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Student Engagement in Sustainability through Work Placements

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Abstract

Understanding how students engage with sustainability during work placements represents a critical gap in education for sustainable development. This study explores undergraduate Business School students' engagement in and learning from sustainability-related projects during work placements. While existing research shows the benefits of placements for student learning and employability, sustainability-related engagement and learning are underexplored. This study addresses this gap through a qualitative study which explores the nature of sustainability-related placement roles, how placement learning experiences shape student development, and how sustainability-related experiences can be effectively embedded into university preparation processes. The findings indicate that, although sustainability is rarely explicit in placement role specifications, there are numerous opportunities to engage informally, particularly when students proactively seek them. Through the conceptual lenses of self-efficacy and career identity, the study provides recommendations for further research, educational institutions and workplace providers.

Keywords: placements, sustainability, student engagement, self-efficacy, career identity

1. Introduction

This study follows the premise that if ‘every job is a sustainability job’, as suggested across policy, industry and educational bodies, such as the 'Environmental Association of Universities and Colleges' (EAUC, 2023) (a membership body for post-16 education), then every placement could enable sustainability-related workplace learning and experiences. Inspired by Donald and Hughes' (2023, p. 4) provocation that "The time has come for innovative thinking and knowledge sharing around the design, delivery, and assessment of placement modules", this project aims to explore the extent and nature of placement student engagement in, and learning from, sustainability-related projects. Higher education represents a life stage in which values are formed and consolidated, thereby establishing career directions (Donald & Healy, 2024), and placements provide experiential opportunities. Despite significant literature on education for sustainable development (UNESCO, 2017) and research emphasising the importance of connecting sustainability-related learning with career development (Shtaltovna, 2024), little is known about sustainability-related learning and engagement during placements.

As a small-scale, exploratory study within a single institution, the research was designed pragmatically to examine the extent and nature of student engagement with and learning from sustainability during work placements. The research involved interviews with students, designed to gain insight into the following research questions (RQ):

RQ1. If students engage in sustainability-related projects while on placements, is it explicit or implicit within the role?

RQ2. What are students' perceptions of how engagement in sustainability-related projects during placements develops their employability?

RQ3. How might sustainability-related components be effectively embedded into university preparation processes?

Through an inductive analytical approach (Thomas, 2006), the constructs of self-efficacy and career identity, which are frequently used in the literature on placements, internships, and work-integrated learning, are employed to frame the analysis of student interviews. Self-efficacy concerns individual belief in capabilities, which influences performance and resilience (Bandura, 1977). Career identity concerns the sense of self that an individual constructs, shaping how they navigate their professional working experiences (Savickas, 1997). Career identity is discussed here as a foundation for self-efficacy. The study provides a new application of these constructs to understanding student engagement in and learning about environmental and social sustainability within placements. It also provides practical implications for the operationalisation of placements for enhancing sustainability-related learning.

2. Building Career Identity and Self-efficacy through Placements

Self-efficacy is a commonly cited benefit of placements and internships. For example, Tsai et al. (2017) found that ‘performance accomplishments’ and related feedback through internships can strengthen career decision self-efficacy. Developmentally, by “doing something new, being someone new, and getting recognised as someone new, a placement student's understanding of themselves and their skills and abilities (i.e., their self-efficacy) will change” (Inceoglu et al.,

2019). The process of acquiring new skills aligns with their self-perception as emerging professionals.

Self-efficacy concerns beliefs in one's capabilities, influencing both performance and endurance/resilience (Bandura, 1977) and is considered a key component of career constructivist theory (Savickas, 1997). Career construction theory suggests that through mastery of learning experiences, an individual can turn learning challenges into opportunities to build confidence and resilience. This, in turn, contributes to the development of career identity. The relationship between self-efficacy and career identity is evident in Dacre Pool and Sewell's (2007) CareerEDGE model, which situates self-efficacy (including self-esteem and self-confidence) as central to career development through personal learning and identity formation. The model is applied here to generate insights into the formation of sustainability-related self-efficacy, self-esteem, and self-confidence.

