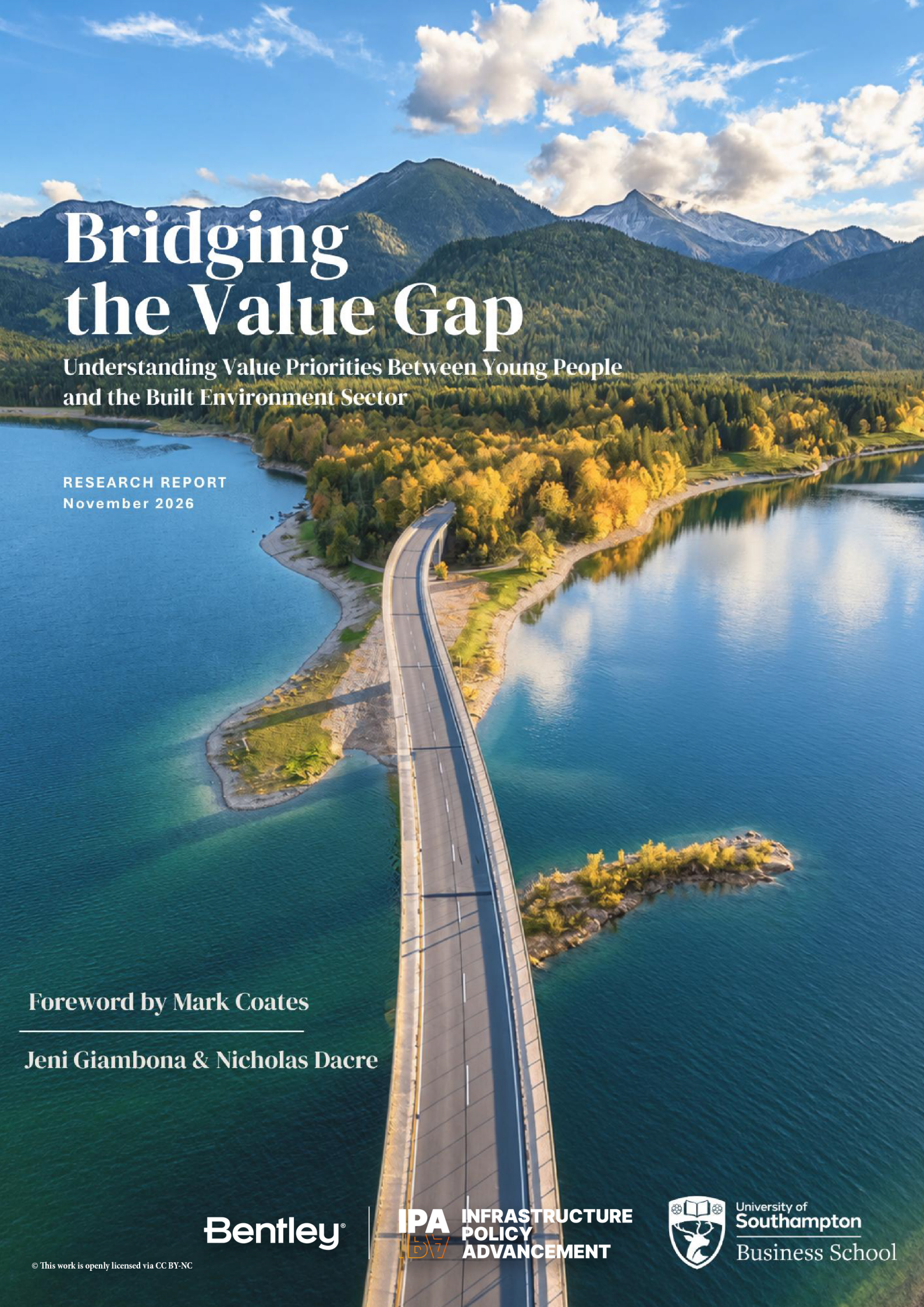


Bridging the Value Gap

Understanding Value Priorities Between Young People and the Built Environment Sector

RESEARCH REPORT
November 2026

Foreword by Mark Coates

Jeni Giambona & Nicholas Dacre

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University of Southampton Business School

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Foreword



Mark Coates

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The future of infrastructure depends on decisions made long before a project reaches the drawing board. Some of the most consequential are made by young people deciding where to invest their abilities and ambitions. A sector that plans assets over decades needs to take an equally long view of the people who will design, build and manage them. Their willingness to join us, the opportunities available to them and the support they receive will shape what we can deliver for society.

Bridging the Value Gap draws attention to the distance between recognising the value of a career and being able to pursue it. Young people need to understand the work, see a clear route into it and have a realistic opportunity to take that first step. They also need confidence that the promise of meaningful work is supported by fair pay, good working conditions and opportunities to progress. Our responsibility is to make those careers both understandable and attainable, and to ensure that the experience of joining the sector lives up to the expectations we create.

Degree apprenticeships have an important part to play, combining paid employment and practical experience with degree study without tuition fees for the apprentice. Alongside full-time university study and other technical routes, they can broaden access to professional careers. Their success depends on employers providing places, protected time for learning and the supervision that enables people to develop.

Getting people into the sector is only the beginning. As artificial intelligence changes how work is undertaken, we must also consider how they will gain experience and develop professional judgement throughout their careers. Investment in these tools should be accompanied by investment in learning, so that young people can understand and question the outputs they use, recognise their limitations and develop the competence and confidence to take on greater responsibility.

The responsibility for developing people extends to those who commission and fund infrastructure. Decisions about investment and procurement help determine whether employers can make sustained commitments to training and development. Where delivery arrangements leave little room for supervision and learning, we risk consuming the expertise available today without developing enough for tomorrow. The capability a programme leaves behind should therefore form part of how we judge its contribution. Alongside the assets delivered, we should ask whether it has prepared people to take on greater responsibility and equipped organisations to undertake the work that follows.

I welcome this report because it takes seriously the choices young people are being asked to make. It also invites those of us in established positions to examine our assumptions about the careers we offer, including aspects of working life we may have come to accept without question. Listening to prospective entrants should help us improve both the routes into our organisations and the experience of working within them. This gives the report significance beyond recruitment: it provides a valuable starting point for a conversation about the kind of sector we want to become and the part young people should have in shaping it.

Research



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1 Executive Summary

The built environment sector faces an ongoing challenge in attracting, developing and retaining the workforce needed to support future growth. While many careers within the sector offer qualities that young people value, including meaningful work, career progression and opportunities to contribute to society, these benefits are not always recognised or connected to accessible career opportunities. This report explores this disconnect through the concept of the 'value gap', which considers how young people recognise and evaluate potential careers within the sector. While the skills gap focuses on the people and capabilities the sector needs, the value gap examines whether young people understand the career opportunities available, know how to access them and can find roles that align with their expectations. Addressing this gap therefore involves improving career awareness, clarifying pathways into employment and supporting meaningful opportunities for people to develop and progress within the sector.

The research combined three stages, beginning with a systematic review of 43 studies, followed by a survey of 69 students and 285 built environment professionals, and concluding with a stakeholder workshop in which professionals, educators and students interpreted the survey findings, challenged emerging assumptions and helped guide the recommendations. The findings indicate how career recognition, pathway knowledge, credible exposure and available opportunities underpin the progression from initial awareness to informed career consideration.

1.1 Key insights

1. Career value and visibility
The sector offers many of the career attributes young people value, but these do not always translate into career appeal. The findings point to a gap between the value young people recognise in built environment careers and how those careers are presented to them.

2. Navigation and attainability
The main difficulty extends beyond rejection of the sector. Young people may recognise broad value while remaining unable to identify occupations, compare routes, find clear information on requirements or identify realistic next steps.

