

Diversity and the Built Environment: student experiences and challenges with accessing the labour market

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Introduction

It is widely recognised that there is underrepresentation in the wider built environment sector, particularly in terms of people from ethnic minorities and gender. This is despite increasing diversity in terms of representation at higher education institutions (HEI), and progress being made in other sectors. There is also inequality in terms of the research being carried out to help understand the factors that affect access, attrition on courses, and progression to employment. There has been far greater focus on the impact of gender and ethnicity disparities from research on architecture, in comparison to other professions within the built environment sector. There is also some evidence looking at the wider issues of diversity in terms of higher education and progression to employment, but without breaking down the impact by specific courses. In statistics provided by the Office for Students, for example, courses relevant to this study may come under different categories and without distinction between different subjects despite the disparities between architecture and landscape management or construction, as an example.

It should also be noted that some statistical measures give only an approximate indication of numbers, and their validity has been questioned in some cases. For example, standard measures of socio-economic disadvantage in higher education, such as POLAR and TUNDRA, can be considered problematic due to yielding high numbers of false positives and therefore identifying students as from socio-economically disadvantaged backgrounds when in fact they are not (Boliver et al., 2022).

This research was commissioned by BE Inclusive to answer three key questions:

1. Do diverse student populations face disparities in academic achievement in higher education, and if so, what are the underlying factors contributing to these disparities?
2. How do diverse student populations experience built environment courses at higher education institutions, and what are the key factors that influence their experiences?
3. What factors are key in the transition from study to employment, and how does this differ for people with diverse characteristics?

Summary

Overview

This report utilised an evidence review and qualitative focus groups to look at: the disparities in academic achievement in higher education for diverse student populations, their underlying factors; the experience of diverse students on built environment courses at higher education institutions; and the key factors in the transition from study to employment for people with diverse characteristics.

Key findings

- Underrepresentation in the built environment sector starts upstream, well before application to Higher Education Institutions (HEI).
- Increasing diversity at HEI is not fully reflected in built environment courses.
- Students from all ethnic minority backgrounds have a greater likelihood of dropping out due to academic failure than White students even after allowing for sociodemographic characteristics.
- Experiences of students from different backgrounds at HEI remains unequal, particularly for students with disabilities.

- Work experience and work placements are highly valued as an element in choosing a career in the built environment,
- Course content is often seen as irrelevant or overly theoretical, with insufficient application to the practical day-to-day experience of work.
- Personal contacts and experiences are central to defining career intentions.
- Lack of diversity in the built environment sector can act as a barrier.
- There is insufficient support for students to transition from study to career.
- The availability of employment opportunities and geographical location can act as a further barrier to those entering the professions.
- Early career experiences are formative and often negative for professionals, particularly for women and those from ethnic minority backgrounds.

Recommendations

For further research:

- Additional focus groups to cover a greater range of sectors within the built environment to test findings.
- Additional focus groups with participants with more experience in the sector to further investigate the persistence of barriers to progression and retention, as well as those who have left the sector.

For Universities:

- Consider developing specific career support to groups facing additional barriers to entering employment / to tackle persistent underrepresentation.
- Continue to develop recruitment practices that encourage applications from underrepresented groups and improve offer rates.

For professional bodies:

- Provide work experience and university application support specifically directed at underrepresented groups.

- Expand bursary programme to support students from low socio-economic backgrounds both at university and to achieve chartered status.
- Support employers to improve recruitment processes to support and increase the progression of underrepresented groups.
- Develop a workplace culture code of practice to tackle discrimination and improve working conditions for groups facing barriers to retention and progression.
- Review accreditation of university courses and curriculum content.

Methods

Rapid evidence review

To answer the first research question and elements of the second and third, we carried out a rapid evidence review. This provided a succinct and synthesised overview of the existing literature regarding access and widening participation within built environment accredited higher education courses, student experiences when enrolled on those courses, and subsequent transitions into employment upon completion. Our review searched, analysed and synthesised sources including:

- Reports from the within the built environment sector
- Higher education reports and research relevant to access and widening participation
- Academic literature.

Secondary quantitative data relating to student demographics and attainment available via public data sources was also gathered and reviewed to explore disparities relating to built environment courses.

Qualitative research focus groups

To answer the second and third research questions we carried out a series of six focus groups to explore in more detail some of the themes identified by the evidence review, and after discussion with the commissioning organisations.

Invitations to participate were extended to possible recruits via social media and bulletins by the professional bodies. Respondents were then emailed with further information and asked to complete a consent form and indicate which, if any, personal characteristics they identified with as part of our intent to understand the experiences of underrepresented groups in particular. Those that confirmed their desire to participate were then invited to a focus group comprised of either current students, early career professionals, or those exploring alternative careers. Despite a good response, there was inevitably a reasonably high attrition rate at each point resulting in a total of twenty-five individuals participating in the focus groups. Two focus groups were held for current students, two for early career professionals, one for those exploring alternative careers, and one further group for anyone unable to attend previously.

We asked participants to indicate which personal characteristics they identified with when signing up but did not ask for further information. Any reference to these characteristics and how it affected their experiences or views was down to individuals during their participation in the focus group. A number of participants identified with more than one characteristic.

Characteristics	Number
Female	16
Male	9
Disabled, including neurodivergent	3
Ethnic minority background	9
LGBTQ+	5
Low socio-economic background	4
TOTAL participants	25

Limitations

The evidence review was not a systematic review but a rapid assessment of available evidence. Research on student experience and progression to employment, is disproportionately focused on architecture as a subject and pathway, with surveying and construction as the next most common foci. Some studies consider the built environment as a group, but as pathways to some professions are more diffuse, it is difficult to capture the full variation of experience. Similarly, ethnicity has been a more common focus for consideration of diversity, with significant emphasis placed on both access to and participation in HE, and the degree awarding gap. Again, architecture has been more subject to research considering both ethnicity and the impact of racism in particular. Gender is a common thread across the built environment subjects and professions, with some individual studies looking at progression in particular. However, it is not an area that has been given much consideration at university participation level. In this search no specific studies were found that considered disability in relation to the built environment, or specifically considered the experiences of LGBTQ+ individuals.

Data broken down by different courses is not always available, nor is data always disaggregated by characteristic. Understanding the transition from key stage 5 to higher education is complicated due to multiple routes that are possible from different subjects studied. This is an area that would benefit from greater focus as it is likely that many students do not consider the built environment as a possible career, or are dissuaded from pursuing it, before even applying for relevant courses.

The focus groups were not representative across all built environment professions, with participants predominantly coming from planning or planning related courses. As a result, the findings may not reflect specific concerns of students from other courses or entering other built environment professions. We asked participants to indicate whether they shared personal characteristics with underrepresented groups on signup, but we did not ask them to confirm or otherwise identify these in the groups. Groups were mixed and therefore relied upon participants to feel comfortable enough to share personal experiences, particularly negative ones. Those respondents who had decided to pursue a career outside of the built environment were very small in number and whilst they shared interesting insight, we can't know how representative this is of other individuals. We were unable to recruit any participants who had failed to complete their higher education course.

Further research should be carried out across other built environment professions to identify common or divergent themes. Additional insight from individuals later in their career to understand barriers and from those who have left the professions, would also help to build a broader picture.

Research findings

Do diverse student populations face disparities in academic achievement in higher education, and if so, what are the underlying factors contributing to these disparities?

Widening participation / access

Whilst the issue of widening participation / access is strictly outside the scope of this evidence review, it is nevertheless useful to touch on issues relating to factors that influence the choices of students, both in the courses they study and transition to employment after graduation. Underrepresentation of demographic groups begins upstream, with barriers to accessing higher education persisting in patterns of retention and attrition on courses, and in transition to employment and beyond. These themes should be explored to understand whether challenges are systemic or specific and what recommendations might be most likely to influence change.

Table 1. the Office for Students access and participation framework (OfS, 2022b)

<i>Underrepresented groups</i>	<i>Priorities for access and participation</i>
<ul style="list-style-type: none"> • students from areas of low HE participation, low household income or low socioeconomic status • some black, Asian and minority ethnic students • mature students • disabled students • care leavers • carers • people estranged from their families • people from Gypsy, Roma, and Traveller communities • refugees • children from military families. 	<p>2018, to eliminate:</p> <ul style="list-style-type: none"> • the gap in entry rates at higher tariff providers between the most and least represented groups • the gap in non-continuation between the most and least represented groups • the gap in degree outcomes between white and black students • the gap in degree outcomes between disabled and non-disabled students. <p>2022, new priorities, to:</p> <ul style="list-style-type: none"> • partner with schools and other local organisations to raise the attainment of young people • develop more diverse pathways into and through higher education through more flexible courses • ensure access leads to participation on high quality courses and secures good graduate outcomes • improve the quality and volume of evaluation of access and participation plan activity • make access and participation plans more accessible in a way that prospective students, their parents, and other stakeholders can easily understand.