Self-efficacy is akin to the concept of *self-regulation*, which Smith and Curtis (2020) describe as students' ability to reflect and take informed action based on this reflection. Reflective self-regulation helps build a *pre-professional identity* (Jackson, 2017) grounded in self-awareness and observation of others. From a career constructivist perspective (Savickas, 1997) reflexive practices are a form of identity-making through which individuals make sense of who they are and who they wish to become professionally. Smith and Curtis's (2020) UK study on scaffolding support for workplace transitions is relevant to this study's examination of sustainability-related self-efficacy. For example, it can be posited that students could helpfully reflect on and observe sustainability-related behaviours in others, both before and during placements. Alignment between learning contexts is essential, especially in connecting academic learning with workplace experiences. In a study of placements for university students in China, Li et al. (2024) found significant benefits and confirmed the conclusions of other global studies (Thi Ngoc Ha & Dakich, 2022; Zehr & Korte, 2020) that students frequently overlook the connections between 'classroom and workplace' learning. This means that opportunities to develop both sustainability skills and career identity may be missed.

Empirical studies on sustainability-related learning and placements are lacking, although featured within broader education for sustainability research. For example, in the analysis of the influence of self-efficacy beliefs on how sustainability is integrated into personal and professional lives of university students in Turkey, Demirci and Teksöz (2017) highlight the value of experiential learning of placements, enabling 'transformational learning' (Mezirow, 2016). Applied to the career literature, such profound learning experiences may contribute to the construction of a *vocational personality* (Savickas, 1997). This provides a persuasive rationale for nurturing and integrating sustainability-related learning in placement roles.

Hughes (2023) cautions that students struggle to connect work-integrated learning experiences to their career growth, which limits the identification of targeted learning opportunities and the communication of their achievements. In the context of sustainability-related learning opportunities, the importance of nurturing students' self-efficacy is evident in the continued scaffolding of learning and in the use of every opportunity to support students' career identity development.

3. Methods

This study aims to examine students' experiences of sustainability during work placements, understand how these experiences contribute to their employability, and identify implications for university placement preparation processes. This section sets out the methodological basis of students as partners, followed by how interviews were designed and analysed.

3.1. Design Context – Students as Partners

Funding by the authors' university's Centre for Academic Enhancement and Development, which enabled the recruitment of two student partners as co-researchers, who participated in the research project from conceptualisation through to analysis, with one student listed as a co-author of this article. Students as active partners/co-creators reflect an established approach in higher education research (Healey et al., 2014). Adopting a co-creation model in this research enables students to bring their lived experience to research design and data collection. Positioning student partners as interviewers enabled student-student discussions grounded in shared firsthand experience and rapport within a similar age cohort. The selection criteria for student partners were that they be in their final year and have completed a placement. One student partner withdrew midway through the study for personal reasons at a very early stage; this was unfortunate, but it did not affect the study.

The positioning of student partners as interviewers was a deliberate methodological choice (and indeed the premise upon which modest university funding was granted). Student-to-student interviews were expected to facilitate greater openness and rapport, given the shared experience of undertaking a placement and navigating sustainability within it. Furthermore, partnership pedagogy, in which students are partners in educational research, has been shown to enhance students' professional skills and contribute to identity development (Lau & Zheng, 2025), thereby constituting an essential contribution of this study.

Work placements are integral to the School and the university's education and employability strategy. At the time of the study, students could choose to seek and undertake a 40-52 week placement during the third year of the degree (thus extending the degree to a fourth year), in or outside the UK. Students are supported in finding a placement through a second-year module. During the placement, students are supported by an academic tutor and an organisational line manager to complete a portfolio of reflective exercises. Similarly, sustainability-related learning is a core component of the programme's learning requirements. The positionality of the research team is recognised as shaping the assumption that sustainability-related learning is relevant across placement roles, regardless of sector, and that sustainability is important to business practice; a reflexive approach was thus maintained throughout.

3.2. Interview Design and Process

An interview methodology was selected, given the exploratory nature of the research, the ability to gather retrospective insights, and the need for interviewer prompts to elicit and guide conversations in which sustainability was more implicit in student projects. The academic team collaborated with student partners to develop and pilot an interview guide. Interview questions explored the student's role specification and whether it involved sustainability, either explicitly or implicitly (RQ1); any sustainability-related learning and experiences and how these were

perceived to develop employability capital (RQ2); and perceptions of related university processes (RQ3).