3. Credible exposure
Direct, structured exposure was strongly associated with student career appeal. Workshop participants described how mentoring, projects and work experiences help explain tasks and workplaces.

4. Influence ecosystem
Career understanding develops across families, schools, advisers, employers, professional institutions, peers and digital platforms. Information may be disjointed, incomplete or lost between these groups.

5. Employment fundamentals
Purpose, sustainability and technology do not replace salary, security, progression and work-life balance. Careers information should cover employment conditions and development as well as the sector's wider contribution.

6. Attraction and system capacity
More marketing will not automatically resolve workforce shortages when available opportunities or employers' capacity to support and develop new entrants are the greater constraint. Identifying the main constraint helps practitioners select an appropriate response.

1.2 Key recommendations

- **Map** occupations and pathways around recognisable interests, with clear entry requirements, timelines, qualifications, pay, progression and current local opportunities.
- **Build** connected and structured exposure pathways through employer talks, school and site visits, practical activities, work experience and mentoring, followed by clear information about the next step into further study, an apprenticeship or employment.
- **Present** what the careers offer, including the nature of the work, entry routes, salary, working conditions and career progression, alongside opportunities to contribute to sustainability, innovation and society.
- **Provide** teachers, careers advisers and parents with up-to-date information on job roles, entry routes, qualifications, salary, progression and local opportunities, together with clear points of contact within the sector.
- **Match** events and outreach to the availability of work experience, placements, apprenticeships and entry-level roles, as well as employers' capacity to supervise and develop new entrants. Early access to technical education needs to lead to available opportunities through clear, suitable routes.
- **Measure** conversion at each stage, recording how many participants move from initial career engagement to work experience, applications, offers and sector entry, while monitoring progression and retention after recruitment.

2 Rationale and aim

2.1 The built environment workforce challenge

The built environment sector supports the delivery and operation of housing, infrastructure and public assets, making a substantial contribution to the UK economy (Giambona & Dacre, 2025). Construction alone accounts for around 6% of UK economic output and supports more than two million jobs (CITB, 2025). The Construction Industry Training Board (CITB) forecasts that construction output will grow by approximately 1.8% a year to 2030 and estimates that around 41,200 additional workers will be required annually (CITB, 2026). Skills England identifies 30 priority construction occupations and projects 493,000 additional jobs and 595,000 replacement requirements between 2025 and 2035 (Skills England, 2026). Meeting the demand will require new entrants as well as continued training and development within the existing workforce.

However, the workforce challenge begins before recruitment, as young people need to recognise relevant careers, understand entry routes and be able to access available opportunities before they can enter the sector. This creates a value gap where careers that may align with young people's priorities are not recognised or understood, or where an apparently suitable route does not lead to an accessible opportunity. Industry surveys suggest that interest in construction and access to careers advice remain uneven. Barratt Redrow (2026) reported that 9% of surveyed teenagers selected construction as the career area that interested them most. A survey from the Chartered Institute of Building (CIOB) found that 31% of people aged 16-24 were likely to consider a construction career, while 47% reported receiving no construction-related careers advice during education (Evans & Barnes, 2025).

Existing studies map the occupations and capabilities the sector needs. For example, Skills England (2026) connects priority occupations with qualification levels and 117 apprenticeship standards; CITB (2026) links forecast output to employment and recruitment requirements. Rubinsohn and Brown (2025) identify changing professional needs in areas including digital tools and AI, sustainability, data and business skills. This notwithstanding, workforce demand alone does not show what may be limiting entry into the sector. This project explores the relationship between value gap and skills gap, investigating whether potentially relevant careers are recognised, understood and accessible to young people.

Current policy increasingly emphasises technical education and stronger links between education and employment. Recent proposals include expanding vocational options from age 14 and engaging employers earlier in young people's education, alongside a greater role for local skills systems in connecting educational pathways with employment opportunities (Greening, 2026). Similarly, industry discussions have highlighted the importance of establishing technical education as a credible route into professional careers, supported by clear progression pathways across schools, colleges, apprenticeships, universities and employment (Feeley, 2026). While these developments have the potential to broaden the pathways available to young people, their effectiveness will depend on how clearly these routes are defined, how closely they align with occupational needs, and whether young people can access meaningful opportunities to pursue them.

However, expanding educational pathways and strengthening links between education and employment will not, in themselves, resolve workforce shortages, as the availability of opportunities and employers' capacity to recruit, train and retain new entrants also shape workforce supply. Skills shortages can reflect several workforce constraints, including a lack of experienced specialists, limited entry-level vacancies and insufficient staff time to supervise new entrants. Recruitment problems can also be concentrated in particular regions, while poor working conditions or limited development may affect retention. Clear information about roles and entry routes may help potential applicants with limited career knowledge, but it will not resolve a shortage caused by insufficient placements, slow development or weak retention. The Construction Leadership Council similarly treats entry, training, deployment and retention as connected workforce issues that extend beyond low interest (BEFA, 2026). Recent engineering sector analysis also highlights how progression through education affects the future supply of workers. Some of the specialist expertise required by the sector takes years to develop, and recruitment difficulties can remain where available candidates do not have the qualifications and experience required for particular roles (Patel, 2026).

Additionally, The systematic review stage of this study found that many built environment roles align with young people's career priorities, so a mismatch with the work available does not fully explain limited career consideration. Salary, security and progression remain important, alongside work-life balance, learning, meaningful work, technology, sustainability, inclusion and social contribution. Contemporary built environment roles can offer many of these characteristics through digital engineering, low-carbon design, modern methods of construction and infrastructure transformation. This alignment raises the question of whether young people recognise the career value available within the sector and can connect it with available routes and opportunities.

2.2 Research aim and questions

This study examined how young people define career value, how they understand the contemporary built environment and what influences whether they view careers in the sector as attractive and attainable. The project, therefore, delved into how young people become aware of particular roles, understand the pathways into them, develop relevant experience and identify realistic opportunities for progression.

The research addressed one core question:

> *'How do young people understand career value and the built environment, and what influences whether they consider and pursue careers in the sector?'*

In order to answer this fundamental question, we set out the following objectives:

- Identify the career characteristics young people value and examine their alignment with contemporary built environment roles.
- Examine young people's knowledge of built environment occupations and entry routes, together with the people, information and experiences that shape career exploration.
- Develop evidence-based recommendations to improve career recognition, route navigation, access to relevant experience and progression into the sector.

3 Research Approach

The research combined a systematic literature review, a multi-stakeholder survey and a facilitated stakeholder workshop. The three distinct yet connected stages are summarised in Table 1.

Table 1. Methodological framework

Method	Sample	Purpose
Systematic literature review	Academic and grey-literature sources	Establish career values, sector understanding, career influences and conceptual gaps
Questionnaire survey	n=354 analysed: 285 built environment professionals and 69 students	Examine young people's career priorities and sector understanding alongside practitioner views of careers and routes into the sector
Workshop	Built environment professionals, education stakeholders and students	Examine interpretations, explain how constraints arise and develop actions

3.1 Systematic literature review

The systematic literature review followed an established protocol, specifically the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidance for transparent identification, screening and reporting (Page et al., 2021). Scopus and Google Scholar were searched between May and August 2026. Selected government, professional-body and industry publications were added to provide the perspectives of UK workforce and policy. The search terms reflected three main areas: young people, career choice and awareness, and built environment careers, including construction, civil engineering, surveying and architecture. These terms were adapted for each database. The review examined literature on career priorities, sector understanding, entry routes and career influences, as well as broader topics including sustainability, innovation and recruitment. English-language publications from 2015 onwards were screened for direct relevance to the research question.