(Raiden et al., 2023, p. 492)

Diversity at entry point to higher education

Applicants and joiners to higher education reflect an increasingly diverse population. Efforts to increase participation and widen access have had an impact on higher education, though it is clear that it remains unequal across different institutions and courses, with many social and racial inequalities established prior to university continuing to have an impact on entry and retention figures.

Vertical mobility increasingly relies on having the financial means to complete higher education, and this is particularly noted in architecture where there are additional costs of studying. Huge levels of student debt accumulate from long courses, meaning those from poorer, and more likely to be minority ethnic, backgrounds are increasingly being priced out of architectural education (Mayer, 2022; Troiani, 2023). The lack of level 6 apprenticeships due to funding and the inability of small-scale

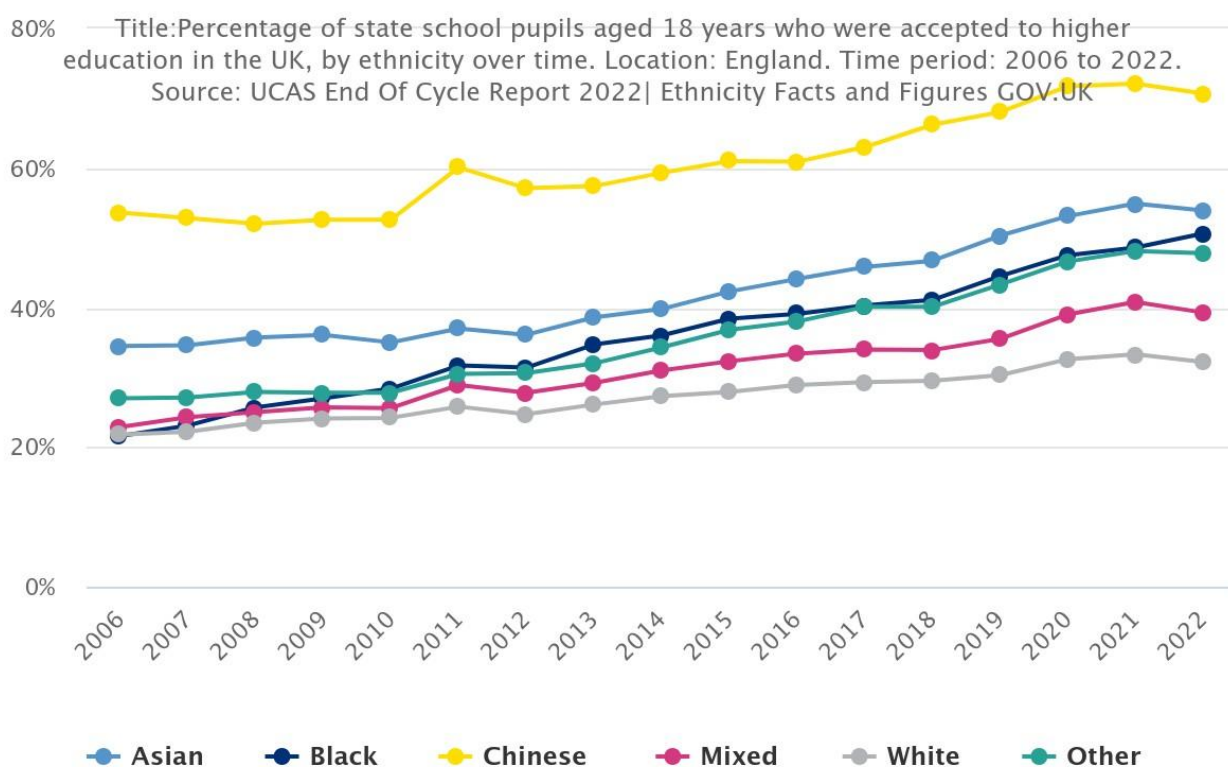
practices to offer (79% of all RIBA chartered firms in 2019), despite their greater flexibility, has a negative impact on diversity and dropout rates (Troiani, 2023).

Built environment courses falling under the HESA (the Higher Education Statistics Agency) classification for construction - Architecture, Building and Planning; and Engineering and Technology - tend to be more attractive to men than women, but data breakdown is not generally available at course / department level. A study of one post-1992 institution looking at application and entrance to construction courses showed that construction courses underperformed by significant margins in comparison to the overall Higher Education sector with regard to protected characteristics but also that they attract a less diverse pool of applicants (Raiden et al., 2023, p. 495-6).

Data summary – entry rates into

Higher Education

- In 2022 the percentage of Black 18-year-olds who were accepted to higher education in the UK (the 'entry rate') was higher than in 2021. For all other ethnic groups the rate was lower.
- For every ethnic group the entry rate was higher in 2022 than in 2006.
- People from the Chinese ethnic group had the highest entry rate in every year from 2006 to 2022.



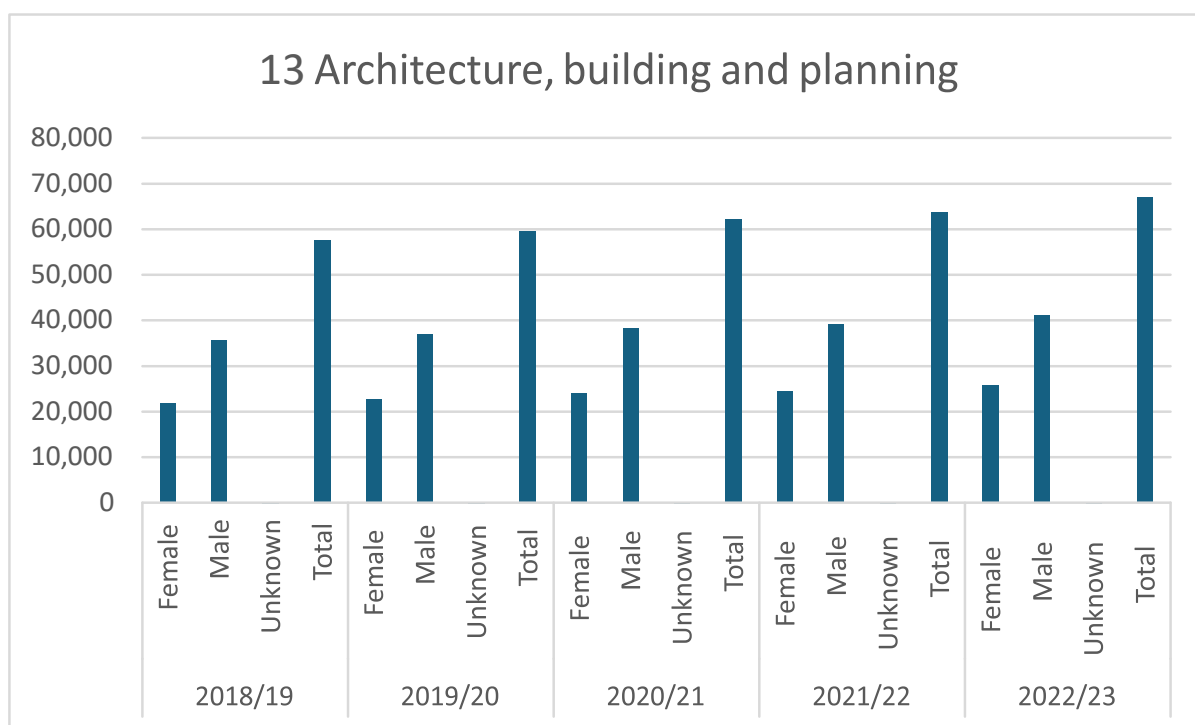
[Gov.uk \(2023\) Entry rates into higher education](https://www.gov.uk/government/statistics/ucas-end-of-cycle-report-2022-ethnicity-facts-and-figures)

Data summary – entry rates into Higher Education

UCAS statistics on applications and offer rates by sex, area background, and ethnic group:

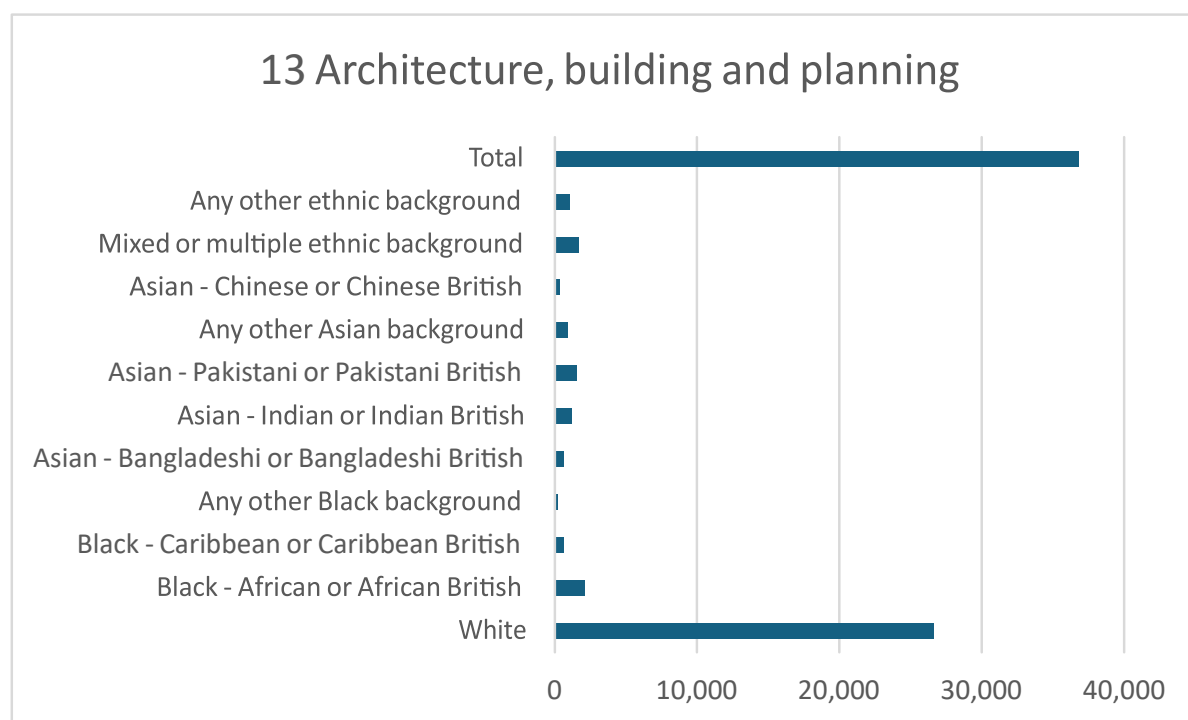
- The lowest offer rate is for the Black ethnic group (59%) and the highest for the White ethnic group (72%)
- Women's offer rate (67.7%) lower than that for men (73.3%) ([UCAS, 2021](#))

Whilst a higher percentage of minority ethnic background pupils apply for HE than White pupils, the acceptance rate for white pupils is marginally higher than some other groups, and significantly higher than the Black ethnic group.



([HESA, 2024](#))

Data summary – entry rates into Higher Education



([HESA, 2024](#))

Attrition

All ethnic minority groups have a greater likelihood of dropping out due to academic failure than White students even after allowing for differences in university and socio-demographic characteristics. Black African students are twice as likely (7.1%) as their White peers (3.8%) to fail. White students are more likely (though there is a smaller gap) to quit voluntarily (Kollydas, 2021).

The problem of fewer women and people from ethnic minority backgrounds finishing architectural education has been highlighted, in contrast to the diversity of the student body itself, suggesting that change is needed in the education programme (Pidsley et al., 2020).

Socio-economic barriers are increasingly being explored as part of widening access and participation, but little has been said about the experiences of those from lower socioeconomic backgrounds whilst at university. Needing to work for financial reasons reduced the amount of time available to study than for non-working students, creating a disparity that can affect both the quality of work and experience. In architecture this was felt keenly in the studio culture where long hours were expected. Many students felt unable to share challenges believing that tutors disapproved of them working, and therefore only shared this information when required as an explanation for why they were falling behind others (Pidsley et al., 2020).

Data summary – attrition

Note: data is not disaggregated by student characteristics for individual subjects.

Percentage of entrants to full-time undergraduate courses who are no longer in Higher Education by subject group and entry qualification: ([HESA, 2022](#))

	Engineering and technology	Geographical and environmental studies	Architecture, building and planning
A level/VCE/Advanced higher grades 4 A's or Scottish higher grades 5 A's	1.6%	0%	1.8%
A level/VCE/Advanced higher grades at least a B and 2 C's or 3 C's or Scottish Highers grades at least One A and 4 C's or 2 B's and 3 C's or one B and 3 C's or 5 C's	2.4%	2.7%	5%
Level 3 and A level equivalent qualifications with unknown points	12.6%	16.8%	8%
International Baccalaureate	3.6%	3.7%	1%
BTEC	11.8%	7.3%	10.1%
Access course	6.3%	20.6%	N/A
Higher education qualification- other undergraduate	9.6%	3.4%	5.4%

This data suggests a higher rate of attrition for architecture, building and planning courses other related programmes. This is particularly noticeable for students with slightly lower qualifications, suggesting that the challenges of the course or other factors related to lower qualifications, such as lower socio-economic background, may be a factor in attrition.

Degree awarding gap (DAG)

A recent study looking at contributory factors to the degree awarding gap in relation to built environment courses specifically, indicates that the interaction of policies and practices with the culture and systemic privilege in higher education institutions, perpetuate inequity. This is then seen in the lack of role models or mentoring, the curriculum content and design, a lack of sense of belonging and interaction affecting the student experience, and leadership and institutional culture (Ajaefobi, 2023).

Student explanations for DAG focus on a lack of role models and mentoring, institutional culture and a sense of belonging – meaning a need for a change of culture and embedding tackling issues of race in strategic goals. Similar explanations were given by academics, whereas organisations were more likely to focus on the importance of work placement opportunities and socio-economic factors rather than creating a sense of belonging and role models. Overall, the main theme in the literature was racism and unconscious bias¹ as the factor explaining DAG (Ajaefobi, 2023).

‘Meritocratic ideals, which celebrate individual agency, may empower students to believe that educational outcomes are fair reflections of their aptitude. Yet, as

¹ We use this term as it is widely recognised and used in the literature, but acknowledge that there are many individuals who reject this description, arguing that any such bias is simply racism or discrimination.

discussed below, our students also recognised that such perspectives can dangerously hide and neglect the invisible but active disadvantages that operate at the structural level.’ (Wong et al., 2021)

Student views of the degree awarding gap by ethnicity would lead to recommendations of greater economic support for students from ethnic minority to improve access and support a more diverse student population (Wong et al., 2021). There may also be value in raising awareness of the existence of some grants and bursaries as in one survey, only 20% of students had heard of RTPI’s student bursaries (Hickman et al., 2021).

Data summary – Degree awarding gap

- The gap between the likelihood of White students and students from Black, Asian, or other minority ethnic backgrounds getting a first- or upper-second-class degree is among the most stark - 13% among 2017-2018 graduates (Universities UK & nus, 2019).
- The latest data shows that progress is being made: the gap between the percentage of white students and students from Black, Asian and Minority Ethnic (BAME) backgrounds awarded a First or a 2:1 in their degree has reduced by 4.4%, from 13.2% in 2017/18 graduates to 8.8% in 2020/21.
- However, still the gap between White and students from ethnic minority backgrounds awarded a First specifically is especially concerning at 9.5%, rising to 19.3% for Black students in 2020-21 (Universities UK, 2022).

Experience at university

Overview

Whilst the overall diversity of the student population has increased, qualitative studies repeatedly suggest that the experience of students from different

backgrounds remains unequal. Black and minority ethnic postgraduate students at London-based universities reported feeling ‘out of place’ in British universities ‘because they find themselves in spaces calibrated to maintain white supremacy’ (Ahmet, 2020, p1). There have been notable controversies at some of the oldest institutions, such as Oxford, in relation to the enduring legacy of the British Empire in the form of statues and names.²

Research on diversity and student experience predominantly focuses on ethnicity, particularly concerning the well-documented degree awarding gap. While much of this research is general to higher education institutions (HEI), some studies specifically examine built environment courses, with a strong emphasis on architecture. Gender is not typically highlighted as a significant concern in the context of university experience, although it plays a crucial role in understanding the transition to employment and career progression. However, the intersectionality of gender and ethnic minority backgrounds is acknowledged as an important issue.

Leadership and representation

Despite an increase in the numbers of women, and students from Black and ethnic minority backgrounds, attending Higher Education, there continues to be a lack of diversity in decision-making and senior positions. Some case studies show progress regarding inclusion and promotion of women but also continued feelings and experience of discrimination at all levels, in relation to gender stereotypes and expectations, as well as racism (Bhopal, 2019). A lack of role models and representation of women as educators, leads to further disadvantage for women students who don’t identify with male values (Troiani, 2023) (Wong et al., 2021).

A lack of Black and other ethnic minority role models in higher education institutions is seen particularly in their absence from senior positions, arguably leading to a lack of a range of perspectives in the built environment as a result of underrepresentation from academics from ethnic minority backgrounds (Ajaefobi, 2023).

² <https://www.bbc.co.uk/news/uk-england-oxfordshire-52975687> [accessed 19/05/25]

A study of staff-student partnerships showed value in reflecting the diverse experiences of both staff and students (Mercer-Mapstone & Bovill, 2020). Methods that helped to build connections between staff and students also served to break down stereotypes related to ethnicity, as well as providing helpful feedback and understanding of student experiences directly to university leaders (Li, 2024).

Architecture

‘You simply don’t see sufficient BAME representation in most university architecture departments’

Hannah Corlett, founding director of HNNA and a senior teaching fellow at The Bartlett, quoted in Waite (2020).

(Troiani, 2023) reflects on how the master-pupil chain in architecture reinforces a male, white image of architects. ‘Apply this to architectural education, a close, true friendship with a master involves an invisible form of social transmission of cultural capital that censors and selects the most valuable architectural progeny. Students mirror and please their tutors by reaffirming their master’s values and offer to master vitality and support.’ (Troiani, 2023, p. 14). The experience of studying architecture therefore becomes a means of socialising students into the profession, meaning that some remain outside the elite circles.