Following ethical approval (UREC registration no. L24325), 214 students currently on placement or returned to the final year of study after a placement year were invited via email to participate in an online, audio-recorded interview conducted by a student partner. The invitation to participate explained that this was an opportunity to reflect on the role of sustainability in placements, adopting a broad definition that encompasses the Sustainable Development Goals, environmental, diversity and inclusion, ethics, charitable/volunteering projects, governance, and related areas. While all business school students formally study sustainability in core modules, this is not explicitly reflected in the course title. Therefore, students' interests and familiarity vary.

All interviewees provided informed consent before participation; supporting documentation is available from the authors upon request. The student partners were briefed on ethical requirements, including the protection of interviewees' confidentiality and anonymity, throughout the research process. Students, as interviewees, sign non-disclosure agreements as part of the placement process, so both the interviewer and the interviewee were aware of potential sensitivity regarding the employer, should it arise (although no concerns were raised).

Between April and June 2024, twenty-three interviews were conducted. This represents an eleven per cent response rate. Thirteen interviewees were female, and ten were male. Similarly, thirteen were currently on placement, and ten had returned to university. Interviews lasted an average of thirty minutes. As an exploratory study, twenty-three interviewees provided a sufficient basis for proceeding with the analysis. As the interviewees were not recruited explicitly based on prior sustainability knowledge, the interviewer's expertise in 'teasing out' more implicit examples of sustainability engagement was necessary. The authors worked closely with the student partners to develop these skills and ensure a systematic approach, as sustainability, when viewed as part of ethics, governance, environment, and social/community/wellbeing, has broad application. When these aspects are not linked to formal job roles, it may not be evident to students how their experiences relate to organisational and professional sustainability practices unless this is explored through open conversation. Through a diligent process of student partner recruitment, the student in this study had experience in a family business committed to sustainability principles, significant expertise throughout the programme/placement, and was thus able to draw out such nuances in discourse.

3.3. Interview Analysis

All 23 interviews were transcribed using Zoom and anonymously coded in NVivo 14. The student partner, under the guidance of the academic team, conducted an initial round of coding aligned with the research questions. This was approached descriptively, following the research questions concerning experiences of sustainability during placements (RQ1), the perceived personal and organisational benefits of engagement (RQ2), and reflections on university processes and support (RQ3). The academic research team then conducted a second review, refining codes into clustered descriptive themes according to each research question, such as 'limited choices/competitive market' (RQ1), 'belief in personal impact/contribution to organisational change' (RQ2), and 'value of reflective assessment/need for clearer prompts' (RQ3).

Conceptual, interpretive coding was then carried out by the academic team, based on the sensitising concepts (Bowen, 2006) of self-efficacy (e.g., confidence, belief, resilience) and career identity (changes in self-view, clarification of career direction, alignment with organisational values). An iterative, collaborative process reduced individual interpretive bias and enhanced the reliability of the findings. It was not deemed necessary in this exploratory study to record students' programmes of study or the sectors or sizes of organisations in which students had placements. However, interview responses indicate that employers were highly diverse.

Throughout methodological discussions, roles as educators invested in sustainability education, alongside similar 'invested' interests among recruited student interviewers and possibly among students who volunteered for interviews, were recognised. It is acknowledged that educator positionality is grounded in an assumption that sustainability learning can be relevant across placement roles, and attitudes are shaped by institutional context. It was considered that the students interviewed may not immediately recognise sustainability within their roles, and that some probing may therefore be required to elicit its articulation. Reflexive team discussions during analysis helped critically examine possible interpretive bias.

4. Findings

The findings are presented according to the leading conceptual coding themes related to self-efficacy and career identity, as identified by the academic team in the final stage of coding (as outlined in the previous section). The quotations in the tables are representative examples of the codes within each conceptual interpretive theme and are aligned with the research questions.

4.1. Sustainability as an Influencing Factor in Placement Choice

The interviews began by asking students whether sustainability had featured in their placement search and choice. Several interviewees reported taking the placement because they had few other choices. While this does not mean that students are not motivated by sustainability, it may indicate that it was not a significant enough factor or did not influence decisions due to limited options. The quotes in Table 1 illustrate a key theme of *pragmatic decision-making* based on limited opportunities or choices rather than values alignment (R12, R10, R5). This can be seen as limiting the potential for the development of sustainability talent in early-stage careers. *Values-based attraction* was also evident, whereby sustainability commitments influenced students' placement choices (R8). This indicates that while sustainability is not currently a leading factor for most students, it can serve as a differentiator for sustainability-engaged students when organisational commitments are both available and visible.