The search identified 414 records. After 52 duplicates were removed, 362 titles and abstracts were screened. Seventy-eight publications proceeded to full-text assessment, and 43 studies were retained for thematic synthesis. Data were extracted on study context, participants, career priorities, sector characteristics, sources of influence, barriers and proposed interventions. Themes were developed across the included studies and then compared with the selected policy and industry material. The latter provided context but were not included as part of the 43 studies retained through the systematic screening process.

3.2 Questionnaire survey

The survey was designed to investigate in greater depth the themes identified through the systematic literature review, examining how these were reflected in the experiences and perspectives of different participant groups. The analysis included 354 responses, comprising 285 built environment professionals and 69 students. Student Responses provided insights into career priorities, recognition of built environment career characteristics and perceptions of career appeal, while professional responses captured practitioner perspectives on career pathways, routes into the sector and wider workforce challenges. No duplicate profiles were identified among the eligible records.

3.3 Stakeholder workshop

The facilitated workshop followed the literature review and survey analysis. Participants included built environment professionals, education stakeholders and students. Practitioners examined emerging findings drawn from the literature and survey, identified operational constraints and refined possible actions.

4 The career value challenge

4.1 What young people value and what the sector provides

The literature review identified employment conditions, development opportunities, purpose and the quality of work as important considerations in young people's career choices. Contemporary built environment careers can meet many of these priorities. Salary, job security and progression remain important alongside work-life balance, wellbeing, learning and meaningful work (Ayoobzadeh et al., 2024; Lingard et al., 2025). Additionally, and unsurprisingly, career priorities also develop through lived experience. Wang et al. (2023) link career expectations with personal evaluation and social support, with self-development particularly important among university students. Kong et al. (2015) show how organisational career management and support can clarify career goals and future opportunities. Modestino et al. (2019) describe career identity as developing through previous experience, current opportunities and future aspirations. Young people may therefore judge the same career differently depending on their previous experiences, the information available to them and the opportunities they can see in practice.

Built environment careers can offer many of the attributes young people value, particularly opportunities for learning, progression, meaningful work and varied projects. their appeal can weaken, however, when employment involves long hours, limited work-life balance, insecurity or physically demanding conditions. Workload is also an important source of stress in the construction workforce, making mental health a relevant consideration (Barnett, 2025). Digital tools and changing project requirements create opportunities to learn, while professional careers can offer varied work and progression (Dacre & Kockum, 2026; Dacre et al., 2025; Ilieva & Vitanova, 2019). However, the challenges identified above have contributed to some construction-trained graduates choosing other sectors (Ling et al., 2016). Table 2 summarises the literature and provides the basis for the comparison of young people's career priorities and characteristics of contemporary built environment work. It highlights areas of alignment while recognising that employment conditions and career experiences vary across the sector.

Table 2. Alignment between young people's career priorities and contemporary built environment careers

Career Priority	Description	Contemporary Built Environment Characteristics	Key Studies
Meaningful work	Young people increasingly seek careers that provide purpose and contribute positively to society.	Built environment professionals contribute to infrastructure, housing, environmental sustainability and community wellbeing.	Wang et al. (2023); Lingard et al. (2025)
Career development	Opportunities for continuous learning and long-term progression are highly valued.	The sector offers multidisciplinary career pathways, professional accreditation and continuous development opportunities.	Ilieva and Vitanova (2019); Wang et al. (2023)

Career Priority	Description	Contemporary Built Environment Characteristics	Key Studies
Work-life balance and wellbeing	Flexible working arrangements and employee wellbeing have become increasingly important career expectations.	Organisations are increasingly adopting wellbeing initiatives and flexible working practices, although implementation remains uneven.	Ayoobzadeh et al. (2024); Lingard et al. (2025)
Sustainability and social impact	Young people increasingly wish to contribute to environmental sustainability and broader social impact.	Net-zero construction, circular economy, resilient infrastructure and sustainable development have become central priorities.	Unuigbe and Zulu (2023); Moshood et al. (2025); Unuigbe (2026)
Innovation and technology	Technology-rich, future-oriented careers are increasingly attractive.	BIM, AI, automation, digital twins and smart infrastructure are transforming professional practice.	Ilieva and Vitanova (2019); (Corbin et al., 2024); Najafi and Rahimian (2025)
Diversity, inclusion and belonging	Inclusive organisational cultures, equal opportunities and psychological safety are increasingly valued.	The sector has increased emphasis on diversity, inclusion and workforce wellbeing, although challenges remain.	Ayoobzadeh et al. (2024); (Adigun et al., 2025); Lingard et al. (2025)
Job security and financial rewards	Financial stability and long-term career prospects remain important.	The sector generally provides relatively stable professional careers with competitive pay across many disciplines.	Wang et al. (2023); Bharadwaj et al. (2025)

4.2 Role visibility and pathway knowledge

General awareness of construction or the built environment does not ensure an understanding of its career paths. young people were more familiar with roles linked to architecture and civil engineering than with other built environment occupations such as quantity surveying, planning, project management, digital engineering, building control and sustainability consulting (Barnes, 2025; Jiang et al., 2021; Pieper, 2023; Unuigbe, 2026). This disparity in career awareness may limit the range of occupations young people consider when exploring potential career pathways, potentially overlooking roles that align with their interests in emerging technologies, sustainability, business or community development.

Although more visibility of roles available within the built environment can broaden young people's career choices, those choices also depend on clear information about entry routes. Qualifications, accredited programmes, apprenticeships and longer-term professional development create different routes into the built environment sector; however, these can be difficult to understand and compare when knowledge of educational routes and professional qualifications is limited (Pieper, 2023; Poon, 2019). For example, a young person may recognise a role that matches their interests but still remain unclear whether that particular career path can be entered through university, an apprenticeship or a technical route, what each route requires, and how it supports later progression. Assessing career visibility and knowledge of entry pathways separately helps distinguish between roles that young

people are unaware of and those that attract interest but lack clear or well-understood routes into the profession. Career information also needs to present a realistic account of the type of work, including, where pertinent, the long working hours, physical demands, potential insecurity and gendered workplace experiences that remain in parts of the sector (Ling et al., 2016; Suresh et al., 2023).

4.3 The influence ecosystem

Families, education, professionals and wider sources of career information and support form an influence ecosystem that shapes career understanding. These influences can reinforce one another, but they can also provide different or conflicting messages about career options and routes. Bharadwaj et al. (2025) found family to be the strongest influence on construction career choice in their Gen Z sample, with approximately 41% of participants citing family. Families can encourage entry through role models and practical support. They may also discourage entry when relatives associate the sector with difficult working conditions or limited long-term prospects (Bigelow et al., 2019; Oshodi et al., 2020; Suresh et al., 2023).

Parents and carers often interpret career information through their own experiences, education, employment history and social networks. Their advice may focus on familiar occupations or established routes when emerging roles and qualifications fall outside their experience (Billett et al., 2022; Ion, 2023). Access to professional knowledge and contacts also differs between families. up-to-date and accessible information is therefore important for parents as well as for young people. Schools, careers advisers, higher education institutions and employers provide different forms of support within this ecosystem. Education can introduce subjects and routes, while work experience, site visits, career fairs, guest lectures and mentoring allow young people to get more directly familiar with specific tasks and working environments (Naoum et al., 2020). Digital platforms widen access to career stories, professional networks and vacancies, although information based on individual experience may be incomplete or difficult to verify (Nguyen, 2024; Sampson et al., 2018; Tkachuk et al., 2024). the literature reviewed identifies sources of influence on young people's career understanding, as summarised in Table 3. Recruitment initiatives operate within this wider influence ecosystem, with several factors acting simultaneously.