Other elements of institutional culture are more subtle, but just as alienating. The issue of alcohol-centralised culture as both student and into profession via networking events or project discussions at pubs, can lead some students to feel ostracised or excluded (Pidsley et al., 2020).

Surveying

Women in surveying frequently mentioned the physical setting and atmosphere of courses as affecting their experience. There was also a sense that regional location was influential, with northern courses perceived as 'tougher'; some put significant emphasis on traditional 'real surveying' with the south seen as moving more towards business and management oriented courses, linked to City requirements for the property professional (Greed, 2022).

Racism and unconscious bias

Whilst racism and unconscious bias are recognised across higher education, it has been raised most vigorously in architecture. In contrast, research on many of the other built environment courses has focused more heavily on gender as the key issue.

In 2020 a group of students and alumni at the University of Sheffield wrote an open letter challenging racism at the School of Architecture based on first hand experiences from Black and Asian students, as well as providing a comprehensive action plan to tackle it. 'At the time of writing we argued that our school was complicit in the structures that perpetuate systemic racism within architecture. We would still argue that this is the case, not only in Sheffield School of Architecture but throughout architectural education and practice.' (Pidsley et al., 2020, p.10). There is a strong belief that 'as a Black student in the UK, it is expected of you to work twice as hard as your white peers for a shot at the same opportunity.' (Pidsley et al., 2020, p. 15).

Economic inequality and racial inequality often appear to be linked in architectural study. A more economically diverse student and staff body demands a more socially conscious curriculum and ethos, but some studies suggest that socio-political issues are not the subject of open, confident discussion. Instead, there is a risk of the

subconscious encouragement of a 'creative saviour complex' with projects set on 'deprived' sites that serve to highlight class divides among students (Pidsley et al., 2020).

Student views call for institutional commitments to challenge and eradicate all forms of racism on campus, including microaggressions. One student respondent told of asking a question and having a response that situated them as the 'angry black woman'. Another reflected on only seeing other Black people around the university in the morning; staff working as cleaners and servers (Ahmet, 2020). Students were reported as wanting increased representation of ethnic minorities among both staff and students improve the sense of belonging and raise aspirations, with an emphasis on staff diversity (Wong et al., 2021).

Personal and professional identity

Correlation between the culture of students' home lives and their academic success in educational institutions can 'devalue the cultural background of some students and ... condition them into defensive concealment of this knowledge when in educational spaces' (Khatun et al., 2021). Gendered identities were often shared across cultures and reflected in expectations of women. This becomes particularly significant in determining the experience of students from under-represented backgrounds studying built environment courses and exploring a sense of professional identity. For example, traditional attributes of many built environment courses, such as endurance and commitment, may exclude those that have dependents or other caring responsibilities.

One study considered the connection between home identity and the development of a professional identity as a vital ingredient in any course preparing students for a professional role. Connecting past and present experiences to an emergent

professional identity can be particularly challenging for students who are in a fragile position in terms of ‘belonging’ (Khatun et al., 2021).

The transition to higher education, and to new disciplines such as architecture or planning, can prove daunting. For increasing numbers of students embarking on higher education courses through widening access programmes, the learning process will need to also nurture confidence and self-belief.

Architecture

HEI learning processes based on discourse and critique have always been a challenge for many architecture students, but this is even more so for students who lack a sense of belonging or are from backgrounds that are not typically reflected in either the course material or the academic teaching staff (McClean et al., 2019).

‘Doing architecture and being an architect are indivisible.’

(Meddings, 2020, p. 175)

The centring of individual expression in the learning experience in architectural education makes the relationship of the individual to the collective very intense and potentially confrontational, particularly in a design project review (Meddings, 2020). ‘Architectural education follows a linear pathway devised for when architects were only young, male, white, and middle-class. Studying architecture requires fitting that one size.’ (Troiani, 2023, p. 19).

Planning

Ambiguity in the professional identity of planning in terms of its academic discipline and intellectual basis, may also cause tension, particularly in terms of meeting the aspirations and expectations of students and graduates.

‘if planning struggles to define itself, it is difficult to see how the public can be expected to understand the profession, let alone form a positive perception of it.’

(Taylor & Close, 2022)

Curriculum and teaching

There have been widespread calls to ‘decolonise’ curricula across education at all levels over the last decade or longer. There is a strong sense that students from an ethnic minority background are marginalised and that this is linked to curricula that are dominated by Eurocentric perspectives. Some authors claim these curricula ‘centre whiteness’ and identify ethnic minority students and staff as ‘other’, thus hampering progress towards race equity (Arday et al., 2022).

Built environment courses, as reflecting a sector that struggles to improve its diversity and inclusiveness, are often seen as having curricula that are unrelatable to students from ethnic minority backgrounds (Ajaefobi, 2023). The elimination of structural barriers needs a diversification of the curriculum in terms of values and perspectives (Wong et al., 2021).

Further questions around the curriculum relate to the importance of connecting course content to aspects of the professional discipline. Many students wanted a greater focus on employability during their courses (O’Leary, 2017). This also relates to the value of work experience placements for accessing professional employment post graduation. These are often seen as harder to access for students for lower socio-economic backgrounds, particularly if they rely on paid employment to fund their studies, and for students from ethnic minority backgrounds when ‘even BAME³ names can become a barrier to getting a placement’ (Ajaefobi, 2023, p. 65).

³ Black, Asian, Minority Ethnic – this term is falling out of use as being perceived to give precedence to particular ethnic minorities over others.

Architecture

The behaviour of tutors, and underpinning expectations and values, affect the experience of students. In architecture, the stress of tutor critique is particularly noted (Xie et al., 2019), and is often seen as inherited traditions being adopted uncritically and unreflectively (McClean et al., 2019). The design studio is highlighted as an area where experiences are particularly varied, as tutors can be positive mentors but are also judges. The result is a perceived need by students to satisfy the expectations of them rather than exploring their own design interests (Osama & Maani, 2019).

High stress and mental health issues have been identified in architecture students compared with both the general population and other students. This has been related to the culture of high workload, but also that long hours and stress can be perceived as a badge of honour. It is suggested that poor communication between staff and students may result in messages about work/life balance not being given or received effectively (Kirkpatrick, 2018).

Planning

In a survey of current and recent planning graduates, there was a 'striking' number of participants who wanted greater course content focused on practice (Hickman et al., 2021). This is revealing of a long-standing debate around the role of planning education between producing practice-ready professionals and abstract critical thinkers about space and place (Taylor & Close, 2022). There was also some consistency between current students and graduates in terms of topics they wanted greater coverage of in the course of their studies, including governance and decision making, development management, communication, negotiation and mediation, and climate change and energy (Hickman et al., 2021). Communication and negotiation skills were also highlighted in a report looking at training needs and current skills gap in the planning profession (Taylor & Close, 2022).

Construction

Use of mentors and role models on courses to inspire and motivate was noted as particularly effective for female students in research by Thevenin and Elliott (2018), in (Raiden et al., 2023).

Mental health and disability

There is increasing awareness of mental health concerns and a wider range of disabilities, especially those that are 'unseen' (for example Crohn's, Autism or ADHD), but the perceived willingness of educational institutions to accommodate needs is varied. Creating effective inclusive learning environments means providing different support for different disabilities, and recognising that students may also face social, emotional and academic barriers to learning alongside physical or financial ones (Jacobs et al., 2022).

Post-1992 universities attract a more diverse student population than Russell group, leading to stratification in the sector. This includes students identifying as disabled. For the academic year 2023/24, over 115,000 first degree entrants declared a disability, or multiple impairments, health conditions or learning difficulties ([HESA, 2024](#)). Systematic reviews of experience of university, report social challenges including social isolation, and mental health conditions including anxiety and depression.

Support for autistic students is most commonly with accommodation arrangements, face-toface time and provision of academic supports (Chown et al., 2018). But provision to support autistic students to transition from university to employment was very sparse, and often basic (Vincent et al., 2022).

Architecture

A number of studies consider the issues of mental health specifically in relation to architecture, often linking it to the length of the course and the significant financial commitment, coupled with deeply entrenched cultural expectations of long hours of study. Ultimately this is likely to particularly disadvantage those who need to work to fund their studies, and those who have caring responsibilities (McClean et al., 2019).

‘Suffering in architecture is insidiously imprinted upon us as a ‘necessary evil’ from Year One; we are taught to both expect and endure it and, if we cannot, then we are told that perhaps architecture is not for us.’

(Mcaulay, 2018)

Data summary – National student survey data 2024

Note: Data is not collected and/or represented in a disaggregated way for student characteristics, nor are any questions asked about Diversity, Equality and Inclusion (DEI).