TABLE 1: INTERVIEW QUOTATIONS – INFLUENCING FACTORS IN PLACEMENT CHOICE

Quotations	Self-efficacy	Career identity
'Of course, [sustainability] does matter to me, but realistically at that point I was just trying to find a placement in the industry which I want to break into" (R12).	Pragmatism based on opportunity rather than values alignment	Choices constrained by context
'There wasn't really that much out there ... it was quite hard to find something" (R10).	Pragmatism based on low perceived control	Choices constrained by context

<i>'It was quite competitive coming out of COVID. Placements weren't readily available, so anything I got I was quite grateful for, and just snapped up the first offer I got' (R5).</i>	Pragmatism based on low perceived control	Choices constrained by context
<i>"The company as a whole had strong sustainability foundations that they stuck to. That's sort of what pushed me in the direction of looking at more sustainable companies for my placement" (R8).</i>	Values-based attraction	Identity anchors in sustainability

Source: own compilation

4.2. Sustainability Roles and Opportunities tend to be Implicit rather than Explicit (RQ1)

Generally, students did not recall job descriptions explicitly detailing sustainability opportunities or roles. Table 2 presents quotations that illustrate limitations and opportunities for *anticipatory self-efficacy* and career identity development through formal cues, such as how sustainability is communicated in formal recruitment materials. Some students recalled elements of sustainability information communicated in other organisational materials (R6). Although a single case, it illustrates that an organisation that emphasises the importance of sustainability on its corporate website does not necessarily incorporate this in job descriptions. Other students did not feel strongly about whether sustainability should be addressed in job descriptions. Still, some perceived potential value in this (R10, R2) - noting that explicit sustainability content could signal organisational acknowledgement and create a more positive impression, even if it didn't influence placement decisions.

TABLE 2 – INTERVIEW QUOTATIONS – EXPLICITNESS OF SUSTAINABILITY ROLES AND OPPORTUNITIES

Quotations	Self-efficacy	Career identity
<i>"They have information about [sustainability] on their website, on the values, the culture. That's the place where they have the information, but I don't think they had information on the application website" (R6).</i>	Limitations - Anticipatory efficacy	Limited formal cues for early identity shaping
<i>"I think it's really good to have it in a job description.... It just gives people the option and lets them know the organisation have acknowledged it" (R10).</i>	Opportunities - Anticipatory efficacy	Support for more formal cues for early identity shaping
<i>"I don't think it would have swayed me in any way, but it definitely would make me think more fondly about the company and have a better judgment of it" (R2).</i>	Opportunities - Anticipatory efficacy	Support for more formal cues for early identity shaping

Source: own compilation

4.3. Opportunities for Sustainability-related Learning (RQ1)

The quotes in Table 3 illustrate diverse individual and organisational reasons for limited engagement in sustainability-related learning, which are coded into two main themes: building self-efficacy by *navigating organisational complexity*, such as workplace pressures and operational demands. These quotations aligned with identity building through understanding

organisational boundaries (R14, R21) or through aligning individual and organisational values (R18, R15).

Overall, even where organisations were known to be actively committed to sustainability goals, their day-to-day relevance to placement students was not explicit. In some cases, students proactively asked about sustainability and found managers lacked knowledge (R14). Another observed a disconnect between employee commitment and management actions (R15). For others, perceived organisational realities acted as barriers to engagement (R21, R18). Other student quotes indicate no connection between self-efficacy or career identity development and perceived non-sustainability of task focus, and therefore did not perceive these as relevant to role responsibilities or learning priorities (R7, R2).