Table 3. Factors Shaping Career Value Recognition

Factors	Primary Role	Contribution to Career Value Recognition	Relevant Studies
Family	Career expectations, encouragement and role modelling	Shapes early career aspirations and occupational preferences	Oshodi et al. (2020); Suresh et al. (2023); Bharadwaj et al. (2025)
Schools and teachers	Career education, curriculum and subject choices	Influences awareness of career opportunities and pathways	Naoum et al. (2020); Suresh et al. (2023)
Careers advisers	Information and career guidance	Supports informed career decision-making where guidance is effective	Oshodi et al. (2020); Bharadwaj et al. (2025)

Factors	Primary Role	Contribution to Career Value Recognition	Relevant Studies
Employers	Work experience, placements, employer engagement	Improves understanding of contemporary careers and workplaces	Gomis et al. (2022); Zhou and Shirazi (2025)
Professional institutions	Outreach activities, ambassadors and educational resources	Enhances role visibility and professional identity	Barnes (2025); Unuigbe (2026)
Social media and digital platforms	Career stories, influencers and online information	Can both improve awareness and reinforce misconceptions	Nguyen (2024); Tkachuk et al. (2024)
Peers and wider social networks	Social comparison and informal discussion	Reinforces career norms and occupational expectations	Zhang et al. (2023); Adah and Ekweani (2025)

4.4 The value gap

Although Built environment careers can offer many of the outcomes young people prioritise, including financial security, career progression, meaningful work, continuous learning, technological innovation and social contribution, these benefits do not always translate into clear or accessible career opportunities. The value gap emerges when the attributes young people seek are not effectively connected to recognisable occupations, understandable entry routes and realistic opportunities for progression. In this report, the value gap is defined as the disconnect between the career value young people seek and their ability to recognise that value, understand and access relevant pathways, and experience it through available career opportunities.

This disconnect can arise at several stages of career exploration and entry. Young people may have limited awareness of the range of occupations within the built environment or associate the sector primarily with site-based construction. Consequently, they may be attracted to areas such as sustainability, infrastructure or digital innovation without recognising the specific roles through which they could pursue these interests. Even when a potentially suitable occupation is identified, uncertainty about qualifications, apprenticeships and employer requirements may make it difficult to determine an appropriate route into the profession. Furthermore, awareness of an entry route does not necessarily translate into the ability to pursue it. Young people may still lack clear information about available vacancies and placements, recruitment and selection processes, or the support provided to those entering the workforce. The value gap therefore extends beyond career awareness to encompass the clarity, accessibility and practical viability of the pathways connecting young people's aspirations with employment opportunities.

This value gap can also persist into early career experience where employment conditions affect whether the expected value of a chosen career is perceived in practice. Salary, job security, working arrangements, travel, training and career progression remain important when comparing career options. Information about the sector’s social purpose may encourage initial interest, but employers also need to provide sufficient entry opportunities, supervision and suitable working conditions. These factors affect young people’s ability and willingness to enter the sector, develop in their roles and remain in the industry. Therefore, working conditions, supervision and development contribute

to the widening of the value gap when they limit access to opportunities or prevent expected career value from being realised.

Based on the findings of our study, Figure 1 presents a conceptual framework to help bridge this value gap, bringing together the factors that shape young people's career understanding and choices with the opportunities and employment conditions that support entry, development and retention in the sector.

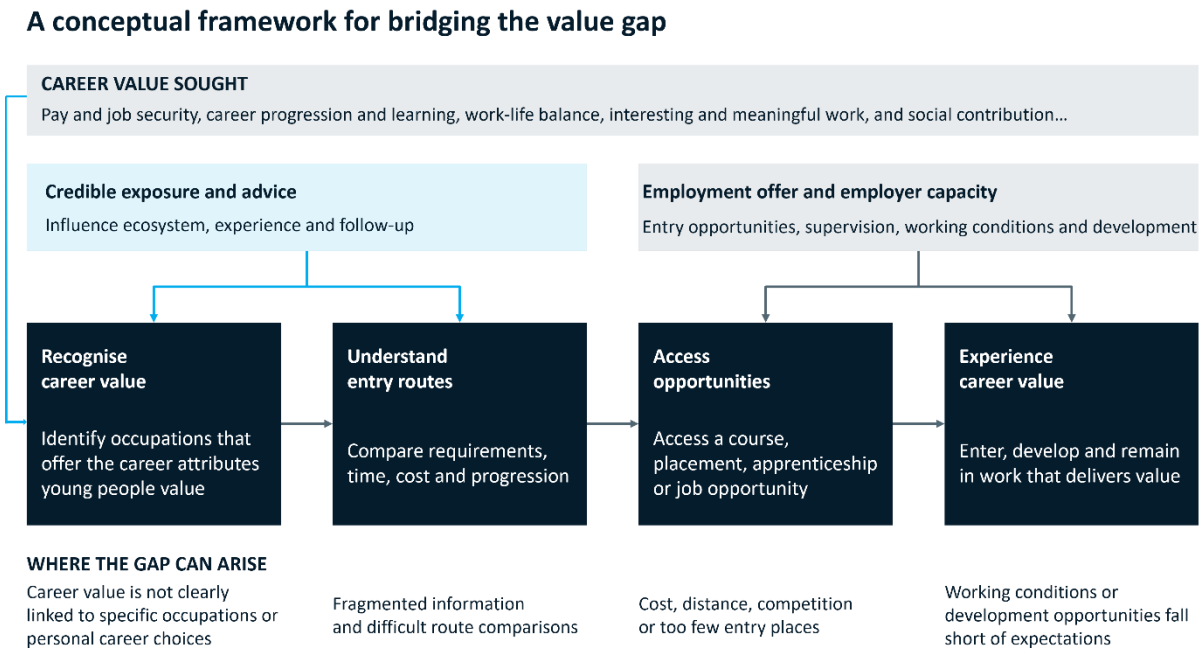


Figure 1. A conceptual framework for bridging the value gap

5 Bridging the value gap

The combined findings from the literature review, questionnaire survey and stakeholder workshop identified six connected dimensions of the postulated value gap. These dimensions are: career value and visibility, navigation and attainability, credible exposure, the influence ecosystem, employment fundamentals, and attraction and system capacity. these dimensions are summarised in Table 4.

Table 4. Findings from three-stage research

Findings	Results	Practical implication
Career value and visibility	Students recognised positive career attributes more strongly than they endorsed the sector's presentation and its appeal.	Show the work through clear roles, projects and employment information.
Navigation and attainability	Broad interest did not ensure knowledge of occupations, routes or realistic next steps.	Provide clear comparisons of entry routes linked to current opportunities.

Findings	Results	Practical implication
Credible exposure	Organised exposure was strongly associated with student career appeal.	Connect practical experience with reflection and a clear next step.
Influence ecosystem	Families, education, employers, institutions, peers and digital sources jointly shape career understanding.	Coordinate information and follow-up support across organisations.
Employment fundamentals	Purpose and innovation did not replace salary, security, progression or work-life balance.	Present benefits, conditions and trade-offs together.
Attraction and system capacity	Interest cannot become workforce growth without vacancies, supervision, development and retention.	Identify the main constraint before selecting an action.

The sections below will explore each dimension in more detail.

5.1 Career value and visibility

Employment fundamentals ranked among the strongest priorities in the student survey. As shown in Figure 2 below, a good salary was rated very or extremely important by 87.0% of students. Long-term job security, progression and opportunities to learn new skills were jointly reached second at 85.5%, followed by work-life balance and interesting projects at 84.1%. Meaningful work remained important to 79.7%. These findings chime with previous research that saw a combination of security, development, balance and supportive work as important in career choice (Kong et al., 2015; Wang et al., 2023).

