providers supporting career choices in the Built Environment. For example, there is a lack of joined-up thinking and connectivity in schools - they may have been visited by multiple professions and institutions all saying broadly the same thing to the same audience. We have to be much more tightly aligned, minimising competition

amongst firms or professions within the sector, ensuring the sector as a whole

‘a consistent message of what careers in the Built Environment look like.’

resonates and is appealing versus other sectors.

A greater impact could be achieved through an industry wide approach to prime the future talent pipeline. There is a massive issue concerning the relevance of institutions and what the Built Environment means to 14-19-year-olds as an audience. A more inclusive, tailored, customer-driven approach would need to use appealing language (such as digital, building communities and placemaking). There needs to be a coherent and consistent message of what careers in the Built Environment look like, as well as the wide variety of opportunities and one version which can be cascaded and adopted.

An analogy was drawn with EngineeringUK where all registered engineers have to pay a levy that goes to this organisation for promotion of their industry. This is an example of where a specific intervention works well to support developing a critical mass and joining things together to attract new talent into the industry (e.g. schools, curriculum). Is there potential to unlock ‘levy’ funds (Industry Training Board and ring-fenced Apprenticeships) to address skills imbalances in the sector?

3. Demand Planning and Smoothing

There is much demand but very little supply to address critical sector skills shortages. Short term labour market intelligence and demand planning is perceived as not always reflective of what's really happening within a specific region or locality. To deliver the right skills at the right time, there needs to be an emphasis towards the future state of skills, as well as the here and now. The aim is moving towards the medium to long term regarding future skills, representing an exciting and

'attraction to the sector is about projecting a professional image that would be seen as a great destination.'

varied choice of interlinked careers with the ability to change pathways. This is really important in terms of how we're going to change the narrative as it's not just about 16-18-year-olds. Attraction to the sector is about projecting a professional image which portrays it as a great destination.

The government has a role to play here around supporting demand planning as private sector workload is always going to be volatile; but this can be countered through influencing economic cycles in the public sector. The government needs to be informed in smoothing demand to mitigate boom and bust cycles. This would ensure that the demand planning for skills is in the right place but also links into the attractiveness of the industry. It is important that people know that they have a stable job and won't be redundant in two years in a downturn.

4. Aggregation of Resources

The industry needs to stabilise, attract talent and future-proof, in alignment with the digital and increasing productivity agendas. To stabilise, we need all government parties to

understand and be better informed about the sector as they need to have a strategy to enable them to take the long-term view. Addressing all these issues in the right political climate is critical to allow the industry to respond to this positively. The co-ordinated pooling of disparate budgets and resources which has already been deployed against these areas could support and develop a thematic evidence-informed approach. This would enable consistent aggregated resources which would help accelerate change.

5. Future Skills Strategy

There is a barrier around the number of people with relevant future skills expertise to drive forward innovation. We need critical mass in this area because some of these activities include innovative methods which draw upon both manufacturing and construction. In the meantime, to make courses responsive, the government may need to provide incentives that allow people to progress (upskilling as well as new entrants). There will be a transitional phase in terms of getting the people with the right

'linked into the demand planning so we know what skills are needed when and where.'

skillset and currency to be able to be effective and move the industry forward. A resilient workforce which is appropriately qualified with relevant lifelong future skills and training will benefit the economy.

This will link into an integrated leadership model where understanding what the new career families within the industry are going to be; how you define them; how you accredit them; how you mobilise them; and how you set-up the courses in conjunction with education providers and industry will be necessary so provision is relevant and optimised. This all needs to be connected to

the demand planning, which needs a strategic overview through a defined and clear strategy, so we know what skills are needed when and where. This will have implications for the funding of both the further and higher education market. Hence, if demand is within specific disciplines or locations, then incentives and funding should be allocated according to priority.

6. Changing Culture (Quality Marking)

In addition to technical competence there is also the cultural requirement of professional responsibility, accountability and ethics. These core values and behaviours influence the way we want industry professionals to practice.

It is evident from the Grenfell tragedy that it is not clear where ultimate accountability lies. A

‘an independent body which certifies competence to overcome a perceived lack of trust and increase confidence.’

responsibility and competency matrix for each project is needed, with clear and transparent accountability, assigned for every aspect of a building that is life safety critical from design, construction to operation and maintenance.

There is the need to certify competence to overcome a perceived lack of trust and increase confidence so as to provide greater assurance to the end-user.