TABLE 3: INTERVIEW QUOTATIONS – OPPORTUNITIES FOR SUSTAINABILITY-RELATED LEARNING

Quotations	Self-efficacy	Career identity
<i>“I went to my manager, who didn't know that much about it. When I did a couple of intern functions, where the bigger bosses rock up, and were asked those kinds of questions, it got interesting trying to pick apart what they were saying” (R14).</i>	Navigating organisational complexity	Identity building - understanding organisational boundaries
<i>“On a grassroots level, employees want to help and want to reduce CO₂. But when it comes to the management, they say they do, but their actions don't reflect it. We'll give you £2,000 for a wild meadow, but we're not actually going to make a concrete investment in a green wall or in putting solar panels on our large factories... We're going to say we love it and then not do anything about it” (R15).</i>	Navigating organisational complexity	Identity building – aligning individual and organisational values
<i>“We've had to do a lot of air shipments - we need stuff to sell stuff because people want stuff, and we just have to do it. There's no option. I mean, it's either that or we just wait for 6 months” (R21).</i>	Navigating organisational complexity	Identity building - understanding organisational boundaries
<i>“I think they wanted to do a lot more sustainability. But we had a big wave of redundancy, so I think profitability was a big thing” (R18).</i>	Navigating organisational complexity	Identity building – aligning individual and organisational values
<i>“I could have probably asked, but I didn't have the time to go looking for what the sustainability practices were in my company, because it wasn't something that was directly affecting (my) job” (R7).</i>	Non-sustainability task focus	Sustainability not integrated into identity
<i>“Once I've learned how to do the basics, such as using software, designing things, writing copy, then I would go down that avenue and look into sustainability. But for a first jump into learning things, it would probably feel a bit too specific for me” (R2).</i>	Non-sustainability task focus	Sustainability not integrated into identity

Source: own compilation

4.4. Student Perceptions of Personal Benefits from Sustainability-related Learning in Placements (RQ2)

The quotes in Table 4 represent themes in perceptions of personal benefits in building self-efficacy through *personal agency/mastery* by taking initiative to seek sustainability opportunities, which enable skills development, and build career identity by aligning personal interests with organisational values (R6, R15, R14). Another student described how workplace experiences directly shaped career direction (R1), thereby demonstrating the pragmatic career-shaping outcomes of placement experiences.

TABLE 4: INTERVIEW QUOTATIONS – PERCEPTIONS OF INDIVIDUAL BENEFITS

Quotations	Self-efficacy	Career identity
<i>“I was involved in the Muslim network, and I was the head of the Ramadan 2024 challenge. When you reach out, even if you say that you don't have experience, they accept you. I clearly told them I don't have experience, but I immediately got the job” (R6).</i>	Personal agency, mastery	Identity building – aligning individual and organisational values
<i>“I went straight to the sustainability manager when I got there and said, ‘Is there something I can do?’ And he said, ‘Not right now, but let me get back to you. And then a couple months later, I was running the project” (R15).</i>	Personal agency, mastery	Identity building – aligning individual and organisational values
<i>“If you combine a bit of knowledge and a drive, there's hopefully empowerment to make something happen ... if you think this really matters and this is the thing I'm going to really push for in my one year here, that can really be a driving force” (R14).</i>	Personal agency, mastery	Identity building – aligning individual and organisational values
<i>“Because of everything that I saw on my placement around well-being, I've now steered my whole career in that direction, or begun to do it” (R1).</i>	Personal agency, mastery	Identity building – aligning individual and organisational values

Source: own compilation

4.5. Student Perceptions of Organisational Benefits from Sustainability-related Learning during Placements (RQ2)

Table 5 presents quotations illustrating two sub-themes in perceptions of organisational benefits through *generational agency*: the belief that younger workers bring greater sustainability consciousness and a drive for change (R8, R11, R7), and the ways in which this can be linked to career identity building as a change agent. For others, self-efficacy was built through *mastery*-based learning that delivered tangible organisational value through specific sustainability projects (R12, R15), thereby linking to career identity development through the recognition they gained. The examples provided clearly demonstrate how placement students can contribute meaningful organisational value when given opportunities to engage with sustainability.