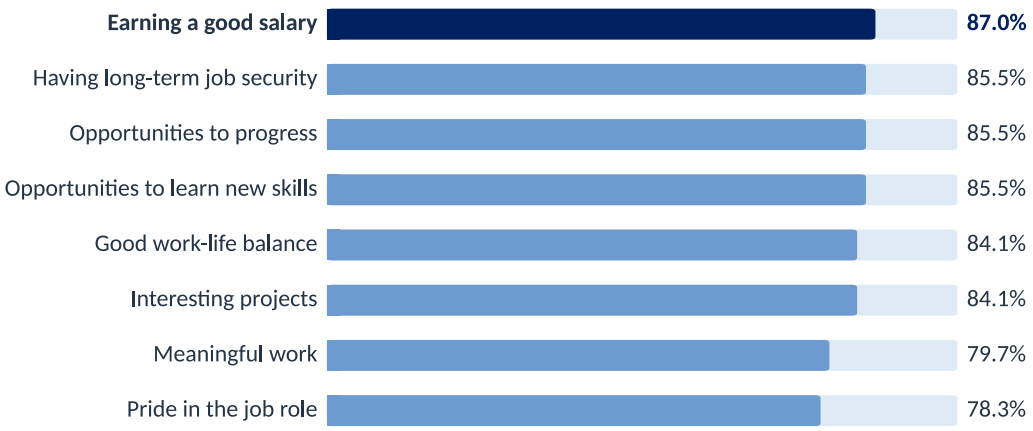


Figure 2. Young people's career priorities

Young people also associated several positive features with roles in the built environment (Figure 3). Positive contribution to society and interesting projects were recognised by 85.5%, while 84.1% recognised meaningful work and 81.2% recognised opportunities to learn and develop. Recognition of Modern technology and environmental sustainability reached 71.0%. The two statements on modern, relevant presentation of the sector and the appeal of that presentation each received agreement from 50.7% of students.

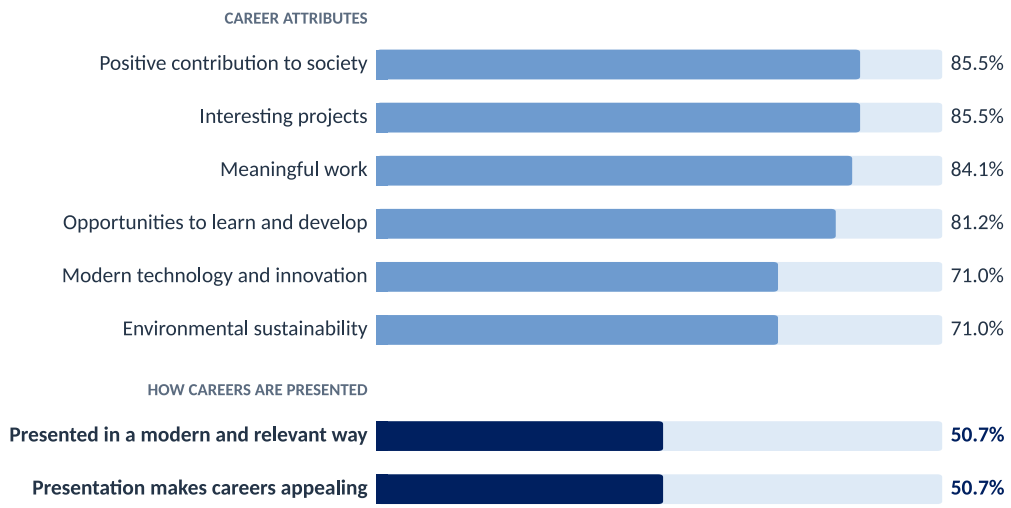


Figure 3. Young people's recognition of the sector's career value

The findings are summarised by research stage in Table 5 and suggest that young people recognise the career value the sector offers, but do not always connect this value with a career they would consider.

Table 5. Career value and visibility synthesis

Reference	Findings	Application
Systematic literature review	Career value combines salary, security and progression with learning, wellbeing, purpose, sustainability and social contribution. Built environment work can offer many of these outcomes, while sector presentation and working conditions remain uneven (Ayoobzadeh et al., 2024; Lingard et al., 2025).	Present career value as a combination of work content and employment conditions, linked to specific occupations.
Survey	Students rated salary most highly (87.0%). Security, progression and opportunities to learn new skills each reached 85.5%, followed by work-life balance at 84.1%. They recognised social contribution and interesting projects (85.5% each) more strongly than modern presentation or the appeal of that presentation (50.7% each).	Show how particular roles deliver the outcomes students value, using concrete information about tasks, projects, pay and development.
Workshop	Participants described a wide range of professional and technical opportunities but noted that many remain hidden behind a narrow construction image. One participant said that many young people '*do not have a clue about the enormous opportunities within this industry*'.	Make less visible occupations easier to identify and describe them through the work, workplaces and outcomes involved.

5.2 Navigation and attainability

Industry professionals expressed concerns about young people's awareness of career opportunities and entry routes within the sector, alongside strong support for targeted interventions. Only 10.9% of professionals believed that young people were aware of the variety of careers available, while 10.5% believed they understood the different entry pathways.

> **Workshop Findings**
> **One participant said that many young people:**
> ***do not have a clue about the enormous opportunities within this industry.***

Clearer information on entry routes was the most strongly supported priority for action (88.8%), followed by greater collaboration across organisations (87.7%). Additional work experience opportunities and improved careers education were each supported by 86.3% of respondents. These findings are illustrated in Figure 4.

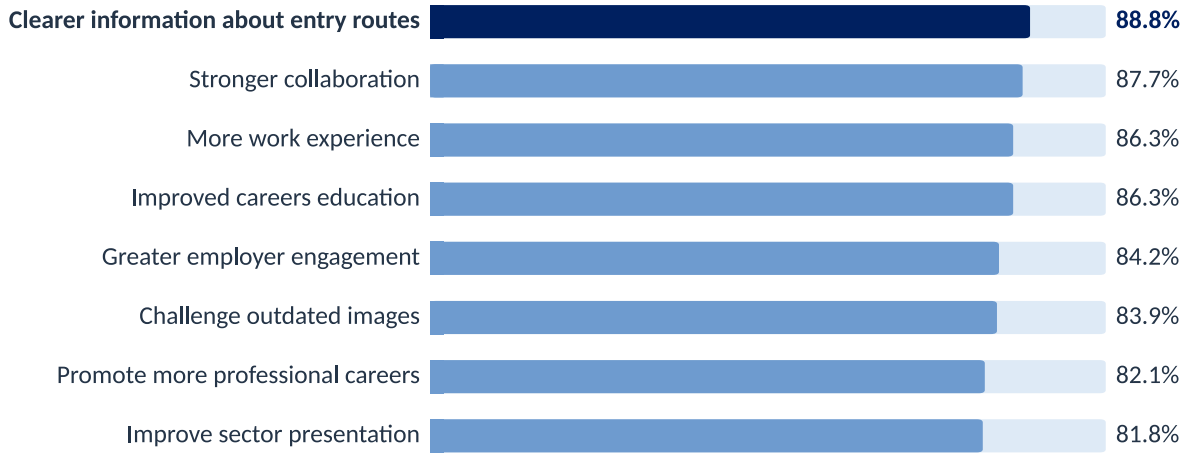


Figure 4. Practitioners' priorities for action

The complexity of routes into professional careers was also highlighted during the workshop, with one participant describing the pathways as 'a maze'. Information on qualifications, accredited courses, apprenticeships and university programmes was often spread across different organisations, making it difficult to connect entry routes with specific occupations or vacancies.

Practical considerations, including course and travel costs, the location of training providers and employers, competition for places and responses to applications, could further influence access to opportunities. Participants therefore distinguished general interest in the sector from the knowledge and opportunities required to pursue a career.