7. T-levels

It is important to influence the development of T-levels, so that course content is current and relevant to the industry. The breadth of the Built Environment and defining it at the outset, and its associated disciplines, will appear in more than just the ‘construction’ route. We need a clear understanding of what careers in the industry will look like and the

interactivity between them. Whilst it is focused technical education it should be seen

‘clear understanding of what all these careers will look like and the interactivity between them.’

as part of the wider professionalisation of the industry. Is this more about ensuring that the opportunities presented are clearly visible within the emerging T-level structures? Access to them and their procurement should be available to a wide range of learners and providers. These should not just exist in areas where specialist resources may be available. The DfE consultation on the implementation of T-level programmes (2017) is accompanied by the IfA draft occupational maps with relevant knowledge, skills and behaviours within a route (2017). Innovative approaches to mandatory work placements are needed and the ability to provide these are central to their design.

8. Apprenticeship Levy Flexibility

These monies should be spent flexibly to support and keep resources within the sector. For example, one-man bands or SMEs which would like to take on an apprentice but don’t have the support structures to do so. Adjusting apprenticeship levy through incentives and funding to support specific industry areas or locations would make a tangible difference to capacity.

Any company over a certain size has to pay the apprenticeship levy even if they do not employ apprentices. These unspent monies should be ring-fenced; so that our industry can take a portion of that money to ensure that more apprentices are supported. If there is more flexibility on how the money is spent, it will reduce risk and produce more competent people. This creates positive outcomes for the Built Environment sector.

Outcomes

Three Key Themes

The lively and productive discussion generated in the workshops resulted in three key areas which the attendees agreed represented the best areas to focus on at a high level, in order to overcome the identified challenges. The overall aim is to create **an enhanced skills supply model: which facilitates better collaboration between government, industry, professional bodies and education providers**; aggregates the overall supply within a commonly agreed framework; and enables more sustainable development of skills over time, avoiding the ‘feast and famine’ cycles.

Outcome 1:

Provide a Long-Term Roadmap

Key to the successful supply of skills is a clearly articulated and longer-term plan for the Built Environment. An industry plan which spans multiple electoral cycles, and envisions a 20-30 year roadmap for the Built Environment, would allow the skills supply to be matched in a more proactive and considered manner. This helps overcome the highly reactive, short-termist model necessitated today, and offers a much better balance between the skills required to support and enable current industry techniques and standards, whilst also transitioning more proactively and progressively towards the higher productivity skills needed in the future.

It would allow education providers to invest in programmes with certainty for the longer-term, with support, funding and direction to plan the development of appropriate study programmes. Education programme planning and development are not easily achieved and quality suffers when it is rushed. In the short-termist and largely reactive model we have today, critical skills at the required levels of quality are either neglected or not being catered for at all. Decisions are based on commercial imperatives, regulatory or funding constraints and risk appetite of individual providers.

A longer and more certain horizon plan defining the agreed range, levels and overall quantum of skills required, coupled with certainty of the overarching education policy, funding and regulations, would undoubtedly make it easier for education providers to be much more effective partners to industry.



Figure 1: Agreed Outcomes

Outcome 2:

Develop Sustainable Skills Supply

Vital to the effective and ongoing supply of skilled professionals is the need to provide a sustainable model which is not at the mercy of changing economic fortunes. There is a huge missed opportunity during economic downturns to use the time to develop the very skills which will be required to accelerate and drive economic recovery. A free market approach to education means that skills supply simply follows the economic market conditions, and emphatically shuts down during recession. A defined (and funded) mechanism which actively maintains the availability of skills during a recession would smooth the current peaks and troughs.

Education providers are often caught between the competing agendas of government departments, which can be contradictory or overlap, causing unnecessary complexity for organisations charged with their execution. Skills can be more sustainably developed through a more holistic and joined-up approach to: policies and regulations impacting provision of further and higher education; greater availability of funding routes for high-demand vocational education; and better alignment of key initiatives such as apprenticeships and T-levels.

Setting out a series of individual policies, which do not interact cohesively, makes the job of skills provision unnecessarily complex and challenging. This diminishes the overall capacity and quality of skills supply which adversely impacts the sector.

Outcome 3:

Implement a Common Careers and Education Framework

At the heart of a solution to the required level of skills within the Built Environment should be a single and common framework for professional qualifications, education and careers – across all Built Environment disciplines. Today this picture is, at best, articulated only within each discrete professional body, and at worst, fragmented to the extent that it lacks cohesion, so as to be unintelligible. An overarching framework which is commonly designed, agreed and implemented would afford a number of key enablers, which would help overcome many of the current challenges.