For the Architecture, Building, and Planning subjects:

- In response to the question: “How fair has the marking and assessment been on your course” - 81.4% respond positively
- In response to the question “How clear is it that students’ feedback on the course is acted on” - The lowest positive score among all the questions at 65.7% ([Office for Students, 2024](#))

Construction

In construction, mental health problems were more acute for female students, for whom mental health deteriorated across the four-year degree, in contrast to the male students who saw an improvement in their mental health. It is argued that the construction classroom may act as a microcosm of the cultural environment for

women in society in general and the construction industry 'macho culture' filtering back into the university sector (Scott-Young et al., 2020).

Transition to Employment

To date, the value of higher education has largely focused on prospective earnings and professional employment. However, it is clear that many young people increasingly have a wider range of considerations for entering higher education and when considering future career options – including personal fulfilment and job satisfaction.

Whilst there is a paucity of evidence focused on graduate career satisfaction, just as ethnic differences in outcomes have become more apparent in recent years, there is now greater awareness that the benefits of higher education are not accruing equally to all students. HESA analysis shows Black African and Black Caribbean graduates reported lower career satisfaction three and a half years after course completion relative to other ethnic groups, with the largest gaps being among those who entered higher education aged 26 or over. Whilst this data is not broken down by course or profession, it remains an important consideration in understanding the transition to employment in built environment professions among individuals of different personal characteristics (Bermingham et al., 2020).

Many students enter their studies with a clear interest in the subject and the perceived contribution they can make, however they are generally less decided as to their specific intended career directions. In planning, surveys suggested a private sector route was the marginal preference of respondents, revealing a tension between perceived public value and the benefits of private sector employment (Hickman et al., 2021).

The degree awarding gap reduces the proportion of students from ethnic minority backgrounds that progress into employment in the professions within the built environment. Many graduate roles require a first or 2:1 as a minimum requirement, which is not met by many students from Black and other ethnic minority backgrounds (Ajaefobi, 2023, p. 60). This disparity continues with recruitment and progression where underrepresented groups lack informal networks to help them overcome barriers in the built environment industry (Ajaefobi, 2023).

Data summary – gaps in graduate outcomes

1. There are significant earnings gaps after three years between graduates from different ethnic groups, with a gap of around £4,800 between the group with the highest earnings (graduates of Indian background) and the group with the lowest earnings (graduates of Pakistani background). There is a £4,500 gap in earnings between graduates from London and those from the North East (Ramaiah & Robinson, 2022).
2. Many of these gaps continue to widen in the 10 years following graduation. The gap between the highest- and lowest-earning ethnic groups increases from 16% one year after graduation to 24% nine years later. The earning gap between graduates from London, the South East, and the rest of England grows from 10% to 16% over the same period (Ramaiah & Robinson, 2022).
3. The trajectory of gender earnings gap is particularly striking. In the year following graduation, male graduates earn 8% more than their female peers, but in the following nine years this grows to a gap of 32%. Subject choice contributes to the initial differences in earnings between male and female graduates. However, as graduates age, a larger proportion of this gap is explained by other factors, such as differences in parenting responsibilities, hours worked, the propensity to ask for pay raises or apply for promotions, and labour market discrimination (Ramaiah & Robinson, 2022). Gender gaps in earnings are large, and larger than equivalent Free School Meals (FSM) or ethnicity gaps. Educational qualifications do not seem to narrow this gap and are actually associated with bigger gaps in some cases, including degree or equivalent level 6 at selective institutions (Kozman & Khan, 2024).

4. A clear FSM gap exists, with earnings consistently higher among non-FSM eligible cohorts compared to their FSM eligible equivalent cohorts. For people who were eligible for FSM at school, degree-level study in Higher Education is associated with a bigger increase in their earnings but a sizeable FSM earnings gap remains. For those who attended the most selective HE providers, the gap is even wider (Kozman & Khan, 2024).

Perceptions of the built environment sector

Greater numbers of an increasingly diverse cohort of students are entering higher education, but this is not translating into graduates entering the built environment professions. Recruitment and retention issues have been reported across built environment roles (Taylor & Close, 2022). Despite increased awareness of the issues and efforts to address recognised disparities, the built environment professions as a whole continue to be regarded as problematic for many demographic groups. In architecture, where writers seem to be generally more outspoken about their concerns, it is described outrightly as institutionally racist (Waite, 2020), and as reflecting an old boys club culture (Mayer, 2022).

A wealth of research exists in regard to gender, much of which points to problems with the image of the industry. Perception of poor career options, family influences, gender stereotypes, male domination and lack of female peers continue to act as barriers to greater diversity in the built environment. Greater gender diversity at leadership level and initiatives to support work-life balance are seen as of central to addressing this disparity (Baker et al, 2021) (Raiden et al., 2023).

Existing interventions have limited effect

Programmes such as PlanBEE at Gateshead college, in conjunction with employers, provided a salary while studying, with an expectation of employment at the end. This

had an effective impact on students from low socio-economic backgrounds, but less impact in regard to gender and ethnic minority backgrounds (Strachan et al., 2020).

Architecture

In architecture, women continue to be viewed as having different interests and skills that were commensurate with lower status and lower paid roles. This often intersects with ethnicity. One student reported her experience of a seminar in which three White male presenters – an architect, a contractor, and a client – when challenged on the team's lack of diversity claimed that whilst female architects worked on earlier design stages, they were excluded from the technical design. The student points to the response as showing the industry to still be 'a White, old-boys club which is largely unwilling to recognise it has a problem' (Mayer, 2022). This perception inevitably influences progression from studies to employment with potential candidates in architecture feeling overwhelming disappointment at 'page after page of middle-aged White men smiling at the camera' (Pidsley et al., 2020, p. 23).

Groups such as Black Females in Architecture (BFA) reflect the need to cater for groups facing specific problems not being effectively addressed by the wider profession. They also reflect a lack of confidence in efforts for change, such as [RIBA's Future Architects](#) scheme that was set up in 2019 as a 'network and community for future and emerging architects designed to support, inspire and provide a voice for those transitioning from education to practice.' (Mayer, 2022). RIBA's on Race Diversity Survey in 2020 suggested that 'both blatant and less overt racism' in architecture was getting worse. This perception contributes to a lack of representation in the industry of people from an ethnic minority background. 33% of ethnic minority respondents, 43% of Black specifically, and 17% of White respondents, said racism was prevalent. More than a quarter of respondents from ethnic minority backgrounds said they had been a victim of racism at work (Waite, 2020).

‘Black people have to conform just to obtain and retain the job. White people are encouraged to steer away from the norm’

Simone de Gale, one of the first architect recipients of a Stephen Lawrence Charitable Trust bursary (Waite, 2020)

There seems to be little research looking at why people leave the professions, particularly architecture, although it has been suggested that drop outs are due to low pay and long hours: a newly qualified architect earns around £34,000, a figure seen as less competitive than other professions (Mayer, 2022).

Planning

70% of respondents to surveys commissioned by the RTPi and carried out by the University of the West of England, intended to become a chartered member of RTPi in the future (Hickman et al., 2021, p. 22). There was no breakdown by ethnicity or gender in these figures. Opportunities for career progression was the one of the most prominent responses from a survey when asked why they had chosen to study planning. They also reported the importance of having the ability to make a positive contribution, although it should be noticed that the survey had a relatively low response rate so care should be taken about its generalisability (Hickman et al., 2021).

A potential mismatch between graduate expectations and ‘real-world’ planning poses a challenge for longer term recruitment and retention. The potential for future disillusionment may also be a factor in graduates choosing alternative career options (Hickman et al., 2021; Taylor & Close, 2022). Neither of these reports explore differences in experience or motivation by ethnicity or gender.

Construction

Construction faces skills shortages in graduate roles along with retention issues. Young people are not aspiring to construction-related programmes at further and higher education, and current employees are leaving the industry. It remains one of the least diverse sectors in the UK. There are six main barriers: the image of the industry; low levels of career knowledge; stereotyping especially around gender; the working culture of the industry; marketing and recruitment practices; and training and education (Strachan et al., 2020).