TABLE 5: INTERVIEW QUOTATIONS – PERCEPTIONS OF ORGANISATIONAL BENEFITS

Quotations	Self-efficacy	Career identity
<i>“I think a lot of the audience that are really pushing sustainability are the younger ones, because we're the ones that ultimately are going to be living in the future of, the planet dying. Younger people bring the desire for change to companies that might be a little bit stuck in their ways. It's just a fresh, new, forward way of thinking” (R8).</i>	Generational agency	Identity building – change agent
<i>“For the majority of people who are working in a higher level, nothing is going to happen in their lifetime. It might not even affect us, but it'll certainly affect our children and grandchildren. So I think that we'd be more conscious about it than other people” (R11).</i>	Generational agency	Identity building – change agent
<i>“It's just a very different outlook on things. I guess it's a generational thing, like a lot of these big companies are run by a man in his sixties or something. And so someone that's our age coming into it has spent our entire lives hearing that we need to make a change because we just cannot go on like this” (R7).</i>	Generational agency	Identity building – change agent
<i>“I did research on different companies that are holdings within an investment portfolio of ours. I had to identify what they're doing in terms of Diversity, Equality and Inclusion, and what score I would assign to them according to our internal framework” (R12).</i>	Mastery contributions	Identity building – recognition
<i>‘I have been working on a sustainability project ...to reduce the single-use plastics in the cafeteria area. I have personally been leading and running... the group. And I've got support from the CEO and CFO for it, with projected cost reductions of about eight grand a year” (R15).</i>	Mastery contributions	Identity building – recognition

Source: own compilation

4.6. Student Attitudes towards University Processes (RQ3)

Table 6 presents quotations representing sub-themes in student perceptions of university processes, illustrating self-efficacy through *mastery*-building via assessed work (R8) and transformative learning through reflection (R16), which can be linked to career identity development through employer recognition and deeper self-awareness. There were also suggestions for more explicit sustainability prompts in assessment guidance (R18).

It was apparent that some students struggled to recall or identify sustainability-related learning opportunities in their academic programmes before placement, even though all programmes included such content. For most students interviewed, assessment involves a reflective portfolio and a presentation to the company and university tutor. The findings indicate the value of explicitly explaining to students how academic learning on sustainability can be related to placements, and of ensuring that this is also set out in assessment materials.

TABLE 6: INTERVIEW QUOTATIONS – ATTITUDES TOWARDS UNIVERSITY PROCESSES

Quotations	Self-efficacy	Career identity
<i>“A lot of my assessed presentation focused on sustainability and the owner of the company ... was so impressed they asked me to send it to them, and they've actually used it with a couple of clients” (R8).</i>	Mastery building - assessment tasks	Identity building – recognition
<i>“My view of how my view of corporate sustainability has changed through writing about my experience” (R16).</i>	Mastery building - transformative learning	Identity building – personal values
<i>“Sustainability should be included in the skills matrices, with examples of how it can be linked to placements to act as a “prompt” (R18).</i>	Suggestion for efficacy building through support	Identity building – suggestion for support

Source: own compilation

5. Discussion

This study set out to explore student engagement and learning about sustainability during placements, and the findings have been analysed through the concepts of self-efficacy and career identity.

5.1. Opportunities for Student Self-efficacy through Engagement with Sustainability during Placement

A key observation is that sustainability is rarely a leading factor in placement choices, even when personal values align, and that placement decisions are pragmatic, driven by a competitive labour market and role availability. During placement, some did not pursue sustainability-related learning because it seemed peripheral to the role and was perceived as raising organisational concerns. In contrast, others harnessed prior knowledge and personal interest, either taking opportunities to engage when they arose or seeking them out. These experiences enabled the development of self-efficacy and career identity by navigating formal organisational structures, acting proactively, and interpreting organisational cues, among other activities. This illustrates self-efficacy in terms of belief in capability (Bandura, 1977).

This underscores the need for a sustainable career ecosystem in which students, educators, and organisational leaders consider how placement learning experiences explicitly connect to broader planetary and societal goals, regardless of role. It also highlights how prior sustainability-related learning in the curriculum can be effectively presented to employers and students as a resource for use during placement. By doing so, the frequency with which placement students decouple placement tasks from university learning (Li et al., 2024) could be reduced – leveraging the benefits for all. Currently, unless students or placement educators are interested in and committed to sustainability, it is unlikely to remain within the placement's scope. By encouraging student-employer discussions about how projects and tasks relate to environmental and social sustainability, new perspectives can emerge regarding how a student perceives their role and contribution. In turn, such experiences will build efficacy and career identity, alongside a career trajectory that supports global sustainability goals.