The framework would provide a common language with which to communicate and engage with all stakeholders. This would include: those thinking about joining the industry; those in the sector seeking to enhance their careers; those wishing (or needing) to demonstrate their levels of competence; and organisations who need to specify skills requirements. Perhaps even more importantly, it would enable aggregation and enhanced collaboration throughout the educational supply chain. This should include more efficient content development and effective delivery, as well as increasing supply to match the sector's demand.



The Way Forward

Declaration of Next Steps

The three outcomes could best be managed and delivered by a body which is set up with the appropriate mandate, required funding and specific terms of reference for this purpose.

The attendees at the Summit all agreed that this body will play a critical role in operating at the intersection of the four major stakeholders:

- Government
- Education Providers
- Professional Bodies
- Industry

The mission of the new body will be to:

enable the Built (and Natural) Environment through skills, education and talent both now and in the future.

It will focus on activities which drive forward the aspirational outcomes identified above, through specific workstreams which engage in each case with wider groups of stakeholders. Its defining tenet will be to ensure:

the whole is greater than the sum of the parts.

Framework and model for a Built Environment Skills Body

Capability – define and develop required skills

Capacity – attract and retain required levels of talent

Competence – validate and certify quality

Coherence – engage within a single model

Confidence – quality mark and assure the end user

Commitment – engage and make positive impact

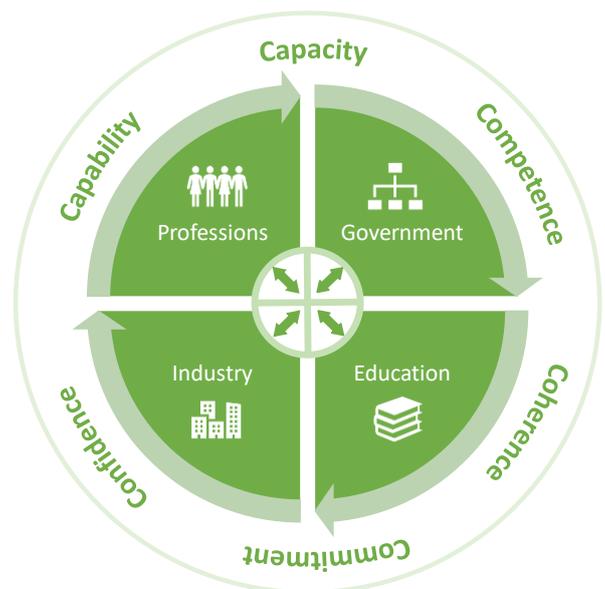


Figure 2: New Skills Body Model

Immediate Action: Establish a model for a holistic Built Environment Skills Body

In order to establish the new skills body model by March 2018:

1. A comprehensive **review** will take place to map, understand and evaluate the existing construction and related Built Environment bodies which have a similar or potentially overlapping remit and/or terms of reference including the CLC and relationship to the skills element of the Industrial Strategy.
2. It is the intention that an **aggregation** or re-focusing of an existing body or forum will be more desirable than the creation of something new. A proposal will be made based on the mapping and review above.
3. An evaluation and proposal of appropriate **membership** organisations will be made, which will enable **integrated leadership** of the stated outcomes.
4. Thereafter, the detailed **terms of reference** will be drawn up and agreed.
5. UCEM will commit to **funding** the body for the minimum of its initial year, after which an ongoing funding approach will be put in place.



Appendix

Speaker Profiles

Amanda Clack, President, RICS



Amanda joined CBRE as an Executive Director, Head of Strategic Consulting and a member of the UK Board in October 2017. She works across the business with public and private sector clients to deliver major strategic consultancy projects. Prior to this she was a partner at EY and at PwC, where she led on property, real estate and construction for consulting. She is a chartered quantity surveyor and a Fellow of RICS. In her role as past RICS President Amanda's major themes were infrastructure, cities, and addressing the competition for talent.

James Wates CBE, Chairman of BRE Trust, Wates and CITB



James joined Wates Construction in 1983 and the Wates Construction Board as Marketing Director in 1994. He was appointed to the Wates Group Board in 1997 and became Chairman in 2013. He is Chairman of CITB, Chairman of the BRE Trust, Past President of CIOB, Co-Chairman of BuildUK, a member of CBI, Trustee of University College of Estate Management and a Non-Executive Board Director of Argent Services LLP. In January 2012, James was awarded the CBE for services to Construction and the charitable sector.