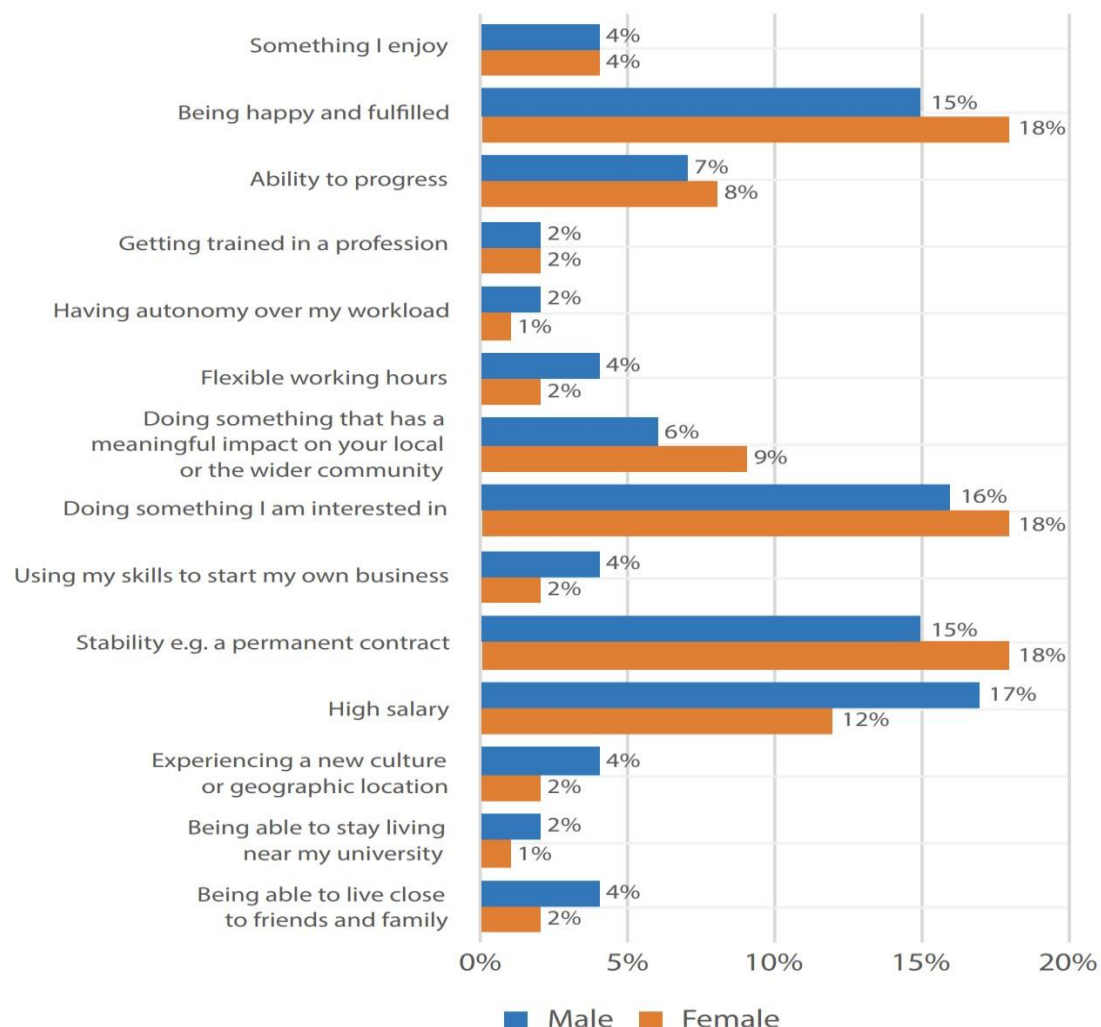
Surveying

29.5% of women respondents to a questionnaire indicated that they were influenced by a family member already working in surveying when asked about their choice of a surveying career. Other reasons included an interest in buildings, good career opportunities, and the role of work placements while at school (Clarkson et al., 2023).

Gender

Research from HEPI suggests that men appear to be more focused on their career search than women, beginning their career planning earlier during their time at university and making more applications. Of specific interest is the suggestion that men also display more confidence in applying for jobs and therefore are more speculative in what they apply for, with women more likely to be less ambitious in the jobs they apply for. This suggests gendered differences in attitudes to employment, with a higher proportion of men than women viewing high salary as a key indicator of a good job. Women are more likely to search for job security and work-life balance as part of a good company culture (Cornell et al., 2020).

Figure 16 – How do you define a successful career?



Data from the HEPI / JobTeaser survey. Base: 581 female and 458 male.

(Cornell et al., 2020, p. 34)

Construction

In construction in particular, gender inequality is evidenced by significant pay gaps for women in senior roles. The situation worsens after parenthood when many women change to part-time or lower-level roles in return for greater flexibility. This all contributes to a 'pervasive organisational bias that prioritises male characteristics' (Clarkson et al., 2023). This perception of the masculine culture of the industry also

requires a focus on retention initiatives to tackle resulting issues of low self-worth, alongside improved flexible working, transparent promotion criteria, return-to-work training, and outreach to schools (Naoum et al., 2019).

It is important to note that Oo et al (2020) in (Raiden et al., 2023) report that women have relatively high job satisfaction once working in construction jobs, and this is increased when career expectations are met. If the pay and other disparities are addressed, then this inequality can be reduced. There is a clear view that inclusive construction sites help retain talent and attract new entrants. They also facilitate the development of a healthy working environment to counter concerns about the image of the industry around gender, ethnicity and disability. That being said, construction firms continue to largely ignore disability in the labour market, relying on broader equality and health and safety information (Raiden et al., 2023).

In surveying, results from surveys also suggest that female RICS members are dissatisfied with current efforts towards promoting gender equality. They report the ongoing issues of outdated working practices and culture indicated in previous research. However, they are also largely unaware of some of the RICS initiatives to address inequalities, such as School Inspire, suggesting that these have not yet been effective (Clarkson et al., 2023). Women entering surveying may still be seen as ancillary rather than central, as gender – as well as class and being ‘the right type’ - continues to be a key factor in determining career outcomes. Opportunities in the private sector for women surveyors exist but continue to be reduced for older women as the ‘pyramid narrows’ (Greed, 2022).

Disability

Disability remains a key barrier to employment, largely due to structural barriers given equal education levels (Bryan et al., 2023). There remains a lack of research in the UK on trends among university graduates in relation to disabilities and

employability, though age, institution and disability type are essential predictors (Sobnath et al., 2020). There is a need for greater guidance around the transition from university to employment, particularly for disabled students, including autistic students (Sobnath et al., 2020; Vincent et al., 2022).

The most recent study of the career journey for disabled students suggests that it is shaped by three core elements: the individual, the employer ecosystem, and the support ecosystem. Whilst some challenges are universal, others are amplified for disabled graduates, and some impact disabled people alone. Support for building skills and the confidence needed to enable students and then graduates to imagine themselves in a professional role are required alongside the removal of barriers from the recruitment process. Perception of an employer's willingness to support and discuss adjustments is an important part of whether disabled candidates feel able to apply to jobs (open inclusion, 2024).

How do diverse student populations experience built-environment courses, and what are the key factors that influence their experiences?

Built Environment courses lack diversity of both students and staff

The evidence review shows that despite increasing diversity in higher education, it remains unequal across institutions and courses. Social, racial and gender inequalities established prior to university continue to have an impact on entry and retention figures. Whilst the data is not available at course or department level, classifications for courses that encompass the built environment sector continue to show higher ratios of men to women (HESA, 2024) and Black applicants have the lowest offer rate (UCAS, 2021).

I think there's the stats where as soon as you have a third woman in a room, people perceive it as 50/50... you see it playing out in reality.

- Early career, Civil Engineering

Current students who participated in the research had a mixed view of the diversity of their cohorts at university, reflecting the variation already noted between courses and institutions. One described their group of students as 'very diverse', whereas another spoke of the 'shock' of the environment after coming from a diverse sixth form. Those participants who identified as coming from an ethnic minority background particularly noted the lack of diversity on their courses, and amongst university staff. Whilst most university staff were spoken of in positive terms, one participant was conscious that they had only had 'one lecture by a black professor' in their entire studies.

Whilst gender disparities were recognised by female participants, they were largely unsurprised to encounter male-dominated courses. One male participant also recognised that the behaviour of some of the academic staff on their course towards students still ‘felt a bit like a boys club’. One participant was ‘pleasantly surprised’ with the number of women on her graduate course whilst another felt that women comprising a third of the course was ‘really really good for engineering’. This was despite the further knowledge that the numbers of women had dropped to a quarter by the end of the course.

“people don't expect it to be someone from my demographic doing civil engineering.”

- Female, Current student

Work experience is a hugely valuable element in choosing a career in the built environment

Many participants referenced work experience or placements as hugely important in determining their choice of career. Some talked of the value of experience whilst at school that introduced them to a new potential career and sector, whilst others referenced placements undertaken as part of courses.

It's not like you can just put into a search engine what career would I enjoy. You just have to get out there and do it.

- Current undergraduate, Planning

Courses varied in terms of whether they required work placements or supported students to gain experience. One LGBTQ+ early career participant reflected that they were left to their own devices in terms of finding work experiences, and that for many

‘it was a bit of a challenge’. The evidence review highlighted barriers that might affect the experience of students from lower socio-economic backgrounds, such as a need to undertake employment which could affect their ability to participate in work experience or placements, as well as a lack of a network of contacts to secure those placements. Those who pursued an integrated course or undertook work placements during their studies were overwhelmingly positive about the value of doing so.

Experiences at university reflected a range of challenges for different groups

The lack of ethnic diversity at university surprised some participants, particularly those who had expected a more diverse environment due to the location of the institution in a diverse city. Despite this, current students didn’t report specific negative interactions but instead focused on the lack of diversity actually helping them ‘become more adaptable and resilient,’ as well as committed to supporting change. One suggested that being one of very few Black women studying on their course actually prepared them for a less diverse work environment. They also saw it as a personal issue and worked with the university to try to recruit more Black students as well as to ensure that they felt supported on courses and enjoyed a sense of community.