5.2. Placements as a Sustainability Career Narrative Building

This study confirms that sustainability-related projects during placements provide a rich opportunity for students to bring personal passions and awareness, associated with *self-identity capital* (Donald et al., 2023) into a workplace context. Several students described engaging with environmental, equity, or ethical workplace issues that influenced their career aspirations, self-confidence, and beliefs. Consistent with carer construction theory (Savickas, 1997) such experiences become meaningful within career identity development as students navigate organisational tensions and realities, prompting them to reflect on and evaluate their personal values.

Cripps and Bobeva (2025) illustrate the personal and professional value of building individual self-awareness of values and strengths aligned to organisational and global sustainability goals. The findings here directly illustrate how placements provide a fertile ground for building ‘stories’ as part of both personal and professional identity. Notably, several students also identified the importance of soft skills, such as communication and persuasion, in identifying and engaging in sustainability-related projects. Thus, opportunities for both reflection on individual value formation and the development of soft skills for sustainability are important to consider in the design of educational and placement programmes.

5.3. Making Sustainability Visible in Placement Recruitment and Organisational Practice

The study confirmed that students frequently engage in sustainability-related projects (both formally and informally), even though this is often not explicitly detailed in job descriptions. The implicit nature of sustainability in recruitment and role design processes is not reported to influence application decisions, but does influence perceptions of the organisation. From a self-efficacy perspective, limited explicit signalling of sustainability opportunities can limit ‘anticipatory’ learning and opportunities for values alignment.

The findings indicate that students could identify tangible organisational benefits from their engagement in sustainability-related projects, thereby contributing to their self-efficacy through confidence-building and a sense of legitimacy. Therefore, organisations could consider making sustainability visible in placement job descriptions and recruitment materials to attract talent, enhance engagement, and support sustainability and people development strategies. This is especially relevant to organisations seeking to recruit values-aligned talent. Indeed, Onyido et al.’s (2022) study of sustainability-themed placements suggests that organisational benefits can be derived from a ‘circular approach’ in which learning from one cohort’s experience informs the next.

5.4. Enabling Pro-active Sustainability Learning through Placement Design and Reflection

The findings emphasise the importance of structured reflection in enabling students to recognise, develop, and communicate sustainability-related learning. Placement assessment tasks, such as employer presentations, have been shown to build self-efficacy by increasing confidence from employer feedback, and to feed learning experiences into career identity by shaping insights into personal values. This aligns with Donald and Hughes’ (2023) emphasis on scaffolding reflection, especially for experiences that may not immediately appear

‘successful’. Students’ reflections on the apparent absence of organisational commitment to sustainability and opportunities are shown, through the findings, to be insightful into how this aligns with their personal values and what they might want to shape in the future as they build career identity.

Sustainability-related learning is therefore recommended to be embedded in university and employer processes for goal setting, skills matrices, and associated workplace discussions from the outset. Despite the university's and programme's commitment to sustainability, the findings indicate that more can be done in formal placement preparation and assessment to encourage student recognition of and agency for sustainability-related learning and engagement opportunities within workplace roles.

6. Conclusion and Recommendations

6.1. Conclusion

This study sought to explore the extent and nature of sustainability-related engagement and learning during placements, and their contributions to self-efficacy and career identity. Overall, the findings show that while sustainability is rarely explicit in placement roles specifications, there are many opportunities to engage informally, especially where proactively sought by students. Educational programmes should encourage students to pursue such experiences as they can build confidence, inform awareness of personal values, and further shape employability identities and narratives. In doing so, students can create a sense of self-efficacy and career identity, both of which are essential for employability.

Organisational priorities and sustainability resourcing are seldom clear-cut, and navigating these tensions is fundamental to developing future leadership skills. In this regard, placement students may need opportunities to practise sensitively steering organisational conversations on contentious issues.

The findings from this study have broad implications for the development of sustainability talent pipelines. By making sustainability opportunities explicit in placement descriptions and embedding sustainability competencies into induction and development processes, organisations across sectors can simultaneously address talent acquisition while advancing sustainability agendas. It is time to position placements as part of an employability ecosystem in which future professionals can develop workforce capabilities aligned with personal and organisational values and aspirations for sustainability transitions.