Dr Peter Bonfield OBE, Chief Executive, BRE Group



Dr Peter Bonfield joined BRE as a research scientist in 1992 and became Chief Executive Officer of the BRE Group in January 2012. A materials engineer with a PhD in wind energy and the design of turbine blades, he is passionate about the role that building science can play in finding solutions to the challenges that the Built Environment faces. Peter was awarded an OBE for services to research and innovation in the construction industry in June 2012. He has led on several key governmental reviews, including in 2016: *Improving property level flood resilience* and *Each Home Counts*.

Mark Farmer, Founding Director and CEO, Cast Real Estate and Construction Consultancy



Mark has been at the forefront of emerging UK residential market segments and is playing a leading role in modernising the construction industry through the adoption of greater levels of pre-manufacturing. Mark is a member of RICS, Vice Chairman of the ULI UK Residential Council, a member of the BPF Build to Rent sub-committee and co-chairman of Constructing Excellence. Mark authored the October 2016 UK Government Review of the Construction Labour Market Model entitled '*Modernise or Die*'.

Attendee Profiles

Denise Chevin

Freelance Journalist and Editor

Denise is an experienced, award-winning journalist and editor, working across print, on line and events. She has a wealth of experience as an editor and commentator across the Built Environment.

(Denise participated in the Skills Summit on behalf of Graham Watts OBE, CEO of the Construction Industry Council.)

Martin Cawley

UK Business Development Manager, UCEM

Martin has many years of experience in supporting businesses with learning and development needs and strategic workforce planning. He has been integral to employer relations and the development of UCEM's Apprenticeship provision.

John Gellatly

Chairman, Board of Trustees, UCEM

John joined UCEM as non-executive Chairman in January 2015. He has worked for Aviva Investors as Head of UK and Europe, Global Real Estate Multi-Manager Group and will take up a new role as Chief Investment Officer Global Real Estate for the Abu Dhabi Investment Council in January 2018.

Clare Johnson

Head of Learning & Development:
Government Property Profession, The Cabinet Office

Clare joined the Cabinet Office in February 2016 after nearly two years as Deputy Head of Surveying Profession at the Valuation Office Agency. She has been instrumental in supporting the development of Chartered Surveyor Trailblazer standards.

Graham McPhail

Head of Education and Training, CITB

Graham is responsible for the National Construction College and Higher Education Strategy. Graham sits on the National Executive Committee of the British Association of Construction Heads (BACH).

Professor Joanna Price

Vice-Chancellor, Royal Agricultural University

Professor Price is a veterinary scientist by trade and has been Vice-Chancellor of the RAU since September 2016.

Simon Prichard

Senior Partner, Gerald Eve and Chair of the Windsor Group

Senior Partner at Gerald Eve since 2015. He is a well-respected and prominent figure within the property industry and is Chair of the Windsor Group - a committee representing the top property firms in the UK.

Mike Smith

Head of Propertymark Qualifications

Mike leads Propertymark Qualifications (formerly NFOPP Awarding Body); the specialist awarding body delivering nationally recognised qualifications and accreditation services for the property industry. Mike has an extensive background in skills development and recognition, curriculum development and assessment and apprenticeships, including the new Trailblazer Standards for property.

Terry Watts

Managing Director, CIOB

Appointed in 2017, Terry has extensive experience in the skills, construction supply-chain and technology sectors, and in large and small business change management. He is passionate about having an ever greater impact on the professional standards of construction in his role at CIOB.

Aled Williams

Dean, Research, Innovation & Partnerships
UCEM

Aled's role focuses on developing UCEM research capacity, output and excellence; working on partnerships that lead to genuine solutions for the sector. He sits on the Executive Committee of the Council of Heads of the Built Environment (CHOBE).

Bibliography

All-Party Parliamentary Group for Excellence in the Built Environment (2017) 'Building on Brexit: How leaving the EU must drive modernisation and training in the Built Environment', Commission of Inquiry of the All-Party Parliamentary Group for Excellence in the Built Environment (APPG). Available at: <http://cic.org.uk/admin/resources/appgebeskills-report-3.pdf> [Accessed 23 October 2017]

Association of Graduate Recruiters (2017) 'Developing Degree Apprenticeships – the Employer Perspective'. Available at: <https://c.ymcdn.com/sites/ise.site-ym.com/resource/collection/7a850055-3087-407c-8e41-a24ae7015560/AGR%20and%20HEFCE%20Developing%20Degree%20Apprenticeship.pdf?hSearchTerms=%22apprenticeship+and+report%22> [Accessed 23 October 2017]