Several of the participants who identified as being from an ethnic minority were international students and thus potentially faced additional challenges in terms of navigating an unfamiliar university experience. This included language or accent issues and difficulty in engaging in group work. Issues related to class were mentioned more than ethnicity, perhaps highlighting areas of intersectionality.

Two key issues were raised most frequently in relation to experiences at university: social class, and wellbeing and mental health. Universities were perceived as very

much middle class, especially in relation to staff / lecturers. Social class was referenced by several participants as influencing their experience at university.

I subconsciously kind of changed my voice to match the kind of
middleclass professors

• Current student, Planning

One early career planner stated directly they would not have been able to complete their course without the help of bursaries, including one from the RTPi future planner bursary. Another talked about the investment required to pursue a master's degree and felt that whilst it was a worthwhile long-term investment, it could also be 'quite a big gamble', reflecting a level of insecurity underpinning their experience.

Those participants who reported coming from a lower socio-economic background were more demanding in terms of their expectations from university around value for money. One participant was critical of receiving teaching from 'an undergraduate who worked in an architect's office for a year', another complained of 'pre-recorded' lectures. They felt that 'the value for money is very debatable from a lot of these universities.'

Those participants that identified as being disabled had very different experiences and levels of support at university. One spoke positively of support from lecturers checking in advance if accommodations were needed, for example for field work. Another example of support was through provision of software to support their written work, and regular meetings with a support worker to talk through coursework. However, one participant with ADHD described managing until part way through their course but then receiving an automatic fail for submitting the wrong document for an assessment. They described feeling taken aback by the lack of consideration shown when they asked to have accommodations put in place. A further participant

described a 'certain lack of empathy' among faculty members around making accommodations to support their needs.

Generally, participants reported feeling well supported in terms of wellbeing and mental health issues, however this clearly depended on the institution. One real estate student described having a course representative for all the built environment courses to facilitate feedback from students to staff, and to raise general wellbeing issues. One career changer felt well supported in relation to managing caring responsibilities alongside studies. Some universities seemed to provide a range of support services, from career counselling to psychological support, or more informal groups. However, others felt that little was on offer. One participant who was pursuing an alternative career path felt they were, 'left to [their] own devices... expected to see ourselves through'.

Course content was often seen as irrelevant or overly theoretical

The main criticism from participants in relation to course content or structure was where academic or theoretical approaches were perceived to be emphasised over more practical learning. The importance of learning skills needed for day-to-day work was mentioned several times. In some instances they linked this to work experience or placements and highlighted the value these had in helping them to develop a clear understanding of their chosen profession. A significant proportion of the participants were studying on planning or planning related courses and they frequently welcomed coverage of a range of different areas of the sector, particularly blending principles of sustainable development with other aspects of courses.

Participants in the early stages of their career who had the benefit of hindsight, were notably less positive about the content of their courses, seeing it as often quite disconnected to practice.

when I entered the profession... nothing that I'd learned was really of
relevance to the day-to-day tasks

- Early career, Planning

A mismatch between the types of projects and skills they learnt at university compared with the reality of the job was highlighted, for example around resource management or understanding the difference between a full and an outline planning application. One participant who was required to do manual drawings and illustrations felt this was out of date with an industry that relies heavily on digital tools. The importance of employability and practice in the curriculum was highlighted in the evidence review (O'Leary, 2017; Hickman et al., 2021; Taylor and Close, 2022).

The value of industry accreditation of courses was questioned by some participants. Whilst one participant spoke highly of being involved in the accreditation process for their course, which was new, an early career professional was less confident in the process of quality assurance, wondering if those designing and accrediting the course 'have ever worked in planning'.

What factors are key in the transition from study to employment and how does this differ for people with diverse characteristics?

Personal contacts and experiences are central to defining career intentions

Very few participants expressed a clear intention to enter a profession in the built environment prior to university, and most described having ‘very little knowledge’ of what a career in the built environment entailed. This may be particularly the case for those entering planning, as it is more common to study a broader subject at undergraduate level before undertaking planning at postgraduate level. This contrasts with architecture or engineering, for example, which are usually studied from undergraduate degrees. Whilst only a few of our participants referenced having family members in the sector, it is clear from the evidence review having personal contacts and access to relevant experiences can be an important factor in uptake of studies in the built environment. As a result, the lack of diversity in the sector is likely to be reproduced without specific interventions at an earlier stage.

When people ask how I got into surveying, they expect me to say that one of my parents is a surveyor, but no one in my family is a surveyor. I found that everyone in work, their parents or someone in their family is a surveyor and that’s how they became interested in it.

- Current undergraduate, Real Estate

In discussing the factors influencing their choice to pursue a career in the built environment, several participants talked about finding a ‘personal calling’ and referenced the importance of the social value of the work. Whilst most spoke positively of their choice and commitment, those with more experience in their

profession spoke of challenges relating to managing work life balance, and high stress levels, particularly within the public sector. There were numerous mentions of dealing with sometimes negative public perceptions of the sector, and planning in particular.

I'd like my career to reflect the greater impact that planning can have hopefully for the benefit of future generations.

- Early career, Planning

Lack of diversity in the built environment sector affects experiences and can act as a barrier

Participants who identified as coming from a low socio-economic background described social class and 'classism' as a barrier to entering the built environment professions. One described joining a team that was predominantly made up of individuals who attended private school and therefore connected over expensive activities such as skiing, leading to a feeling of exclusion. They also referenced assessment centres for certain larger companies running graduate schemes as reflecting values that were 'classist'. There were a number of comments relating to the impact of social class when in employment, from perceived differences in fundamental values, to the difference in opportunities available as a result. The ability to 'name drop' or introduce new clients was seen as leading to more chances to work on projects or gain other advantages.

my perspective and some of my colleagues are some people whose family are in property they go into planning almost as a charitable act... whereas

I think if you are more from a working-class background or from deprived backgrounds you do appreciate public services, good infrastructure, schools, hospitals.

- Low socio-economic background, Early career, Planning

There was a real perception that many issues related to interacting with older, more senior colleagues, particularly for female participants.

sometimes how agents are with you and maybe this is more like a gender thing and also an age thing kind of being undermined a little bit, especially when you're at the early stage of your career

- Female, Early career, Planning

Participants who indicated they were from an ethnic minority background included some who were international students, posing potentially different challenges to those from the UK. Many were very positive about the support they received from lecturers or tutors but others felt that there was a lack of knowledge or support when visa sponsorship was necessary to access job opportunities.

Some of the participants from ethnic minority backgrounds specifically referenced wanting to be 'the change that I wanted to see'. They recognised they were underrepresented in the sector and wanted to be part of shift towards greater diversity. It was noticeable that current students seemed more optimistic about their ability to challenge norms and stereotypes and increase diversity compared with those who were in their early careers. Participants already in employment shared a wider range of stories about discrimination or harassment related to personal characteristics, or expressed exercising caution around where they chose to work. One early career participant criticised what they saw as companies 'ticking a box' by recruiting one Black employee and called for more effort in recruitment.

if I'm working in an environment where people don't have control over their emotions and stuff like that, I'm like, do I really want to be here?

Do I want to put myself at risk?

- Exploring alternative career

Early career optimism about improving levels of diversity, and willingness to challenge negative perceptions of the profession, was in contrast to some of the comments and anecdotes shared. These demonstrated that barriers still exist for underrepresented groups, both to entering the profession and for retention and progression and perhaps they were being underplayed or not fully recognised by those who were only just embarking on their career. Indeed, sometimes examples of gender discrimination, harassment or racism, were almost dismissed as expected and / or things to overcome through personal resilience and confidence.

The industry definitely brought out a bit more of a feistier side to me, a bit more of one where you have to stand your ground, you have to put your foot down, you have to tell people where to go, or things like that.

- Exploring alternative career options

We weren't able to speak to many who had entered and then left the profession, but those we did speak with suggest that the early positivity around wanting to challenge underrepresentation and be a role model to others, was not sustainable in the longer term. This was particularly reflected by women and those from an ethnic minority background. These participants talked of the frustration of feeling isolated and attempting to fit in with cultures that did not promote their inclusion. Whilst recognising that some changes had taken place across the built environment sector they questioned the extent of that change in reality. Many perhaps didn't initially recognise the extent of the issues they encountered, only questioning some

experiences after sharing with friends and family who saw them as shocking and unprofessional.

University support for the transition from study to career was often lacking

One participant described feeling left behind, 'before I knew it everyone has already submitted job applications'. Whilst some universities provided useful support and guidance, this seemed very dependent on how in touch individual lecturers were with the industry. Several participants said they relied on personal networks for guidance and support, echoing the networks that encouraged initial entry to higher education to study built environment courses. For those undertaking postgraduate qualifications to enable them to enter the planning profession after a non-planning-specific undergraduate degree, there was a significant challenge in applying for jobs very early in their course before they felt they had acquired adequate knowledge and skill and understanding of specialisms. No participants mentioned receiving any specific support available in relation to being from an underrepresented group or in terms of support for any additional challenges faced in relation to a disability.

There's very little being done to help people kind of get into the professional world once they're ending their studies. and that should be a moment where people get more help because I think that's where you're most vulnerable.