Young people interested in infrastructure, digital design or sustainability may still face difficulties identifying suitable roles, comparing entry routes, understanding qualification requirements or finding opportunities within travelling distance. The findings are summarised by research stage in Table 6.

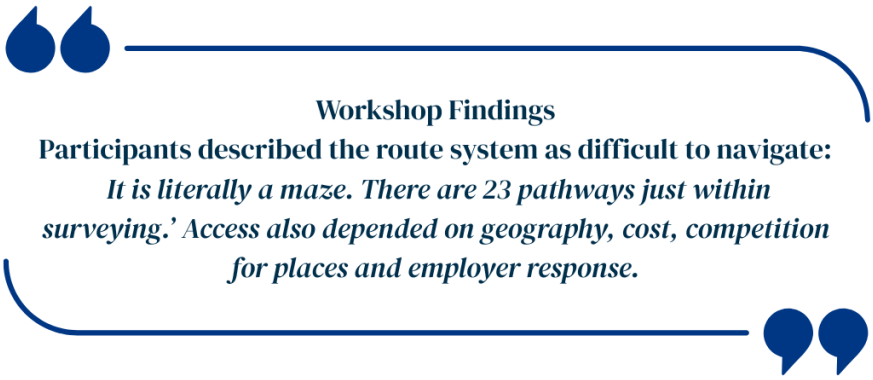


Table 6. Navigation and attainability synthesis

Reference	Findings	Application
Systematic literature review	Young people may recognise the sector but have limited access to clear information on its occupational breadth or the qualifications and routes attached to particular roles. Less visible professional, technical and sustainability roles are especially difficult to identify (Barnes, 2025; Oshodi et al., 2020).	Explain occupations and routes separately, allowing users to compare requirements, duration and progression.
Survey	Only 10.9% of professionals believed young people were aware of the variety of careers and 10.5% believed they knew the sector pathways. Clearer information about apprenticeships, college, university and work-based routes was the highest-rated action (88.8%).	Provide comparable route information covering entry requirements, qualifications, costs, timescales and current opportunities.
Workshop	Participants described the route system as difficult to navigate: '*It is literally a maze. There are 23 pathways just within surveying*.' Access also depended on geography, cost, competition for places and employer response.	Test route information by whether a user can identify an occupation, compare options and complete a realistic next step.

Figure 5 summarises four conditions that may shape informed career consideration, from recognising suitable occupations and understanding entry routes to identifying accessible opportunities and evaluating employment conditions.

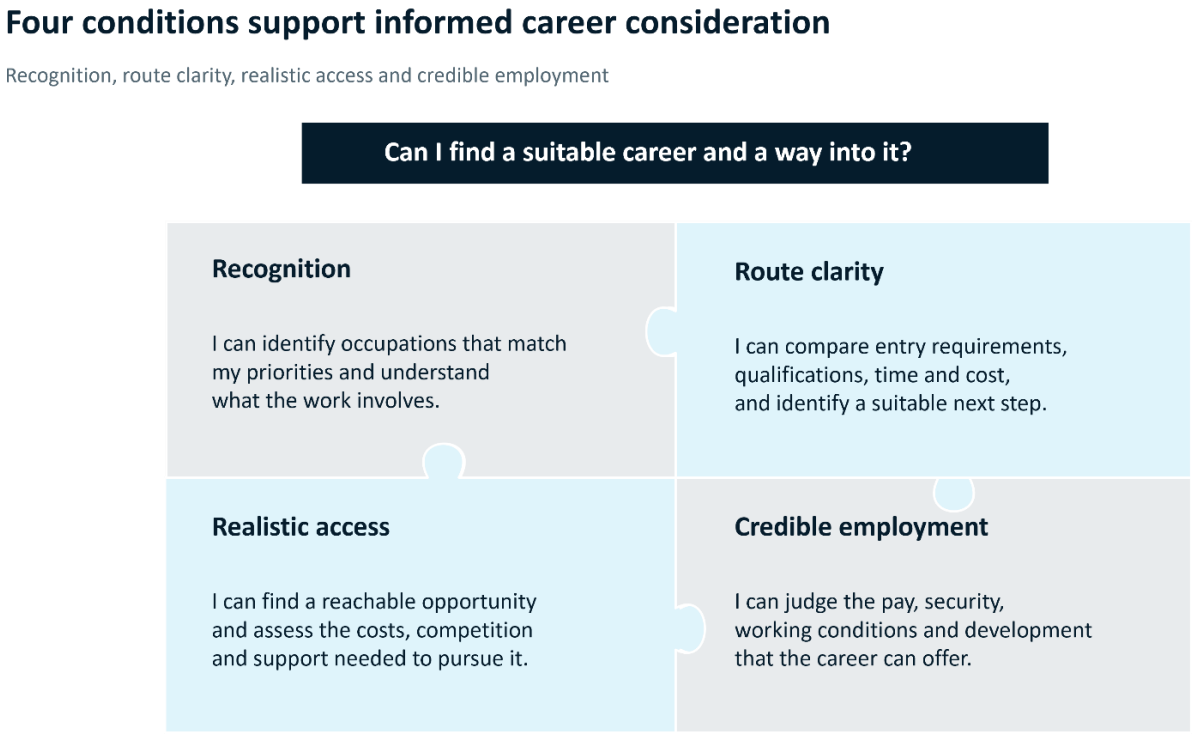


Figure 5. Four interconnected conditions for informed career consideration

5.3 Credible exposure

Our research showed that, in The student survey, greater exposure to the sector was associated with stronger career appeal. The finding is consistent with previous literature indicating that contact with employers, educational experiences and social support can contribute to career exploration (Galliott & Graham, 2015; Zhou & Shirazi, 2025). Workshop participants shared which forms of experience they found most useful. mentoring, work experience and participation in projects allowed young people to see what different roles involved, speak directly with people doing the work and understand how an individual task contributed to a completed building or infrastructure project.

Site and workplace contact also gave them more concrete information about working environments, travel, team relationships and the social purpose of the work. These experiences were most useful when they included a practical activity and clear next steps, such as a named course, placement, apprenticeship, vacancy or a person to contact. A presentation or one-off visit can introduce young people to the sector, but their value is limited if not coupled with clarity on which roles match their interests or what they can do next.

Workshop Findings
Participants said:
As we saw on the screen earlier, the best way to show somebody what we do is to bring them in and let them experience it.

Table 7 summarises findings relating to this dimension summarised by research stage.

Table 7. Credible exposure synthesis

Research source	Findings	Application
Systematic literature review	School experience, employer contact and social support can contribute to career exploration, particularly when young people can examine work and discuss it with someone who understands the occupation (Galliott & Graham, 2015; Zhou & Shirazi, 2025).	Use direct experience to explain work, workplaces and routes, not solely to increase general awareness.
Survey	The exploratory exposure index was strongly associated with student career appeal (Spearman's $\rho = 0.707$, $n = 69$, $p < 0.001$). Professionals also prioritised additional work experience (86.3%), and 84.2% selected work experience as an effective communication method.	Combine work experience, visits and employer contact with reflection and follow-up. The association is exploratory and does not establish causality.
Workshop	Participants described mentoring, work experience and project activity as turning points. "*As we saw on the screen earlier, the best way to show somebody what we do is to bring them in and let them experience it.*"	Include relevant activity, contact with people doing the work and a named course, placement, vacancy or person as the next step.