6.2. Recommendations

Based on the study’s findings and conclusion, the following recommendations are proposed for research, institutional and organisational practice.

6.2.1. Recommendations for Further Research

1. A longitudinal study of placement students, from pre-placement through to graduation and beyond, would illuminate the impact of placement-based sustainability learning. This could follow Edwards’ (2014) study on the impact of placements on students’ self-efficacy. This might focus on objective measures, such as skills and

competencies and the graduate roles undertaken, as well as more subjective measures, such as values, aspirations, and perceptions of self-efficacy.

2. Drawing on the environmental research work of Nielsen (2017), the concept of self-regulation could be employed to examine the ‘intention-behaviour gap’ whereby students set and strive for sustainability-related goals but do not always adhere to them (linking to a career ecosystem perspective on varying influences across time and context).

3. Apply a self-efficacy scale, such as Demirci and Teksöz’s (2017), to provide a more quantitative measure (adapted for placements) of students’ perceptions of how they might integrate sustainability into professional contexts.

4. A macro-level investigation of placement role descriptions (and recruitment materials) to ascertain the degree to which they feature sustainability-related skills and opportunities.

5. The student-staff partnership approach to research in this paper has positively contributed to the richness of research findings, and it aligns with calls to provide such opportunities to enhance student agency and provide research benefit (Payne et al., 2023).

6.2.2. Recommendations for Educational Institutions

1. Connect sustainability-related learning with soft skills, such as communication and influence, to enable students to be ‘workplace ready’ through linking academic programmes of sustainability-related learning with employability skills. Placement assessment instruments, such as reflective portfolios, should explicitly consider sustainability-related learning. The approach outlined by Cripps and Bobeva (2025) to ‘Career storytelling for the Sustainable Development Goals’ could be helpfully applied to placement students.

2. Encourage student reflection on individual and organisational values alignment, so that they are empowered to navigate choices, navigate organisational dynamics and build a career identity that brings personal meaning and satisfaction.

3. University placement-related administrative and assessment processes should effectively integrate the importance of sustainability-related learning opportunities and the value this can bring to both students and employers. Hughes’ (2023) recommendation to benchmark and communicate competencies during, rather than post-experience, is especially valid for meaningful sustainability-related engagement and learning.

6.2.3. Recommendations for Placement Providers

1. As recommended in the study of early career talent and sustainability by Cripps and Louw (2025), employers could attract talent and gain generational appeal by including explicit sustainability-related opportunities in their placement offers to students.

2. To engage sustainability and human resources teams in working with placement student line managers to facilitate sustainability-related learning and engagement opportunities.

6.3. Limitations

The results here are subjective and interpretive, and as a qualitative, exploratory study, are constrained by a limited sample size. Extending the study to more students across a larger number of institutions would help gain more transferable insights. The study here was limited to Business School programmes; therefore, replicating it across other disciplines would be informative. The findings should be interpreted as reflecting the institutional context and may not be transferable to universities with different organisational commitments and approaches to sustainability and placement-related learning.

As the invitation to participate emphasised the importance of understanding sustainability in placements, this may have skewed the interviewee profile toward those with some interest in sustainability. Although the interviews were conducted by a student partner with the deliberate intention of minimising social desirability bias through peer-to-peer discussion, this cannot be discounted. As a single-method study, the interview data rely on retrospective self-reporting and lack triangulation with employer insights. It would be particularly advantageous to obtain line managers' views on promoting sustainability-related learning during placement. Finally, although the coding of interview quotations was introduced to ensure consistent interpretation across the team, the limited sample size and interpretive approach do not enable a structured comparison of students' attitudes and experiences.

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Conflict of Interest

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Data Availability

Data supporting the conclusions of this study can be made available upon reasonable request from the corresponding author.

AI Use

The authors declare that any use of artificial intelligence tools in the preparation of this manuscript was limited to ChatGPT for technical and language support. The authors further affirm that all cited sources are real, accurately referenced, and have been verified by the authors. Full responsibility for the content and integrity of this article remains with the authors.

Ethics Statement

For studies involving human participants, the authors confirm that the research complied with relevant institutional and national ethical standards. Ethical approval was obtained where required, and informed consent was secured from all participants prior to data collection. If ethical approval was not required, the authors confirm that the study adhered to applicable ethical guidelines.

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