- Disabled, Early career, Planning

Several participants seemed to have low expectations of what support they could expect from universities. One student who identified as having a disability said they had some support from the career advisory service around getting placements and work experience over the summer, but was not overly positive about the input, stating only 'they did the best they could'.

Participants were vocal about the importance of learning skills at university that prepared them for the world of work. They hugely valued work placements and experiences and were most critical of courses that did not provide this, or did not offer the support they needed to access opportunities. This was particularly true for some students facing additional barriers such as lacking access to the networks available to some others. One participant from an ethnic minority and low socio-economic background admitted they 'didn't even know what a graduate scheme was, let alone the whole application process and assessing centres and everything'. It was clear that some courses or institutions didn't recognise these barriers to employment clearly or offer adequate support, neither did some companies running graduate schemes.

The availability of employment opportunities and their location posed a further barrier for some

A prevalent narrative of there being a shortage of planners and lots of jobs available was contested by several participants who were disappointed on entering the labour market to find it more challenging than expected.

We're told that there's going to be such a demand for planners and we're still kind of waiting to see where all of these planning jobs are at the moment.

- Early career, Planning

Further barriers existed for some participants, particularly those who identified as being from an ethnic minority and/or a lower socio-economic background. There was a strong preference expressed for being in more urban locations and part of teams that were diverse, to ensure they had the support of others who shared aspects of their identity. This need for a sense of security directly related to their identity and

affected choices they made about future employment. In some cases this was a choice between a well-paying job and a job that paid a lower salary but was located in a city or area that they would feel more comfortable living in. For those who had been in the sector longer, this was influenced by previous negative experiences.

I've made deliberate choice to work in cosmopolitan teams instead of a remote rural team because in my past experience I learned it would be easier for me just to focus on the job on its own instead of focusing on

dealing with the emotions of how to make that kind of positive working relationship with colleagues work. So it's better that way.

- Ethnic minority, female, Exploring alternative career

Early career experiences can be formative for long term retention

The impression given, albeit from a small sample, is that the cumulative impact of negative experiences further restricted employment choices and progression in a manner that was not always anticipated by those earlier in their career. Without having experienced more negative encounters, they seemed more prepared to overlook or 'manage' tricky situations such as sexist remarks or behaviours or racial discrimination.

The participants who were exploring alternative career paths were far more negative about their experiences in the built environment sector than those who were just starting out, despite sharing the same initial ambitions for career progression. They spoke of challenges as women and as members of an ethnic minority in the UK, often being the only one in a team or office. One stated having children as a major reason for leaving their job, due to a lack of flexibility. They also reported facing additional challenges related to gender, particularly in relation to work on sites but

also as a result of a working culture that seemed to do little to tackle issues around sexism or misogyny. Stories of experiencing intimidating behaviours that made them uncomfortable and vulnerable were spoken of as relatively common for themselves and other women working in the sector, but they also spoke of more serious instances of assault where the perpetrator remained working for the company.

If I'm working in an environment where people don't have control over their emotions and stuff like that, I'm like, do I really want to be here?
Do I want to put myself at risk?

- Exploring alternative career

Individuals shared examples of experiences of racist remarks as well as discriminatory comments, sometimes described as microaggressions. One participant said a white colleague described her as 'so boring' because she didn't smoke or drink. As the workplace culture was one based around going out and drinking, they found they missed out on opportunities to build relationships with the team which affected their participation in team meetings: 'gradually it developed into a situation when my voice was muted.' She went on to describe feeling forced out of the profession by 'the hidden racist element' that left her repeatedly humiliated.

it's to do with the whole culture of the construction industry of what's acceptable

- Exploring an alternative career

Female participants early in their career often described issues such as organising social events or work experience placements being passed to women in the office, or being given additional responsibilities, such as informal mentoring, without

recognition of the additional workload or formal recognition for appraisal purposes. One participant worried that they had been encouraged into a gender-coded role with a focus on stakeholder engagement because she was female rather than her specific skill set and remained uncertain as to whether this was actually what they wanted to do. In another case a male head of department was seen using potentially problematic hiring practices when recruiting 'a bunch of young women', based on attitude and 'fit'. Early career participants tended to have more positive views of how the sector was tackling diversity issues, but inevitably they were working from a position of less experience. Those with more experience had a far more cynical view of how far changes in the sector had gone, based on an accumulation of negative experiences.

In general, you'll find the whole attitude has been shifted even though you can't say it's the authentic change for everybody.

- Exploring alternative career

For participants who declared a disability or need to employers, there was often a sense that employers had 'tick box' reactions, particularly in recruitment practices. The most common was allowing extra time during recruitment processes but there seemed to be little thought given by companies more broadly to how accessible standardised testing was as a tool for assessing suitability for a job. Once employed, it appears that some firms were very responsive to requests for support but, as with experiences whilst at university, the onus remained on the individual to request and identify the specific support or tools they need. There was also concern from some about whether what was stated as being offered during recruitment would actually be respected in practice.

there is what's sort of offered in a leaflet with regards to accommodations

and whether when you're actually on the ground things are going to run as smoothly or those accommodations are going to be respected.

I think it's a big sort of worry.

- Disabled, early career, planning

Professional bodies and chartered status play an important role in progression

There were a number of positive comments about the support received from professional bodies, although it must be noted that these were also seen as 'middle class organisations'. Opportunities for networking with professionals who could offer support and guidance were particularly welcomed with a number of early career professionals benefitting from engaging with formal and informal groups. However, feelings about chartered status were more complicated. Several participants saw achieving chartered status as important to their future employment but raised concerns about the cost of undertaking chartership, the support needed, and, in some cases, the relevance of the content. One of the participants who was exploring alternative career opportunities, said that they had dropped their intention to secure chartered status due to insufficient support from their employers. They described an absence of a proper system of support, leaving too many people having to 'muddle their way through it'. An early career planner also expressed struggles to get the right experience needed for accreditation as this lay outside their current role. Overall, chartered status was seen as worth having, but there was little sense that the process of gaining it brought any specific benefits.

Opportunities for progression were a source of concern for the future

Gender was one reason for concern, with having children stated as one clear barrier to progression. One reason given was the need for physical connection through site visits which became increasingly difficult to manage. Early career participants didn't automatically think gender would be a barrier, though it was clear that they had noted potential issues relating to the current levels of diversity in the sector.

You do notice that a lot of the higher positions within companies are taken by men.

- Early career, civil engineer

Several respondents from ethnic minority backgrounds specifically felt the need to choose roles or employers that provided a more diverse environment to work in, potentially restricting their choice of employment or options for promotion. In a number of cases they specifically desired to work in the public sector and there was a clear sense that the possibility of promotion was more limited than in the private sector. This was in contrast to findings in the evidence review that suggested a preference for working in the private sector. There was a perception that lower staff turnover meant accepting that you would be in a junior role for longer in local authorities. However, there seemed to be a significant amount of variation both regionally and between public and private sector employers.

An early career participant felt that as one of two or three Black employees at their workplace there was inequality in terms of the opportunities available to them. They suggested this could also be linked to social class issues. Several participants specifically referenced feeling that they lacked people to relate to in the workplace,

particularly in terms of ethnicity. None of the participants who identified as LGBTQ+ had experienced any issues in relation to that aspect of their identity.

Professional identity plays an important role in mediating experiences

It was notable that when discussing their choice of career, the participants overwhelmingly talked about having a really close affinity with the work, linking it to their personal values. But of further note was the number that said they hadn't really known much about the job beforehand. Even when they enter the profession, there was a sense of battling entrenched stereotypes and misconceptions among the wider public, but also within the sector. For some, there was also a concern that efforts to increase diversity led to tokenistic efforts or exploitation.

They never ask your permission. I'm now in the prospectus for the school based on a picture of me on results day.

- Ethnic minority background, Current student, Planning

Given the barriers identified by many of participants in the research, relating to ethnicity, socio-economic background, gender and disability in particular, and given what we know from the quantitative data in the evidence review, it can be assumed that there are many people for whom the built environment is not an accessible or attractive choice of career. These barriers exist at each point of entry or transition, between school and university, to postgraduate study, into graduate employment and then progression into more senior or specialised posts.

Recommendations

For further research:

- Additional focus groups to cover a greater range of sectors within the built environment to test findings.
- Additional focus groups with participants with more experience in the sector to further investigate the persistence of barriers to progression and retention, as well as those who have left the sector.

For Universities:

- Consider developing specific career support to groups facing additional barriers to entering employment / to tackle persistent underrepresentation.
- Continue to develop recruitment practices that encourage applications from underrepresented groups and improve offer rates.

For professional bodies:

- Provide work experience and university application support specifically directed at underrepresented groups.
- Expand bursary programme to support students from low socio-economic backgrounds both at university and to achieve chartered status.
- Support employers to improve recruitment processes to support and increase the progression of underrepresented groups.
- Develop a workplace culture code of practice to tackle discrimination and improve working conditions for groups facing barriers to retention and progression.
- Review accreditation of university courses and curriculum content.

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