5.4 The influence ecosystem

The literature review and workshop identified parents and carers, teachers, careers advisers, employers, professional institutions, peers and digital platforms as sources of career information, with each providing different forms of advice and support. The survey of practitioners also indicated a need for collaboration across organisations and communication with parents and carers. Parents may help young people assess financial security, study costs and travel requirements. teachers can connect occupations with subjects and qualifications, while Careers advisers can help students compare education, apprenticeship and employment routes. employers and early-career professionals are better placed to explain everyday tasks, recruitment requirements and progression routes. The quality of each piece of advice may depend on how well parents, teachers and careers advisers understand the roles and routes available. Teachers and advisers may have limited time or lack current knowledge of specialist roles, while parents often draw on their own employment experience and may give greater weight to security, cost and occupational status (Barnes et al., 2020; Bharadwaj et al., 2025).

Workshop discussions highlighted gaps in the career's information available to teachers and careers advisers, particularly regarding specific occupations, current opportunities and entry routes. To help address these gaps, Employers and professional institutions could provide short, occupation-specific guides through existing careers websites and school guidance materials, covering entry requirements, relevant courses, apprenticeships and available opportunities. Industry bodies could help coordinate these resources with employers and education providers to keep the information up-to-date and relevant to local opportunities. Participants also highlighted the value of capturing the knowledge that apprentices, graduates and other early-career professionals could share about recent experience of applying, training and entering the sector. Websites and social media can make information easier to find, share and revisit. However, information alone is unlikely to support action.

Digital content should direct young people to a relevant course, employer, placement, application page or further source of advice. Better coordination between schools, careers advisers, employers and training providers could help ensure that guidance remains clear and up to date.

Workshop Findings
Participants said:
Teachers and careers advisers do not necessarily have up-to-date information about all the different opportunities.

Figure 6 illustrates the influence ecosystem that shapes young people's career understanding, with digital platforms providing access to information and support across these sources.

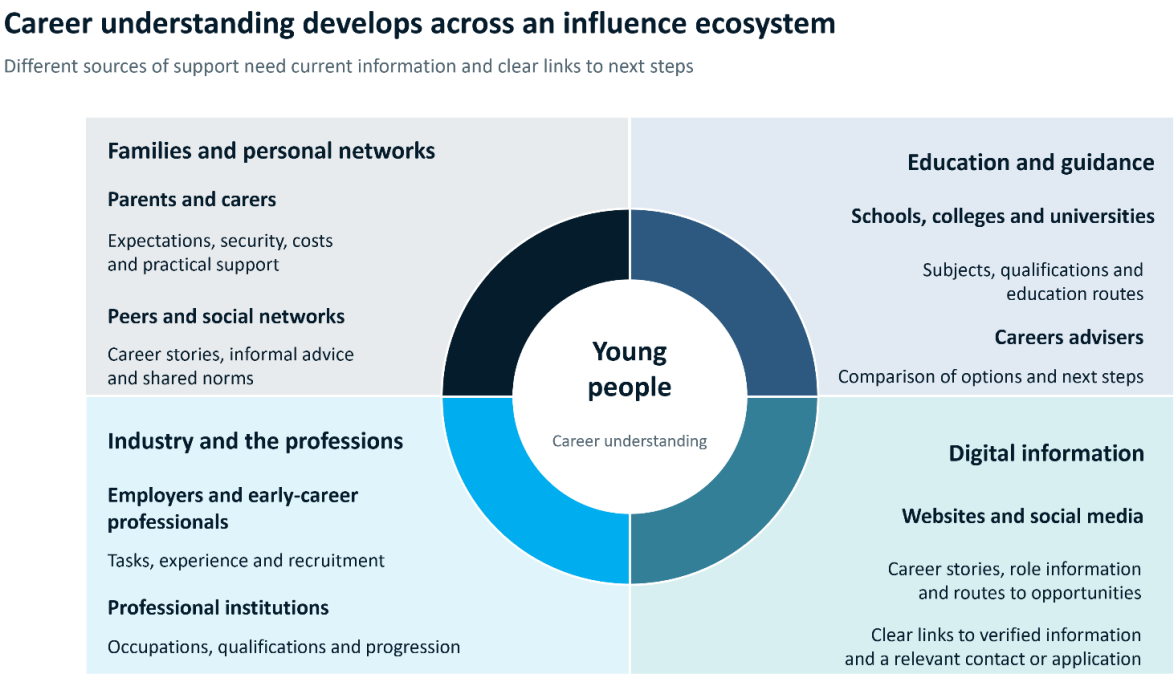


Figure 6. The influence ecosystem around young people

Table 8 summarises findings relating to this dimension broken down by research phase.

Table 8. Influence ecosystem synthesis

Research source	Findings	Application
Systematic literature review	Families, teachers, careers advisers, employers, professional institutions, peers and digital platforms contribute different forms of information and influence. Their guidance depends on current knowledge, available time and access to occupational networks (Barnes et al., 2020; Bharadwaj et al., 2025).	Coordinate advice across organisations and recognise the influence of families and personal contacts.
Survey	Professionals strongly supported careers education (86.3%), collaboration across schools, colleges, employers and professional bodies (87.7%), and communication with parents and carers (75.8%).	Provide current role, route and local opportunity information in formats that can be used in guidance conversations.
Workshop	"*Teachers and careers advisers do not necessarily have up-to-date information about all the different opportunities*". The participants also described severe limits on teachers' time.	Assign responsibility for updating information, connecting users to verified opportunities and maintaining follow-up support after initial engagement.

5.5 Employment fundamentals

The workshop confirmed that employment fundamentals such as Salary, job security, progression and work-life balance were among students' strongest career priorities. Meaningful work, sustainability and technology were also valued features of built environment careers. However, it also identified several practical considerations that could affect a young person's decision to pursue a career in the built environment, including apprenticeship duration and pay, travel to sites or training providers, local living costs, movement between projects and changes in the availability of work.

The appeal of working conditions depends partly on individual circumstances. Travel between projects can offer variety and broader experience, but it may also increase costs or restrict access for those without suitable transport. project-based work may provide early responsibility and opportunities to learn, although project locations and uncertainty about future work may be less attractive to some applicants.

Careers information should explain these practical conditions as well as the sector's contribution to sustainability, infrastructure and technological change. Young people also need enough detail to compare occupations, including the work involved, entry requirements, starting pay, training, location, travel and opportunities for progression. This would help them judge whether a role fits their interests and circumstances.

Table 9 summarises findings on the employment fundamentals broken down by research phase.

Table 9. Employment fundamentals synthesis

Research source	Findings	Application
Systematic literature review	Salary, security, progression and work-life balance remain important alongside purpose, sustainability, learning and technology. Long hours, insecurity and workplace culture can discourage entry and make retention more difficult in parts of the sector (Ling et al., 2016; Suresh et al., 2023).	Explain employment benefits and trade-offs together and address organisational problems through improvements to working conditions.
Survey	Salary was highly important to 87.0% of students; security, progression and learning each reached 85.5%, while work-life balance reached 84.1%. One student asked for "Clearer details available showing the salary, progression routes and time frames".	Include pay, progression, working arrangements and development in occupational and route information.
Workshop	Discussion covered apprenticeship duration, pay, independent living and continuity between projects, as well as "*Travel and time away from home and career progression and stability*".	Provide occupation-specific information about location, travel, working hours, support and progression before entry.

5.6 Attraction and system capacity

Workshop participants reported different recruitment pressures across the sector. Some professional roles and degree apprenticeships received large numbers of applications, with only a small number of places were available. Limited staff time for supervision and training could prevent employers from expanding these programmes. At the same time, in other parts of the sector, employers struggled to fill vacancies requiring experienced workers or to find enough suitable applicants locally. high application numbers in one part of the sector can exist alongside unfilled vacancies and shortages of experienced staff in another.