Bonfield P (2016) 'Each Home Counts', An Independent Review of Consumer Advice, Protection, Standards and Enforcement for Energy Efficiency and Renewable Energy. Department for Business, Energy & Industrial Strategy / Department for Communities and Local Government. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/578749/Each_Home_Counts_December_2016_.pdf [Accessed 23 October 2017]

Bonfield P (2016) 'The property flood resilience action plan', An action plan to enable better uptake of resilience measures for properties at high flood risk, Department for Environmental Food & Rural Affairs. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/551615/flood-resilience-bonfield-action-plan-2016.pdf [Accessed 23 October 2017]

CIOB (2017) 'Construction Quality Commission: Call for evidence on Construction Quality', Available at: <https://kj06q2hv7031ix2143c36tpx-wpengine.netdna-ssl.com/wp-content/uploads/2017/10/Chartered-Institute-of-Building-Construction-Quality-Commission-Call-for-Evidence-1.pdf> [Accessed 30 October 2017]

CITB (2017) 'A New Reality: Immersive Learning in Construction', Available at: http://www.citb.co.uk/documents/research/t1438-rr-citb-a_new_reality_report.pdf [Accessed 23 October 2017]

CITB (2017) 'Faster, Smarter, More Efficient: Building Skills for Offsite Construction', Available at: http://www.citb.co.uk/documents/research/offsite_construction/offsite_construction_full_report_20170410.pdf [Accessed 23 October 2017]

DCLG (2017) 'Accelerated Construction: Local Authorities, Expressions of Interest', Department for Communities and Local Government (DCLG). Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/581520/Accelerated_Construction_EoI.pdf [Accessed 23 October 2017]

DCLG (2017) 'Fixing our broken housing market', A housing white paper, Department for Communities and Local Government (DCLG). Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/590464/Fixing_our_broken_housing_market_-_print_ready_version.pdf [Accessed 23 October 2017]

DfE (2017) 'Implementation of T level programmes', Open consultation, Department for Education. Available at: <https://www.gov.uk/government/consultations/implementation-of-t-level-programmes> [Accessed 6 November 2017]

Farmer M (2016) 'The Farmer Review of the UK Construction Labour Model: Modernise or Die', Time to decide the industry's future. Construction Leadership Council, London. Available at: <http://www.cast-consultancy.com/wp-content/uploads/2016/10/Farmer-Review-1.pdf> [Accessed 23 October 2017]

Frith B (2017) 'Degree apprenticeships risk becoming the "preserve of the privileged"', hr magazine. Available at: <http://hrmagazine.co.uk/article-details/degree-apprenticeships-risk-becoming-the-preserve-of-the-privileged> [Accessed October 23 2017]

HM Government (2017) 'Building our Industrial Strategy', Green Paper. Department for Business, Energy & Industrial Strategy. Available at: https://beis.gov.uk/citizenspace.com/strategy/industrial-strategy/supporting_documents/buildingourindustrialstrategygreenpaper.pdf [Accessed 23 October 2017]

HM Government (2017) 'Industrial Strategy: building a Britain fit for the future', Policy paper, Department for Business, Energy & Industrial Strategy. Available at: <https://www.gov.uk/government/publications/industrial-strategy-building-a-britain-fit-for-the-future> [Accessed 27 November 2017]

IfA (2017) 'Institute for Apprenticeships: Occupational Maps', Occupational maps consultation, Institute for Apprenticeships, Department for Education. Available at: <https://consult.education.gov.uk/apprenticeships/institute-for-apprenticeships-occupational-maps/> [Accessed 14 December 2017]

National Audit Office (2016), 'Delivering value through the apprenticeships programme'. <https://www.nao.org.uk/wp-content/uploads/2016/09/Delivering-the-value-through-the-apprenticeships-programme.pdf> [Accessed 30 October 2017]

Powell A (2017) 'Apprenticeships Policy in England: 2017', Briefing Paper, House of Commons Library. Available at: <http://researchbriefings.files.parliament.uk/documents/SN03052/SN03052.pdf> [Accessed 23 October 2017]

Randstad (2016), 'Women in the construction industry in 2016'. Available at <https://www.randstad.co.uk/women-in-work/women-in-the-uk-construction-industry-in-2016.pdf> [Accessed 23 October 2017]

RICS (2016) 'Building inclusivity: laying the foundations for the future', RICS Inclusive Employer Quality Mark, RICS, London. Available at: http://www.rics.org/Global/building_inclusivity_280616_rt.PDF [Accessed 23 October 2017]





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