It is clear that a 'one size fits all' approach does not work. Recruitment figures need to be assessed alongside the constraints affecting each specific occupation and location. Low awareness may explain difficulties in some roles, but programmes that already receive more applications than they can accommodate face a different problem. In these cases, the constraint may be the number of placements or the time available to supervise new entrants. Other vacancies may remain unfilled when experienced workers are scarce, or opportunities are difficult to reach. Practitioners therefore need to identify the main constraint affecting the occupation or location before deciding how to respond. Careers activity may support recruitment, but it cannot by itself increase entry places, supervisory capacity or the supply of experienced staff.

> **Workshop Findings**
>
> *We now have thousands of applicants for graduate placements, while the number of placements is reducing year after year.*

Table 10 gives a snapshot of the findings by research stage.

Table 10. Attraction and system capacity synthesis

Research source	Findings	Application
Systematic literature review	The reviewed research gives more attention to career choice, occupational knowledge and engagement than to employers' capacity to support interested applicants. It provides less detail on vacancies, placements, supervision, development and retention.	Do not assume that increased interest is sufficient; examine the organisational conditions required to convert interest into entry and development.
Survey	"*I don't believe that attracting young people to construction is the issue at all … there aren't enough opportunities available.*" Other open responses requested additional placements, apprenticeships and entry-level roles.	Compare applicant demand with available entry places and distinguish limited interest from limited opportunity.
Workshop	"*We now have thousands of applicants for graduate placements, while the number of placements is reducing year after year.*" The discussion also distinguished attraction from capacity for entry, development and retention.	Match action to the constraint: communication, additional entry capacity, workforce development, local provision or retention improvement.

Career engagement should also connect young people with accessible entry opportunities, including apprenticeships, placements and graduate roles. Employers' capacity to support development after recruitment is equally important (Eggleton et al., 2021). Evaluating the effectiveness of career engagement should therefore extend beyond participation and attendance to consider applications, entry into employment, professional development and longer-term retention (Giambona & Dacre, 2025). Table 11 presents the different workforce challenges identified in the study and the actions associated with each.

Table 11. Workforce challenges and actions

Workforce challenges	Main constraints	Actions
Low awareness and few suitable applicants	Limited knowledge of roles and entry routes	**Clarify** occupations and entry requirements, linking career information to current vacancies and application support.
High application numbers but few entry places	Limited vacancies, placements or supervisory capacity	**Expand** entry opportunities and supervisory capacity, while providing clear selection criteria and applicant feedback.
Shortage of experienced workers	Long development periods or limited specialist capability	**Develop** existing employees through structured progression, specialist training and supported mid-career entry.
Regional mismatch	Differences in local demand, training provision and mobility	**Coordinate** local employers and education providers, supported by practical travel, relocation and flexible training options.
Early exit or limited progression	Working conditions, inclusion, management or development	**Improve** job quality, workplace support and access to visible development and progression routes.

6 Practical implications

An interconnected approach would help young people understand career value, gain relevant experience and identify clear routes into available opportunities. Employers also need sufficient capacity to recruit, supervise and develop new entrants.

Figure 7 identifies six interdependent actions which should underpin any future interventions designed to progressively close the value gap. The research indicates that these elements should be considered collectively, rather than standalone actions, thus ensuring a coordinated and mutually reinforcing approach.



Figure 7. Six actions for bridging the value gap

The sections below give a brief overview of what each element should capture.

6.1 Make career value more visible

Careers information should show how specific occupations offer the attributes young people value. Descriptions of meaningful work, sustainability and technology should identify the relevant roles and explain their everyday tasks. Employers and professional institutions can support this by providing information on specific occupations, their work and opportunities for career development. Digital platforms can extend the reach of this information, while keeping the focus on recognisable occupations and the opportunities associated with them.

6.2 Make entry routes easier to navigate

Route information should help young people judge how to enter a role and whether the route is realistic for them. For a role under consideration, This includes the main entry requirements, university, apprenticeship or other work-based routes, likely time and cost, and opportunities for progression. local courses, placements and vacancies also matter, since a route that exists in principle

may still be difficult to pursue in a particular location. Provide enough detail for young people to identify and take a suitable next step, without overwhelming them with every possible route.

6.3 Connect exposure with clear next steps

Work experience, mentoring, workplace visits and employer contact should help young people understand unfamiliar roles and provide guidance on what to do next. Young people need an opportunity to consider what they have learned and how it relates to their career options. For some, the next step may be further guidance or exploring a relevant course; others may be ready to pursue a placement, apprenticeship or vacancy. Careers activities should make these options clear and direct participants to the relevant information, support or opportunity afterwards.

6.4 Strengthen the influence ecosystem

In the influence ecosystem, each stakeholder can contribute in different ways according to its expertise, information and contact with young people. Industry professionals can provide current information on roles, recruitment and available opportunities, while professional institutions can help explain occupational routes, qualifications and longer-term progression. Schools and colleges can connect this information with education and subject choices over time, and careers advisers can help young people compare options and identify an appropriate next step. Clear responsibilities can help sustain advice and support as young people move from initial career exploration towards a route or opportunity.

6.5 Provide a credible employment offer

The employment experience needs to support the career value presented before entry. Employers have direct responsibility for many of the conditions that shape this experience, including working arrangements, supervision and opportunities for development and progression. Pay and job security also remain important when young people compare career options. Where a role already attracts interest, but recruitment or retention remains difficult, employers need to consider whether the employment offer is contributing to the problem. Clearer promotion will have limited effect where working conditions and development opportunities fall short of the value being promoted.

6.6 Match action with workforce capacity

Identify the main recruitment constraint for each occupation before increasing careers activity. Low awareness may require clearer careers information or more direct contact with employers. Where an apprenticeship or graduate programme already attracts sufficient applications, increasing interest will add limited value if the number of places or capacity to support new entrants is the main constraint. Shortages of experienced workers may instead require greater investment in workforce development. Local shortages also need to be considered alongside the availability of training and entry opportunities in the area. Evaluate each action against the constraint it is intended to address.

7 Conclusion

Industry research commonly frames workforce challenges in the built environment as a skills gap, identifying the occupations, capabilities and training provision required to meet future demand. However, workforce shortages may also reflect limited career awareness, unclear entry routes and barriers to accessing opportunities. This report introduces the value gap as a complementary perspective, examining whether young people recognise the value of careers in the sector, understand and access relevant pathways, and experience that value through employment. While the skills gap identifies where people and capabilities are needed, the value gap helps explain why workforce demand does not always translate into informed career consideration, accessible entry and continued participation.

The findings suggest that the gap extends beyond limited interest. Young people recognised the sector's social contribution, interesting projects, meaningful work and opportunities for learning, but responded less positively to the way its careers are presented. Industry professionals' responses also highlighted limited clarity around occupations and entry routes. Direct experience can make unfamiliar work easier to assess, while families, schools, careers advisers, employers, professional institutions and digital platforms influence the information and support available as young people consider their options.

The value gap can persist after a young person identifies a suitable career. Clear information about a role and its entry route does not ensure access if training, placements or vacancies are limited or difficult to reach. After entry, working conditions, support, mentoring and development opportunities determine whether the career delivers the value presented before recruitment. The value gap therefore extends from recognising and evaluating a career to being able to access an opportunity, develop within it and remain in the sector.

Bridging the value gap requires career awareness and interest are supported by accessible routes and opportunities. Young people also need clear information about occupations and entry routes to judge which options match their priorities and whether available opportunities are suitable for them. Credible experience can support informed career choices, but the opportunities available after that point also need to provide a realistic route into the sector and support continued development. Careers activity therefore forms part of a wider workforce challenge, with attraction, access and employment experience all shaping entry and continued participation.

Moving forward, the value-gap perspective offers a basis for considering how careers information, education pathways, employer engagement and workforce development might be better connected. Understanding how young people progress from career exploration into employment and longer-term development could help the sector identify barriers, evaluate interventions and strengthen workforce participation.

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